Decade
Perspective
Capital
Management, LLC

Investor's Guide

## Page 1

After-fee Rates of Return

|  | DPCM Adviser Portfolio | Vanguard <br> ket Index* | USAA <br> Cornerstone* | USAA Target 2050* | Vanguard Target 2025* | Hedge Fund Index* | American Funds AGTHX* |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2009 | 51\% | 29\% | 35\% | 32\% | 25\% | 19\% | 29\% |
| 2010 | 14\% | 17\% | 13\% | 17\% | 14\% | 11\% | 12\% |
| 2011 | 15\% | 1\% | -4\% | -5\% | 0\% | -3\% | -5\% |
| 2012 | 17\% | 16\% | 12\% | 12\% | 13\% | 8\% | 21\% |
| 2013 | 23\% | 33\% | 11\% | 19\% | 18\% | 10\% | 34\% |
| 2014 | 11\% | 12\% | 5\% | 3\% | 7\% | 4\% | 9\% |
| 2015 | -16\% | 0\% | -4\% | -2\% | 0\% | -1\% | 5\% |
| 2016 | 31\% | 13\% | 5\% | 9\% | 7\% | 1\% | 8\% |
| 2017 | 27\% | 21\% | 15\% | 19\% | 16\% | 9\% | 26\% |
| 2018 | -5\% | -5\% | -7\% | -9\% | -5\% | -6\% | -3\% |
| 2019 | 31\% | 31\% | 16\% | 20\% | 20\% | 12\% | 28\% |
| 2020 | 18\% | 21\% | 9\% | 11\% | 13\% | 6\% | 38\% |
| 2021 | 39\% | 26\% | 11\% | 18\% | 10\% | 10\% | 19\% |
| 2022 | -24\% | -20\% | -14\% | -16\% | -16\% | -4\% | -31\% |
| 2023 | 17\% | 26\% | 12\% \# | 19\% | 15\% \# | 7\% | 37\% |
| Cumulative Return | 707\% | 589\% | 175\% | 259\% | 245\% | 117\% | 580\% |
| Annualized Return | 15\% | 14\% | 7\% | 9\% | 9\% | 5\% | 14\% |

*"DPCM Adviser Portfolio" depicts the returns of the adviser's personal and business accounts only
"Vanguard Market Index" depicts the returns of the Vanguard Total Stock Market Index Fund
"USAA Cornerstone" = USAA Cornerstone Strategy Mutual Fund, "USAA Target 2050" = USAA Target Retirement 2050 Mutual Fund
"Vanguard Target 2025" = Vanguard Target Retirement 2025 Mutual Fund
"Hedge Fund Index" = Credit Suisse Hedge Fund Index, "American Funds AGTHX" = American Funds Growth Fund of America Class A Fund
** Rate of return values reflect the time-weighted rate of return earned each period and include the effect of all fees, trading costs and reinvested dividends for the DPCM Portfolio and each fund.

Do not assume that recommendations made in the future will equal the performance of previous recommendations.
Past performance is not indicative of future results. Investing entails a degree of risk and potential loss of principal.
A list of all recommendations made by the adviser in the last 12 months is available upon request.

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- Ben Franklin

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## The Voting Machine and the Weighing Machine

When the vast majority of investors buy a stock, they buy the stock because they think the price of that stock will go up - and soon. Whether professional money managers or individual investors, these folks expect the stock's price to rise the next day, the next week, the next month - certainly within a year or two after purchase. This approach is inherently flawed. The stock market is really nothing more than a gigantic auction in which partial
"In the short run
the stock market
is a voting
machine, but in
the long run it is a weighing machine."

- Ben Graham (No. 1 Fund Manager of AllTime according to Forbes Magazine) ownership interests in businesses (stocks) are appraised, bought and sold. In the short run (as Ben Graham suggested 75 years ago), the outcome of this appraisal process is heavily influenced by factors that are psychological and emotional in nature. Factors such as fear, greed, herd behavior, social proof, incentive caused bias, the influence of the media, and some dynamic combination of rational and irrational decision-making made on the part of millions of market participants converge to determine short-term stock price movements.

Predicting the impact of just one of the multitude of variables listed above would be difficult. Crafting an investment strategy centered on the forecasted interplay and influence of a series of such ethereal and evasive variables to predict a given stock price a year from now borders on the absurd. A study conducted by John Bogle, founder of The Vanguard Group, illustrates the failure of such an approach. The study tracked the performance of actively managed mutual funds for a 15 year period from 1983 to 1998. Of the funds that actually survived the period, over $97 \%$ underperformed the most widely followed market average (the S\&P 500) after taxes, with the average fund earning an annual rate of return $4 \%$ lower than the S\&P 500 Index. ${ }^{1}$ Because of these results and the psychological influences listed earlier, I believe that stock price movements can be unpredictable and irrational in the short run.

The stock market can be quite unpredictable and irrational in the short run; on the other hand, in the long run, the market generally gets it right. By "gets it right," I mean that over long periods of time, stock prices accurately reflect the value of the businesses of which they represent a partial ownership interest. The historic relationship between corporate earnings growth and long run stock market appreciation supports this argument. The first graph on this page depicts rolling 25-year averages of annual corporate earnings and stock market growth from 1908 thru $2008 .{ }^{2}$ As you can see, the general trajectory of each series moves similarly over the long-haul as stock market appreciation is driven by the earnings of businesses. When single year stock market growth rates are included with this data, the single year returns tend to be much more volatile as depicted in the second graph below.

The drastic disparity between the volatility of short run and long run average market appreciation supports Mr. Graham's quote above. Over the long run, earnings and the corresponding value of businesses drive stock prices. In the short run, psychological and emotional influences can cause stocks' prices to fluctuate significantly beyond the bounds of what they are actually worth.



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## Lessons from History's Intelligent Investors

After transitioning out of the Air Force, I developed a passion for investing. Prior to enrolling in business school at Carnegie Mellon, I read several books about investing and completed the first level of a professional designation course known as the Chartered Financial Analyst (CFA) Program. While each of these experiences were beneficial, that which had the most significant personal impact was my study of a number of history's most successful investors including, among others; Warren Buffett, Ben Graham, Charlie Munger, Phillip Fisher, Walter Schloss, Lou Simpson, Seth Klarman and Peter Lynch.


A common theme revolving around the two points made in the previous section emerged from my study of the investment approaches of these investors. First, even though these investors collectively comprise what might be thought of as the Investor Hall of Fame, every one of them conceded that they could not predict stock price movements in the short-term. Second, each of them recognized that over the long-term, the reality of what a business was worth would ultimately determine its stock price. From this perspective, these investors exploited the irrational nature of the market in the short-term to buy stocks at cheap prices relative to what they were actually worth. As time passed and the market acted more like a weighing machine and less like a voting machine, these men were rewarded by the price appreciation of the stocks they had purchased.

The investment strategies of DPCM are based heavily on the lessons learned from these intelligent investors. My investment approach is simple. I seek to buy partial ownership interests in great businesses at cheap prices. When considering an investment in a share of common stock, I make a conservative calculation of what a business is worth and in turn, what a fractional share of that business is worth. If I determine that a stock is worth roughly $\$ 100$ and I find that I can purchase the stock in the market for $\$ 50-\$ 65$, I buy it. In doing so, I have absolutely no opinion as to whether the stock price will go up, down or sideways in the short-term. Rather, as a long-term investor, I focus solely on the value of the business I have purchased an ownership interest in because as logic, historical data and the men referenced above have shown, this is what ultimately drives stock prices.*
*This section is designed to provide a very broad overview of the investment approach DPCM adheres to. Interested readers are encouraged to proceed to Appendices 1-5 at this time for additional information pertaining to DPCM's investment approach before continuing.

## Investment Options Available to the General Public - Mutual Funds -

As a cadet majoring in Management at the Air Force Academy, the following phrase was drilled into my head: "People respond to incentives." In seemingly every Management course I took, instructors articulated this phrase during lectures as the principle was manifested in one form or another. While the effect incentives can have on military organizations cannot be overstated, I have learned that incentives have enormous consequences in the financial world as well, and the investment management industry is certainly no exception. In this section, I will present the structure of the investment management industry as I currently see it and discuss the incentives that I believe
 drive the behavior of individuals and firms operating in each of the two broad channels of the industry. This discussion is not meant to pass judgment on individuals employed in either of these areas, but rather to enable potential clients to make fully informed decisions when investing their life savings.
> "If the behavior of institutional investors weren't so horrifying, it might actually be humorous. Hundreds of billions of other people's hard-earned dollars are routinely whipped from investment to investment based on little or no in-depth research or analysis. The prevalent mentality is consensus, groupthink.

> Acting with the crowd ensures an acceptable mediocrity; acting independently runs the risk of unacceptable underperformance...Managers who do well in the short-term are rewarded with more assets. Those who do not do well in the short-term often don't survive long enough to see the long-term."
> - Seth Klarman (One of twelve members of The Alpha Magazine Hedge Fund Hall of Fame)

## Retail Channel

For the purposes of this discussion, the retail channel consists primarily of local financial advising entities. Titles of individuals in this channel typically include investment adviser, financial planner, private banker, and private wealth associate, among others. From an incentive standpoint, it is crucial for investors to understand that for the majority of the channel, on both the firm and individual level, fees are based on a percentage of the funds that investors provide.

Under this compensation arrangement, the fastest and easiest way for the retail channel to generate more revenue is to simply bring in more clients and increase the size of the proverbial pot upon which they assess percentage-based fees. Conversely, the fastest and easiest way for the retail channel to lose money is to lose existing clients. As a result, the retail channel has evolved into much more of a sales and asset gathering-oriented function than one of active investing. With such an emphasis on asset-gathering, it should come as no surprise that the actual security selection process of buying and selling stocks, bonds and other securities is primarily outsourced to the wholesale channel in the form of some combination of mutual funds.

## Wholesale Channel

For most investors, the wholesale channel consists of the large mutual fund families familiar to most people. These firms generate revenue in a similar manner as the retail channel discussed above in that they take a percentage of the dollar value invested in their funds each period. To more easily understand the consequences of this incentive arrangement, it is best to think of these firms as companies that are selling products (shares of mutual funds).

In order for these companies to maximize revenue, they must sell products that their customers (individual investors or retail advisers) will want to buy (invest in). But in exactly what type of mutual fund does the average individual want to invest?

An example from the naiveté of my past is instructive. As a sophomore at the Academy, I accumulated a modest amount of savings which I decided to invest for my future retirement. Shortly after making this decision, I conducted "research" on mutual funds which consisted of looking at the returns of a number of funds over the most recent sixmonth, single-year and two-year periods. Next, I compared these returns to the returns of the benchmarks to which the funds were tied; I also compared funds against one another. Lastly, I took note of the number of stars that were next to each fund name (mainly because I had remembered once hearing that stars were important in a TV commercial). After mulling over this mountain of data, I eventually purchased shares of mutual funds.
This story makes me cringe today, but I believe it accurately illustrates what goes through the mind of the average investor when he/she considers investing in a mutual fund. More importantly, the story also reveals important information about the types of products that the wholesale channel seeks to sell to the general public in order to maximize revenue under its current incentive structure. The consequences of the wholesale firms' incentives are most apparent in the manner in which the firms compensate their portfolio managers, the people who actually make the buy/sell decisions for the firms' mutual funds.

CLOSET INDEXING


The overriding factor determining the career progression, job security and compensation for portfolio managers is how well their fund does compared to a given benchmark, each quarter, single-year and twoyear period. From the perspective of the wholesale firm this is an ideal alignment of incentives as it rewards managers based on how well they produce products that people will buy and retain. Unfortunately, for the average investor this arrangement creates a misalignment of incentives that can have disastrous consequences for their life savings.

As the aforementioned study by John Bogle illustrates, very few of the mutual funds that are fortunate enough even to survive over the long run actually outperform the market. This is because the incentive structure facing portfolio managers puts them in a situation where they must try to do exactly what the Warren Buffetts of the world concede they are not capable of doing - predicting stock price movements on a quarterly or annual basis. As a result, fund managers adopt a "closet indexing" strategy which mitigates their career risk by ensuring their funds never substantially underperform the market in the short run. While this strategy makes sense for fund managers, it leaves fund investors exposed to the risk of investing in overpriced securities and causes funds to mirror market returns on a before-fee basis. Average before-fee returns produce below average after-fee results. Because of this, mutual fund returns end up getting soundly beaten by market averages over time and millions of investors go along for the ride, paying fees to the wholesale and retail channel every step of the way.

In John Bogle's study, 97\% of actively managed mutual funds underperformed the S\&P 500 Index, while the average fund earned an annual rate of return (ARoR) that was $\mathbf{4 \%}$ lower than the index over the 15 year period. Considering the significant effect small differences in rates of return and fees can have on the final value of a portfolio, the fact that the vast majority of the general public invests its life savings in actively managed mutual funds is quite sobering.

Rate of Return Fifteen Years Ended 6/30/1998 S\&P 500 Avg Mutual Fund S\&P 500 Outperformance Funds outpaced by index 15.00\% 10.80\%
*Bogle, John. Common Sense on Mutual Funds.

In choosing to invest in actively managed mutual funds, investors unwittingly make a decision that, studies show, will likely cost them hundreds of thousands if not millions of dollars.

## Compounding

This table illustrates the dramatic effect a difference in rate of return of 4\% per year will have on the final value of your investment portfolio.

| Yr | 12\% ARoR |  |
| :---: | :---: | :---: |
| 0 |  | 50,000 |
| 1 |  | 72,800 |
| 2 |  | 98,840 |
| 3 |  | 128,524 |
| 4 |  | 162,305 |
| 5 |  | 200,690 |
| 6 |  | 244,248 |
| 7 |  | 293,618 |
| 8 |  | 349,514 |
| 9 |  | 412,738 |
| 10 |  | 484,186 |
| 11 |  | 564,867 |
| 12 |  | 655,906 |
| 13 |  | 758,567 |
| 14 |  | 874,266 |
| 15 |  | 1,004,590 |
| 16 |  | 1,151,315 |
| 17 |  | 1,316,431 |
| 18 |  | 1,502,171 |
| 19 |  | 1,711,032 |
| 20 |  | 1,945,815 |
| 21 |  | 2,209,656 |
| 22 |  | 2,506,067 |
| 23 |  | 2,838,986 |
| 24 |  | 3,212,821 |
| 25 |  | 3,632,510 |
| 26 |  | 4,103,587 |
| 27 |  | 4,632,248 |
| 28 |  | 5,225,435 |
| 29 |  | 5,890,925 |
| 30 |  | 6,637,426 |
| 31 |  | 7,474,695 |
| 32 |  | 8,413,660 |
| 33 |  | 9,466,560 |
| 34 |  | 10,647,107 |


| $\mathbf{8 0} \mathbf{A R O R}$ |
| ---: |
| $\mathbf{5 0}, \mathbf{0 0 0}$ |
| 70,200 |
| 92,502 |
| 117,089 |
| 144,158 |
| 173,924 |
| 206,618 |
| 242,491 |
| 281,814 |
| 324,881 |
| 372,009 |
| 423,541 |
| 479,849 |
| 541,334 |
| 608,431 |
| 681,610 |
| 761,378 |
| 848,284 |
| 942,923 |
| $1,045,936$ |
| $1,158,018$ |
| $1,279,918$ |
| $1,412,449$ |
| $1,556,485$ |
| $1,712,976$ |
| $1,882,946$ |
| $2,067,501$ |
| $2,267,837$ |
| $2,485,249$ |
| $2,721,134$ |
| $2,977,001$ |
| $3,254,482$ |
| $3,555,342$ |
| $3,881,486$ |
| $4,234,973$ |
| 1027 |

35 \$ 11,970,656 \$ 4,618,027
Difference \$ 7,352,628
"The most powerful force in the universe is compound interest."

- Albert Einstein


## Investment Options Available to the General Public - Index Funds -

At this point, the astute reader may be kicking around a few questions in his/her mind. The most immediate of these is likely to be the following:

> If the vast majority of mutual funds underperform
> the market averages over the long run, why not just invest in the market averages, benefit from the compound interest that will build on the unpaid fees and, more often than not, earn a higher rate of return on my investment?

Indeed, this is a great question. Through index funds, any investor can essentially invest in the same market averages or benchmarks that the vast majority of mutual funds underperform over time. Although there are fees associated with index funds, they are usually a fraction of the fees charged by actively managed mutual funds. I believe index funds are a much better alternative for the majority of the general public. Index funds are readily accessible through most employer-sponsored retirement plans and can be obtained directly from the firms offering the funds.

The next question follows on the first:

> If my best alternative is to invest in index funds, why are you starting this business and why should I pay you to manage my money?

## I believe we can work together to create an option that capitalizes on the long-term advantages of active management (which the mutual fund industry's short-sighted and salesoriented approach fails to exploit), while offering protection from the two major flaws of any indexing investment strategy.

I could not think of a more dangerous or risky thing that an investor could do with her life savings than use it to "invest" in overpriced stocks, an overpriced mutual fund or an overpriced index fund. In fact, I like to think of engaging in such activities as being similar to playing a game of financial Russian roulette with your life savings. To exactly understand my position it is helpful to revisit some of the information already covered.

In the short run, the stock market can produce irrational stock prices that are driven by emotion. When the emotion driving this process is that of greed, stock prices can become grossly inflated relative to what they are actually worth. Ironically, this condition occurs exactly when the general public
 feels most comfortable with investing. When you hear that your neighbor, mailman and coworker have made $200 \%$ in the past month on a bunch of stocks you've never heard of (let's call them Ariba, Priceline and Akamai Technologies*), the media fuels the hype and everyone and their grandmother piles into the stock market. Under these conditions, it is logical to expect stock prices to rise beyond what they are actually worth.

The unfortunate consequence to this euphoric short-cut to wealth is that in the long run the stock market "gets it right". Much like a player in a game of Russian roulette, market participants who buy overpriced funds or securities are likely to win for a while. The more they play, however, the more likely they are to face their inevitable fate. For the investor purchasing shares of overpriced index funds, this outcome will manifest itself in the form of a substantial decrease in the net asset value of the index from the level of his initial purchase as markets downwardly reassess the value of the numerous stocks in the index fund. In fact, investors in index funds have had the pleasure of enjoying this very experience twice in the past decade. One of my biggest complaints with indexing is that it offers no protection from this inevitable outcome. While I do not dispute the fact that most actively managed mutual funds will offer the individual investor no more protection in overpriced market environments, I still consider this lack of protection to be one of two major flaws inherent in the indexing approach. The second flaw is illustrated in the next section.

| *Historical Share Prices |  |  |  |
| :--- | :---: | :---: | :---: |
|  | $\mathbf{1 9 9 9}$ | $\mathbf{2 0 0 2}$ | March 2009 |
| Ariba | $\$ 532$ | $\$ 8.82$ | $\$ 7.65$ |
| Priceline | $\$ 974$ | $\$ 8.53$ | $\$ 456$ |
| Akamai Tech. | $\$ 327$ | $\$ 0.89$ | $\$ 17$ |
| Vanguard 500 Index Fund (VFINX) | $\$ 140$ | $\$ 76$ | $\$ 63$ |

## Constructing an Optimal Portfolio of Classmates

Imagine that you are eighteen years old and driving in your car on the way to your high school graduation. Upon pulling into your school's parking lot and getting out of your car, you are approached by a well-dressed woman carrying a briefcase. She immediately informs you that she has a proposition for you. She places the briefcase on the hood of your car, opens it and reveals that the briefcase is filled with one-hundred-dollar-bills. Next, she tells you the case contains $\$ 500,000$ and that she is conducting a behavioral finance research study for an overfunded business school. To your delight, she goes on to say that you are the lucky recipient of the $\$ 500,000$ in the briefcase, however there is a catch. You must invest the entire $\$ 500,000$ in a portfolio consisting of members of your graduating class. Under the stipulations of the study, every $\$ 1,000$ you invest in a classmate entitles you to a reimbursement from the business school for $1 \%$ of the income that classmate will generate over the course of the next 40 years and you will receive the reimbursement at the end of the 40th year. The woman insists that you must provide her with an allocation of the $\$ 500,000$ within 10 minutes after the conclusion of the ceremony, says, "Congratulations" and walks away with the briefcase.

How should you allocate the $\$ 500,000$ ? If you have an MBA or are employed in the investment management industry, you may be inclined to fall back on the principles of Modern Portfolio Theory and diversification. If this is the case, you will likely opt to diversify your \$500,000 evenly among each of your 500 classmates. By doing so, you will create what will amount to being an index fund of classmates. In the event that one classmate outperforms your expectations while another underperforms your expectations, these effects will counteract one another and create less volatility for the overall portfolio of classmates. These benefits of diversification will be enhanced as each additional classmate is brought into the portfolio and eventually you will eliminate as much "un-systemic" volatility of expected classmate returns as possible.
"Once you're in the business of evaluating businesses and decide that you are going to bring the effort, intensity and time involved to get that job done I think diversification is a terrible mistake... If you can identify six wonderful businesses that is all the diversification you need and you're going to make a lot of money."

## - Warren Buffett

> "To suppose that safety-first consists in having a small gamble in a large number of different directions... as compared with a substantial stake in a company where one's information is adequate, strikes me as a travesty of investment policy."
> - John Maynard Keynes
> "Diversification for its own sake is not sensible... My view is that an investor is better off knowing a lot about a few investments than knowing a little about a great many holdings. One's very best ideas are likely to generate higher returns for a given level of risk than one's hundredth or thousandth best idea."

- Seth Klarman
"The idea of excessive diversification is madness. We don't believe that widespread diversification will yield a good result. We believe all good investments will involve relatively low diversification."


## Charlie Munger (Billionaire Investor and Vice Chairman of Berkshire Hathaway)

## "No investment principle is more widely acclaimed than

 diversification. Some cynics have hinted that this is because the concept is so simple that even stock brokers can understand it... It never seems to occur to any of them that buying a company without sufficient knowledge of it may be even more dangerous than having inadequate diversification."- Philip Fisher (One of the "20 Greatest Investors" according to Forbes Magazine)

If you don't have an MBA you will probably approach this investment opportunity from a different perspective. As you sit in the graduation ceremony, you will likely consider the investment potential of each classmate on a case-by-case basis. For instance, perhaps your best-friend John sits next to you during the ceremony. You have known John since Kindergarten and you consider him to be intelligent, honest and destined for success. Conversely, a football teammate of 8 years, Fred, routinely showed up late to practice, received no respect from teammates and had a habit of hiding under the bleachers during conditioning drills. Based on this information and a little bit of common sense, it may make sense to double-up on John and not invest a dime in Fred. As you continue scrolling down the list you will inevitably come across some individuals like Lisa. You have seen Lisa around school for years, but have only had a few conversations with her and as such, don't feel confident making an informed estimate of her future earnings potential.

The prudent approach is to concentrate your funds in the "John" category of classmates. There are two reasons for doing this. First, you know the John-types very well and as a result feel comfortable making an informed estimate about their future income generating potential. Second, you have a strong conviction that the John-types, when compared to their peers, have above average earnings potential and are thus better investments than the majority of the graduating class. Although you cannot be certain that all of your Johntype classmates will live up to your earnings expectations, when considering your investment alternatives it does not make sense to divert funds away from them. Such investment alternatives include classmates you strongly feel have below-average earnings potentials and several others for which you simply cannot make an informed judgment.

The above reasoning utilizes an extension of a metaphor presented over fifty years ago by Philip Fisher in Common Stocks and Uncommon Profits. ${ }^{1}$ I think it does a tremendous job of illustrating the benefits of a concentrated investment approach, which essentially means limiting your funds to a select number of securities. It is my opinion, however, that there remains to be addressed a dimension of security markets that makes portfolio concentration even more advantageous.

For those that have not endured the pain of scrolling through the appendices yet, I apply rigorous requirements when seeking out what I define as great businesses. Of the 5,500 publicly-traded companies I scan summary financial data on, there are roughly 300 that meet the quantitative requirements I look for in a business. Of this 300, a majority fail to meet the established qualitative requirements. This leaves a small pool of businesses that I would feel comfortable making an informed decision about with respect to their future earnings potential and intrinsic value (what the business/stock is actually worth). To make the situation more challenging, the shares of these great businesses are rarely available at cheap prices.

At this point, as an investor operating under these conditions there are three approaches you can take. One alternative is to scrap the great business idea and blindly allocate your funds across all 5,500 stocks, with no regard for the quality of the businesses, the prices you are paying for them or what they are actually worth (i.e. indexing). The second alternative would be to allocate funds equally among the great businesses. While you would own a diversified basket of wonderful businesses, this may prove dangerous as great businesses usually carry prices that reflect their greatness. At times, share prices of these businesses can be overpriced to the point that it creates the

Russian roulette conditions we discussed in the last section.* The optimal decision is to concentrate your investments. By doing so, you may acquire shares of the great businesses that are available at cheap prices, while avoiding those that are poor, overpriced or you are most uncertain of.

The next question a reader may ask could be the following: By restricting yourself to a small pool of great businesses, isn't there a chance there won't be any of these businesses available at cheap prices? Absolutely. In fact, in a greed-driven, overpriced market like the one discussed earlier it is probable that I will not be able to identify any great businesses selling at cheap prices. During these periods, new contributions will likely be invested in the safety of Treasury (government bond) ETFs until market conditions change. Over this time, client portfolios will underperform both equity indexes and actively managed mutual funds on an annual and possibly cumulative basis for as long as the overpriced environment persists.

While this strategy will undoubtedly make for some very humbling times in the short run, I am confident that it will provide a substantial advantage over the long-haul. More often than not, when the proverbial gun finally goes off in overpriced markets, the emotion driving the irrational process quickly changes from that of greed to fear. Speculators run for the exits, people stash money under their mattresses and stock prices become very cheap relative to what they are actually worth. As a long-term investor, this is precisely the environment in which you should wish to operate. Under this scenario, those investors who were disciplined enough to avoid following the crowd in overpaying for stocks, suddenly find themselves with liquid assets which they can convert to cash and use to buy into great businesses at very cheap prices.

[^1]
## Objectives

The compounding section included in this guide illustrates the important roles that rates of return and fees can play in determining the ultimate value of an investor's portfolio. DPCM clients can expect a transparent method of monitoring the after-fee rate of return that is earned on their portfolio and an explanation of how that rate compares with their other investment alternatives. Indexing, as I indicated earlier, is likely the best long-term investment method available for the majority of the
"My best stocks have been in the third, fourth and fifth year that I have owned them, not the third or fourth week. People want money very rapidly. It doesn't happen that way. Those people are going to be very disappointed in the stock market."

- Peter Lynch (One of the "Top Five Fund Managers of AllTime" according to Forbes Magazine) general public, and serves as an appropriate benchmark for comparison.

In February of each year all clients will receive an annual letter. This letter will include a calculation of the rate of return that was earned on the funds in each client's account as of Jan $1^{\text {st }}$ of the previous year, as well as the cumulative rate of return that has been earned over the life of the client's portfolio thru Dec. $31^{\text {st }}$ of the previous year. These returns will be expressed after the deduction of a $1 \%$ annual fee is applied to the year end value of the client's actively managed portfolio. These rates of return will be presented next to the annual and cumulative returns of the Vanguard Total Stock Market Index Fund (Ticker: VTSMX) for each period. The VTSMX rates of return will serve as a proxy for what is believed to be a client's best alternative long-term investment method.

It is important that clients understand my two objectives in managing their funds when monitoring my performance and their holdings in general. These objectives are listed below in order of priority.

1) Avoid any permanent loss.
2) Maximize the rate of return client portfolios earn over the duration of their investment.

The objectives listed above should not be interpreted as guarantees of future performance.

Information pertaining to these objectives includes the following:

- Clients should not contribute funds to their portfolios if they may have a need for cash from those funds within the next 4 years.
- I will not manage client portfolios with the objective of outperforming the VTSMX in any single year.
- Client portfolios will periodically achieve lower annual rates of return than the VTSMX (especially during overpriced market environments).
- I will purchase securities that have the potential of declining significantly in market price if I believe they offer exceptional long-term return potential with respect to the risk they face of incurring a permanent loss.


## Three Paths

The last section of this guide consists of a discussion of the three paths available to readers in investing their savings. The demands of travel, degrees of traffic, final destinations and initial steps readers can take to pursue each of these paths are discussed below.

## The Path of Speculation

Unbeknownst to many of its travelers, the path of speculation is the path most frequently traveled. This path receives the most traffic because there is little demanded of those who wish to follow it. If you would like to follow this path, simply drive to a large commercial center near your place of residence and go into the first local financial advisory office you see. Upon entering the facility, you will likely be directed to meet with an impressive looking gentleman who boasts a threeletter acronym at the end of his name.

After discussing your financial goals and risk tolerance-as defined as your tolerance for short-term market price fluctuations, this gentleman will likely construct a portfolio consisting of shares of actively managed mutual funds. Aside from the time spent in this meeting, there will be very little required of you over the remaining course of your life. You will likely enjoy a sense of security in knowing that you are doing what everybody else does with their life savings-investing in mutual funds. The price fluctuation of these funds will move in a similar fashion to the overall market and you may find this psychologically reassuring as you share in the shortterm joys and sorrows of the masses. Unfortunately, the research cited earlier suggests that the fees you will pay to your adviser and the fund managers he discreetly bills you to use, coupled with the below-average returns earned by mangers motivated to speculate on short-term stock price movements, will likely cost you and your family hundreds of thousands if not millions of dollars over the remaining course of your life.

## The Path of Indexing

The path of indexing receives less traffic than the path of speculation because it is more labor intensive and psychologically demanding of its travelers. In order to acquire the requisite knowledge to implement an indexing investment strategy one generally must complete an introductory investment-related college course or drive to a local library and spend three hours reading a book (I would recommend the book written by John Bogle cited earlier). He can then dial 1-800-VANGUARD and request to speak with a customer service representative who will guide him through the remainder of the process. Beyond this effort, the indexer must maintain discipline and not deviate from his strategy in the face of falling market environments.

While the psychological demands listed above are greater for the indexer, there are other areas that may offer some comfort. Although blind purchasing of ownership interests in hundreds of businesses with no concern for the financial condition, operating history, products, services, management, strategy, competitive position, price or value of them certainly doesn't strike me as an optimal investment approach, a segment of the investment community considers it to be. Additionally, the volatility and long run return of indexed portfolios will mirror those of the broader market. This will likely offer solace to those who find comfort in following crowds, while also ensuring a significantly greater return than will be achieved by the vast majority of those who follow the path of speculation.

## The Path of Intelligent Investing

The path of intelligent investing is the road less traveled. In today's fastpaced, instant-gratification society this path is rarely marketed to the general public. The reason for this is that unlike the more frequently traveled paths, this path demands a great deal from its travelers. These demands exist because the psychological comforts associated with following the crowd or minimizing short-term market price fluctuations simply cannot be offered if the path is to be traveled safely. Although these comforts may feel beneficial in the short run, the consequences of allowing the market to guide investment decisions are disastrous over time.

Fortunately for those considering the path of intelligent investing, there are countless examples of those who have followed this path successfully and the benefits they received from doing so. Through the course of reading this Investor's Guide you have been introduced to a few of them. While most people attribute the success of these investors to above average intellect, I think this is only a small part of the equation. There are countless examples of geniuses who have lost fortunes in financial markets. The primary source of the success of these investors was drawn from the strength of their character. Specifically, each of them displayed honesty, intense focus, dedication and an ability to maintain a decade-long perspective while all those around them failed to do so.

## Closing

I have been privileged to develop relationships with several people who have exemplified these same character-based qualities in other contexts of life. Whether these qualities manifested themselves on athletic fields or in military, academic or professional settings, these people possess the character required to benefit from the advantages of intelligent investing. I believe you have such character and can similarly benefit.

I started this business to present people like you with an opportunity to benefit from the long-term safety and returns intelligent investing can offer. Although I cannot guarantee specific returns, I can guarantee to invest your savings through an investment approach that is consistent with the qualities of intelligent investing. Through this approach, I will invest your funds in a highly concentrated portfolio of diligently researched great businesses that are available at cheap prices, while avoiding all those that are marginal, overpriced or overly difficult to value. I believe this approach offers the best long-term return potential in accord with the risk of permanent loss. I will invest your funds in the same businesses in which I myself, members of my immediate family and my closest friends are invested.

Thank you.

Respectfully,

Denny Poland
Founder, Decade Perspective Capital Management LLC

September, 2009

Advisor Contact Information:
Email: dpoland@dpcapm.com
Phone: 412.607.4972

## Investment Approach Appendix

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## Appendix 1 Great Businesses - Compounding Machines -

When seeking to identify great businesses, from a quantitative perspective, I like to think of businesses as being like compounding machines. Much like vending machines, these machines accept cash, but instead of instantly dispensing soda cans, candy or potato chips, they provide a return on that cash in the subsequent year. The great thing about these machines is that after purchasing the rights to use a machine, you can reinvest some proportion of the cash disbursed to you back into the machine each year for as long as it remains in service. While all compounding machines perform the same general function, they differ in two areas: the annual rate of return they provide on the cash put into them each year and the percentage of that return that must be reinvested into the machine each year. There are three broad categories of compounding machines that are illustrated by the businesses described below:

## Google Machine

The Google Machine exemplifies the ideal type of compounding machine. For each dollar that is put into the Google Machine, it is capable of returning a quarter or more to contributors each year. As a requirement for this exceptional return, contributors usually must reinvest their entire distribution back into the machine annually. This requirement is not as negative as it might appear since it affords the contributor an exceptionally high rate of return on his capital while avoiding the tax consequence incurred by not reinvesting the distribution.

## 3M Machine

The 3M Machine is similar to the Google Machine in the sense that it is capable of providing contributors with a quarter for every dollar they put into it. However, the 3M Machine puts a limit on the percentage of it's disbursements that may be reinvested because it is an older machine and would have a hard time maintaining its rate of return if all of its distributions were reinvested.

## GM Machine

The GM fits the category of the least desirable type of compounding machine. The poor souls that contribute to this machine are lucky to earn a nickel for every dollar they put into it. Additionally, they are required to reinvest the vast majority of any distributions at this low rate. Occasionally the machine breaks and fails to provide any return whatsoever. When these occurrences become the norm, the machine will be taken out of service and the investor will lose on the price he paid for the right to use the machine and any reinvestments he made into it.

The financing decisions of the individuals charged with managing these machines can enhance or diminish their core operational compounding ability. Managers can use the proceeds of past contributions as collateral for loans to amplify the rate of return for a given machine. As long as the rate of return created by the operations of the machine exceeds the overall interest rate required on these loans, the overall rate of return of the machine will be enhanced. Should this not occur, the bank will seize the machine and the contributor will likely lose everything.

In reality, most businesses fall somewhere between the GM and the 3M Machine and there are a very small number of Google Machines out there. Over time, it becomes more and more difficult for Google Machines to maintain their high rates of return as more and more capital is put into them. In fact, I know of only one business that I would categorize as a Google Machine that has been so for the past 30 years. This machine is unique in having a brilliant manager who continually reallocates distributions from a number of smaller 3M Machines the business owns to use in purchasing other 3M Machines that are available on cheap terms. As effective of a capital allocator as this manager has been, as he has dealt with more and more capital, his rate of return has steadily diminished. Because of this, the majority of the great businesses we will deal with will come from the 3 M Machine category.

I believe the most important quantitative factors to consider when identifying great businesses are the relationship between how much the machine will allow you to reinvest, the rate of return it earns and the consistency of each of these measures. When considering the rate of return, it is important to distinguish between the amount of the return attributable to the operational effectiveness of the business and the amount attributable to leverage (the degree of bank loans/capital market debt used). A moderate use of leverage is often in the best interest of shareholders, but if used excessively, leverage can be dangerous. Because of this, businesses using excessive leverage with respect to their ability to generate free cash flow will be excluded from what are defined as great businesses.

## Appendix 2 Great Businesses - Sustainable Competitive Advantage -

General Electric, after more than 110 years, today remains the only original component of the widely followed Dow Jones Industrial Average. The majority of the businesses no longer in the index succumbed to competitive pressures or technological obsolescence. It is important, therefore, to consider how such factors might alter the compounding effectiveness of any of the "machines" that were identified as quantitatively great businesses in the previous appendix. To this end, it is required that great businesses have some lasting quality or characteristic that is unique to them relative to their competitors which will enable them to withstand the pressures they will inevitably face as competitors encroach on their customers, resources and profits. These unique characteristics are collectively known as competitive advantages. Three broad sources of sustainable competitive advantage are presented in the context of the businesses below:

## Harley-Davidson

The strength of a brand/brands can offer a tremendous advantage to a business over time. Brand loyalty creates an environment in which customers make purchasing decisions based on some criteria beyond price. In the domestic market for heavyweight motorcycles, for example, there is one brand in particular that illustrates this competitive advantage quite well. Owners of motorcycles bearing this brand take immense pride in owning their motorcycles; they have actually tattooed the brand onto their bodies and formed exclusive clubs that oblige members to own this specific make of motorcycle. This exceptional brand loyalty enables the business to charge a substantial premium for its products. This pricing power makes it extremely difficult for other motorcycle manufacturers to put a dent their market share or profits. While motorcycles are high value items, the strength of a brand can also provide a competitive advantage in other markets such as non-durable goods, service and retail. Businesses that enjoy a competitive advantage stemming from the strength of their brand/s include: WD-40, Tiffany \& Co., HJ Heinz, Williams-Sonoma, Deere \& Co. and Goldman Sachs.

## Wal-Mart

When the opposite market conditions of those described above exist, there is very little differentiation and consumers make purchasing decisions based primarily on price. In this environment those businesses that possess relative strength in areas tied to volume bargaining power and economies of scale/scope will hold the competitive advantage. Further, they are in especially strong positions when they link two highly fragmented groups that have limited negotiating power. In a commodity environment, the low-cost manufacturer, distributor or service provider generally possesses a competitive advantage. Businesses that have benefited from this form of competitive advantage include: Sysco, USAA, Exxon Mobil, TJX Companies and GEICO.

## Union Pacific Railroad

The third form of sustainable competitive advantage can occur when a business operates in a monopoly or concentrated oligopoly environment. In these environments, regulatory hurdles, geographical barriers, patents, switching costs, standard ownerships or enormous capital expenditure requirements often mitigate the effects of competition. Although operating in a seemingly ideal competitive environment, these businesses often fail to meet the quantitative requirements because heavy government regulation limits their profitability.

While these broad sources can be a helpful guide, to qualify as a great business the competitive advantage must be sustainable. Although there is no way to guarantee that a business will maintain its competitive position within an industry, an investor can protect himself by limiting his investments to industries that are not prone to rapid change. Firms that hold a competitive advantage but produce products, provide services or compete solely in rapidly evolving fast-cycle industries will not be considered great businesses.

## Appendix 3 Intrinsic Value \& Margin of Safety

Intrinsic value is the objective reality of what a business and, by extension, a share of its common stock is worth. Although stock prices are driven by intrinsic value over the long run, in the short run stock prices can move independently of intrinsic value.

The definition of intrinsic value is the discounted value of the cash that can be taken out of a business during its remaining life. As I am sure you can imagine, this calculation is not an easy one to make. Because of this, intrinsic value should be thought of much more as an estimate than a precise figure.
"Very rarely is any share priced at its true value. In a single year the price can go 50\% too high and $50 \%$ too low...It really pays to be able to tell which stocks have the lowest price today in relation to their true value."
-John Templeton (No. 2 Fund Manager of All
Time according to Forbes Magazine)

When calculating intrinsic value, an investor must forecast future earnings, cash flows and other variables. An investor can take a number of common-sense steps to improve accuracy and mitigate the risks involved in making this calculation. Most importantly, he can focus solely on great businesses and use the margin of safety principle.

## Valuing Great Businesses

For DPCM and its clients, it happens that the best businesses to own over the long run are also the easiest ones to value. The businesses left standing after the quantitative and qualitative screening processes covered in the previous two appendices exclusively include the most consistent, conservatively financed and competitively dominant publicly traded companies in the United States. It is, therefore, infinitely easier to forecast the earnings and the amount of cash that could be taken out of these businesses. Furthermore, focus on such a small pool of potential businesses allows substantial time and energy to be allotted to valuing them. Many actively managed mutual funds hold over 100 stocks and the average manager turns over (buys/sells securities) $93 \%$ of their portfolio per year. After establishing a client portfolio, more than 4 transactions per year in that portfolio are unlikely to occur due to the long-term oriented investment approach DPCM adheres to.

## Margin of Safety

An engineer tasked with building a bridge capable of supporting the weight of a 20-ton truck would build into his design a margin of safety with a capacity well in excess of 20-tons to offset any imprecise calculations or assumptions. To provide protection against these uncertainties he might likely build the bridge with a capacity of supporting 35 tons or more. The excess capacity will offer a substantially higher degree of protection than a bridge designed with a 20 or 22 -ton capacity.

Along similar lines, if the intrinsic value of a stock is calculated to be $\$ 100$, it is not prudent to rush out and buy the stock when it is available at $\$ 98$ or $\$ 92$. A minimum $35 \%$ margin of safety will be required before purchasing a stock to provide a critical measure of protection against the risk involved in the imprecise calculation of intrinsic value.

The bridge-building metaphor used above was used in a speech by Warren Buffett over twenty-five years ago. ${ }^{1}$ The margin of safety concept it illustrates was introduced by Ben Graham fifty years before that. ${ }^{2}$ Although it is likely that the majority of "value" fund managers in the mutual fund world have a copy of the book in their offices, there is no way they could even remotely follow the book's precepts. These fund managers generally lack the authority to avoid "investing" in the market, sectors of the market or even specific stocks within those sectors. ${ }^{3}$ Also, as explained earlier, when one "invests" from a quarterly or annual perspective, as does the mutual fund industry, concepts like intrinsic value and margin of safety quickly take a back seat to predictions of short-term price movements that can be independent of intrinsic value. Freedom from these constraints will offer DPCM a significant advantage over the long run.

[^2]
## Appendix 4 Mr. Market \& The Price of Hamburgers

The single most important factor in determining a person's success in investing is the perspective with which he/she views security markets. This Appendix consists of allegories used by two of the greatest investors in history. These allegories are presented below in the words of these investors to help clients view the stock market from a different perspective.

Mr. Market - Ben Graham ${ }^{1}$
You should imagine market quotations (stock prices) as coming from a remarkably accommodating fellow named Mr. Market who is your partner in a private business. Without fail, Mr. Market appears daily and names a price at which he will either buy your interest or sell you his.

Even though the business that the two of you own may have economic characteristics that are stable, Mr. Market's quotations will be anything but. For, sad to say, the poor fellow has incurable emotional problems. At times he feels euphoric and can see only the favorable factors affecting the business. When in that mood, he names a very high buy-sell price because he fears that you will snap up his interest and rob him of imminent gains. At other times he is depressed and can see nothing but trouble ahead for both the business and the world. On these occasions he will name a very low price, since he is terrified that you will unload your interest on him.

Mr. Market has another endearing characteristic: He doesn't mind being ignored. If his quotation is uninteresting to you today, he will be back with a new one tomorrow. Transactions are strictly at your option. Under these conditions, the more manic-depressive his behavior, the better for you.

But, like Cinderella at the ball, you must heed one warning or everything will turn into pumpkins and mice: Mr. Market is there to serve you, not to guide you. It is his pocketbook, not his wisdom, that you will find useful. If he shows up some day in a particularly foolish mood, you are free to either ignore him or to take advantage of him, but it will be disastrous if you fall under his influence. Indeed, if you aren't certain that you understand and can value your business far better than Mr. Market, you don't belong in the game. As they say in poker, "If you've been in the game 30 minutes and you don't know who the patsy is, you're the patsy."

## The Price of Hamburgers - Warren Buffett ${ }^{2}$

A short quiz: If you plan to eat hamburgers throughout your life and are not a cattle producer, should you wish for higher or lower prices for beef? Likewise, if you are going to buy a car from time to time but are not an auto manufacturer, should you prefer higher or lower car prices? These questions, of course, answer themselves.

But now for the final exam: If you expect to be a net saver during the next five years, should you hope for a higher or lower stock market during that period? Many investors get this one wrong. Even though they are going to be net buyers of stocks for many years to come, they are elated when stock prices rise and depressed when they fall. In effect, they rejoice because prices have risen for the "hamburgers" they will soon be buying. This reaction makes no sense. Only those who will be sellers of equities (stocks) in the near future should be happy at seeing stocks rise. Prospective purchasers should much prefer sinking prices.

So smile when you read a headline that says "Investors lose as market falls." Edit it in your mind to "Disinvestors lose as market falls -- but investors gain." Though writers often forget this truism, there is a buyer for every seller and what hurts one necessarily helps the other. (As they say in golf matches: "Every putt makes someone happy.")

[^3]
## Appendix 5 The Volatility-Risk Inequality

When assessing the risk that's involved in investing in a stock, the conventional wisdom equates risk with volatility; that is, the more a stock's price has fluctuated in the recent past, the more risk that is involved in purchasing that stock. This conventional wisdom extends into the context of a portfolio as well. Modern Portfolio Theory holds that an investor can decrease the overall risk of his portfolio by combining securities with market quotations that have historically moved in opposite directions of one another with respect to the overall market.

To create a standard unit of measurement to depict the relationship between the magnitude and direction of a stock's past market price movements compared to those of the overall market, a measure known as beta is often used. A stock's beta can be thought of as an indicator of how much a stock's past market prices have moved in comparison to the overall market. The past prices

## "It has been helpful to me to have tens of thousands of students turned out of business schools taught that it didn't do any good to think." <br> "(Long Term Capital Management) felt that the beta of the stock told you something about the risk of the stock. It doesn't tell you a damn thing about the risk of a stock in my view." <br> "I'd be a bum on the street with a tin cup if markets were efficient." <br> - Warren Buffett

 of a stock with a beta of 1 have generally moved in sync with the market. The prices of a stock with a beta of 1.5 have been more volatile than the market and have tended to move in the same general direction of the market. The prices of a stock with a beta of . 75 have been less volatile than the market and moved in the same direction of the market. The prices of a stock with a beta of -. 75 have been less volatile than the market and moved in the opposite direction of the market. From these examples, the stock with a beta of 1.5 would be perceived to be the single most risky investment because its past market prices have been most volatile with respect to the market.To make a long story short, the conventional wisdom holds that the risk involved in investing in a stock is a function of the past volatility of that stock's market quotations.

It is helpful to assess the accuracy of this conventional wisdom within the context of the historical stock prices of American Express.

## American Express

In June of 2007 a share of stock in this business was quoted at $\$ 65.06$ per share with a market capitalization of around $\$ 78$ billion. (Market Capitalization can be calculated by multiplying a stock's price times the number of shares outstanding in a publicly traded company. Market Capitalization can be thought of as the stock market's valuation of an entire business at a point in time.) Less than two years later, in March of 2009 this business had a stock price of $\$ 9.71$ with a market capitalization of less than $\$ 12$ billion.

Question: In retrospect, when was more risk involved with buying into this business? When the market was offering it for $\$ 78$ billion or $\$ 12$ billion?

The answer to this question is obvious to just about anyone who approaches it from the perspective of a potential business owner, but things are often made much more complicated than they need to be.

In June of 2007 the stock had a beta of 1.1, as its stock price had moved in a fairly similar magnitude and direction to the overall market over the previous four years. In the time between June of 2007 and March of 2009, however, the stock's price declined significantly more than the market. Because of this increase in relative volatility, the stock had a beta of 1.6 in March of 2009.

I am well aware that a number of unprecedented economic events occurred within the time period referenced above, but these events do not justify the blatantly illogical outcome that the conventional view towards risk produces. According to this view, even in hindsight, it was less risky to pay $\$ 66$ billion more for the same business because the past volatility at a price of $\$ 12$ billion was greater than the past volatility that existed at the price of $\$ 78$ billion. Furthermore, the business referenced exemplifies all the characteristics of a great business, possesses the $15^{\text {th }}$ most valuable brand in the world (which itself is valued at over $\$ 20$ billion), was one of the few financial services firms that remained profitable throughout the period and had over \$17 billion of free cash on its balance sheet in March of 2009.

The volatility of past market quotations of a stock can have no bearing on the risk that is involved in buying a long-term ownership interest in a business. At DPCM, risk will be viewed as being a function of two variables: value and price. Price is what you pay for a security and value is what that security is actually worth. When it is possible to buy into a great business at a cheap price, it will be viewed as a low risk investment opportunity. Conversely, overpaying for any financial asset will be viewed as extremely risky. If the market consistently overvalues a stock, such that it has experienced very little past volatility, it will be avoided just as if it had been fairly priced and had recently skyrocketed to its current level. The larger the margin of safety between what something is worth and what one pays for it, the better. Whether this investment opportunity arises from a stock that has recently plummeted in price or one that has experienced negligible volatility is irrelevant.


[^0]:    ${ }^{1}$ Bogle, John. Common Sense on Mutual Funds.
    ${ }^{2}$ The data used in the graphs above is maintained by Robert Shiller, Professor of Economics at Yale University.

[^1]:    ${ }^{1}$ Fisher, Phillip. Common Stocks and Uncommon Profits.
    *Coca-Cola Historical Stock Prices: July 1998 \$86, March 2009 \$37

[^2]:    ${ }^{1}$ Buffett, Warren. "The Superinvestors of Graham-and-Doddsville," Hermes.
    ${ }^{2}$ Graham, Benjamin. Security Analysis.
    ${ }^{3}$ Mahar, Maggie. Bull: A History of the Boom, 1982-1999.

[^3]:    ${ }^{1}$ Graham, Benjamin. The Intelligent Investor.
    ${ }^{2}$ Berkshire Hathaway Inc., Chairman's Letter, 1997.

