

SERIOUS MONEY

Richard A. Ferri, CFA

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Serious Money: Straight Talk about Investing for Retirement

Introduction

We would all like to be successful investors, yet few people achieve a fair return on their investments given the risks they take. Misconceptions about the financial markets cause large reductions in returns. What are these common mistakes and how can people change their approach to eliminate them? Typical investment books promote strategies designed to beat the markets. Those ideas may sound good and look good on paper, but studies conclude that "beat the market" advice almost always fails, hampering retirement savings in the long-term.

Serious Money offers a better alternative. It promotes a philosophy that leads to superior wealth by "indexing" the markets' return. Indexing is an investment style designed to match the performance of the stock and bond markets, rather than trying to beat their performance. By using an indexing strategy, most investors will achieve higher returns on their investment portfolios, without added risk. One way to achieve the return of a market is to use a market matching "index fund." Several mutual fund companies offer index funds. They are also available on a variety of markets, including the U.S. stock market, foreign stock markets, Treasury bond market, corporate bond market, and others. Investors who embrace an indexing strategy will be much farther ahead in the long run than if they listen to popular investment advice that attempts to "beat the street."

There is a big difference between perception and reality on Wall Street. The carefully crafted perception from the investment industry is it is easy to beat the markets by following the recommendations of stockbrokers, analysts, magazines, books, newsletters, and other advice experts. Unfortunately, little evidence supports this belief. In fact, nearly every major academic study concludes the opposite. Beat the market strategies sold to the public en masse eventually backfire, causing below-market results overall. The allure of beating the market has created huge profits for those *selling* investment products and services; however, investors in those products have experienced a large gap between their return and the return of the markets.

This book includes dozens of references citing little known academic studies. Top colleges and universities publish a tremendous amount of information that is useful to individual investors. Several Nobel Prize winning economists contribute to this body of knowledge on a regular basis. Unfortunately,

much of the research remains trapped in academia. There are two reasons for this. First, the research is often complex and technical, making it difficult for the average reader to decipher. Second, much of the research refutes the marketing claims of large investment firms, and that means trouble for the firms. Unfortunately, professors on a limited budget have difficulty competing against the marketing power of Wall Street, so the message does not get out.

Serious Money explains an investment approach that leads to greater opportunities for a secure retirement. By understanding the financial services industry, and by learning what the real drivers are behind investment success, any investor can construct an efficient portfolio that meets their needs.

Part I: The Performance Gap (Chapters 1 - 6)

The book begins with an explanation of the retirement problem facing America, and why every working adult needs to learn about effective investment strategies. Income from Social Security and employer pensions is diminishing. This means each person will need to rely more on his or her own investment savvy to ensure his or her financial security in retirement. The problem is so critical, that some Generation X workers believe they are more likely to be abducted by a UFO than to collect Social Security benefits.

The remainder of the book is divided into three distinct parts. Part I describes the hard facts about the public's lack of investment success in the financial markets, and explains some reasons for the shortfall. Most people are not fully aware of how their investments are performing or how they compare to the appropriate market benchmark. Surveys show wide dispersion between perceived investment returns and actual portfolio results. One example was the scandal surrounding the famous Beardstown Ladies (*Beardstown Ladies' Common-Sense Investment Guide*, New York: Simon & Schuster, 1995). This noted investment club of respected older women published several best-selling books on investing before someone discovered that their great success in the stock market was a sham. The club had grossly miscalculated their return over the years.

How large is the performance gap between investor returns and market returns? The average individual investor achieves about half the return of the markets they invest in. Surprisingly, a number of studies document this phenomenon, some going back to the early 1900s. Recently, a major research project of mutual fund investors conducted by an independent company confirmed the earlier findings. Having personally analyzed the returns of hundreds of individual portfolios, I find performance is definitely lacking. Individual investors are not achieving performance anywhere close to the markets they

invest in.

Why does the performance gap exist? Three chapters in Part I summarize three major reasons for the gap. First, the cost of investing is considerably high for the public. Whether they realize it or not, investors spend on average 2% per year for portfolio management. Brokerage commissions, mutual fund sales loads, management fees, and other charges have a large and direct impact on investment results. Second, market-timing errors reduce performance. As investors try to guess the future direction of the markets, they attempt to buy low and sell high. This may sound very appealing in theory, but there is no academic evidence to support the idea that market timing strategies work. Third, people want to be winners, and they want to own winning investments, so they tend to chase the hottest stocks and mutual funds that have recently beaten the market. Unfortunately, as investors switch from one investing fad to another, they tend to buy high and sell low, which significantly reduces their long-term results. Studies show that chasing-the-hot-dot is the single greatest barrier to investment success.

Part II: Investment Experts and other Barriers to Success (Chapters 7 - 10)

Why do people consistently make investment mistakes such as market timing? One answer lies in an analysis of the investment industry. Part II takes a hard look at the antics of Wall Street and the sellers of investment advice. The industry does an adequate job of educating the public about basic investment concepts and retirement needs, but it does a poor job of executing those concepts. Having spent ten years as a stockbroker at two national firms, I am very familiar with the misleading sales tactics used on Wall Street, and the potential of the products sold. Do not confuse the goals of your financial advisor with your own. While many honest and ethical people work in the field, as a whole the industry exists to make money from you, not for you.

The public is often confused by the role of financial planners, stockbrokers, and other advisors who render investment advice. Most of these people sell investment products and services and are paid a commission or fee for doing so. The title of "Vice President" and other fancy names are earned by reaching a sales quota, not as a result of experience or client satisfaction. There are very few requirements needed to become a financial advisor and virtually no academic background is necessary. As a result, many advisors have very limited understanding of the economics, the stock and bond markets, and the investment products they recommend. Although many people believe their advisor is an investment expert, this is typically far from the truth. Most recommendations are based on the desire to sell a product, not investment acumen.

The mass media has taken Wall Street by storm. Hundreds of magazines, TV shows, radio talk shows, and Internet sites spout out fountains of investment advice on a regular basis. Is any of this information worth following? The perception is that the advice helps people invest effectively for retirement and other long-term goals. Clearly, the investment world does not change that rapidly. As a result, there should be no need to recommend different investments on a daily basis, as most in the media do. It would be more beneficial to investors if the media stayed consistent with a few wise mutual fund choices. However, the media is not in the advice business, they are in the advertising business. Their goal is to sell advertising space to financial companies such as mutual funds, brokerage firms, insurance companies, and others distributors of financial products and services. Therefore, the information that pours out of the media concentrates on short-term strategies, which does the public more harm than good. This information may please advertising clients who benefit from turnover, but it does not help individual investors who are trying to save and invest for the long run. In many ways, your success as an investor is based on your ability to ignore the quasi-advertising in the mass media, and concentrate on the important concepts highlighted in Part III this book.

With more than 400 mutual-fund companies and over 10,000 mutual funds on the market, investing in mutual funds has become a national phenomenon. However, the mutual fund industry has many ghosts in the closet. Few people know much about the funds they invest in or about the mutual fund industry in general. The last chapter in Part II explains some interesting and disturbing facts about the mutual fund business. In the never-ending battle for investor attention, many companies use questionable sales practices and promote short-term investment strategies. This lowers investor performance and increases your frustration.

Part III: Closing the Performance Gap (Chapters 11 - 16)

Part III of this book offers a unique solution for achieving a fair return on your retirement savings. It begins with a brief historical review of the stock and bond markets, which includes an estimate of the returns expected in the future. The performance of the markets over the next 20 years is likely to be more challenging than the last 20 years.

Investing in the stock market is best accomplished through indexing. This method of investing involves the purchase of index mutual funds that are designed to produce the return of a market index, such as the Dow Jones Industrial Average. Several low cost index funds are now available through a number of mutual fund companies. Ultimately, an investor should build a globally diversified portfolio of low cost

stock and bond index funds, and maintain that mix for a very long time. Indexing the global markets keeps investment costs low and eliminates the need to chase popular strategies.

The bond market offers investors a variety of low cost options. In addition to low cost bond index funds, people can purchase individual bonds. Part III includes simple strategies explaining each method. Purchasing individual tax-free municipal bonds offers a great advantage for high net worth investors. In complex markets, such as high yield bonds or mortgages, investors should rely on low cost mutual funds.

We all have different ideas of what "retirement" means. For some people it means no work at all, for others it means cutting back from a full-time occupation. Nevertheless, every retiree should know approximately how much money they need at retirement and develop a savings plan to meet that goal. The annual income from this nest egg should be large enough to fill in the gap left by diminishing pensions and Social Security.

One step in the financial plan is to decide how much to invest in stocks and bonds. This is called asset allocation. Your asset allocation decision should be based in part on the mathematical assumptions of the retirement goal, plus your attitude toward risk. There is an interesting chapter that covers these concepts. What makes a plan work is the discipline to maintain a consistent allocation over a long period of time and during all market conditions. If people take too much risk in their portfolio, they are likely to abandon the investment plan during adverse market conditions, which will lead to lower long-term results.

Tax planning is an essential ingredient in any investment plan and is covered as a separate chapter. Investors should use tax advantaged retirement accounts and purchase tax efficient investments whenever possible. The less you pay Uncle Sam, the more you have working on your behalf.

The last chapter includes a review of the main points in *Serious Money*, and provides a case study of how one couple invested their portfolio using these ideas. Earning a fair return is not difficult. The methods presented in this book are logical, easy to understand, and lead to greater wealth. Warren Buffet once said, "You don't need to be a rocket scientist. Investing is not a game where the guy with the 160 IQ beats the guy with 130 IQ."

Appendixes:

Serious Money ends with three appendixes. Appendix #1 provides the formulas needed to calculate an

investment return. Every investor should keep track of their returns on a regular basis and compare the returns to an appropriate market benchmark. Appendix #2 is for individual stock investors. It explains why stock investing is only a hobby and should be treated as such. It also explores the relationship between brokerage firms and investment banking clients. Appendix #3 provides background information about the oversold use of canned asset allocation models. Advisors who sell products using simplistic risk tolerance questionnaires to figure an asset allocation cause more harm than good.

Chapter 1

The Importance of Saving for Retirement

Most of us have a pretty clear idea of the world we want. What it takes is an understanding of how to go about getting it.

Hugh Gibson

A dramatic change is taking place across working America. The country is realizing that traditional sources of retirement income from pension plans and Social Security are quickly diminishing. Soon, all retirees will be dependent on personal savings and part-time work for a majority of their income. This means Americans must save an adequate amount prior to retirement, and make intelligent investment decisions with those savings. In a sense, the future of America rests on the ability of workers to save and invest properly.

Unfortunately, most investors do not have the information or experience needed to make the best investment decisions, and that includes professional financial advisors. We are inundated with investment information and advice from hundreds of sources, each promising higher or safer rate of returns. Over the years, the chore of selecting suitable investments has become increasingly difficult as markets expand around the globe and the burgeoning financial services industry expands with it. Wise investors try to develop a simple strategy that makes managing their money simple and profitable.

Before looking at the problems and solutions pertaining to retirement savings, this chapter provides some background information about saving for retirement. Many of the terms explained below are used throughout this book.

Who are Individual Investors?

The financial services industry typically divides investors in two categories: institutional and individual. Institutional investors include banks, trust companies, mutual fund companies, insurance companies, large corporate and government pension funds, endowments, charitable organizations, and other entities with sizable pools of money. Institutions hire professional money managers on a full time basis to evaluate investment opportunities and manage large portfolios. Basically, institutional investors manage other people's money.

In contrast, individual investors are responsible for managing their own money, and possibly a small business retirement plan, family trust, or estate. These people are not professional investors and are not paid for managing investment portfolios or evaluating investment options. Most individual investors

control assets of less than \$100,000. As a result of their smaller size, individuals tend to pay much more for investment products and services, but typically get a lot less for their money. The great gains that you often hear about on Wall Street are not those experienced by the average individual investor. Part I of this book explains that fact in full detail.

It is worth noting that stockbrokers, financial planners, insurance agents, and other personal investment advisors are not institutional investors, although they do manage other peoples money. Generally, these advisors act as middlemen between individuals and institutional investors. In truth, they are product salespeople. These advisors are typically paid a fee or commission for selling the products and services of institutions, such as mutual funds or insurance.

How We Will Pay for Retirement

Americans are becoming increasingly responsible for their own retirement well being. The prospect of living off a company pension and Social Security check is rapidly diminishing. Recent retirees are already relying less on traditional sources of income and more on savings and part-time work. For future retirees, the situation will get worse. As a result, the desire to build a large nest egg for retirement has been replaced by the need to build one.

In the 1960's, a monthly employer retirement check and benefit payments from Social Security accounted for over 50% of a retiree's income. By 1992, those traditional sources of income had dropped to less than 30%. When millions of baby boomers begin to retire in 2010, income from traditional sources may approach 10%. The shortfall in income must be made up through a combination of personal savings and part-time work. Those who do not save for retirement may find their Golden Years are spent flipping burgers at the Golden Arches.

How People Will Pay for Retirement

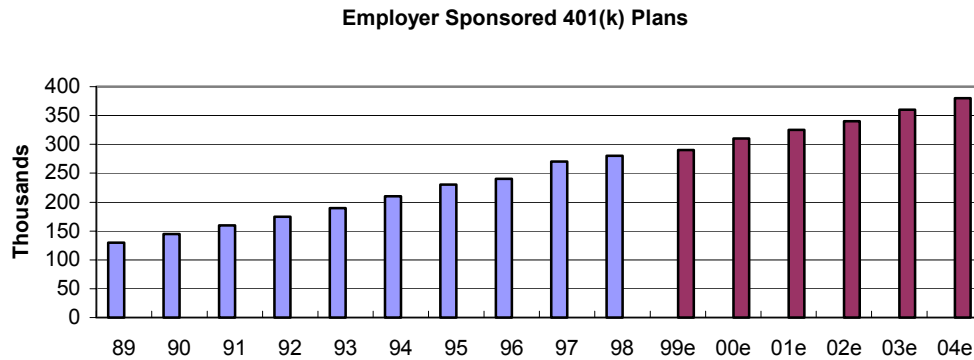
	Traditional Pension	Federal Programs	Personal Savings	Part-time Work
1992	8%	19%	46%	27%
2029	4%	7%	48%	41%

Source: Fortune magazine

The Growth of Individual Retirement Accounts

America's answer to the retirement savings problem seems to be the employer sponsored 401(k) or similar plan. Over 270,000 corporations offer employees a 401(k) tax-deferred savings plan and thousands of public employers offer 403(b) plans to hospital workers, teachers, and government employees.

Contributions are made to these plans through regular payroll deductions, and some employers match a portion of those savings¹. According to the Department of Labor, over 40 million workers are covered under a 401(k) or similar plan. At the beginning of 1999, there was more than \$1.0 trillion invested in these plans, and that amount is expected to grow to \$2.0 trillion by 2003².



In addition to 401(k) type plans, Individual Retirement Accounts (IRA) have also flourished. This has happened for a couple of reasons. One is employee turnover and the second is tax law changes.

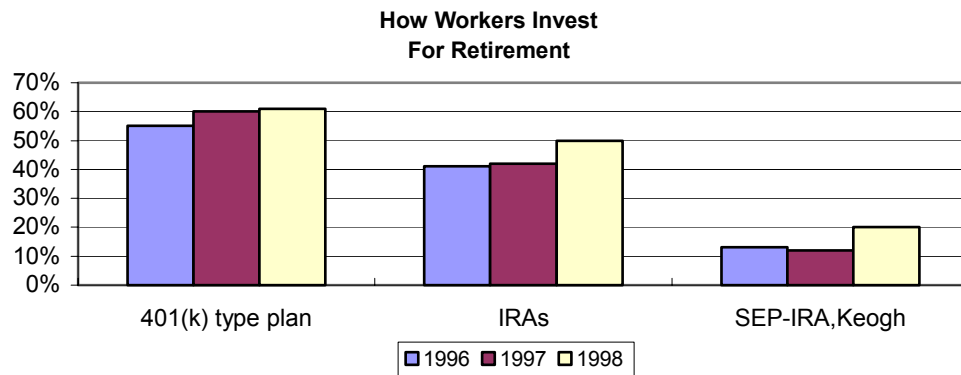
Only a generation ago, a large percentage of workers spent most of their adult life at one company, retiring after decades of service with a gold timepiece and a monthly pension. Times have changed. The Current Population Survey shows workers have become much more transient. Back in 1983 the average middle-aged male worker stayed on the job for 13 years, by 1996 that was down to 10 years. Women average only 7 years at each company they work. The decrease in service time is a result of corporate downsizing, productivity gains, and a fundamental shift in the economy from a manufacturing base to a service base.

The increase in job turnover has resulted in tens of millions of IRA rollover accounts. When a person leaves an employer, they typically roll their portion of a pension plan into an IRA to avoid income taxes. Since the person has just lost their old job, or is just taken a new one, they have more to worry about than investing this money properly. As a result, many workers take the simplest rollover option and place the money at a custodian that was recommended by someone at their previous employer. After several years in the work force and a few jobs later, most people have numerous IRA rollovers scattered all over at various investment firms, banks, and mutual funds. Many of these accounts are not in the optimal place, nor the most efficient investments. Without consolidating this money and investing properly, the accounts can remain stagnant for years, earning below market returns and resulting in less money at retirement.

¹ Over 90% of large plans have an employer match according to the Bureau of Labor Statistics, *Data for Large Business*, 1995; and Buck Consultants, *Survey Report on Plan Design*, Ninth Edition, 1997

² Spectrum Group-Access Research (Windsor, CT)

In addition to IRA Rollovers, many people have a contributory IRA. Prior to 1987, all wage earners could contribute up to \$2,000 per year pre-tax into a contributory IRA. Congress changed the tax law in the late 80s and many people lost the opportunity to contribute. However, the accounts still exist on



the books. Like IRA rollovers, much of the contributory IRA money is neglected, stashed away in some forgotten investment from yesteryear.

By 1997, there were over 140 million IRA accounts nationwide holding \$500 billion in assets³. However, this did not stop congress from creating new IRA's. The Taxpayer Relief Act of 1997 included two new accounts called the Roth IRA and the Educational IRA. Under both plans new accounts need to be opened, adding to the mountain of existing paperwork. Both the Roth and Educational IRA's have gotten a lot of public interest.

Lot's of Accounts to Keep Track Of

Individual investors have a lot of information to keep track of. I recommend using a spreadsheet program like *Microsoft Excel*® or a financial planning program like *Quicken*® to help organize the data. Some Internet web sites offer a free service, which allows you to type in account positions and track the portfolios on a daily basis. Since we are involved in so many accounts, it is not hard to understand how investors can lose track of their investments. Putting all this information in one place is a beginning step toward increasing your investment results.

Summary

During his 1999 State of the Union Address, President Clinton acknowledged the impending crisis in Social Security. As Americans become more responsible for their own retirement income, investment skills must improve. Contrary to popular belief, there is no secret formula to investing in the markets. This

³ Department of Labor statistic, 1997

book dispels many myths about investing and the investment process. Following a few simple rules and sticking with them for a lifetime is what earns a secure retirement. The strategies outlined in Part III of this book are simple, low cost, and offer a tax friendly solution to a serious problem facing us all.

Chapter 2

Investor Results: Perception versus Reality

The easiest thing of all is to deceive one's self; for what a man wishes, he generally believes to be true.

Demosthenes

Saving money on a regular basis is an important part of any retirement plan. Equally as important, if not more important, is the rate of return you earn on your retirement savings. Without an adequate return on investment, decades of saving may not be enough to maintain your lifestyle in retirement. This chapter discusses elements of your personal investment performance that you may not have considered, or have not adequately addressed. These issues focus on your investment results in the financial markets, as opposed to the returns of the markets themselves. There is a big difference. Ironically, a sizable gap exists between the return of the markets and the average investors return in those markets.

When most people talk about investing, they generally discuss how the stock market is performing today or how a particular company is fairing this year. Few people talk about their returns in the context of their total portfolio holdings, and no one, it seems, discusses long-term results. There are reasons for this. First, the public has only a vague idea of how their total portfolio is performing. Second, individuals tend to believe they are earning well above average. When asked to quantify the results with accurate numbers, most people cannot. The default answer is to say that they are holding their own against the market, which is typically not the case.

The problem of investor performance has caught the eye of the [former] Securities and Exchange Commission (SEC) director. There is talk from time to time of requiring mutual fund companies to report individual performance on client statements. This is different than the performance of a mutual fund you see in the newspaper. The calculation for personal investment performance is much different than the way results are calculated for the paper. Appendix #1 provides the formulas for doing these calculations. Until the SEC requires all brokerage firms to calculate performance, the only way for most people to know their account return is to calculate it on your own.

By the way, do not rely on your stockbroker or other financial advisor to calculate this return for you. Most are ignorant about the math involved. Besides, most advisors are paid commissions or fees for their investment advice. Issues involving performance measurement of their advice tend to question the quality of that advice, and the purpose for paying the advisor.

Wise investors will check the results of their portfolio on a regular basis and compare it to an appropriate market index. Monitoring portfolio results will help expose any performance gap that exists

between the return of the markets and your returns. We will discuss in future chapters how investment costs, market-timing errors, and portfolio turnover contribute to the performance gap, and how you can easily eliminate most of the gap in your portfolio.

An Introduction to Investor Returns

It is no secret the stock and bond markets have returned unprecedented gains since the early 1980s. Low inflation and the lengthy economic expansion have provided a windfall for investors in financial assets. Although the performance of the financial markets has been exceptional, the average individual investor has had a very difficult time capturing those returns. According to DALBAR Financial Services, the average stock and bond mutual fund investor achieved only about half the returns of the markets they invested in during the period.¹ Having personally calculated hundreds of individual investor returns over the years, my experience concurs with the DALBAR data (see Chapter 3 for details on the DALBAR data and similar studies).

Obviously, in any study of investor returns, no two people achieve the exact same results, and the range is wide. However, as a group, the performance of individual investors is remarkably low. There may be people that actually performed better than the markets over the long-term, but they are a small group indeed, and I have never met one. A vast majority of investors have not come close to the returns of the stock and bond markets they have invested in, and the trend will continue in the future.

Most Investors Have Only a Vague Idea of Their Investment Results

Surveys show that most investors have only a vague idea of how their portfolios are performing. In 1997, SEC Chairman Arthur Levitt spoke to a large gathering of individual investors and asked the audience, "How many of you know precisely how you've done?" Only one third of the audience raised their hand. If so few of these informed investors knew their actual investment results, one can only guess the small percentage of the entire investing population that know theirs.

If a person does not know their actual rate of return, they tend to make an educated guess. This estimate is usually much higher than the actual result. Studies show people generally believe they are performing 3% to 4% higher than is the case.² Sometimes investors have a selective memory when it comes to total return. They only remember periods of good performance and tend to forget periods of poor performance.

Typically a person is aware of the performance of their best picks, such as a hot mutual fund or top performing stock, but the estimate degrades when their entire portfolio is taken into account. When asked to comment on long-term results, many people quote the return of their best investment as the long-term

return of their entire account, even though one may have little to do with the other.

We tend to alter reality to fit our perception of our abilities. Many investors for whom I have calculated results thought they were beating the markets, when in fact their performance was much less. Author Peter Bernstein explains the reason for this cognitive error:

We like to believe we are above average in skills, intelligence, farsightedness, experience, refinement, and leadership. Who admits to being an incompetent driver, a feckless debater, a stupid investor, or a person with an inferior taste in clothes?³

Common Errors when Calculating Investment Returns

The best way to know how a portfolio is performing is to calculate the return on a regular basis. While this exercise may seem easy, the math can get tricky. Mistakes are common and sometimes they compound into very large errors. I find there are two common mistakes people make when calculating returns. Both errors are explained below.

Counting Deposits and Withdrawals as Investment Gains and Loses

A common error when calculating investment returns is to treat deposits as investment gains, and withdrawals as investment losses, rather than treating them as additions or subtractions to an account. Here is one embarrassing real life example of a group that counted deposits as investment gain:

The Beardstown Ladies are members of a famous investment club formed in the early 1980s. The ladies rose to prominence in the mid-1990s after the club proclaimed fantastic investment results. For 10-years ending 1993, the club reported a compounded return of 23.4% in their stock portfolio versus 14.9% for the S&P 500. The ladies bought stocks of companies they knew, like McDonald's and Coke. The investment success propelled the ladies into stardom. They appeared on TV shows and in commercials, spoke on radio programs, and not to miss a moneymaking opportunity, published best selling books on the subject of personal finance and investing.

The world changed for the Beardstown ladies in late 1997. A reporter from the *Chicago* magazine noticed something peculiar about their published investment results. After calculating the numbers several times, he concluded that a gross error had been made. The error was so large, that the accounting firm of Price Waterhouse was called in to clear the air. In the final tally, the clubs worst fears were realized. The ladies' actual return was only 9.1%, far below the 23.4% they reported, and well below the S&P 500. For years the ladies deposited monthly dues into their account and classified it as an investment gain, rather than additional capital. An embarrassed treasurer blamed the error on her misunderstanding of the computer software the club was using.⁴

It is natural to make return calculation errors in a bull market. Investors expect their account to be performing well. An error may not be large enough to effect performance in the short run, but if not corrected, the distortion compounds over time. Deposits and withdrawals are never treated as investment gains and losses with one exception, withdrawals used to pay direct investment expenses such as manager fees and trading costs are treated as a loss. This exception will be covered in more detail later in this chapter.

Buying and Selling Can Cause Return Calculation Errors

Flip through the mutual fund section of your local newspaper and you can quickly tell how your funds are performing. Although the return of a fund is listed correctly in the paper, it may not tell you much about the performance you have personally experienced in the fund. Investment returns can become distorted if you make frequent transactions in your account, such as adding money to a 401(k) plan each month. The following example highlights this problem:

At the beginning of the year, you invest \$1000 in a stock mutual fund. By the end of the year that mutual fund is up 15%, therefore, you made a \$150 profit. Satisfied with this result, at the start of the second year you place another \$1000 in the mutual fund bringing the total to \$2150.

Unfortunately, during the second year the market moves down and the fund falls 10%. Overall, your account lost \$215, leaving you with a balance of \$1935.

Here is an interesting question. During the two-year period, what was the return of the mutual fund and what was your actual return?

The mutual fund gained 15% the first year and lost 10% the second. A \$100 investment grew to \$115 after the first year and fell to \$103.50 after the second. That's a total gain of 3.5% for the period and an annualized return of 1.7%. Although the fund had a positive return, you did not make any money. You lost \$65. Your annualized return was -2.2% based on average two-year investment of \$1575 (\$1000 the first year and \$2150 the second). In affect, the return of the mutual fund was not the same as your return.

The return to the investor is not determined by the performance of the markets, it is determined by the behavior of the investor. In the example above, the fund did not cause the \$65 loss, a timing error by the investor caused the loss. Let's look at this phenomenon in a larger picture. The stock market returned about 18% annually over the last 20 years, however, the average investor did not experience returns close to that number in their personal portfolios. As we will learn in Chapter 3, the average stock investor earned *significantly* less than the stock market. The timing of cash flows into and out of various investments was a large cause for the difference.

How do you determine your exact performance? You must calculate returns regularly and compare them to an appropriate benchmark. See Appendix A details.

Why Accurate Investment Results Are Not Provided for You

Instead of calculating a rate of return on your own, why not take the easy way out and ask your broker or financial advisor to do it for you? Good luck. Many advisors are not willing or able to produce accurate performance reports. Some advisors simply do not have the technical know-how, while others realize it may not be in their best interest to disclose performance information.

Believe it or not, most stockbrokers and financial advisors are not trained in performance reporting techniques. Performance calculation formulas are not covered under the stockbroker exam (Series 7), nor are they part of the Investment Advisor exam (Series 65). Having worked in the industry for several years, my experience is that advisors generally avoid discussing long-term investment performance with their clients. When someone brings up the question, the classic advisor response is "your account is doing fine."

Wrap Fee Ambiguity

Some stockbrokers and independent advisors do offer limited performance reporting services. "Wrap fee" programs typically include performance monitoring as part of the package. Wrap programs bundle several portfolio costs together into one fee. These services include account management, commissions, custody services, and performance monitoring. The fee is typically deducted from a client's account on a quarterly basis.

I find the performance reports of most wrap fee programs to be confusing and ambiguous. The reports tend to highlight an account's "gross" investment return rather than its "net" return. This means the fee paid for the service is added back into the account before a return is calculated.

If your investment advisor reports gross returns, they are obviously overstating the results. Assume you open a wrap fee account in January for \$100,000 and agree to pay a 3% fee. During the year securities are bought and sold, and \$3,000 in fees is deducted. By the end of December the account value is \$98,000. Most wrap fee reports from brokerage firms will report a gain of 1% on the account, while a logical person can clearly see there is a 2% loss. Why the difference? Most wrap fee programs do not consider the 3% fee as an expense. Instead, fees are considered a withdrawal from the account. As a result, the 1% gain is highlighted on the report.

Hogwash! Unfair! Reporting gross returns to individual investors is a deceptive and unethical

practice. The SEC should ban this standard practice used by most brokerage firms. Although the SEC does require fees to be disclosed, and net-of-fee performance to be someplace on the report, many firms place that data near the end of the performance report and make it as obscure as possible. In my opinion, the reason brokers shun net performance is because the account has failed to achieve its investment objective, and the brokerage firm is trying to hide the truth. In a related matter deserving of SEC attention, many brokers use vague marketing material, highlighting select performance numbers that excludes fees and expenses. Although advisors are obligated to show a prospective client their net results, they often forget to point out the fine print.

Performance reports given to individual investors should be clear, easy to understand, net of all fees, and compared to an appropriate market benchmark. For example, an account that contains small stocks should be compared to an index of small stocks, not the overall stock market. Unfortunately, many advisors choose a benchmark that makes them look good, rather than comparing their results to an appropriate index. On one occasion, I sat in on a meeting where an investment advisor tried to convince my client that his firm's risky high-yield junk bond portfolio was a good choice because the returns were better than the returns of super-safe Treasury bills!

Until the SEC cracks down on performance reporting shenanigans, you need to look long and hard at the reports you're getting from your investment advisor. More than likely those reports are not worth the paper they are printed on. Your best protection is to calculate performance numbers on your own, and then compare those results to an appropriate market index.

¹ DALBAR *Special Report: Quantitative Analysis of Investor Behavior*, DALBAR Financial Services, Boston, MA, April, 1994, covering a period from 1984 through 1994, updated to 1996.

² W. N. Goetzmann and Nadav Peles, "Cognitive Dissonance and Mutual Fund Investors," *Journal of Financial Research*, Summer 1997. Of two groups of investors, one group consisted of people who were members of an investment club, and the others were less informed participants in a small retirement plan. The informed group had no better record of guessing their performance than the uninformed group.

³ P. Bernstein, *Against the Gods: The Remarkable Story of Risk*, New York: John Wiley & Sons, 1996, pg. 269

⁴ Calmetta Colman, "Beardstown Ladies Fess Up to Big Goof," *Wall Street Journal*, Mar18, 1998, p. C1.

Chapter 3

Measuring the Performance Gap

One of the great differences between a wise man and a fool, the former only wishes for what he may possibly obtain, the latter desires impossibilities.

Democritus

In the 1980s and 1990s, the stock and bond markets delivered superior returns, better than any other twenty-year period in the history of Wall Street. Most individual investors in those markets assumed they were participating in their fair share of the gains, but in reality, the average investor experienced performance well below the return of the markets. While this is a somber fact, it is not a new phenomenon. Individual investors have a long history of below average performance that spans the 20th century. The problem is, few people know it, even less are willing to admit it, and only a handful will ever do anything about it.

A History of Underachievement

In the early 1900s, a man who called himself Don Guyon worked at a prominent Wall Street brokerage firm. In 1915, after years of observing individual clients buying and selling stocks, he decided to conduct a study to see if he could improve their trading records¹. Guyon began documenting the trades of six clients, meticulously recording all their transactions in five active stocks. This was no easy task. Back in the days before computers, all transactions were recorded by hand. To accurately assess the investment skill of each client, Guyon needed to match all the sell orders against all the buy orders. He also had to adjust for stock splits and dividend payments. The profit or loss of each trade was recorded in a cumulative balance.

Guyon diligently tracked this activity for eight months. When he thought he had enough data, he tallied the results. During the period, the average gain of the five stocks was 65%, with each one returning from 29% to 129%. The investors thought they had done fairly well during the period, but their actual results were quite the opposite. The average *loss* in each account was 3.5%.

¹ Don Guyon, *One-Way Pockets*, Fraser Publishing Company, Burlington Vermont, 1965. Originally published by Capstone Publishing Company, NY, 1917. The five stocks studied were US Steel, Crucible Steel, Baldwin Locomotive, Studebaker Corporation, and Westinghouse Electric.

How did the clients lose money while the stocks they bought and sold surged ahead? Guyon theorized the problem was not the stock; *it was the behavior of the investors*. Generally, the clients waited for a stock to go up in value before committing a large amount of money to it. Apparently, investors feel more comfortable buying stocks that had recently made money for someone else. If a stock went down after purchase, it was sold at a loss.

This trend following behavior caused excessive portfolio turnover. Many trades were profitable, but after adjusting for commissions and trading spreads, all of the profit disappeared. Investor behavior can affect portfolio returns, and those returns can be far different than the markets. Based on this new evidence, Guyon recommended that his clients hold their positions longer and avoid the cost of trading.

Times Have Not Changed

Have investment results and trading habits improved from the early 1900s? They should have, based on the superior information at our fingertips. But there is no evidence to support that claim. Recently, one independent research company attempted to quantify the answer. In 1995, Boston based DALBAR Financial Services published an in-depth study of investor performance in mutual funds. The purpose of the study was to see how much money investors made in mutual funds, as opposed to how well the mutual fund performed in relation to the markets. The original report studied mutual fund investors from 1984 through 1994, and then updated the information in 1995 and 1996.

DALBAR divided the mutual fund universe into stock and bond funds, and further divided the funds based on the distribution method direct and indirect. Indirect funds are those offered by stockbrokers and other salespeople who charge a commission. Direct funds are those offered by fund companies direct to investors at no commission. These four categories allowed DALBAR to study the behavior of investors in different markets and different distribution systems.²

Mutual funds measure return based on relative performance to a market whereas investors measure return based on the dollars gained or lost. Similar to the Guyon study, DALBAR tallied the profit or loss on each mutual fund trade during the period, and calculated a cumulative total dollar gain for all fund investors over the years. DALBAR measured the difference between the dollar gains of investors and the reported returns of mutual funds. The results are hard to believe at first reading.

² DALBAR Financial Services, Boston, MA, excerpts taken from the *DALBAR Special Report, Quantitative Analysis of Investor Behavior*, June 1996. Considerable amount of data and text in this section were directly from the DALBAR study. The DALBAR report is available to the public on request.

DALBAR Results From 1984 Though 1996

Researchers found a large gap between the average reported return of the funds and actual investor profits in those funds. It did not matter whether the fund category was direct market no-load funds or broker sold load funds, the “performance gap” for both categories was extremely large. The gap between reported mutual fund returns and investor returns is illustrated in Figure 3-1:

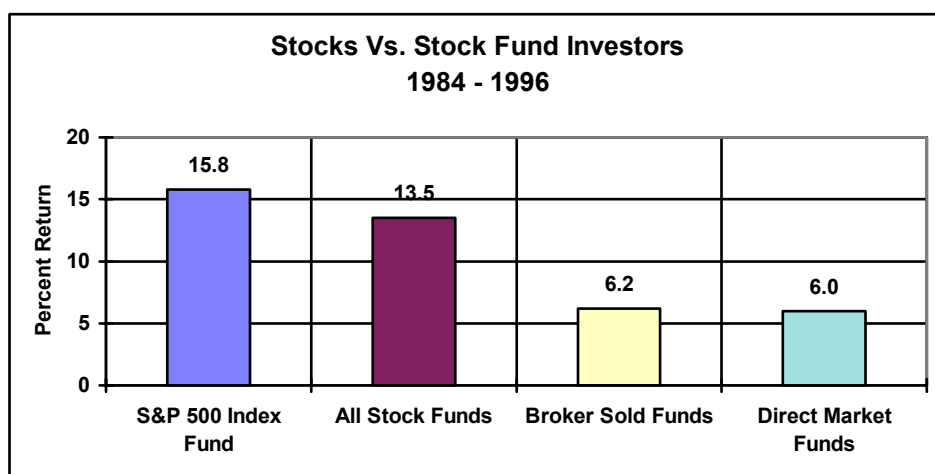


Figure 3-1: Source - DALBAR Financial Services

The average stock mutual fund achieved a 13.5% return during the period. However, mutual fund investors did not achieve anything close to the return of the average fund. The average investor saw their capital compound at only 6.1% annually during the 13-year period. In addition, a simple S&P 500 index fund achieved a 15.8% annual return over the period, outperforming everything else.

Notice the 0.2% difference in returns between broker sold funds and direct market funds. The data suggests that investors who purchased commission funds achieved higher returns than no-load investors. DALBAR determined investors who bought load funds held onto their positions longer, thus had an increase in total performance. However, the study did not take into account commissions paid to buy broker sold funds, thus adjusting for the load caused the actual return of load funds to be lower than those stated in the study. While the issue of load verses no-load is a hotly debated topic in the investment industry, the fact remains that investors in both categories did poorly.

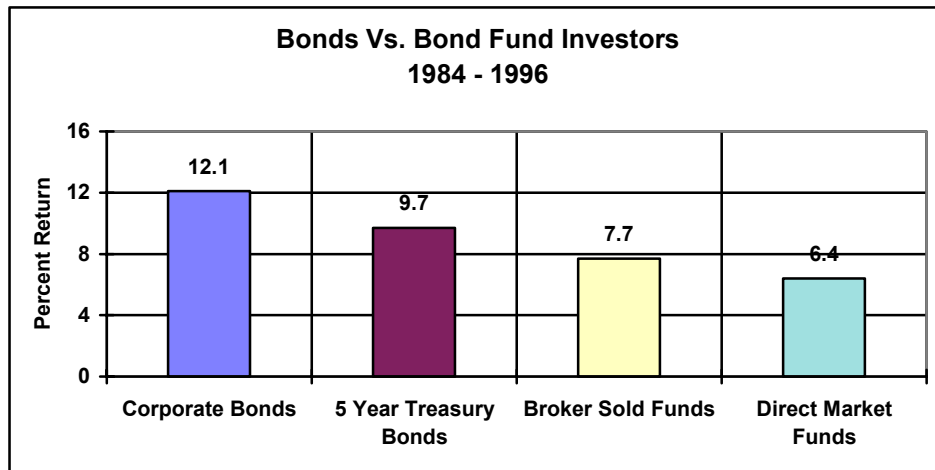


Figure 3-2: Source - DALBAR Financial Services, Ibbotson Associates

Bond fund investors also experienced a performance gap as illustrated in Figure 3-2. The return of investors in bond funds is compared to the return of a 5- year Treasury note and a corporate bond composite over the same period. Both indexes were reduced by 0.2% to reflect the cost of buying the bonds. Overall bond fund investors performed more than 2.0% below the 5-year Treasury note and 5.0% less than corporate bonds. Investors in broker sold funds achieved a higher return than direct market investors, however, this was before commissions. If the data was adjusted for sales loads, it is debatable whether load fund investors would have made more money than no-load fund investors. In either case, all investors made less money than they would have made had they simply purchased individual Treasury notes or corporate bonds.

What does the DALBAR study tell us? It makes it clear that the average individual investor significantly under-performs the markets they invest in. It is also clear that account returns are far more dependent on investor behavior than on market returns. Despite all the buy and hold literature disseminated by the investment industry, the public is still very much inclined toward trading in and out of various investments at precisely the wrong time.

The study also provides little evidence that stockbrokers and other financial advisors effectively manage their client's money. Based on the high correlation of returns between broker sold funds and direct market funds, one can only conclude that investors do not gain monetarily by seeking the advice of investment experts, especially after factoring in commissions and fees.

Other Studies of Investor Performance

The DALBAR results sparked other research into the area of investor returns. Morningstar conducted a study of growth fund investors in 1995. It was limited to only US growth funds, and covered a five-year period from June 1989 through May 1994. The conclusion of the study was consistent with the DALBAR results. The average growth fund in the category returned 12.5% during the period whereas the average investor in growth funds lost 2.2% of their capital. The Morningstar study is important because it highlights the damage that can result from chasing hot performing funds. We will take a closer look at this study in Chapter 5, Chasing the Hot Dot.

Money magazine published an informative article on investor returns in April 1997. The article highlighted mutual funds that achieved high returns during the previous year but lost investors money during the same time³. For example, Money looked at the Van Wagoner Emerging Growth fund (VWEG). During the first half of 1996, VWEG shot up over 60%. If an investor had put \$10,000 in the fund on January 1st they would have had \$16,000 by the end of June. Unfortunately, few people put money in the fund in January. Assets were less than \$1 million.

The superior performance of VWEG in the first half of 1996 caught the eye of investors. Assets exploded to over \$800 million by the end of July, but it was too late. During the second half of the year, the fund collapsed. VWEG fell over 30%, from its peak ending up 27% for the year. While this is a great return for the entire year, most investors only caught the 30% downturn in the second half. Money calculated the average shareholder loss at 20% of their investment, for a total of \$100 million. Even though VWEG beat the stock market in 1996, the average investor in the fund lost money. Published performance can be vastly different from investor's experience.

The SEC is Aware and Concerned

The Security and Exchange Commission (SEC) is fully aware of the discrepancies between market returns and investor returns. Barry Barbash, director of the SEC Investment Management Division, would like to see changes in the way performance is reported to clients. During a speech given to the Investment Company Institute in March 1997, Mr. Barbash said he would like to see personalized performance data on mutual fund statements that shows how an investor's buying and selling affected their results. "The discrepancy between a fund's performance and that of its shareholders can be large," he said. "Investors would benefit from knowing how well they did as opposed to how well their fund did." Barbash

³ Jason Zweig, *Funds That Really Make Money For Their Investors*, Money, April 1997, pg. 124 - 134

acknowledged that the cost of this data would add an expense to owning a mutual fund, and educating the shareholders would also be challenging.

How Stock Pickers Have Fared

Mutual funds have become a vehicle of choice for stock market investors, but there are still a number of do-it-yourself stock pickers around. Have trading habits improved since the days of Don Guyon? Not according to Terrance Odean of the University of California. In 1997, Odean conducted a landmark study of 10,000 individual accounts at a large discount brokerage firm. He analyzed the performance of 97,483 stock trades in those accounts between 1988 and 1993. Odean kept track of the stocks each investor sold and compared them to the performance of the ones they bought⁴.

Odean compared the results over several time periods. During the two-year period, the stocks sold beat the market by 2.9% and the stocks bought underperformed by 0.7%. Transaction costs also reduced returns by another 5.9%. Odean figured the average stock investor lost 9.5% in value trading stocks during the period. In all time frames, the stock traders lost value over buy and hold investors.

“Overconfidence is a big issue here,” Odean believes. Investors appear to think they are better stock pickers than they actually are. He also found several examples of a “herding” mentality. Although over 10,000 stocks are actively traded on the US exchanges, a majority of the stock accounts held the same popular stocks. Most of these stocks were recent Wall Street darlings that had made a large price gain in the months prior to the date they were purchased.

Robert Shiller, professor of economics at Yale University, found similar herding patterns in his research. Shiller surveyed individual investors and found that “interpersonal communication” was the number one factor affecting an investment decision. People buy stocks their friends are buying, and sell what their friends are selling.⁵

Dr. Jeremy Siegel of the Wharton School attempted to quantify the results of individual stock pickers. In his book, *Stocks for the Long Run*, Siegel suggests that the average stock investor lags the market by about 5% per year⁶. He states the reasons for this shortfall is a lack of information and a lack of skill. In order to achieve superior returns, Siegel believes you must have superior information about an investment, and have the skill to trade on that information. Since few individual investors have superior

⁴ As reported in *Registered Representative* magazine, July 1997, pg. 38

⁵ Robert Shiller, *Market Volatility*, MIT Press, Cambridge, MA, 1992

⁶ Jeremy J. Siegel, *Stocks for the Long Run*, Irwin Press, 1994, pg. 292.

information or skill at trading, most stock investors perform poorly. Don't feel bad. Most professional money managers have only average information and average skill, so they do not beat the market either.

Having spent many years measuring the performance of individual accounts, I can attest to the accuracy of the studies above. I have yet to meet a non-professional investor who consistently achieves superior returns. There are times when people get lucky and guess right, but over the long haul, the markets are far more efficient than the average investor. Playing the market can be fun, but don't confuse luck with skill. That wreaks havoc on your retirement savings.

In the last two chapters, we learned that most people achieve returns significantly below the markets they invest in, yet they believe they are faring much better. The next three chapters look at three reasons why this performance gap exists.

Chapter 4

The High Cost of Low Returns

A billion dollars here, a billion dollars there, and pretty soon you're talking about real money.

Everett Dirksen

Our examination of the performance gap begins with the obvious, a discussion of fees and expenses. As a general rule, investment costs detract from performance on a one for one basis. There is no advantage to paying a high price for investment products or advice. The perception that superior returns can be achieved by paying a large fee to a mutual fund manager or an investment advisor is a marketing myth. There is no data to support this wishful thinking. If you spend a lot of money seeking superior returns, you will end up further behind.

The average investor faces a mountain of expenses, many of which they don't even know about. Some costs are easy to find, such as brokerage commissions, management fees, custodial costs, and sales loads. However, the most damaging costs are often hidden below the surface. These include trading spreads, market impact of trades, opportunity costs, "soft dollars", taxes, and other expenses that degrade returns. Taking all costs into consideration, except taxes, the average individual investor gives up about 3% per year on their stock funds and about 1.5% per year on their bond funds. If you hire a financial advisor to pick investments for you, subtract another 1% or so from returns. Except for the very fortunate, investment costs prohibit individual investors from ever achieving long-term results close to the markets they invest in.

The True Cost of Investing in Stocks and Bonds

The best way to understand investment costs is to analyze a basic stock and bond trade. Stocks and bonds are the building blocks of most investment portfolios, and the cost of trading these securities are inherent in mutual funds, unit trusts, and wrap fee accounts.

One important cost that is often overlooked is the cost of taxation. Paying unnecessary tax on investment gain can cause a large reduction in long-term wealth. Tax considerations are mentioned briefly in this chapter and in Chapter 15. Wise investors work hard to reduce the cost of investing. This is the first step toward reducing the performance gap.

The Cost of Executing a Stock Trade

Executing a stock trade is more expensive than most people think. All investors incur some form of commission cost, even large institutional investors. Besides the commission cost, there is a bid/ask trading spread, market impact of a trade, and the opportunity cost of trading.

Only SEC licensed brokers are allowed to trade securities on the major exchanges, and they charge a fee for their service. The commission paid on a stock trade varies depending on the broker and brokerage firm. If you sell 1000 shares of General Motors, the commission may cost \$800 using a full service brokerage firm, but only \$20 through an Internet broker. Does the \$800 full service brokerage firm do anything different than the \$20 broker? No. Both trades are routed through the same standard electronic trading system and clear through the same channels. Unless you are trading thousands of shares at a time, or trade obscure over-the-counter stocks, the difference between an expensive full service broker and a cheap discount broker is simply the cost of the commission.

The stock market is a live auction, and professional traders run the auction. They bid for stock when investors want to sell, and offer stock for sale when someone wants to buy. The difference between the bid and the offer price is known as the bid/ask spread. The spread varies widely from stock to stock, depending in part on the liquidity of that issue. Large companies, with many shares of stock outstanding, usually trade with a small spread, perhaps 6 cents per share. Small companies, with few shares outstanding, can trade with a much larger spread, perhaps \$1.00 per share. Novice stock investors are shocked to find the cost of the bid/ask spread is much more expensive than the commissions they pay.

Hidden Costs of Trading Stocks

The cost of stock trading is not limited to the commission and bid/ask spread. There are abstract expenses that are not readily apparent. One cost is market reaction to a buy or sell order. The markets are dynamic, and every order has an effect on supply and demand. It is a new experience for novice investors to learn that their buying and selling can change the market price of a stock. Consider this old Wall Street story:

One day an old wise investor passed a stock tip to an eager young man. The young man knew this was a good tip, so he called a broker and bought 1000 shares of the stock for \$2 per share. The next day the stock was quoted at \$3 per share. When the fellow heard the news, in his excitement he bought another 1000 shares. By the third day the stock was offered at \$5 and the young man was convinced he had found gold. He borrowed \$5,000 against his house to buy 1000 more shares. By the fourth day, the stock was offered at \$8. Sitting on a large profit, the young man decided to take the money and run. He told his broker to "SELL IT ALL", to which the broker replied, "Too whom would you like me to sell? Only 3000 shares have traded all week and you have been the only buyer!"

Most individual investors never consider the impact their trades have on the market, but large mutual fund managers are keenly aware of the problem. Consider the difficulty in selling hundreds of thousands of shares of a thinly traded, illiquid stock. It can take several days or even weeks to sell the position, and the price will likely drop along the way. John Bogle Jr. studied the market impact of trading small-cap stocks in a mutual fund. He found that small-cap funds holding \$350 million in assets or more suffered a significant deterioration in performance due to the market impact of trading. Small-cap mutual funds with over \$700 million in assets generally lose more money to market impact than the manager could possibly gain with superior stock selections¹. The market impact of trading can be costly to investors, but you will not find this expense listed in any mutual fund prospectus.

Opportunity cost is more abstract than market impact of trading. Generally, it takes time for money managers to convert an idea into a market trade, even if it is a very liquid stock. Opportunity cost is the price change that occurs between the time a manager

¹ John Bogle Jr, CFA, *Optimal Fund Size and Maximizing Returns*, Investing in Small-Cap and Microcap Securities, AIMR Seminar, September 25, 1996, Boston MA

decides to trade a stock and the time that trade is actually executed. If a fund manager has information on a stock that has not been widely disseminated, they must execute trades quickly. It will only be a matter of seconds before the information is widely known and fully reflected in the stock price. In a fast paced market, time is money. Slow execution means higher opportunity cost.

Take a trip on a cruise ship and you will understand hidden costs. An advertisement in the newspaper may read, “For only \$695 per person, you can enjoy an all-inclusive week on a beautiful luxury ocean liner”. Sounds like a bargain, but that’s not the end of the story. In order to get to the ship, you must fly to the port, which could cost \$300 round trip. Parking at the airport cost \$70 per week. Once you are on board, you discover all sightseeing trips ashore are an extra cost, and they are not cheap. Add \$150 for land tours. Like an occasional fruit drink while cruising? They cost \$5 each. At the end of the trip, you are expected to tip the waiters, busboys, and room service. Tipping runs another \$250. By the end of the week the \$695 vacation cost you \$1,500. The hidden costs of investing are no different than taking a cruise. It’s what you don’t see that gets you.

The Cost of Trading Bonds

Bond trading has the same costs as stock trading, only the brokerage commission is typically hidden in the price of the bond. Most bond trades are conducted over-the-counter, meaning the brokerage firm with whom you are dealing will sell you their bonds that they have in inventory. The difference between the price you pay for a bond and what you can sell it for is known as the sales spread. Each brokerage firm is independent and sale spreads vary from firm to firm. So it pays to shop around for the best price.

To give you an example of a bond trade, assume you want to sell a bond that has a current market value of \$10,000. You call your broker to request a bid price. The broker will show the bond to the firm’s bond trader, and then call you with the traders bid price, less a “mark down”. For this example, let’s assume the trader bids \$9,800. The broker will call you and offer \$9,700. If you accept this bid, the broker buys the bond from you for \$9,700, turns it over to the trader for \$9,800, and books a \$100 commission. Then the

trader puts the bond in the firm's inventory, where it is re-offered to other clients for \$10,000. The National Association of Securities Dealers (NASD) has rules that govern the spreads on bond trades, and excessive spreads are illegal. More information on trading bonds can be found in Part III, Chapter 13, Investing in the Bond Market.

Mutual Fund Fees and Expenses

Now that we understand the basics of stock and bond trading, it is time to add two more layers of expense. Mutual funds and private portfolio managers charge management fees to run portfolios. With a mutual fund, this fee is listed in the prospectus as part of the fund's expense ratio. If you work with a stockbroker or other financial adviser, an extra commission or fee is also included. This section explains the expense inherent in commission mutual funds and wrap fee accounts.

Mutual Fund Expenses

Open any mutual fund prospectus and you find a section titled "Portfolio Expenses" or similar wording. This is a list of the fees charged directly to the mutual fund on an annual basis. They include investment manager fees, marketing fees, legal costs, administrative fees, and miscellaneous expenses. Several funds charge a 12b-1 fee. This money is paid to brokers and other advisors each year who have placed investors in the fund. It is an incentive to brokers to sell more of the fund. A 12b-1 fee provides no benefit to current shareholders, and continues to be a topic of discussion between the SEC and the investment industry.

The "Operating Expense Ratio" is found by dividing all these fees by the total amount of money in the fund. A typical operating expense ratio runs about 1.5% for stock funds and 1.0% for bond funds. However, expense ratios can vary widely from fund to fund.

Recently there have been a number of highly publicized studies suggesting mutual fund fees are dropping. That is a misconception. If you eliminate low cost producers Vanguard and Fidelity from the universe of fund companies, fees have actually crept

higher over the years². Studies show that high fees are not good for investors. Table 4-1 compares the returns of high expense Growth and Income funds to low expense funds over a ten and fifteen year period. The evidence makes a strong case for investing in low fee funds.

Table 4-1
Growth and Income Funds
Expense Ratio Verses Performance
1984 - 1998

Category	Expense Ratio	10 Year Return	15 Year Return
All 65 Funds	1.27%	15.6%	14.6%
Low Fee	0.69%	16.5%	15.7%
High Fee	1.83%	14.8%	13.8%

Source: *Morningstar Principia*

The Trading Costs within Funds

The cost of trading stocks and bonds within a fund are not included in the expense ratio, but they do add to the expense of managing a fund. As explained earlier, mutual fund managers must pay commissions and bid/ask spreads when they trade securities. The more trades a manager makes during the year, the more it reduces the value of the fund.

Table 4-2 compares the returns of high turnover Growth and Income funds to low turnover funds. The data clearly suggests that portfolio turnover is one of the factors driving returns.

Table 4-2
Growth and Income Funds
Portfolio Turnover Verses Performance
1984 - 1998

Category	1998 Turnover Rate	10 Year Return	15 Year
All 65 Funds	68%	15.6%	14.6%
Low Turnover	24%	16.5%	15.5%
High Turnover	109%	14.8%	13.8%

Source: Morningstar Principia

² Scott Cooley, *Revising Fund Costs: Up or Down*, Morningstar Mutual Funds, February 21, 1999

According to Morningstar, the average turnover rate of a US equity fund is about 80% per year, meaning about 4 out of 5 stocks are held less than 12 months. This turnover generates a brokerage commission cost of about 0.3% per year³. Some funds have higher turnover, which increases the commission cost of those funds. On average, small-cap portfolios have about twice the turnover of large-cap funds.

In addition to the commission expense, mutual funds sometimes incur a profound market impact cost. Plexas Group is a research and consulting firm that tracks trading costs for investment companies. Plexas estimates the market impact of a large-cap US equity funds run about 0.4% per year and small-cap funds were significantly higher with a market impact about 1.5%⁴.

One final hidden expense faced by almost all mutual funds is the cost of holding cash in a portfolio. Cash includes Treasury bills and other short-term interest bearing investments. Most stock mutual funds hold between 5% and 10% in cash, depending on market conditions. Over time, the cash portion of a portfolio reduces the return of the fund. For example, if the stock market went up by 10%, and a stock mutual fund held 5% in cash paying 4%, the “cash drag” of the fund was 0.3% for that year. Said another way, if 5% of the portfolio under-performed the stock market by 6%, the cost of holding cash was 0.3%. The cash portion of a stock fund is charged the same management fee as the stock portion, making it a very expensive money market fund. Market impact and cash drag are not part of the Operating Expense Ratio, but they are an expense nonetheless.

In 1972, Charles Ellis explained that the reason professional managers cannot beat the market is that they have effectively become the market⁵. Commissions, fees, and hidden expenses have precluded most mutual funds from achieving market returns over the last 25 years. I do not anticipate a change over the next 25.

³ Miles Livingston and Edward S. O’Neal, *Mutual Fund Brokerage Commissions*, Journal of Financial Research, Vol. 19, no. 2 (Summer 1996): 273-92

⁴ Plexas Group, *Quality of Trade Execution in Comparative Perspective: AMEX vs. NYSE vs. NASDAQ*, August 1996, Plexas Group Inc., Los Angeles, CA

⁵ Charles D. Ellis, *Investment Policy; How to Win the Loser’s Game*, Business One Irwin, NY, Page 5

Sales Charges

The final cost is the cost of investment advice. Stockbrokers, insurance agents, and other financial advisors sell over 60% of all mutual funds. The funds they sell typically carry some sort of sales commission or load that pay the salesperson for their time. Until a few years ago, most investors paid an upfront sales commission to buy a mutual fund. Times have changed. The fund industry now offers all kinds of ways to pay your advisor. There are “A” share front-end loads, “B” share back-end loads, “C” share level loads, “L” share combined loads, and “Z” shares for use in wrap fee programs.

A large bulk of fund sales is through brokerage firms, but this method of distribution does not come cheap for mutual fund companies. Fund companies are required to pay access charges to get in the door of a brokerage firm. This charge simply allows access to the firm’s salespeople. A fund company may spend \$100,000 or more per year for the right to talk to brokers, but then they must spend a lot more money wining and dining the brokers to get them to listen. That will include the cost of lunches, golf outings, trips, and an assortment of goodies.

In many cases, the level of access a fund company has within a brokerage firm depends on the size of the check they initially write. At some brokerage firms, the highest paying fund companies earn special privileges, such as the right to be on the firms “recommended fund list”. Is this an ethical way for brokers to select mutual funds for their recommended list? Of course not. But that is Wall Street. “Pay to play” is a big revenue source for brokerage firms, and it is a necessary evil for most mutual fund companies. Performance is secondary to payoffs. As David J. Evens of Glencoe Investments once said, “Performance is nice; but marketing is better”.⁶

Wrap-Fee Services

In the 1970s, E.F. Hutton developed a private managed account program for individual investors who had an account worth \$100,000 or more. The program allowed small investors to hire institutional money managers that normally invest only for large clients.

⁶ Article by Jim McTague, *Dropouts*, Barron’s, April 7, 1997

Clients pay for this service under an all-inclusive “wrap fee”. The fee includes commission costs, manager fees, custody, performance monitoring, and other miscellaneous charges. The wrap fee can run as high as 3% per year, although the going rate seems closer to 2%.

Hutton’s wrap fee program was an instant hit and was quickly copied by other brokerage firms. Over time, the wrap concept spilled over into the mutual fund industry. Financial advisors began charging annual fees to build and manage mutual fund portfolios. The popularity of all wrap fee programs has mushroomed. Large brokerage houses are the biggest sellers of wrap fee products, although banks, insurance companies, independent advisors, and even accountants are now offering wrap account products. According to a 1998 study by Charles Schwab, more than one trillion dollars are managed under a wrap fee program, and the trend is not slowing.

The Hidden Costs in Wrap Fee Accounts

The wrap fee is supposed to cover all trading costs and management fees. But it doesn’t. The fee does not include the bid/ask spread, market impact, or opportunity cost of trading. These unreported expenses can add an additional 1% per year to the cost, depending on the style of the account. In addition, a wrap fee is charged on the non-invested cash portion sitting in your portfolio, not just the stocks and bonds. This creates the most expensive money market fund on the planet. Assume you pay 2% for a wrap account and 90% of your money is placed in stocks while 10% stays in the money market fund. You are charged the same 2% fee on the money sitting in the money fund as you are on the stock portion. Assume the money market fund has its own internal cost of about 0.6% and your total expense on the cash adds up to 2.6%!

Asset growth can be a major drag on performance for investment companies in large wrap programs, and that adds to your cost. Most money management firms are invited to participate in wrap fee programs *after* they finished a period of superior performance. Unfortunately, in the investment industry, success often breeds failure. As the brokers and other advisors throw millions, and sometimes billions of dollars of new money at these management firms, many develop operational problems. It is impossible

to invest this flood of new money the same way the old money was invested in the past. This reality usually causes a significant deterioration in returns, and the eventual downfall of the investment style. I have watched this boom-bust cycle occur dozens of times shortly after a manager is invited to participate in a wrap fee programs at a large brokerage firm.

Mutual Fund Wrap Programs

In the late 1980's, discount broker Charles Schwab introduced the concept of a mutual fund supermarket called Schwab OneSource®. Clients could buy and sell no-load mutual funds from hundreds of different fund families all under one roof. As an offshoot of the mutual fund concept, financial advisors began to offer trading strategies through the program. Advisors charge their clients a separate fee to pick mutual funds. The wrap-a-fund concept was so popular at Schwab that every major brokerage house and insurance company has a similar program.

Mutual fund wrap programs are actually fees on top of fees on top of fees. First, there are stock and bond trading costs internal to the mutual funds. Second, each mutual fund charges management fees and operating expenses. Third, the financial advisor charges an extra fee to pick the funds for you. After accounting for all fees, hidden or otherwise, investors in some mutual fund wrap program can pay upwards of 5% per year to have their account managed. There is no chance that a high cost investment advisor will overcome all of these expenses and achieve market results, let alone beat the market.

Other Packaged Products

It is always thus, impelled by a state of mind which is destined not to last, that we make our most irrevocable decisions.

Marcel Proust

Investment products are packaged and repackaged in a variety of ways. The marketing of those products has changed over the years, but the products themselves have remained

fairly consistent. The list of package products is long, and it grows each day. There are unit investment trusts, limited partnerships, commodity funds, variable annuities, variable life, and on and on an on. If there is a common thread among all these packaged products, it is that they typically charge a high commission and have high annual fees.

It is common knowledge in the industry that high commissions drive the sale of packaged products. Some advisors will find something good to say about any product if the yield to broker is large enough. Many insurance related annuity products pay brokers 6% in commission, followed by annual trailers. Many commodity and hedge funds charge investors 2% in annual fees plus 15% of the profits. At the 1996 annual meeting of Berkshire Hathaway, Warren Buffett labeled a unit investment trust as a “high commission product with substantial annual fees”. Clearly, commissions drive the recommendation of most investments, not the needs of investors.

Summary

The more you pay for investment products and advice, the less you make on your investment portfolio. About 3% of the performance gap is a direct result of annual investment costs, before accounting for sales commissions. The best place to begin to reduce the performance gap is to seek out investments that you do not have to pay a commission to buy. The next phase is to buy only funds with the lowest fees. There are several funds that fit this criterion in Part III of this book.

Chapter 5

Market Timing Myths

One of the funny things about the stock market, every time one man is buying, another is selling, and both think they are astute.

William Feather

The search for superior investment returns leads many people to speculate on the future direction of the market. Those who can foretell the future can make spectacular profits. Market Timing is the common name used to describe this strategy, although it is also called tactical asset allocation.

Can tomorrow's prices be determined using yesterday's information? Identifying market moves before they occur has challenged mankind for thousands of years. Despite numerous claims from countless market gurus over the years, not one has been able to show that their crystal ball consistently works. Why is market timing so difficult? Superior timing implies superior information. In today's technology advanced world, it is difficult, if not impossible for one person to get information faster than everyone else. If a person acquires superior information, they also need to interpret it correctly and act on it very quickly, or the opportunity is gone. For most people reading this book, information flows too fast to be useful. By the time you get the news, it is too late. This is true of a majority of professional investors as well the individuals managing their own accounts. Ironically, brokers are usually the last people to figure things out.

Although there is little chance to make excess profits by timing the markets, many people believe the concept and spend a great deal of time and money searching for a profitable strategy. Wall Street and the financial press cater to this need by selling all sorts of market timing services. There are market valuation models, charting services, guru call-in numbers, newsletters, web sites, fax services, and a variety of gimmicks that tend to separate investors from their money. In truth, there is little academic evidence that any of these systems work. Vast majorities of people who follow timing strategies experience returns well below the market they are trying to beat, with no reduction in risk.

This chapter explains why a portion of the performance gap between investor returns and market returns is related to market timing. We will review the performance of various timing strategies as well as the results of popular self-proclaimed market "experts". Understanding the shortfall of market timing is a crucial step to understanding the performance gap in your portfolio. Bold market predictions by popular

gurus occasionally result in short-term price gains, but there is rarely any follow-through. Investors are wise to save their money, ignore the hype, and focus on long-term goals.

Academic Research on Timing the Market

Read almost any college textbook on investing and you will find a section on market timing. There will likely be a paragraph or two describing what the goal of market timing is, then a host of research explaining why it does not work. Almost every major study of market timing, including those conducted by Nobel Laureate economists, have unanimously concluded that any attempt to profit by predicting the direction of the market will ultimately fail.

This decade is strewn with examples of bright people who thought they built a better mousetrap that could consistently extract abnormal returns from financial markets. Some succeed for a time. But while there may occasionally be misconfigurations among market prices that allow abnormal returns, they do not persist.

Federal Reserve Chairman Alan Greenspan (1998)

Any timing system designed to extract excessive returns from the market will eventually fail. If a strategy were developed that did work, it would be a closely guarded secret, and would only benefit a few people for a short period of time. If some alchemist found a secret formula that turns lead into gold, would they give it away for \$99? No. When others use the strategy, the excess profits would quickly fade. Market timing strategies sold to the public en masse may have worked in the past, but they have no chance for excess profits in the future. These strategies have no value except to sell to a gullible public.

In the early 1900s, Harry Houdini exposed widespread fraud in the fortune telling industry. Houdini offered a large reward to anyone who could prove they could speak to the dead. Though many soothsayers tried to fool Houdini, he uncovered all their tricks. No one ever collected the prize.

Today, market timers run a similar business as Houdini's spiritualists. Their skill is not in predicting the direction of financial markets - it is in marketing their predictions. It does not matter if an advisor has no skill in choosing superior investments, what's important is to convince the public that they have special insight. These modern day soothsayers understand that selling their investment advice is much more profitable than following it. No broker has ever gotten rich by purchasing the products they peddle. They get rich off the commissions and fee charged to the gullible public.

A Short History of Market Timers

If I have noticed anything over these 60 years on Wall Street, it is that people do not succeed in forecasting what's going to happen to the stock market.

Benjamin Graham

Wall Street gurus have been predicting market prices since shares began trading in the 1800's, and researchers tracking the gurus continually find that their predictions have no value. Alfred Cowles, a research analyst and statistician in the early 1900s, studied Wall Street forecasts early in that century. In 1933, he reported his findings in the prestigious *Econometric* journal. Cowles statistically proved there was no benefit to market forecasts published by Wall Street strategists at the time. John Maynard Keynes, a famous economist and highly successful stock investor, rendered the same conclusion:

The idea of wholesale [portfolio] shifts is for various reasons impractical and indeed undesirable. Most of those who attempt it sell too late and buy too late, and do both too often, incurring heavy expenses and developing too unsettled and speculative state of mind.

Stock market timing strategies evolve over the years. Until the 1960s, the rule-of-thumb was to sell when the dividend yield on stocks fell below interest rates on bonds, and buy when the opposite occurred. However, in 1959, stock yields fell below bond yields and never looked back. During the 1960s, the dividend strategy was revised and a new approach was established. When the market yield fell below 3%, wise investors were supposed to sell, and when it rose above 5%, investors should buy. That idea faltered in the early 1990s when the dividend dropped below 3% and stayed there until this day. Investors who followed popular dividend strategies missed one of the greatest bull markets in history.

Market timers are always fighting the last war. Timing techniques designed during the rising inflationary period from the 1940s through 1970s did not work during the disinflation period of the late 1980s and 1990s. Peter Lynch, former manager of the Fidelity Magellan fund, commented about the failure of market timers throughout the 20th century:

The investment geniuses among us could have put all their money into the S&P 500 stocks in the 1920s, switched to long-term corporate bonds in the 1930s, moved to into small-company stocks in the 1940s, back into the S&P 500 in the 1950s, back to small stocks in the 1960s and the 1970s, and returned to the S&P 500 in the 1980s. The people who followed that inspired strategy are now billionaires living on the coast of France. Since I never met a single billionaire who made his or her

fortune exactly in this fashion, I must assume that they are in short supply relative to the rest of us who exhibit normal intelligence¹.

Wall Street and Market Timing Models

Many sellers of investment products and services feel the term “market timing” has gambling implications. The phrase almost sounds cheap. Therefore, in the 1990s, Wall Street came up with a new name, *tactical asset allocation*. Many people claim there is a difference between market timing and tactical asset allocation, but don’t be misled. Tactical asset allocation is based on a belief that the stock and bond markets are predictable, and it is possible to profit by moving money from one market to another at an appropriate time. In other words, it is market timing dressed in drag.

Wall Street wizards squawk asset allocation advice on almost a daily basis. Large brokerage firms recommend tactical weightings in stocks, bonds, and cash as part of their daily routine. Today, the recommended allocation may have a certain percent in stocks and a certain percent in bonds, but tomorrow the allocation may change due to “new information” or “current conditions”. It does not matter if the word today is “buy” or “sell”, either one makes money for the firm. When a company makes a big change to their asset allocation, they do so with great fanfare and lots of media coverage. A firm will issue press releases, offer conference calls, and have lots of phone conversations with reporters. In short, large Wall Street firms try to make a major asset allocation change a marketing extravaganza. In a sense, a successful asset allocation change is not one that accurately predicts the market, a successful change is when a firm can take this non-news worthy event and turn it into front-page headlines, which means free advertising for the firm.

Does tactical asset allocation work, or is Wall Street taking Main Street for a ride? Look no further than the *Wall Street Journal*’s running scorecard on the issue. The results of tactical asset allocation models recommended by the major brokerage firm are regularly published in the Journal. The return of the models are ranked against each other and compared to the results of a static allocation. The static “Robot” blend holds 55% stock, 35% bonds, and in 10% money market funds. Although the robot blend never changes, the brokerage firms are free to vary their allocation anytime².

A 10% money market position in the Robot blend should make this model easy to beat, but that is not the case. The average brokerage firm does not beat the Robot portfolio. For five years ending in 1998, eight out of twelve firms were below the static blend, and two of the largest brokerage firms fell

¹ Peter Lynch, *Beating the Street*, Simon & Schuster, New York, 1993, pg. 17

² John Dorfman, *Experts Urge Cutting Exposure to Stocks*, The Wall Street Journal, August 11, 1997, C1

significantly below the benchmark³. Of the firms who did outmaneuver the markets, no firm held the top spot for the entire period. One important point about the study, it suffers from survivorship bias. Several firms have dropped out of the study over the years due to mergers, acquisitions, or their own request. As a result, only the results of the surviving firms are reflected in the study, which tends to push the average higher than if all the firms stayed in the study.

The Real Reason for Tactical Asset Allocations

There is no denying that the more financial predictions you make the more business you do and the more commissions you get.

Fred Schwed, Jr.

If market timing does not work, why do so many brokerage firms spend time and money trying to make it work? The answer has nothing to do with finding a formula that beat the markets. It has to do with generating commissions and fees. When clients hear that a brokerage firm made an asset allocation change, they become curious, and sometimes concerned. This leads to phone conversations with brokers, which leads to more business. It is a known fact that brokerage firms increase sales after they change their opinion on the markets. An internal study by one large brokerage firm found sales in its wrap fee mutual fund products increased substantially following a suggested asset allocation change. Ironically, an informal study of those changes also reveals that clients would have been better off ignoring the advice. Following the recommendations would have lead to lower returns in the long run.

Investment Newsletters and Market Predictions

There's an old joke about high school physical education teachers that goes like this:

Those who cannot do - teach. Those who cannot teach - teach physical education.

The same logic can be applied to market timers who sell investment newsletters:

Those who invest poorly – sell advice. Those who sell poor advice - sell market-timing newsletters.

Look through any issue of Investors Business Daily and you will find dozens of ads for newsletters claiming superior market timing ability. John Graham and Campbell Harvey of Duke University graded the ability of newsletter writers to time the markets. They found little evidence to support the advertising

³ Aaron Lucchetti, "Strategist Post Worst Results in 8 Years", *Wall Street Journal*, October 28, 1998, pg C1

claims of the newsletter writers.⁴ The study covered hundreds of newsletters published between 1983 and 1995. Following the market-timing advice of the letters would have produced only a 12% annualized return for the period, while the S&P 500 compounded at a 17% return. An abstract of the study is as follows:

Many investment newsletters offer market-timing advice; that is, they are supposed to recommend increased stock weights before market appreciation and decreased weights before market declines. Examination of the performance of 326 newsletter asset-allocation strategies for the 1983-95 period show that as a group, newsletters do not appear to possess any special information about the future direction of the market.

A second study by Roger Blake and Meir Statman looked at the reasons why letter writers changed their market opinion at various times. They found that movements in the market affect writer opinions and not the other way around. In other words, the letter writers as a group were following the market instead of leading it. The study also found that excess market volatility caused rapid changes in opinion, while low volatility caused a slow but gradual change⁵. Newsletter writers are basically trend followers. They prefer to drive forward by looking in the rear-view mirror. That causes many accidents in portfolios.

Professional Money Managers and Market Timing

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

Warren Buffet, Letter to Partners, 1963

Are professional fund managers able to predict the market better than Wall Street analysts? Do they possess skill or information the public does not have? There are dozens of academic studies on this subject. Measuring a fund manager's ability to market time can be conducted in one of two ways. The researcher can measure the level of cash held by a mutual fund at various turning points in the market, or they measure the level of risk the manager had taken at those times.

Mutual Fund Cash Levels

The amount of cash held in a mutual fund can give way to important information about a fund manager's market timing ability. When fund managers believe the market is overvalued, they typically reduce the

⁴ John R. Graham and Campbell R. Harvey, *Grading the Performance of Market-Timing Newsletters*, Financial Analyst Journal, Nov/Dec 1997

⁵ Roger G. Clarke and Meir Statman, *Bullish or Bearish?*, Financial Analysts Journal, May/June 1998

stock allocation and raise cash. This cushions a portfolio against market loss, and prepares the fund for shareholder redemptions. If managers believe the market is headed higher, they typically increase the allocation to stocks and reduce the cash position. This will enable them to capture the higher return of the stock market.

The Investment Company Institute (ICI) tracks the cash position of mutual funds, and has data going back to early 1980's. Prior to the market crash of 1987, the average stock fund held steady at about 9% cash. There was no attempt to raise cash prior to the sell-off. After the 1987 market crash, managers as a group increased their cash position to 11% because they were anticipating further declines. But the market did not go down as expected. It quickly stabilized, and then produced significant gains in 1988 and 1989. At that point the managers bought stocks and reduced their cash position back to the 9% level. Managers were wrong on both sides of the 1987 crash. They were late getting out of the market and late getting back in during the recovery. Remember, these are the experts!

Let's look at a different period of time. In late 1990, during the build-up to Desert Storm, the stock market sold off and then managers sold stocks and increased cash to 11%. When the war began in mid-January 1991, the stock market surged, catching the managers with a large cash position. Over the decade managers gradually reduced the cash in their portfolios.

The data clearly shows mutual fund managers change cash positions after the market changes direction, not before. They react to market movements. They do not anticipate them. The idea that an active manager will "get you out" of a market before it falls is simply marketing hype. There is no evidence to support that claim.

By the time this book was published in 1999, mutual fund cash positions were at a historic low of 4%. Is this a bad sign for the market in the new century? Maybe. But then, we have already learned that over the long-term it does not pay to make predictions.

Mutual Fund Risk Levels

Another method of determining if managers can correctly predict market direction is to look at the risk of the securities in the portfolios. If a manager expects the stock market to move higher, they should increase the number of risky stocks in the portfolio to capture a return higher than the general market (technology). If they believe the market is heading lower, risky stocks should be sold in favor of conservative stocks (banks).

A review of mutual fund risk studies can be found in *Investment Analysis and Portfolio Management*, a textbook written by Frank K. Rielly, University of Notre Dame⁶. Rielly reviewed a number of risk studies conducted over a number of years. He finds convincing evidence that professional managers were not able to capture higher returns by changing the risk of their portfolios prior to a market turn, nor did any single manager exhibit consistent skill in changing their portfolio beta. Not surprising, Rielly concluded that portfolio managers have no market timing ability.

Market Timing and Individual Investors

So far we have learned that professionals have not been successful timing the markets, but how have individual investors fared? The general public seems to follow market timing on two levels. In the short run, the recent trend and popular opinion influence decisions to get in or out of the market. In the long-term, decisions are imbedded political and economic events that affect the moral of the entire Nation.

Short-term Market Timing

Short-term timing is emotional and reactionary. Typically, a person makes a change to their asset allocation as a result of a sharp turn in the direction of the markets that makes them nervous. During volatile markets, people listen closely to chatter they hear in the bathroom at work, or they may follow the recommendation of a popular market guru on television, or make a decision based on something someone in the family said, who knows someone who said something. Whatever the trigger, short-term timing decisions are emotional, not logical. Hopefully, they are not permanent.

In a bull market, investors are always skeptical that the market will continue higher. It is said the stock market climbs a “wall of worry”. On the other hand, during times of sharp market declines, many investors are positive the market will continue to go down, and they believe they should get out immediately. In times of fear, investors herd together and imagine the worst outcome. In his epic work, *The Crowd*, Gustave Le Bon explains why following the advice of others during a time of market volatility is not the wisest action:

The decisions affecting matters of general interest come to by an assembly of men of distinction, but specialists in different walks of life, are not sensibly superior to the decisions that would be adopted by a gathering of imbeciles...In crowds it is stupidity and not mother-wit that is accumulated⁷.

Watching the flow of public money into and out of mutual funds is a good place to study short-term timing. Studies of mutual fund cash flows during volatile market conditions reflect popular opinion

⁶ Frank K. Rielly, *Investment Analysis and Portfolio Management*, Dryden Press, Third Edition, pg. 853-5

of the markets. In 1987, after the stock market crash, stock mutual fund redemption's increased significantly, and exchanges into bond funds went up dramatically⁸. A similar reaction occurred in 1990.

Stephen Nesbitt of Wilshire Associates studied mutual fund cash flows to measure the affect of market timing on returns⁹. His goal was to measure the cost of market timing to investors by measuring the movement of money between broad categories of mutual funds, i.e. moving from stock funds to bond funds. Nesbitt's research covered a period of ten years, from 1984 through mid-1994. He found the average investor lost about 1% each per year due to sector switching between stocks and bonds, not including commission costs. As investors try to time the markets, they loss money, and the more they moved, the more they lost. Effective portfolio management means choosing a level of risk that is right for your needs, and staying the course over the long-term. Chapter 14 covers this concept in detail.

Long-term Market Timing

Over a lifetime, stocks outperform bonds, and bonds outperform money market funds. Therefore, most people should invest a large portion of their lifetime savings in the stock market. Right? Not quite. While this advice works well in a bull market, the public has a totally different opinion about the future when major political and economic disruptions cause fear and uncertainty. Those events cause structural changes in our lives, which are typically reflected by a prolonged bear market for stocks.

Up until the publication of this book in 1999, there are two important periods of time that should be studied by every stock investor. They are the period following the crash of 1929, and the period following the market meltdown of 1973-74. These two periods offer clues as to how people shifted their investment behavior following a period of political turmoil and deep bear markets. The following data is complied from Federal Reserve records, the Investment Company Institute, the New York Stock Exchange, and other sources. In analyzing the information, one trend is clear - the public will abandon the stock market again in the future when some major event happens. I have no idea what that event will be or when it will occur, but investors will give up on stocks again in the future.

Major Investor Shifts from 1900 to 1999

In 1896, the Wall Street Journal began publishing the Dow Jones Index on a daily basis. It was a composite of the 12 best-known stocks at the time. Though the market was volatile, and stock manipulation

⁷ Gustave Le Baron, *The Crowd*, Cherokee Publishing Co., Marietta, GA, pg. 9

⁸ ICI data on equity and fixed income mutual fund cash flow. 1984 -1998

⁹ Stephen L. Nesbitt, *Buy High, Sell Low: Timing Errors in Mutual Fund Allocations*, Journal of Portfolio Management, Fall 1995, pg. 57-60

was common, the number of stock market investors was steadily increasing. After World War I, in the early 1920s, the stock market started to boom. Rising prices were fueled by speculation and borrowed money. Over 10% the working population joined in the speculation and bought common stocks¹⁰.

The crash of 1929 came slowly at first. Then, following a Federal Reserve tightening and Congressional tax increase on imports, the stock market collapsed. By 1932, the stock market fell 82% from its high, and many people could not pay their margin loans. As a result, banks collapsed, sending the economy into a tailspin and throwing the country into period of despair. The public left the stock market in droves, claiming never to return.

The experience of the 1929 crash stayed on the minds of Americans until the end of the Korean War. By that time public ownership of stocks had fallen from 10% to 4%. The turnaround came in the early 1950s as a new generation of investors emerged. As the stock market moved higher, more investors became involved. These investors were not directly affected by the 1929 crash. During the 1950s, brokerage firms were busy expanding their reach to every city and town. Investment salesman even went door-to-door selling stocks, and a new product called “mutual funds”.

By 1972, stocks as a percent of household financial assets hit 38%. Over 16% of the adult population owned stocks, more than any time in history. Unfortunately, as a result of the Vietnam War, the dollar was beginning to weaken, and in 1973, growing political pressure caused President Nixon to take the country off the gold standard. This policy change caused the value of the dollar to collapse and inflation to surge. Between 1973 and 1974, the S&P 500 fell 42%. The rapid decline drove another generation of investors out of the stock market, and many stayed out until the early 1990s.

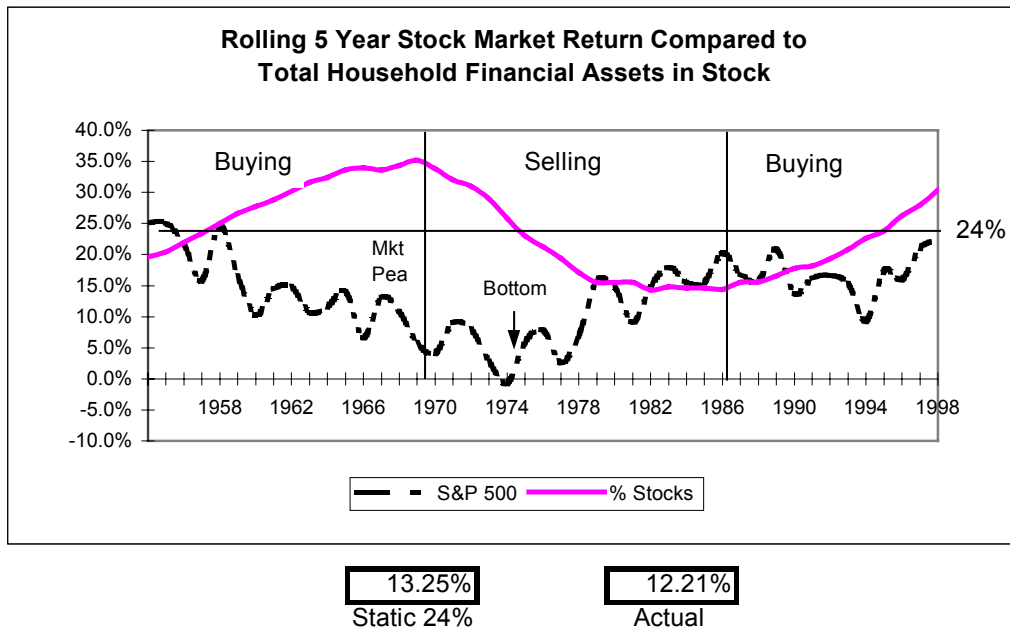
Although stocks compounded at a 15.5% annual return from 1982 to 1992, few new investors entered the market. But, in the early 1990s, a third generation of investors came aboard. Baby Boomers became a major force driving the stock market to new highs and ethics on Wall Street to new lows. An assortment of new individual retirement accounts and the popularity of self-directed employee retirement plans helped fuel the rapid growth. As of 1999, there are more stock investors as a percent of the adult population than ever before. Stocks have grown to over 40% of household financial assets, a new record.

Figure 5-1 puts a lot of this information in graphic form. It compares the rolling 5-year return of the S&P 500 from 1950 through mid-1998 with the percent of household financial assets in stocks and stock mutual funds. For the entire period, the average household held 24% of their financial assets in stocks. However, the mix was constantly changing. Stocks ranged from 11% in 1982 to 40% in 1998.

¹⁰ Charles R. Geisst, *Wall Street: A History*, Oxford University Press, New York, 1997

Using this data, we can estimate the cost of long-term market timing decisions on a generation of investors. Had the public maintained a constant 24% in stocks during the entire 1950 through 1998 period, the annualized return on the stock portion of their portfolio would have been 13.2% (using the S&P 500 as a benchmark). Due to the effects of market timing decisions over a generation, the model produced a return of only 12.2%. Long-term shifts in investor beliefs brought about by political and economic upheaval lowered the investor returns by 1.0% annually. This study supports the conclusion of Stephen Nesbitt; the general public is not good at predicting when the stock market is cheap and when it is expensive.

Figure 5-1



How long the current bull market will last is anyone's guess. Some people believe baby boomers will maintain a high exposure to stocks even during a prolonged economic crisis. I do not believe that is true. When the tide turns, there is doubt how investors will react. The general public did not hold onto stocks after the crash in 1929, nor did they hold after the bear market of 1973-4, and they will certainly sell again in the future. This will have an adverse effect on investor performance in the long run.

Conclusion

This chapter explains the two ways market timing contributes to the performance gap between market returns and investor returns. Short-term timing decisions lower results by about 1% per year (not including trading costs or the tax consequences) and long-term decisions take away more return. The combined cost

of all market timing decisions is estimated at 1 1/2% to 2% per year over an investor's lifetime. It is very difficult to maintain a set allocation to stocks during adverse conditions, but it certainly pays to do so.

Chapter 6

Chasing the Hot Dot

Fortune turns round like a millwheel, and he who was yesterday at the top, lies today at the bottom.

Miguel De Cervantes

Investing in the financial markets require you to make a number of decisions. First, you must decide which market to invest in, such as the US stock market or corporate bond market. Second, you need to decide how much to put into each market. Third, you must decide if you should buy individual stocks and bonds, or purchase mutual funds? Fourth, and most important, you must decide which stocks, bonds, or mutual funds to invest in.

The largest portion of the performance gap between investor returns and market returns can be traced to the security selection process. “Chasing the hot dot” is a phrase used to describe the behavior of most people when choosing investments. This selection process is based almost entirely on a review of recent performance. Though few people will admit that they rely solely on performance when choosing investments, that is how a vast majority of investments are selected.

Chasing the hot dot can be a costly mistake. Studies conclude that investors who base their decisions firmly on recent performance typically experience below average returns in their portfolios. Despite this fact, each year billions of dollars flow into mutual funds with the best short-term performance.

While an investment in these funds seems astute at the time, the out-performance is more of a signal that poor performance is around the corner, rather than a signal that superior performance will continue. Styles go in and out of favor, and a strategy of buying the top performing mutual funds or stocks eventually leads to increased volatility and below average results. The negative results of chasing may not be evident in the short-term, especially if the style stays in favor for a year or so, but over a lifetime of investing, moving from one investment to another based on recent past performance will significantly increase the performance gap.

An Example of Chasing the Hot Dot

PBHG Growth Fund was a very popular mutual fund in the mid-1990s. For three years ending in 1995, PBHG Growth was up over 100%, placing it on top of the mutual fund rankings. Several leading newspapers and magazines interviewed fund manager Gary Pilgrim and crowned him a bona fide stock-picking guru. Investment advisors and newsletter writers across the country were quick to add his fund to

their “Buy” list of funds. The attention helped triple assets in the fund during the latter part of 1995, triple again in 1996, and triple a third time in 1997.

Table 1-6
PBHG Growth Fund Comparison

Calendar Year	Assets in Millions at the Beginning of the Year	Performance Relative to the S&P 500
1993	3	36.7%
1994	184	3.4%
1995	746	12.8%
1996	2,028	(13.1%)
1997	5,931	(36.7%)
1998	5,464	(28.0%)

Source: Morningstar, Inc.

From its inception in 1985 through year-end 1992, PBHG Growth fund had mediocre performance. As a result, few people had ever heard of Gary Pilgrim. In 1993, there was only \$3 million in the fund. Fortunes changed overnight, and during the next three years Pilgrim had one of the hottest hands in the fund business. As a result of the superior return, money gushed into the fund. By the year-end 1995, PBHG Growth Fund accumulated over two billion dollars in assets, most of it from new investors. Then the tide began to turn. The fund under-performed the S&P 500 by 13% in 1996.

Despite the lackluster performance, the long-term results still placed PBHG Growth on top of the mutual fund performance rankings. Money continued to flow in at an unprecedented pace. By January 1997, PBHG Growth had close to \$6 billion in assets. Then the storm struck. During the first quarter of 1997, the fund dropped nearly 20% in value, losing shareholders nearly \$1.2 billion in real money. For the entire year in 1997, the fund registered a return almost 37% below the S&P 500. The poor performance continued into 1998. The fund under-achieved the market by another 28%.

As a general rule, the greatest amount of money flows into the hottest mutual funds at the peak, thus the gains for most investors are dismal at best. For ten years ending 1998, PBHG had a cumulative track record inline with the S&P 500. Unfortunately, the best years occurred when there was little money in the fund. The bad years came only after billions in new money was invested. Most PBHG investors lost significantly amount of money from 1996 to 1998, and they also missed three fabulous years in the stock market. This PBHG example shows how chasing the hot dot can cause a wide performance gap between market returns and investor returns. It is common to find similar circumstances in other funds and fund categories.

PBHG Was Not Alone

In 1994, Morningstar conducted a cash flow study of all US growth funds. They included 219 funds in the study and covered a five-year period between 1989 and 1994. The purpose was to compare the published

return of the growth fund category with the actual profits made by investors in those funds. The study used cash flow to look at movements of money into and out of the funds. These cash flows into and out of US growth funds were calculated in a manner similar to the DALBAR study in Chapter 3.

The average growth fund earned an annual return of 12.5% during the five-year period. Unfortunately, according to Morningstar, the average investor in those funds lost 2.2% during the same time period. The reported 12.5% annual return of the category had little bearing on an individual investor success. It was investor behavior within the category that had the greatest negative impact on their results. Investors shifted money into growth funds at the wrong time, and their profits never materialized. In fact, chasing growth funds in the early 1990s caused investors to lose while the entire market gained.

Tracking the Performance of Past Winners

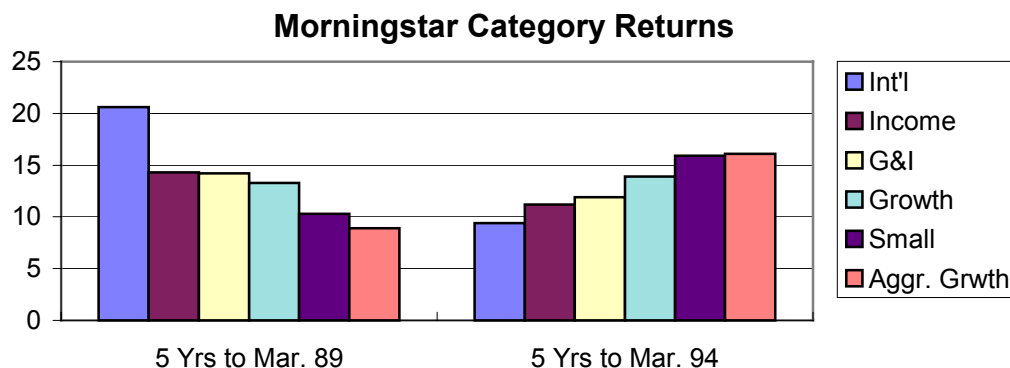
Selecting an investment based on superior performance is like selecting a line to stand in at the super market. The moment you get in one - it stops moving.

Dr. Howard Green

In 1988, CDA Technologies conducted a study of 363 mutual funds to see if past performance could be used to choose investments. They ranked mutual funds by their 5-year returns from 1977 to 1981, and compared the results to the next 5-years. Of the top twenty performing funds in the first 5-year period, not one fund made it to the top group in the second 5-year period, and only two funds made it into the top 100 group. The top twenty funds from the first period ranked 222 on average during the second period. Based on CDA data, buying a mutual fund based on prior five-year performance leads to below average results.

In 1994, Morningstar conducted a similar study. Consistent with the CDA study, the top performing categories the first period were at the bottom category the next. Performance of fund styles is not consistent. Chasing the hot dot leads to below average returns.

Figure 6-1



Mark Carhart of the University of Southern California conducted a recent landmark study of the persistence of mutual fund returns. He found there was a small tendency for the very best funds to continue their performance for a short while, but any excess return generated by holding the top funds did not last more than one year. By the third year, the top funds tended to fall into the below average category. In addition, there was more risk in buying the top funds. When a top fund falls, it does so very quickly, and many go straight to the bottom of the rankings. Carhart also concluded that fund expenses had a large impact on return, and the worst funds within a category tended to be those with the highest fees¹.

In 1996, Morningstar conducted an interesting study comparing popular fund categories against unpopular funds. A popular fund category was characterized as a style that took in the most money over the preceding 12-month period. Unpopular funds had the worst money flow during the preceding 12-months. In the following year, the unpopular funds performed much better on average than the popular ones². As a general rule, mutual fund styles regress to the mean. The performances of all investment styles tend to merge together over time³. If investors flock to styles that recently surged, they already missed most of the upside and are more likely to capture the regression backwards.

Investors Continue to Chase the Hot Dot

Although evidence against chasing the hot funds and hot styles is overwhelming, investors still prefer top performers to everything else. A survey conducted by Montgomery Asset Management in San Francisco found that 63% of investors list superior performance as the number one reason for choosing a fund⁴. Columbia University's Graduate School of Business found the investors chose past performance 2 to 1 over any other method of fund selection. As a result, over 90% of all new investment money flows into mutual funds with the top ratings by Morningstar, while those with the lowest rating lost assets⁵.

Using Star Ratings and other Devices to Pick Mutual Funds

As the number of mutual funds nears ten thousand, there is a huge demand for mutual fund ratings. As a result, the slicing and dicing mutual fund returns have become a huge, competitive business. There are numerous companies in the game, with the largest and most popular being Morningstar Mutual Funds in Chicago, Lipper Analytical Services in Summit, NJ, and Value Line Mutual Funds.

¹ Mark M. Carhart, "On the Persistence of Mutual Fund Performance", *Journal of Finance*, Mar. 1997, Vol. LII, No. 1, pg. 57-82.

² Susan Paluch and Jeff Kelly, *Going Against the Crowd*, Morningstar Mutual Funds, Jan. 1996, Vol. 4, Number 5.

³ John Bogle, *Bogle on Mutual Funds*, Dell Publishing, NY, 1994, pg. 92

⁴ As reported in *Dow Jones Asset Management*, May/June 1997

⁵ Karen Damato, "Morningstar Edges Toward One-Year Ratings", *The Wall Street Journal*, April 5, 1996, pg. C1.

Most private rating agencies use star ratings and other designations to rank mutual funds. However, Morningstar and Lipper are quick to point out their rankings have no predictive value, and that this was not the intent of the rating system. Morningstar editor Amy C. Arnett wrote about misuse of their rating system:

Over the years, Morningstar's star system has been frequently - and sometimes willfully - misunderstood. Many commentators insist on treating the star rating as a predictive measure or a short-term trading signal. The rating, which is clearly labeled as a historical profile, does neither⁶.

Right or wrong, the investment industry sells their products based on a favorable Morningstar rating. You see the ads in every commercial investment publication. Open any Money magazine and you will find several examples of how Morningstar and Lipper rankings are misused by mutual fund companies. In addition, brokers and other financial advisors use mutual fund rankings to imply that their ideas have merit. Generally, a highly rated fund helps make the sale easier. The salesperson's attitude is, "If the public believes a star rating or past performance data can predict the future, then let them believe it. I will use that to my advantage."

While Morningstar is first to admit their rankings should not be used to predict performance, competitor Lipper Analytical couldn't resist driving the point home. In 1994, Lipper examined Morningstar's 5-Star funds from 1990-93 and found their top ratings did not translate to top performance. Lipper found a majority of 5-Star funds performed below average after they received their rating⁷.

The Hulbert Financial Digest newsletter also tracked Morningstar 5-Star funds. The study found the funds lagged the market by a sizable margin. The average 5-Star funds rose 28.9% during the 32-month period while the Wilshire 5000 stock index rose 59.5% and the Lehman Brothers Treasury bond composite gained 36.9%. Mark Hulbert has also found the average 5-Star fund retained its' rating for only five months⁸. Arnett was correct. The star rating has no predictive value.

Owning Several Funds May Not Solve the Problem

It is common belief that holding several mutual funds in a portfolio lowers overall risk. However, diversification only works when the mutual funds are of sufficiently different styles. Many investors falsely assume their portfolio is well diversified simply because they hold several funds. The 401k plans of the Big-3 auto companies offer dozens of mutual funds, many with similar styles. During the growth stock boom in the late 1990s, it was common to find plan participants "diversifying" among 4 or 5 large-cap

⁶ Amy C. Arnett, Editor, *Beyond the Stars: The New Category Rating*, Morningstar Mutual Funds, Summary Section, Dec. 6, 1996, vol. 29, issue 2

⁷ *Selling the Future, Concerns About Misuse of Mutual Fund Ratings*, Lipper Analytical Services, Inc., Summit, NJ, May 16, 1994

⁸ Mark Hulbert, *Forbes*, December 6, 1993, pg. 275

growth stock funds, and ignoring all other fund categories. Buying different funds of the same style is not diversification.

There is a logical reason why many investors do not diversify their mutual fund holdings. Generally, people have little knowledge of investment styles. In a recent survey, Columbia University asked investors to describe what category of funds they owned. 75% of investors did not know if they were in a fixed income fund or a stock fund, and 72% did not know if they were in a US stock fund or international fund⁹. Most people simply invest in the funds that have performed the best over the last few years, regardless of style or category. In 1993, emerging country funds were hot. Some funds were up more than 80% for the year. As expected, in early 1994, more than half of all new stock mutual fund money flowed into emerging country funds. After the surge of new money, emerging country funds collapsed, and many investors sustained large losses.

Individual Stock Investors also Chase Returns

*Nothing captures interest faster or keeps it at a higher level than the mouth-watering thought of a profit. If the potential is large, your prospects interest focuses sharply on your next comments.*¹⁰

Leory Gross

Thus far we have addressed only mutual fund investors, but many people still take the old fashioned route, they build individual stock portfolios. What common habits do these investors exhibit? As a group, they buy and sell roughly the same stocks during the same time, with little influencing their decisions except short-term price momentum, media hype, and what friends are buying.¹¹ Several independent studies confirm these investing habits.¹²

Why do individual investors go for risky stocks and generally ignore Blue Chip companies? “Those are too big, too boring, and everyone already knows the story”, says G.M. Leob in his 1935 classic book, *The battle for Investment Survival*. He explains:

It is characteristic for the novice investor to want to run before he has learned to crawl, or walk. Tell a beginner to buy one of the best-known listed [companies] as his first equity venture and you get a look of scorn for such kindergarten ideas. Talk about the pitfalls in new, unseasoned, small, or relatively obscure stocks and get brush off for your pains. The blue-ribbon roster of America's most

⁹ Noel Capon, Gavan J. Fitzsimmons, and Russell Alan Price, *An Individual Analysis of the Mutual Fund Investment Decision*, Columbia University Graduate School of Business working paper.

¹⁰ Le Roy Gross, *Art of Selling Intangibles - How to Make Your Million\$ Investing Other Peoples Money*, New York Institute of Finance, NY, 1988, pg. 71, Gross's book was written for stockbrokers. His techniques are widely used throughout the brokerage industry. As a broker trainee in 1989, this book was required reading.

¹¹ Terrance Odean, University of California at Berkeley, as reported in *Registered Representative* magazine, July 1997, pg. 38.

¹² Robert J. Shiller, *Market Volatility*, First MIT Press, 1997, pg. 376

successful corporations might be good enough for our best institutions, but somehow fail to interest the tyro. He feels incorrectly that he must buy something “new”, something “special”, or something “exclusive” for him¹³.

There are several studies pointing to the inability for individual investors to pick stocks. In a landmark study, Terrance Odean of the University of California concluded that most investors sell winning stocks before ever seeing large gains develop. He analyzed thousands of individual accounts from an unnamed brokerage and found investors twice as likely to sell winners over losers. This reduced returns by about 5% per year.¹⁴ Jeremy Siegal of the Wharton School came to a similar conclusion. He estimated individual stock investors perform about 5% less than the market as a whole.¹⁵ Siegal assumed investor's stayed 100% in stocks, and did not time the market. Having evaluated hundreds of stock accounts over the years, my experience is that investors perform at least 5% below the market, if not more.

Summary of this Chapter and Part I

The erosion of return in a portfolio from chasing the hot dot is a gradual process. It takes several years before the irreversible effects are truly evident. Since most people hold a fund for between three and five years, they tend to forget what drew them to the fund to begin with. However, when they do decide to sell one fund and buy another, it is emotions based on recent performance that forces the change. Peter Lynch had this to say about chasing the hot dot in his second book *Beating the Street*¹⁶:

How do you choose a value fund, growth fund, or capital appreciation fund that will outdo its rivals? Most people look at past performance. They study the Lipper guide published in Barrons or any one of a number of similar sources that track fund performance. They look at the record for one, three, five years, and beyond...Thousands of hours are devoted to it [reviewing performance]. Books and articles are written about it. Yet with few exceptions, this turns out to be a waste of time.

It is not the action of the stock or bond market that leads to below average investment returns, it is the cost of investing in the markets, and the behavior of investors that affect results. Fees, commissions, market timing, and investment selection errors can significantly reduce returns over the long-term. Eliminate these mistakes, and your results will improve dramatically.

Straight talk about the antics of Wall Street will help set your portfolio straight. Part II of this book explains why the financial services industry supports ill-fated investment strategies, and why market “experts” are more of a hindrance than help.

¹³ G.M. Leob, *The Battle for Investment Survival*, Simon and Schuster, NY, 1935, pg 281

¹⁴ ebit Odean.

¹⁵ Jeremy J. Siegal, *Stocks for the Long Run*, Irwin Press, 1994, pg 292.

¹⁶ Peter Lynch, *Beating the Street*, Simon and Schuster, NY, 1993, pgs 67,68

Chapter 7

Mass Market Investment Advice - A Recipe for Mediocrity

People are motivated by two things: fear and greed. They are afraid to lose what they have and they are greedy to get more.

Bert Cornfield- legendary mutual fund salesman

Ask any investment advisor why you should be in the stock market and they will answer, “Over the long-term, stocks produce higher returns than bonds or money market funds.” Then they will likely point to historic charts and graphs to prove their point. Advisors are correct about the return of stocks. Over time stocks have produced higher returns than bonds or money funds. But the question arises, when they say the word “stocks”, what stocks are they referring to? Most advisors are referring to the entire stock market.

It is obvious that a great number of people invest in stocks because the stock market as a whole has performed well in relation to other investments. Since it is the market that attracts people, an investment in the entire stock market would make sense for most individuals. That way they get the return of the investment that interested them in the first place. Since this is the case, it would be logical for the public to buy index mutual funds. There are lots of index funds, but an index fund benchmarked to the US stock market is designed to invest in a portfolio of stocks that matches the performance of the entire stock market, less a very small management fee.

A major breakdown occurs in the investing process when a person asks an investment advisor, “How should I invest in the stock market?” Unfortunately, most advisors do not recommend people buy index mutual funds. They recommend some other stock investment that has a poor chance of achieving the performance of the stock market. Why do most advisors recommend inferior investment products given the clear advantage of index funds? The reason is the advisor is paid a fee to do so. There is no other reason.

A Conflict of Interest

Part I of this book explained three reasons why individual investors earned significantly lower returns than the markets they invest in. High expenses, poor market timing decisions, and chasing hot investment styles have resulted in a wide performance gap. Part II of this report looks at how the investment industry and mass media encourage investors to behave in a manner that causes a wide performance gap. We will look at the sellers of investment advice, and how their personal goals conflict with the goals of investors.

Wall Street is an exciting place. It represents free markets, capitalism, and opportunity for everyone. But it is also wrought with false promises and questionable sales practices. Whether you are working with a stockbroker or reading an investment magazine, you are faced with the daunting task of separating fact from fiction in an industry whose primary goal is to make money *from* you, not *for* you.

Where the Public Gets Investment Advice

Individual investors generally get their advice from three places; the popular press (including the Internet), friends and relatives, and paid advisors. In 1998, Kansas City based American Century conducted telephone surveys of several hundred individual investors and asked them to list their sources of investment advice¹. The category mentioned most often was the financial press, i.e. magazines, newspapers, TV, and the Internet. Other top sources of advice were friends and family, and paid advisors.

Sources of Advice for Investors

Source of Advice	% Mentioned
Financial media	44%
Friends and family	39%
Accountants and tax advisor	32%
Independent financial planners	29%
Stockbrokers	28%
Bankers	25%

In 1997, the NASDAQ Stock Exchange conducted a similar survey of individual investors who considered themselves “well informed”. NASDAQ asked the group where they got their investment information. About 38% read the *Wall Street Journal* daily and 23% read *Money* magazine each month. Close to 38% watched TV shows like *Wall Street Week* or listened to radio talk shows. Only 20% look to their local newspaper for advice, down from 58% in 1985. As far as the human touch goes, informed investors rely heavily on professional advice, with brokers and other financial consultants leading the pack.

Professional Advisors of “Well Informed” Investors

Personal Advisor	% Mentioned
Stockbrokers (including financial planners)	52%
Friends and relatives	51%
Accountants	43%
Bankers	38%

¹ As reported by Dow Jones news service April 7, 1998

As you can garner from the answers above, most people use two or three sources of investment information when managing their portfolios. Some of the advice comes from print, some from radio, TV and the Internet, some from friends and relatives, and some from advisors. Are these sources of information unbiased? Do they give you all the facts? Not by a long shot. Conflicts of interest run rampant in the investment industry. It takes a clear mind to sort out one or two relevant facts from the investment noise.

It is interesting to note what's missing from the surveys. No one mentioned investment courses offered through local colleges and universities. Many places of higher education run informative, non-sales oriented classes on financial planning and investment management. It's a great place to obtain unbiased (or less biased) investment information.

Perhaps the public believes the advice they are getting outside of academia comes from knowledgeable and properly educated people. That would be a dangerous assumption, and potentially a costly one. We will learn in later chapters that many people in the investment advice game are not well trained, and are certainly not experts.

A Recipe for Mediocrity

For a long time I have not said what I believe, nor do I believe what I say, and if indeed I do happen to tell the truth, I hide it among so many lies that it is hard to find.

Machiavelli in a letter to Francesco Guicciardini, May 17, 1521

Most investment advice sold en masse to the public is a *recipe for mediocrity*. The advice tends to revolve around the concept of "beating the market". While it is possible that mass-market advice may lead to superior returns in the short run, it is destined to fail in the long-term. It is not conceivable that majority of investors beat the market, especially after fees and expense. Yet beat the market advice is in demand, and the burgeoning investment industry finds that demand to be very profitable.

By the time an investment idea makes it's way to the general public, the idea is old. There may be some momentum in the markets that carry the idea forward for a while, but in the long run the public is always late to the game. The markets adjust so fast, the individual investors have little chance to capitalize on new information. Stockbrokers and investment advisors may be one small step ahead of the public, but that makes little difference. Most advisors are not skilled enough to make superior investment decisions.

Since almost everyone has access to the same market information at about the same time, only *opinions* and *interpretations* can differ. These opinions appear all around you in the form of newspaper articles, analyst comments, advice from CNN, and your broker. Some opinions sound more credible than others, and some people may be able to accurately interpret the news and profit from it, but overall the markets adjust too quickly for any individual investor to consistently capitalize on new ideas.

Does anyone get better information? Although it is not supposed to happen, institutional investors with large holdings in a stock may have access to information before it becomes public knowledge. Al Dunlap, former CEO of Scott Paper and Sunbeam, clearly explains this in his book *Mean Business*. Dunlap wrote, “A small investor doesn’t have access to the information and resources Soros does².” He was referring to private meetings between Scott Paper and an investment group representing hedge fund manager George Soros. The hedge fund made a large profit when Dunlap sold Scott Paper to Kimberly Clark. However, institutional investors do not always profit from extra information. Many institutions lost a bundle when Dunlap could not find a buyer for Sunbeam and the company collapsed.

A Preview of the Chapters in Part II

Part II refutes the marketing claims of the sellers of investment products and advice. There are no superior methods of investing that “beats the street” consistently. Advisors and other investment “experts” that sell beat the market strategies have an ulterior motive, making money for themselves. I have found no evidence that beat the market advice works, only that following it leads to mediocre results.

Preview of Chapter 8 – The Myth of Investment Experts

The public has a little knowledge of the way Wall Street works. Large brokerage firms have hundreds of analysts covering thousands of investments, plus dozens of economists following the economic beat. This impressive network of brainpower may give investors the impression that their stockbroker or advisor is very knowledgeable and offers superior advice. This impression is typically far from reality.

Most advisors who consult directly with individual investors are not highly trained, nor are they knowledgeable in an academic sense. A large majority of stockbrokers, financial planners, insurance people, and independent advisors are strictly salespeople, whose training is limited to firms they sell for. Chapter 8 looks at the people we turn to for investment advice, and it exposes a major shortfall that exists in the education and training of most “investment professionals”.

² Albert J. Dunlap, *Mean Business*, Fireside, NY, 1997, pg. 264

Preview of Chapter 9 – The Persuasive Power of the Printing Press

Selling investment advice via the printing press is a multi-million dollar business. There are now dozens of newsstand publications that offer investment advice for \$2.50 or less. Unfortunately, most of the information in these publications is based on market hype and strategies encouraging readers to *chasing the hot dot*, described in Chapter 6.

Some journalist at established publishers are well educated in financial subjects, while many others lack elementary knowledge about the economics and the markets. Reporters frequently quote investment “experts” in their stories. Ironically, many publications only interview “experts” who advertise in their publication, regardless of their skill or knowledge.

Investment books come in all sizes and colors. The best books are based on years of academic research and practical experience. Legendary investor Peter Lynch wrote two books about beating Wall Street at its own game. While these books were entertaining, I doubt any reader “Beat the Street” as a result. Even Peter Lynch himself admits that it is a very difficult undertaking, and that the idea of owning the entire market through a low cost *index fund* has a lot of appeal. Unfortunately, many books are of the get-rich-quick variety. Authors who write these books only intend to make money for themselves, not their readers.

Preview of Chapter 10 – Mutual Fund Follies

In 1946, Ed Johnson, president of Fidelity Investments, explained to the SEC that beating the market is not the goal of his company, “The management has no illusions it can beat the market and does not try...rotation of investments often occurs”³.

Fidelity’s business plan was to create dozens of funds, pushing the good ones and closing the bad ones. Ned Johnson, Ted’s son and subsequent president of Fidelity, would begin a new fund even if he would not put *one nickel* of his own money into it⁴. This strategy has worked for *Fidelity Investments*, the nations largest fund company. As of 1998, *Fidelity* offered over 100 funds and 57 different stock funds.

Mutual fund companies have become the leading investment choice for individual investors. Since beating the market is difficult, successful fund companies have learned the key to the business is

³ Daina B. Henriques, *Fidelities World*, Scribner, NY, 1995, pg. 105

⁴ Ibit, pg. 234, interview with Mark Shenkman, a former money manager at Fidelity.

based on opening new funds in hot sectors, and having a strong marketing plan. By offering dozens of funds, a firm hopes one or two will be a winner, so they can exploit those funds and gather assets.

Summary

Do not confuse the goals of the investment industry with your own goals. While there are many fine people working in the field, the real goal of the industry is to make money from you, not for you. As a result, most mass-market investment advice *encourages* behavior that widens the performance gap. As long as investors continue to seek superior returns, they will continue to pay commissions, buy subscriptions to investment magazines and newspapers, seek the advice of a paid advisor, and purchase an assortment of other products and services provided by the investment industry. This is a recipe for mediocrity.

Chapter 8

The Myth of Investment Experts

None of our men are experts. We have unfortunately found it necessary to get rid of a man as soon as he thinks himself an expert - because no one ever considers himself expert if he knows his job.

Henry Ford

Investment experts are everywhere, especially during a bull market. Are you looking for expert advice? The next time you are at a social gathering, just mention to a few people that you are interested in investing in the stock market, but know little about it. More experts than you ever imagined will soon surround you.

Since the bull market began, the number of paid investment advisors has proliferated to nauseating proportions. During the 1990s, more people entered the investment advice business than any time in history. As a result, the number of licensed stockbrokers has grown to hundreds of thousands. The number of people paid to give investment advice explodes even higher when you add in financial planners, independent investment advisors, and insurance agents. If that isn't enough, thousands of accountants, lawyers, and bankers now offer investment advice in addition to traditional services.

With so many people offering their investment expertise, you do not have to search for an advisor because one will find you. However, if you are looking for a competent advisor it may take a lot of time and effort. The level of knowledge and experience varies greatly in the industry. Unfortunately, the average advisor has a level of investment expertise that is disgustingly low. Few have any educational background in finance or economics beyond what is needed to pass the simple exams required to get into the business. To put the investment industry in perspective, more training is required for a 16-year old to get a drivers license than for a person to become a legally licensed investment expert.

Types of Investment Advisors

There are three broad categories of advisors that work with individual investors. These folks can be classified as traditional stockbrokers, financial planners (FP), and registered investment advisors (RIA). The way you tell them apart is by the way they get paid. Brokers work on commissions. Pure financial planners work on a dollar-per-hour or project based flat fee. Registered investment advisors receive a small percentage based on the amount of the assets they manage.

Insurance salespeople and banks fall under the realm of stockbrokers because they generally work on commission. Accountants and attorneys normally fall under the category of RIA because they collect management fees. However, some accountants and attorneys also collect commission kickbacks or referral fees, so they may be acting as broker or solicitor.

As you read the detailed descriptions below, you will notice there is a blurry line between brokers, FPs, and RIAs. In many ways the blur is by design. Advisors want to be whatever their clients think they should be, so titles change frequently. Nevertheless, in one way or another all advisors are paid based on the products and services they sell or the amount of money they manage, not the quality of advice they provide.

Stockbrokers (commission sales)

In 1998 there were over 60,000 active stockbrokers working for large national and regional firms. The average stockbroker at a national firm earned about \$150,000 in 1998, and the top 5% of brokers made over one million. There are also thousands of people claiming to be independent brokers, which means little except that they work for smaller firms and trade through obscure sounding companies. Regardless of the size of a firm, all registered brokers must place their license with a brokerage firm that is a member of the New York Stock Exchange (NYSE) and the National Association of Security Dealers (NASD). The firm that holds a broker's license also oversees all sales activity, or at least is supposed to.

The high potential income of being a broker lures many people from all walks of life. However, the competition is intense in the business. Only 40% of rookie brokers survive the first three years of selling, and far less are around after five¹. Since turnover is so high, there is always a need for new brokers. That is not a problem for Wall Street because there are only a few requirements to enter the field. For example, one requirement is that you need to be sponsored by an active broker-dealer. This can either be through a large brokerage firm as a full employee, or through a small firm that sponsors you as an unpaid independent. A second requirement is to apply for and take a securities exam, such as the Series 7 Registered Representative exam offered through the National Association of Security Deals (NASD). The exam application asks about criminal records, lawsuits, liens, and other problems you may have had. It does not ask about your experience or education background in the investment field. Knowledge and experience are not requirements to get into the investment field. After a few weeks of study and possibly a crash course on the subject of investing, you take and pass the exam. Now you are fully qualified to sell investment products and services to the public. You are an investment professional.

¹ Mark Sutton, director of Pain Webber's private client group, *On Wall Street*, January 1998, pg. 20.

Once you are in the field, you will not be calling yourself a stockbroker. Very few people in the industry call themselves brokers anymore. It does not sound good. Besides, ten years ago brokers sold mostly investment products, now they sell everything from checking accounts to home mortgages. Due to their expanding role, most brokers call themselves a *Financial Consultant*, *Financial Advisor*, *Investment Counselor*, *Investment Specialist*, *Financial Coach*, and even *Personal CFO*. Regardless of the name change, most brokers are still paid the old fashioned way, by commissions and fees

Here is the bottom line on brokers. It is impossible for anyone being paid a commission to offer objective advice when their personal income is tied so closely to the products they sell. I was a broker for ten years and this is an absolute fact. The conflict of interest that exists between offering objective investment advice and getting paid is overpowering. In the end, getting paid always wins over objectivity.

Financial Planners

The title Financial Planner (FP) has been greatly bastardized over the years. Financial planners used to be people who only wrote detailed financial plans for clients at an hourly rate fee or flat fee. They did not sell investment products or directly manage their money for fees or commission. Nor did they sell insurance or insurance products. These “pure fee-only” planners are still around, but they are very hard to find.

Nowadays, the title of FP is used by a much broader group of people, for better or worse. Like stockbrokers, “fee-based” FPs are more interested in selling investment products and insurance than offering objective financial planning advice. They are, in a sense, independent stockbrokers, but they prefer to call themselves financial planners for marketing reasons. Like a broker, a commission-based planner goes through the securities exam process and places their licenses with a licensed broker-dealer. Insurance agents also fall under this category because they are paid commission to sell investment products. Although most FP’s still offer financial plans, they only do it to the extent that it leads to a product sale or an ongoing money management relationship.

Another type of FP is called “fee-only”, although in this case the “fee” is not for writing a comprehensive financial plan. These fee-only FPs are looking to be paid an ongoing annual management fee for investing their clients’ money. Most fee-only planners use no-load mutual funds and put an advisor wrapper on top of fund costs (see Chapter 4). They meet with clients on a regular basis to discuss the performance of the funds and make necessary changes. Accountants and attorneys sometimes fall under the fee-only type of advisor, although in many instances, they do not actually make the investment decisions themselves. Accountants and attorneys often refer clients to an outside advisor and expect to get a portion of the advisors fee as a referral payment.

If you are going to use a financial planner, I recommend searching for a “pure fee-only” one. Go to someone who charges by the hour for financial advice and does not sell products. An objective planner can help develop long-term investment strategies, review insurance needs, advise you on taxes, and help with estate planning. Just remember that there should be no conflict of interest between the planner and your plan. Look for someone with the Certified Financial Planner (CFP) designation and a four-year college degree in finance. This ensures they have dedication to their practice.

Registered Investment Advisors

If becoming a broker sounds easy, registering as an investment advisor is a snap. Almost anyone can become a Registered Investment Advisor (RIA) and collect fees for investment management services. There are only a handful of rules and regulations that must be followed to get into the business. Most States require applicants to pass a simple hour-long Series 65 test. Traditionally, the test did not cover investment concepts. It only covered procedures and laws surrounding the investment industry. However, due to the large number of lawsuits, some states are starting to require that people taking the test have some rudimentary knowledge of finance and economics.

Advisors with less than \$25 million under management need only register with the states they do business in. Investment advisors who manage more than \$25 million dollars must register with the SEC, which means completing another application and sending in another fee. Registration does not mean Government approval or certification. Nor does it imply the advisor is ethical, competent, or safe. Registration simply means the advisor has submitted the appropriate forms to the government and has paid a filing fee. This is the same as registering an automobile with the Department of Transportation. Just because a person registers a car does not mean that the car runs, or that the person who registered it knows how to drive with any proficiency. The “registered” in RIA simply means the bill was paid-in-full.

Since there are few barriers of entry to becoming an RIA, the field attracts all sorts of people. You will find former journalists, physicists, teachers, bankers, real estate brokers, actors, Nobel Laureates, and even barred stockbrokers who had their Series 7 license pulled by the NASD for unethical or illegal acts. In 1998, there were over 25,000 RIAs registered with the SEC, and a great many smaller advisors registered with states across the country. Ironically, other than state or SEC registration, large investment advisors such as *Fidelity* are on equal footing with small advisors, such as *Joe’s Barber Shop & Investment Firm*.

Advisor Titles and Designations: The Good, the Bad, and the Worthless

Education and experience vary widely in the investment advice field. Many financial advisors may have minimal education and experience while others have extensive backgrounds and education. The only way

to tell the difference is to ask for a resume and check credentials. Generally, at a minimum you are looking for at least an undergraduate degree in business or economics, plus a meaningful professional designation such as Certified Financial Planner (CFP) or Chartered Financial Analyst (CFA). Be careful of firm designations such as Vice President or Senior Consultant. They are meaningless marketing gimmicks.

Designations

Advisors think they appear knowledgeable if they have lots of letters after their name. Typically, these letters take the form of acronyms such as CFA, CPF, CPA-MA, ChFC, CIMA, or something similar. A few of those titles are very prestigious, meaning they require years of hard work, academic study, and job experience. Others are best described as Mickey Mouse. Many designations are earned by simply paying a fee to a financial marketing group. No tests or class work is involved.

One recognized title in the financial community is the Certified Financial Planner (CFP) designation. It signifies a well-rounded education in the area of personal finance, and the holder has to have at least three years of experience in the field. The program requires a candidate to complete five courses covering insurance, investments, estate planning, taxation, and other areas, and pass a comprehensive exam. It usually takes a candidate 18 months to complete the program if the candidate has prior work experience. The insurance industry has an equivalent designation called a ChFC (Chartered Financial Consultant), and the CPA community has a distinguished title called CPA/PFS (Personal Finance Specialist).

A second prestigious designation pertaining mostly to investment analysts and institutional money managers is the Chartered Financial Analyst (CFA) designation. The CFA requires several years of advanced academic study and practical experience. The CFA designation has the stature in the investment industry as a CPA in accounting, a JD in law, or an MD in the medical field.

After the CPF and CFA designations noted above, the level of relevance drops off considerably. Most other titles require little or no academic work and can be earned in a few weeks. There are even mail order titles that people can attain by taking a simple exam or joining a marketing organization. To their credit, most reputable Wall Street firms do not recognize these Mickey Mouse designations, and stockbrokers cannot place them on a business card. However, independent Advisors are a different story. Independents can quickly purchase an alphabet soup of designations and hope their clients don't recognize the fact that the ink on the business card is worth more than the title.

Vice President and other Useless Firm Titles

While brokerage firms do not allow mail order designations on business cards, they do hand out meaningless firm titles to everyone. It is a widely known fact that many clients feel more comfortable working with an officer of the firm. Therefore, almost all brokers are given the title of Vice President. As a result, Wall Street firms have tens of thousands of VPs scattered in every office around the country. The VP title may sound impressive, but it has nothing to do with broker's experience, knowledge, or client satisfaction. It is strictly a marketing designation and reflects the amount of commissions generated by the broker, not the quality of his or her investment advice.

The more money a broker makes for his or her firm by selling investment products, the more prestigious that person's VP title becomes. Titles that signify a higher level of sales may include Executive Vice President, Senior Vice President, or Managing Director. A new stockbroker can easily become a Senior Vice President in a short time if one wealthy relative generates a lot of commission business. A big commission broker will also qualify for free trips and prizes, which are worth much more than any VP title.

Experts Lacking Knowledge

The supreme end of education is expert discernment in all things - the power to tell the good from the bad, the genuine from the counterfeit, and to prefer the good and the genuine to the bad and the counterfeit.

Samuel Johnson

Can you imagine a world where doctors are not required to attend medical school and lawyers do not have to go to law school? Would you hire an accountant that does not know how to read the tax code? What if your child's teacher did not finish high school and was a functional illiterate? Chances are you will not be satisfied with the results. Yet this is exactly how the investment industry operates. There are no educational requirements to enter the investment business or any accredited education needed to stay in.

Academic Background of Most Financial Advisors

The typical financial advisor is hired into the investment business because they have sales skills or social status, and is thought to be able to bring in large, wealthy clients. They are not hired because they have a financial background or investment acumen. The shocking truth is that a person does not even need a high school diploma to become a stockbroker or investment advisor, as long as they pass a few simple requirements noted earlier.

Obviously, Wall Street firms do not want to put financial illiterates into their offices. So, when rookies come on board, many investment firms send them to in-house sales training classes. This training usually takes place off site, and can last several weeks. While at “boot camp”, rookies familiarize themselves with the firm’s products and services. They also learn how to make cold calls and practice other sales skills. If time permits the larger firms may actually teach a class or two about finance and economics, but that is unusual. After sales boot camp is complete, a rookie returns home to start their careers as investment salespeople and are now familiar with their firms high-cost, company recommended products and services. This is the extent of training most brokers will ever get.

Over the last few years the SEC has put pressure on investment firms to provide ongoing education to brokers. The continuing education program (CE) grew out of an unprecedented number of complaints and lawsuits against stockbrokers and other advisors in the industry. While the CE requirement is a step in the right direction, it does not address the real problem. Most classes I attended as a broker at Smith Barney in the late 1990s concentrated on refining sales practices and knowing the legal loopholes in SEC working in an effort to reduce the number of lawsuits against the firm. CE does very little to educate advisors on the basics of finance, economics, and portfolio management.

Insurance salespeople and mutual fund salespeople also misuse continuing education programs. To see how ridiculous the CE programs can become, here is one real life example that happened to me:

A few years back, I took a college graduate course on portfolio management at an accredited college. Just out of curiosity, I called the compliance department at Smith Barney to see if the firm would allow this course to count toward the new CE program that the firm was starting. SB would not allow the course to count because the college I was attending had not applied to be approved by the firm. The very next week, an insurance representative was in our office trying to push his high cost products. As part of that push, he offered to take a group of brokers to lunch at a very expensive restaurant. As extra incentive to sell his product, he told us that his insurance company was recently authorized by Smith Barney to issue CE credits, and if we listened to his sales pitch on annuities while eating a free lunch, we would all “earn” three credit hours.

Higher Education has Low Priority

You don't need a fancy diploma to be successful in this business. If your clients think the market is going up, agree with them and sell them more stocks. If they think it's going down, agree with them and sell more bonds. Just tell people what they want to hear and you will become rich.

Manager at a large brokerage firm where I worked

As professionals, you would expect most investment advisors would continuously seek courses that lead to advanced degrees and meaningful professional designations. Surprisingly, there is no evidence to support that notion. I estimate less than one quarter of all brokers ever take a class outside of their firm. Many Wall Street firms are neutral on the subject of a professional education, and some office managers flat out object to the idea. From management's perspective, a broker's job is to sell products and services. A detailed understanding of the markets and the economy is not essential to that job - in fact, education hinders sales. I have been told more than once as a broker, "Your job is to sell what makes us money as long as it keeps us out of trouble." It has also been whispered to me why analyzing investments reduces sales, "Never let the facts get in the way of a good story." No Wall Street will ever admit that the most educated brokers often make the least profitable brokers. But that truth is widely known by the office managers who hire brokers.

Unfortunately, a new broker is not in a position to pursue higher education even if they wanted to. Most rookie brokers earn meager amounts while in a training status, and when training is over, the meager salary starts to diminish. By the end of the second year, rookie brokers are typically expected to be on 100% commission. As a result of the loss of salary, rookies spend all of their time prospecting for new clients, and trying to sell anything to anyone who will listen. Recall that only 40% of new brokers make it past the three-year mark. Any thoughts of pursuing an academic education must take a back seat to putting food on the table.

Conclusion

The public has a little knowledge of the way Wall Street works. Large brokerage firms have hundreds of analysts covering thousands of investments, plus dozens of economists following the economic beat. This impressive network of brainpower gives many people the impression that stockbrokers and other financial advisors are very knowledgeable and offers superior advice. This is not the case. Most brokers only know enough to stay ahead of their clients and sound like they are informed.

The fact that advisors are not well trained is evident in the DALBAR data shown in Figure 8-1. Notice the small difference in return between investors who buy funds through advisors and those who buy direct from no-load fund companies. The results are almost identical, and well below the market. After accounting for commissions and other fees, brokerage investors likely performed below direct market no-load investors.

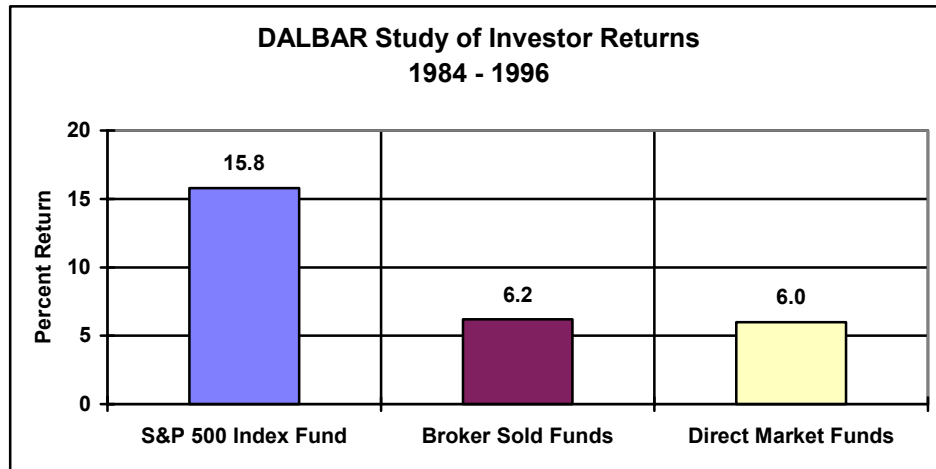


Figure 8-1 Source: DALBAR Financial Services

Despite the illusion of expert advice, the average financial advisor is no better at picking investments than the typical investor, which is not saying much. It has been my experience that advisors fall for the same mistakes as individuals, i.e. market timing and chasing the hot dot. If Wall Street firms decided to train their salespeople on academic knowledge, perhaps they could be of greater assistance to their clients and begin to close the performance gap.

Obviously, the DALBAR study reflects the average advisor and the range of competence varies greatly. The challenge is being able to tell the difference between a good advisor and a bad one. Now that bankers, lawyers, accountants, and the local barber have gotten in the investment advice business, the task of finding a competent advisor has become more difficult. Astute investors should research the background of an advisor before employing their services.

Chapter 9

The Persuasive Power of the Printing Press

News is that which will create greatest excitement among the greatest number.

Ayn Rand - Fountainhead

Interviewing for *Barron's*, journalist Gene Epstein asked University of Chicago economist and Noble Prize Laureate Merton Miller what advice he would give the average investor.

Miller gave Epstein a surprising answer:

“What advice would you give the average investor?”

“Don’t quote me on this, but I’d say don’t read *Barron's*.”

“Why!?”

“Because it will only tease you about investment opportunities you’d best avoid.”

Hat’s off to *Barron's* for printing Miller’s honest answer¹.

How good are investment selections found in newspapers, magazines, books, investment newsletters, and the Internet? They may be entertaining and informative, but according to several independent studies, they offer little value to investors seeking superior performance. In fact, most investment recommendations in the financial press lead to below average returns. This chapter reviews the quality of investment information found in the printed media, and explains how that information widens the gap between investor returns and market returns.

Newsletters

Investment newsletters are as popular as supermarket tabloids, and most are about as honest. Newsletters are purchased on a subscription directly from the writer. Some newsletters sell annual subscriptions for a couple of hundred dollars, and others demand thousands of dollars. How good is the advice in newsletters? As we will soon learn, it is not good at all. However,

¹ Gene Epstein, *Prizing Caution*, *Barron's*, June 2, 1997, pg. 28

newsletter writers would never admit to consistently poor performance, nor do they have to. The Security and Exchange Commission does not govern the media, which is what a newsletter is. Instead, written content in a newsletter falls under the First Amendment and Freedom of the Press. As a result, newsletters, newspapers, magazines, etc. do not have to report the performance of their investment recommendations. If they do happen to publish a return, it does not have to be checked by a CPA firm, so it is often inaccurate and exaggerated.

You may think that newsletter writers should be held responsible for their recommendations, but that is not the case. In 1985, The US Supreme Court ruled that investment newsletters were journalistic articles, not investment advice. Therefore they are exempt from the Investment Advisors Act of 1940 and not subject to SEC regulation. This means newsletter writers can claim they achieved any performance they wish, even if it is not true, and their claim is protected under the First Amendment.

A perfect example of this is *California Technology Stock Letter*, published by Michael Murphy. In a recent advertisement for this newsletter Murphy claimed incredible stock-picking ability, routinely touting stocks that had 700% to 900% returns. Unfortunately, Murphy must not be taking his own advice. The *Monterey Murphy New World Technology Fund*, personally managed by Mr. Murphy, was the worst performing technology fund in the country over a three-year period ending in 1998. The performance of this highflying wonder was negative 8.3%% annualized, compared with a 27.6% annual gain during the same period for the average tech-fund fund².

Michael Murphy is not alone. In late 1987, a self-proclaimed market guru named Joe Granville predicted the market would crash, and he became famous when it did. While Granville was correct on that occasion, he has been wrong ever since. Although Granville claims high returns in his newsletters, for an 18-year period ending in 1998, *The Granville Market Letter* lost 22.5%. Despite this dismal record, the media still seeks his insight, and he is hailed as an important market expert.

As a group, newsletter writers have a terrible track record of picking stocks and mutual funds. The *Hulbert Financial Digest* has been tracking the performance of investment newsletters since 1980. During that period, founder Mark Hulbert isolated only

two newsletters that have beaten the Wilshire 5000, a measure of the broad US stock market³. Since most letters engaged in some sort of market timing, the average letter had only 54% invested in equities during the period. That lowers performance during a bull market for stocks, which explains some of the poor performance. Regardless of that fact, almost every “stock only” letter failed to keep pace with the general market average.

One newsletter that did perform well in Hulbert’s study was the *Value Line Investment Survey*. Each week Value Line evaluates 1,700 stocks and awards 100 of them their top “timeliness” rating. According to Value Line, a portfolio of these top 100 stocks would have beaten the market since the early 1980s. Unfortunately, the *Value Line Fund*, which is managed using the timeliness rankings, had no such luck. The *Value Line Fund* returned 2% less than the market over the same period of time. This is very ironic. In advertisements, Value Line insists the system works, but in practice, it does not work in their own mutual fund. The difference between the real world returns of the fund and the theoretical returns of the strategy are explained in part by trading costs and human judgement. The real world weakness that applies to Value Line data applies to other strategies as well. It is always possible to beat the market in theory, but it is much harder in practice due to fees, expenses, and operational inefficiencies.

Magazines

Wall Street is a place where people who ride a limo to work get their investment advice from people who ride the subway.

Warren Buffet

Finance related magazines have become one of the most influential sources of investment information for do-it-yourself investors. These publications have grown in both circulation and ambition. By ambition, I mean that over the years there has also been a major editorial change. Prior to 1990, financial magazine articles were generally aimed at helping readers cope with financial planning issues, as well as helping them understand the workings of the markets. In recent years, the publications have focused efforts on providing readers with

² Karen Damato, *A Tech Expert’s Own Fund Takes Worst Place*, *Wall Street Journal*, 2/26/99, c1

³ Mark Hulbert, *Newsletters vs. Funds: Which are the Better Performers?*, *AII Journal*, September 1998

detailed investment advice, specifically individual stocks and mutual funds. While this may have lead to wider readership, it has not resulted in higher returns for readers, as the following paragraphs attest.

Money Magazine Study

Money magazine has recommended specific stocks since the early 1980's. Many of these recommendations occur in the annual *Forecast* issue published in late December. In this special issue, Money attempts to make sweeping forecasts about the markets and it highlights stocks the editors think offer superior potential in the coming year. Money editors also made specific sell recommendations in most Forecast issues.

Since Money is a favorite magazine of do-it-yourself investors, the major advertisers tend to be no-load mutual fund companies and discount brokerage firms. Full service brokerage firms like Merrill Lynch and Salomon Smith Barney traditionally were not big advertisers in Money, and as a result the editors of that magazine have no remorse about smearing brokerage firms in favor of larger mutual fund clients. In 1995, Smith Barney grew tired of Money's name calling, and used the annual Forecast issue to show how poor the magazine's editors were at selecting stocks.

Performance Results of Stock in *Money Magazine's Annual Forecast Issue*

	1990	1991	1992	1993	1994	Annual	Cumulative
Buy Recommendations	-16.7%	38.3%	-13.1%	-5.8%	2.1%	-0.8%	-3.7%
Sell Recommendations	-23.1%	23.4%	83.6%	12.0%	NA*	18.2%	95.1%
S&P 500	-3.2%	30.6%	7.7%	10.0%	1.3%	8.7%	51.7%

Data Source: Salomon Smith Barney *Money did not make sell recommendations in 1994.

During the five-year period, Money's buy recommendations fell far below the stock market. In fact, the cumulative buy recommendations lost -3.7% over the period while the S&P 500 gained 51.7%. More interesting was Money's sell recommendations. If you bought the stocks that Money advised you to sell, you would have beaten the stock market by a whopping 43% percent!

Forbe's Honor Roll

Many investors rely on published rankings to select their mutual funds. Each year Forbes magazine publishes an "Honor Roll" of mutual funds, highlighting those the editors believe will provide steady, long-term performance in both bull and bear markets. Forbes claims these funds have "consistency of performance and toughness in tough times".⁴

Princeton University professor Burton Malkiel, author of the widely acclaimed investment book, *A Random Walk Down Wall Street*, [W.W. Norton, NY] questioned the Forbes ability to choose mutual funds that achieve superior returns. Malkiel conducted an independent study of the Honor Roll funds and found that they resulted in returns below the market⁵.

For the entire 1975 to 1990 period, the Honor Roll funds performed 1.4% less than the S&P 500. However, in the later years, the funds were significantly below average. From 1983 to 1990 the Honor Roll Funds returned 6% below the market, and the group did not beat the market in any year. Other studies of the Forbes Honor Roll support Malkiel's conclusion.

Gauging the Market with Magazine Covers

Let's imagine for a moment that you have been on an extended trip to a remote region of the world. For three years you have had been completely cut off from business news and have no idea what happened in the stock market. Upon your arrival back in the US, you notice one popular business magazine cover reads, "Market Collapse May Send Economy Into Tailspin", and a second glows one word "Armageddon?"

Uh-oh. Before leaving you had put your entire retirement account into a stock mutual fund. Are you wiped out? Not quite. A quick call to your mutual fund company reveals that the value of your account has doubled over the last three years. How could that be? You wonder what market the magazines are talking about.

Magazine covers convey how we all feel about the markets today, not what happens over the long run or what will even happen in the near future. If stocks ran up recently, magazines print pictures of bulls and dollar bills. If stocks go down, bears and havoc cover

⁴ *Forbes*, August 29, 1994, pg. 132

⁵ Burton G. Malkiel, *A Random Walk Down Wall Street*, W.W. Norton & Co. NY, 1996, pg. 444

the newsstand. In 1991, Ned Davis elaborated on this subject in his colorful book, *Being Right or Making Money*.⁶ He reviewed magazine covers before and after major turning points in the markets. Davis found the covers are a good way to determine when crowd psychology is at an extreme. When a large number of covers are bullish or bearish, investors should wait 30 days and then beat against the trend. Davis says this method proved to be an accurate indicator nearly 80% of the time. While I do not advocate trying to time the market using magazine covers, it is interesting to look at some examples in the book:

On January 1, 1973, *Barron's* headlines read "Not a Bear Among Them", referring to the panel of investment experts on Barron's Roundtable. The article said the panel was "bullish on Wall Street, business, and the markets." Over the next 30 days, the worst bear market since 1929 began. In 1973 and 1974 the S&P 500 fell over 40% and small stocks fell over 80%.

August 1979, after six years of poor stock market performance, *BusinessWeek* announced "The Death of Equities" on their cover. They advised readers to sell stocks and invest in bonds linked to the price of gold and oil. That issue marked the beginning of a major rally on Wall Street and the peak in gold and oil prices.

In early October 1987, *Fortune* magazine printed a cover story titled, "Why Greenspan is Bullish". The story praised the US economy as well as the stock market. Two weeks later the October '87 crash occurred and stocks lost 20% in one day.

In the mad scramble for readers' attention, editors sensationalize current investment sentiment hoping to capitalize on fear or greed. When the market has been good, magazines print the market will get even better. When the market has been bad, they print it will get worse. The truth is, magazine publishers are not in the business of making readers rich by correctly predicting the market. Their job is to sell advertising space, and fear and greed stories significantly increase readership. Magazine editors do not care what their track record is on market predictions. It is irrelevant to their real job.

Newspapers

⁶ Ned Davis, *Being Right or Making Money*, published by the author, fourth printing 1995, pg. 39

Most newspapers publish stock and bond prices on a daily basis. When the stock market makes a large move one way or the other, journalists try to find the reason why. Many get their information from the national wires, or phone local experts for a quote. As a result, the reason the stock market went up or down is different depending on which paper you read. For example, the reason the market fell as published in the *Boston Globe* may differ from the *Chicago Sun*, which may differ again from the *Los Angeles Times*. It's really up to the reporter covering the story, and the opinion of the local experts they interview.

Newspapers and Their Advertising Clients

The typical investment company spends a lot of money placing advertisements in newspapers across the country. Therefore, when an expert opinion on the markets is needed, journalists are likely to call advertising clients for their thoughts. Some of those comments are then placed into a news story, which is free marketing for the investment company. Though much of this name-dropping in a story is subtle, there have been obvious attempts by major newspapers to steer readers toward investment companies that purchase sizable ad space.

On December 31, 1996, the *Investors Business Daily (IBD)* newspaper ran a front-page article about investment opportunities in sector funds. The story was titled "Playing Hot Sectors with Mutual Funds". The story mentioned Fidelity sector funds five times in the article, but there was only a hint of other companies offering competing funds. While a story mentioning Fidelity funds is not out of the ordinary, the full-page ad for Fidelity Select funds printed on page three was quite a coincidence. In rereading the article, it became clear that the story was planted by IBD in conjunction with the Fidelity placing the large ad.

On August 4, 1998, technical analyst Ralph Acampora from Prudential Securities made a bearish call on the stock market. He made this announcement on national TV about 2:00 PM in the afternoon, after the market had fallen substantially earlier in the day. The following morning, *USA Today* carried a lead story about the sell-off, highlighting Acampora's comments, and featuring a picture of him on the front page of the business section. Acampora was credited with calling the decline, even though he talked about it on television after the market was already down. Nevertheless, Ralph Acampora became *USA Today's* master of the stock market.

The whole setup of the story struck me as strange. Why all the attention on Ralph Acampora? About half way through the sports section of that newspaper I got my answer. On page C12 there was a full-page ad for Prudential Securities. The caption read, “When Your Goal is Capital Preservation, Call Prudential”. Now everything made sense. In exchange for hyping Acampora, Prudential bought a full-page ad in the newspaper. It was a well-planned media extravaganza.

Ralph Acampora’s guess was wrong this time. Within a year, the Dow Jones Industrial Average was up over 40%. It even surged through 10,000 for the first time in history. *USA Today* did not print that story.

Stock Picks in Newspapers

Newspapers are not held accountable for their investment recommendations, nor do they keep track of the stock picks. *USA Today* frequently selects stocks for their “Market Highlights” section. These stocks are based on analyst recommendations from various brokerage firms that advertise in that newspaper.

M. Mark Walker and Gay B. Hatfield of the University of Mississippi evaluated the performance of these *USA Today*’s stock picks to see if investors could achieve above average returns by following them⁷. The study covered a period from 1988 to 1990, and looked at 329 stock recommendations. Walker and Gay found that the stocks highlighted in *USA Today* only lead to superior returns if an investor knew the stocks the day before the newspaper was published. If investors bought the stocks after the paper was published, they would have realized below market returns. Of course, acting on inside information is illegal, so no one can buy the stocks before the paper is published. The moral of the story is that the newspapers do not provide investment information that the average person can use to make superior decisions.

Hypothetical Strategies Verses Real Returns

⁷ M. Mark Walker and Gay B. Hatfield, “Professional Stock Recommendations: Implications for Individual Investors”, *Financial Services Review*, vol. 5, no. 1 (1996), pg. 13-29

William O'Neil is a big name in investment research. The William O'Neil Company publishes *Investors Business Daily* and offers a wide assortment of investment publications. O'Neil also runs seminars based on his proprietary C-A-N-S-L-I-M method of stock selection. His technique is based on years of studying past market winners. The O'Neil method is well researched and theoretically accurate. However, it fails to produce superior returns when actual money is applied to the theory.

In the mid-1980s, David Ryan became famous by winning a stock-picking contest run by Stanford University. His track record over three years was an incredible 1,397%, on paper. Unfortunately for Ryan this was only a theoretical gain. Actual money was not used in the contest⁸. The press from the contest landed Ryan a job at O'Neil's company, and in 1993, Ryan became the portfolio manager of O'Neil's *New USA Growth Fund*. The fund used the patented C-A-N-S-L-I-M method of stock selection as well as Ryan's stock picking experience. Over the next three years, Ryan's performance never came close to the theoretical results of the Stamford contest. Management expenses were too high and portfolio turnover averaged 500% per year, which resulted in large trading costs. In early 1997, the *New USA Growth* fund was sold to another mutual fund company and the remaining assets were merged into a larger mutual fund at that firm.

The *New USA Growth Funds* is an example of how difficult it is to take a strategy that works on paper and make it work with real money. The proliferation of investment software and availability of detailed financial information make it easy for anyone with computer to develop simulated investment strategies that would have worked well. However, there is no guarantee the strategy will work well in the future. Switching from a classroom experiment to managing real money changes the nature of the markets so that no model can accurately predict the outcome. As a result, actual returns are never the same as the expected returns, regardless of the time and effort put into the computer model.

Books

Investment books can be categorized into three broad types. The first type of book is written by academics for students and can be found on college bookshelves. The second type is

⁸ Jack D. Schwager, *Market Wizards*, HarperBusiness, 1989, pg. 238

written for the general reader who is interested in improving their investment skill. The third type is written for the purpose of making the author rich at the expense of the reader.

Books for General Reading

Many titles for general reading have wide reader acceptance like “Bogle on Mutual Funds” by John Bogle, Chairman of the Vanguard Group, and “Investment Biker” by Jim Rogers. These books are written for a wide audience, attempting to capture the interest of professional and non-professional investors. Experienced money managers like Bogle and Rogers make excellent reading. The authors are original, honest, and have something genuine to say. There are times when money managers can go a little overboard. Peter Lynch, former manager of the *Fidelity Magellan* fund, wrote three books on beating the stock market. While Lynch’s books were interesting, they did little to improve the results of the average reader because the average person does not have the resources Fidelity has.

Some books for general reading include those written by journalist. Typically, these works are well researched and very informative. *Fidelity’s World*, by Diana B. Henriques, offers a behind the scenes look at the mutual fund business. *Buffett: The Making of an American Capitalist*, by Roger Lowenstein, is an excellent journalistic work about the life of Warren Buffett. *The Confidence Game*, by Steven Solomon, explains in detail the thinking of Federal Reserve Chairman Greenspan. These books offer wonderful insight into special topics within the financial services industry.

Make-Me-Rich Books

Unfortunately, many books are published for the purpose of making the author and publisher rich at the expense of the reader. These are better known as get-rich-quick books. Here you will find every marketing gimmick imaginable. There is heavenly advice found in Wade Cook’s *The Stock Market Miracle* and astrology readings in *Investing by the Stars*. There are books that appeal to pure greed, like *The Investor’s Guide for Making Megabucks on Mergers*, and *Midas Investing: How You Can Make at Least 20% in the Market this Year and Every Year*.

Get-rich-quick books tend to follow media events. The real estate boom in the late 1970s and early 80s brought on a rash of real estate speculation books. My favorite was

Nothing Down, how to make a fortune ripping off desperate home sellers. In the late 80s the Japanese economy was booming, which resulted in books like *Japanese Stocks: A Basic Guide for Intelligent Investors*, and *The Japanese Miracle*. Years ago, these books were best sellers everywhere, now they sell for a nickel at garage sales across the country. None of these strategies stood a chance of making money, except for the people who published them.

Mutual fund investing has seen tremendous growth in the 1990's. Naturally, there are several books on how to pick the best mutual funds. One popular book, *The Best 100 Mutual Funds You Can Buy* is a classic example. Every year self-proclaimed investment expert Gordon K. Williamson tells us which mutual funds to buy. Although, his *Best 100 Funds* book do not discuss past performance, I compared Williamson's 1994 fund picks in two important categories to see if he had any skill.

The "BEST" Funds vs. Lipper Averages

July 1994 – July 1997

	Growth Funds	Growth and Income
The "BEST" funds	22.9%	20.6%
Lipper Average for Category	23.1%	23.4%
Wilshire 5000 Index	26.7%	26.7%

Overall, Williamson's picks performed below average against the Lipper benchmark and significantly below the market average. Of the 25 funds in the study, only two performed better than the Wilshire 5000 broad US stock market index. In the back of the best funds book, Williamson boasts he is one of the most "*highly trained investment counselors in the United States.*" If this self-proclaimed God of investing cannot pick winning mutual funds, how can we mere mortals hope to succeed?

The New Media – Chat Rooms and the Internet

"Peer into my computer screen, and let us see what the future holds"

Crystal balls have always fascinated mankind. Soothsayers throughout history have made bold predictions of fame and fortune by peering into the glowing light of a crystal ball. In the modern world, computer monitors have replaced crystal balls, and Internet chat rooms have replaced the spirits from beyond.

Data Services and Analysis Programs

Watching lights blink on a computer screen and looking at stock charts all day may tell you what has already happened, but does little to tell you what the future looks like. A high-speed computer will not increase your investment knowledge or performance, but it may give you a tax deduction. Flashy investment software programs with a lot of graphics do nothing new to enhance investment returns, but they do receive data faster and crunch more numbers. Read the *Theory of Investment Value*, written by John Burr Williams in 1936. You will discover that basic investment techniques for valuing stocks have not changed in decades, only the speed of the calculations have changed.

Contrary to the claims found in advertisements, investment programs do not enlighten the user with special information. It is true that data can be obtained almost instantaneously, but data is not a substitute for real understanding. If you do not know what you are looking at, or how to analyze the information, the data is useless. Although mutual fund managers have all the computing power they want in hand, most have not been able to beat the basic market averages over the years. Speed is not knowledge.

Fools One and All

Internet investing is all the rage. There are thousand of investing web sites on the Internet offering everything from stock quotes to historic charts, and a variety of other services. These sites push investment products, news services, or whatever they can make a buck on. One popular site is the *Motley Fool*. It was started by a couple of college kids in the early 1990s. Just about everything you ever wanted to know about the markets can be found on the Motely Fool web site except clues to superior investment returns.

Mark Hulbert, editor of the *Hulbert Financial Digest*, monitored the performance of Motley Fool's model stock portfolios over the years. For three years ending in 1997, the Fool portfolios are not impressive. Hulbert found most model portfolios lagged the stock

market, and one lost a huge amount of money. As rule, the Motley Fool will discontinue a portfolio if it underperforms after a year or so. One defunct portfolio lost over 50% before it was discontinued.

The Motley Fool is not an investment advisor, so they are not required to report performance in accordance with industry standards. However, the jokers do try to maintain objectivity. One of the portfolios, the Motley Fool #2, did beat the market by a wide margin during a certain period. But that portfolio contained two hot technology stocks, which accounted for most of the gain.

Fraud on the Web

Many web sites offer investors the opportunity to swap ideas in an open forum called an Internet chat room. It has been my experience that a chat room is a place where you can have totally useless conversation about investing with someone who knows very little about the markets, but is convinced they know everything.

Chat rooms are also crawling with fraud. Stock operators try to manipulate prices by creating rumors and hyping stock. In early 1999, E-mail complaints to the SEC alleging Internet stock frauds were up to 300 a day, according to the General Accounting Office. Claims range from simple pump-and-dump schemes to sophisticated ploys such as counterfeit brokerage Web sites. Pump and dump is when a person buys thousands of shares of a penny stock, then releases favorable lies about the company over the Internet in hopes that the stock price will jump so they can sell their shares at a large gain.

Unfortunately, the SEC has not been able to keep up with the situation and fraudulent claims flourish. To further complicate matters, the SEC has recently lost more than 40% of their enforcement staffers in important markets like New York and San Francisco.

As millions of inexperienced investors sign onto the web, and hundreds of thousands of them opened on-line trading accounts, there is a growing belief that the Internet will lead to easy riches. If achieving superior returns was easy as buying a computer, logging onto the web, and trading tips in chat rooms, we would all be rich. In reality, there is a much higher probability you will be lulled into a stock manipulation scheme than there is that you will

achieve investment success. A Computer is a great tool, but common sense goes a lot further than the latest Intel processor.

Summary

Newspapers, newsletters, magazines and other printed media typically sensationalize their information in an effort to hold a reader's attention and attract new readers. The investment ideas in the printed press typically encourage harmful short-term strategies such as chasing the hot dot and market timing behavior. This results in a widening gap between investor's performance and the returns of the financial markets.

The printing press is a powerful tool. It can save lives and start wars, but it cannot tell you which mutual fund will beat the market next year. Following specific investment advice from a mass media source is generally not a good idea. Although the information seems important and relevant, unless you have a broad perspective and a deep understanding of the subject, it can do you more harm than good.

Individual investors spend hundreds of millions of dollars each year on investment information. But the money spent buying newsletters, newspapers, and magazines could be put to better use if invested in good quality bonds or a stock index fund. As Merton Miller says, the media will only tease you about investment opportunities you had best avoid.

Chapter 10

Mutual Fund Follies

The illusions of hope are apt to close one's eyes to the painful truth.

Harry F. Banks

The mutual fund industry is a tremendous success story. It has grown from a few hundred funds twenty years ago to over ten thousand today offering almost every investment style imaginable. The number of mutual fund companies has also mushroomed. There are over 500 fund companies in existence today. Mutual funds have become a household word and are the investment of choice for many people. Over forty million Americans have an interest in at least one mutual fund, and assets in those funds total almost five trillion dollars.

Mutual Fund Growth

Mutual fund companies compete in a fiercely competitive industry. As a result, they must develop new products that attract the attention of investors. This is accomplished by ensuring one or more funds beat the market each year. The best way to increase the odds of having a winning fund is to have many funds. Most fund companies carry ten or more funds and continually introduce new funds each year. From 1985 to 1995, the average number of funds per family nearly doubled from 6 to 10¹.

¹ Richard M. Ennis, "The Structure of the Investment Management Industry; Revisiting the New Paradigm", *Financial Analysts Journal*, July/August 1997, pg. 6-13

Table 1
Mutual Fund Proliferation

Year	Number of Mutual Fund Companies	Number of Mutual Funds	Funds per Company
1985	252	1,528	6.0
1990	423	2,917	6.9
1995	558	5,761	10.3

Source: The Investment Company Institute

The more funds that are added, the greater chance that a fund will be a winner. As you can see from Table 2, a fund family with 10 funds has a much greater probability of having at least one winning fund. Fidelity is the premier mutual fund supermarket. With over 100 funds, Fidelity expects to have several funds beat the market each year.

Table 2
Probability of Beating a Benchmark

Number of Funds in the Family	Probability of at Least One Fund Beating the Market	Probability of at Least Three Funds Beating the Market
3	75%	5%
6	90%	50%
10	95%	75%

Source: Richard M. Ennis, CFA

Creating New Funds

Ideas for new funds come from a variety of places. Some originate with portfolio managers and security analysts while others come from the marketing departments of these firms. Many ideas are in the best interest of investors, but the funds that are ultimately created are the ones that the marketing department believes will sell well.

While it is noble to think fund companies come up with all their own original ideas for funds, I believe this is more the exception than the rule. The fastest way to bring in money is to throw together a new fund based on a hot sector in the stock market. Ned Johnson, former president of Fidelity Investments, said if the public would buy a fund, he would create it, although he himself would not put one nickel of his own money into it².

² Diane B. Henriques, *Fidelities World*, Scribner, NY, 1995, pg. 234. Quoted during an interview with former Fidelity money manager Mark Shenkman.

If one day the public decided chicken farms were a good investment, five or six chicken farm funds would quickly be created in the mutual fund industry.

Some new funds are really not new at all. They are reworked old funds that have been laggards in the portfolio and needed a facelift. A fund may be reworked and reintroduced with a zippy new name, an energetic portfolio manager, and new marketing blitz. It is less expensive to try and save an old fund that already has assets in it than to start a new one from scratch.

Me-Too Funds

Most fund companies have limited resources to research new ideas, so the chance of discovering a winning strategy is quite remote. Time is better utilized by selling funds rather than trying to discover superior investment strategies. As a result, most fund companies copy hot selling ideas in the marketplace rather than create them. If one fund company offers a popular new fund, it will not be long before dozens of “me-too” funds are born.

While I was working as a broker, it was possible to gauge the strength of a sector in the market by the number of me-too funds created. When it seemed like every mutual fund wholesaler was pushing a particular style of fund, the style was usually close to a market peak. In late 1997, real estate investment (REIT) funds were very popular. After two years of robust gains in the REIT market, almost every fund company had a new or improved REIT fund. Just like clockwork, during the 12-month period that followed, REIT funds were one of the worst performing categories. In the first half of 1999, nearly every fund company was touting their growth fund, which was loaded with high-tech stocks. Is this a sign that growth and high-tech may be peaking and that stodgy old value stocks may soon outperform? As of this writing it is too early to tell.

Buying a Rising Star

Mutual fund managers are frequently quoted in major publications such as the *Wall Street Journal* and *Barrons*. They also appear on television programs like *Wall Street Week* and *CNN*. The more a manager is exposed to the public, the greater following they gather. Some fund managers become outright celebrities. The mere mention of their

name adds credibility to an investment and can make or break a fund company. These are “star” managers and their name alone is worth millions to a fund company.

When a fund manager becomes a star, the company they work for typically exploits the opportunity by making them “Senior Portfolio Strategist” over several funds, including many new ones. Actually, the star’s real title should be “Senior Marketing Strategist”, because it is not their job to run the portfolios on a day to day basis, it is their job to get in front of the public and promote their firm. The star may be consulted on some portfolio management issues when they happen to be around, but most of the time other people make the decisions.

Mark Mobius of *Franklin Templeton* is a superstar emerging market manager. Between 1993 and 1995 Mobius was named senior advisor of five new funds. Although Mobius has overall responsibility for the funds, he does not manage them on a day-to-day basis. He goes around the world speaking to brokers and investors about the virtues of investing in *Templeton* funds.

Star managers can also be the source of embarrassment. In early 1990, Jeff Vinick caused quite a stir at Fidelity while managing the mammoth *Magellan* fund. He was caught *pumping and dumping* the stock of a particular technology company. After pumping up the stock price by touting the company in the press, he dumped shares during the rally that resulted from his comments. Fidelity managers can no longer comment on the stocks in their portfolios.

Many fund companies recruit star managers from the competition. If a fund manager jumps ship, he or she typically takes a number of their clients with them and can make big money. The star manager is in a good position to negotiate stock options, signing bonuses, and other perks.

Change the Name to Protect the Guilty

What did one investment company do with a tired old fund that had been performing poorly for years? It changed the name and reintroduced the fund as a top performer. After several years of mediocre performance, the *Smith Barney Strategic Investor Fund* was losing market share. Then, an astute employee noticed that the weak performance would have earned it the #1 spot as a Social Awareness fund category. The only problem

was the fund was not managed with a social awareness strategy. No problem! After filing with the SEC, the *Strategic Investor Fund* was renamed the *Concert Social Awareness Fund*, and the performance results were carried over from the old fund. By changing styles, the old fund went from a mediocre general equity fund, to the top performing social awareness fund in the country. The only indication of this switch was an ambiguous statement buried in the prospectus that read:

The financial information set out below represents the financial history of the Fund prior to implementing the social awareness criteria and the Fund's performance may have been different if it had pursued a social awareness criteria since its inception.

As indicated by the quote above, if the *Concert Social Awareness Fund* had been managed from inception as a social awareness fund, there is no telling what the performance would have been. The SEC must have been sleeping the day Smith Barney slipped this one by.

Incubator Funds

If at first you don't succeed, destroy all evidence that you tried.

Anonymous

When a fund company wants to try a new strategy, they often test it on a small, private account first. If the strategy is successful, then they may open the account up to the public as a mutual fund. If the strategy fails, the account will likely be closed and no one outside the firm will ever know it existed. These private accounts are called incubator funds, and a fund company may have several eggs in the incubator at one time.

If an incubator strategy is successful and the account is converted to a mutual fund, the SEC allows the past performance of the private account to carry forward. This is how a brand new fund can advertise a fantastic long-term performance record, even though the fund was not open to the public. While the SEC requires fair disclosure of these facts, few individual investors read the fine print. It is a clear case of legal fraud.

In 1996, the performance of the *State Street Aurora* fund was up over 56%, earning it the #1 spot among 407 small-cap value funds according to the Morningstar mutual fund rating service. Aurora also beat the Russell 2000 small stock index by a whopping 40% that year. Unfortunately, the fund was not available to you and me. It was only open to State Street employees. No public investor could buy in until 1997.

When the incubator fund became publicly available, there was only \$1.2 million of employee money invested in it. However, new investors were attracted to the fund like a magnet, and money began pouring in. Within a few months, the fund held over \$200 million in assets. As you may expect, the rapid inflow of cash had a profound negative affect on the funds ability to invest. In 1998 Aurora significantly under performed their benchmark.

I disagree with the SEC's decision to allow mutual fund companies to use the performance of private accounts. There are huge operational differences between managing a one million dollar private account and two hundred million dollar mutual fund. If a mutual fund company must resort to advertising incubator funds to attract new capital, that does not say much for their ability to manage existing funds.

Other Marketing Claims

Mutual funds companies go to great lengths to create brand names in a mostly homogeneous industry. Barring the worst funds with the highest fees, the performance of most funds in a particular style or category can be expected to fall within a narrow range of returns over the long-term. It has to be this way. There is only a finite selection of stocks to choose from within each category. Nevertheless, fund companies will say just about anything to stand out from the pack. Here are a couple of examples:

Myth #1 - Experienced portfolio managers are better.

Some mutual fund companies try to sell the age and experience of their portfolio managers. The idea is to create the image that older is wiser, and more experienced managers are better stock pickers than younger managers.

There is no academic evidence to support this claim. To the contrary, the evidence suggests that older fund managers cannot keep pace with younger managers.

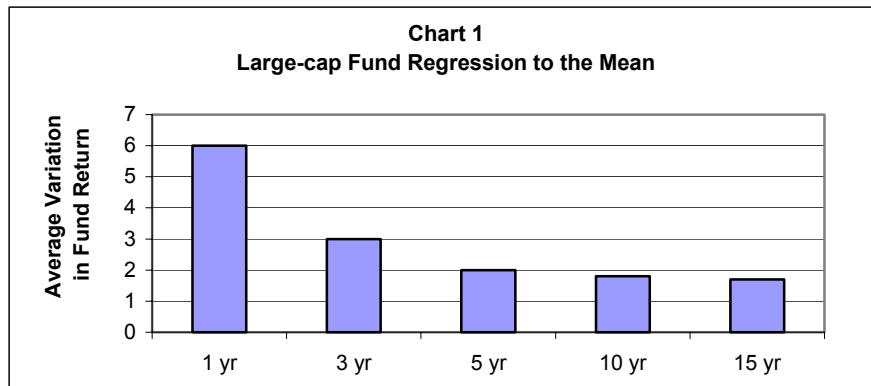
One recent study measured manager performance based on race, sex, age, college attended, SAT scores, MBA or non-MBA degree, and a variety of other factors. The study concluded that young managers perform better than older ones. The researchers speculated that younger managers worked longer hours, used technology effectively, and took more risks³. A screen of large-cap funds in the Morningstar Principia database reveals that managers with more than ten years tenure at a fund generally had the worst performance in the category.

Myth #2 - Bigger funds are better funds.

“You can’t get hurt in a big game,” or so the saying goes. Many large mutual funds promote their funds as solid bedrock performers, able to withstand the worst bear market. This is a marketing myth. Big funds can have big problems. A comparison of risk and return of the ten largest US stock funds, excluding the Vanguard Index 500 fund, show that they do not perform any better than the average mutual fund according to Lipper. About half the large funds performed below the Lipper average and half were above it. Only one large fund beat the performance of the Vanguard Index 500 fund, and that was by .10%. Large funds are not better, just bigger.

“Bigger is better” may have validity in respect. Due to the amount of money in a large fund it must hold many of the same stocks as the S&P 500, therefore, it should perform close to the market return. There should not be a time when a large fund grossly under-performs the market average. Large funds become large because at some point the fund achieved superior returns. But those returns are not likely to occur again in the future because the fund is so large. Shareholders can expect performance fairly close to market return, less operating fees and other expenses.

³ Judith Chevalier and Glenn Ellison, “Are Some Mutual Fund Managers Better Than Others? Cross-Sectional Patterns in Behavior and Performance”, May 1998



In the End it is Regression to the Mean

There are about 5,700 stock funds to select from today. This is interesting since there are only about 1000 or so stocks are large enough to be included in most of those funds. That means many funds hold the same stocks, and consequently, perform similarly over time. This phenomenon is called regression to the mean.

The regression tendency of mutual funds can be shown with a study of the Morningstar Principia database (see Chart 1). Screening the data for large-cap mutual funds with 15-year track records turns up about 65 names. Year over year the average variation between funds is about 6% per year. However, over a 15-year period, the variation falls to 1.7%. As the time horizon increases, regression to the mean in all categories begins to occur. Most of the variation in long-term performance can be explained by operating expenses and trading costs, not by a funds style or the skill of the manager.

Part II and the Performance Gap

Part II of this book explored a number of conflicts that exist between the sellers of investment products and the buyers. We could fill ten volumes on this subject and still not hit all the sales gimmicks used in the investment industry, but there is little point. The fact is Wall Street *encourages* people to invest in a manner that *causes* a performance gap. Remember that the industry exists to make money from you, not for you. There is nothing wrong with paying for investment products and advice, as long *your* best interests are at hand. *Caveat emptor*, let the buyer beware.

Chapter 11

Solutions & Expectations

We should never trust an answer less simple than the one that will do the job perfectly well.

William of Ockham

In Part I of this book, we discovered that a huge performance gap exists between financial market returns and individual investors in the markets. We found several reasons for the performance gap including high costs, market-timing, and chasing hot investments. Part II examined the pitfalls of following the recommendations of investment “experts” and others who thrive on investor mistakes. The financial industry presents ideas to the public in a manner that makes people believe they can beat the markets, which does more harm than good.

Part III is about closing the performance gap. We will learn how to achieve a fair return on your money without taking undue risks. By avoiding high fees and poor behavior, you can enjoy the fruits of the market place.

There is a second lesson to learn in Part III. Taxes are a hidden burden on returns. The power of tax efficiency can significantly increase your wealth over the years.

What You Can Reasonably Expect

The last fifteen years have spoiled us. The stock and bond markets have returned unprecedented gains during the 1980s and 1990s. Many investors believe the bull market will continue for many years into the future. A 1999 survey of investors conducted by *Paine Webber* found that the typical investor believes the stock market will achieve annual returns over 15% for the next ten years¹. Obviously, most investors have not experienced a prolonged bear market, but that does not mean one will not occur in the

future. Before jumping into specifics about investing in the markets, a review of past returns and future expectations is warranted.

Contrary to recent history, there have been long periods of time when the stock and bond markets have not been great investments. From 1968 through 1982, the stock market returned only 6.3%, and long-term government bonds 2.9%. More important, inflation was 7.3% during the same period, meaning that real return for stocks and bonds was negative. It was a terrible 15 years for owners of financial assets. Contrast that with the 1984 through 1998 period. Stocks returned 17.9% and government bonds 12.2% at a time when inflation was only 3.3%, meaning the markets generated unprecedented high real gains.

A long bull-bear market cycle seems to take about 30 years to complete. Basically, every generation has had a bull market and a bear market. Two times in the 20th century there were wide swings in value of financial assets. The baby boomers have not seen a bear market. No one knows when the down cycle will come or what will cause it, but one is very likely to occur in the next twenty years.

Inflation Adjusted Real Returns

We invest in stocks because over long-term periods of time, stocks perform better than bonds and money funds. But what can we expect in the future? That question cannot be answered by only looking only at past returns because inflation distorts the numbers. If an investment generated a nominal return of 5% and at the same time inflation was 5%, the *real* return was 0%, before paying taxes on full 5% gain.

The best way to state the returns of stocks and bonds is as a percentage over the inflation rate. Since 1926, large US stocks returned about 8% over inflation and bonds returned about 3% over inflation. Treasury bills average less than 1% over inflation². Due to the recent strength in the US economy, the valuation of the stock market is well over its historic norm. As a result, investors should plan on inflation-adjusted return for stocks of no more than 6% over the next few of decades.

¹ PaineWebber's Index of Investor Optimism, *Business Investors Daily*, April 28, 1999, pg. b1

² Ibbotson Associates, *Stocks, Bonds, Bills and Inflation, 1999 Yearbook*, Chicago, Illinois

If we apply these long-term expectations to today's inflation rate of 2%, it leads me to believe that large US stocks might return about 8 % over the next 30 years and bonds might return about 5%. An 8% expected return from stocks is much lower than the 15% return investors expect according to the *Paine Webber* survey. But this number is more realistic because it is based on the potential growth of earnings, not the inflation of market valuations.

Table 1
Historical Returns and Future Estimates of
Stocks, Bonds, and Inflation

	1926-1998	<i>Estimate 1999-2030</i>
Inflation Rate	3%	2%
Bond Returns (nominal)	6%	5%
Bonds – Inflation adjusted	3%	3%
Stock Returns (nominal)	11%	8%
Stocks – Inflation adjusted	8%	6%

The figures above are market returns before commissions, fees, and income tax. Investors should not confuse these market expectations with the returns an individual investors will achieve. It is very likely the returns of the average investor will be much lower than the market due to the reasons stated in Parts I and II of this book. Astute investors know that in the long-term, it is very important to keep fees low and reduce taxable income.

My estimates of future market returns are also less than what the sellers of investment products like to infer. Many advisors will quote an expected return on stocks of 11% or higher, because that is its true historic number. But this logic is flawed. It does not take into consideration the historic inflation rate of 3.1%, or the expanded valuations of stock prices. Expectations of return should move *lower* as the markets move higher and inflation subsides. Much of the bull market in stocks and bonds during the last two decades was a direct result of inflation falling from 13% in 1980 to less than 2% in 1999. That will not happen again. Interest rates will not go below 0%.

Why do stock valuations go up as inflation falls? Assets that produce annual income are worth more when inflation drops because the cash goes a lot further when buying things. This also means corporations with earnings growth are worth much more in a low inflation environment because that growth is real. The more an investor pays for

expected earnings growth, the lower their total return will be going forward. Expected earnings growth does not change with a change in the inflation rate, but the amount that people will pay for that growth does change. A corporate earnings stream can be compared to bond interest. Bonds pay a certain interest rate each year, but the total return you get from the bond is based on the price you pay for that income stream. The more you pay for the right to the known stream of interest payments, the lower your yield to maturity on the bond. The same mechanisms are at work in the stock market. The more you pay for future earnings growth, the lower your total return on stocks in the future.

There is another reason to embrace a conservative stance for expected stock and bond returns. As part of your retirement savings strategy, you should create an investment plan (Chapter 14). The plan will require that you make an estimate of your investment return over the years. It is far wiser to use a conservative estimate of return and be pleasantly surprised if the market performs well than to use a high number and watch the market perform poorly. In the second scenario, you may not accumulate enough money to retire.

Overview of the Chapters in Part III

Chapter 12: Investing in the Stock Market

Almost every financial plan will lead to some investment in the stock market. What is the best way to achieve a fair return in stocks? The answer is to develop a diversified portfolio of low cost, market matching index mutual funds.

Indexing the stock market makes a lot of sense for four reasons. First, they are low cost. Second, index funds perform better than almost all “active” mutual funds due to the lower cost. Third, they reduce the desire to chase the hot dot since investors already own all stocks. Fourth, index funds are very tax efficient.

Nearly every academic study concludes that index funds offer better performance overall than active strategies. A few actively managed funds are able to achieve returns that are higher than index funds, but it is impossible to tell which funds will be successful in the future.

Chapter 13: Investing in the Bond Market

This chapter gives the reader insight into fixed income investing, and outlines two strategies to keep costs low. One strategy calls for investing in high quality, individual short-term bonds, which avoids the expense of investing in a mutual fund.

Generally, a self-managed bond portfolio generates a higher return than a fund, especially in area of tax-free bonds. Individual bonds can be purchased from a variety of sources. You may purchase Treasury bonds directly from the government or through any stockbroker. The concept of developing and maintaining a bond “ladder” is also discussed.

The second strategy discusses bond index funds, and building a portfolio based on bond index funds. When considering high-yield bonds and other complex fixed income assets, I recommend using mutual funds instead of individual bonds.

Chapter 14 - Financial Goals and Asset Allocation

It is very important to plan a retirement savings strategy before selecting your investments. When setting financial goals, you must determine how much income you will need at retirement and what amount of income will come from personal savings. This information will determine the size of the nest egg you need to accumulate. Once you know this amount, the next step is to develop a plan for accumulating those assets.

The theory of asset allocation is discussed in Chapter 14. Asset allocation helps investors achieve a fair rate of return on their investment while reducing risk through broad diversification. If practiced effectively, asset allocation helps eliminate most of the performance gap caused by market timing errors.

Chapter 15: Tax Efficient Investing

Uncle Sam wants you to pay income taxes, but you do not have to pay him right away. In fact, you can legally delay most income taxes on investment gain indefinitely, even after death. The longer you delay paying income taxes, the more money you will accumulate. A good investment plan always puts heavy emphasis tax efficient investing. Chapter 15 links successful tax strategies with wealth accumulation.

Inflation is also a form of taxation, which is brought about by our government's fiscal and monetary policies. Since we are not in a position to change the inflation rate, we must build portfolios that adjust our retirement income for anticipated inflation.

Chapter 16: Putting it All Together

This chapter summarizes the concepts in this book by presenting a case study. A middle-aged couple has been very successful in their chosen occupations, but not very successful investing the proceeds of their labor. The case focuses on common misconceptions discussed in this book, and offers several changes to help the couple close the performance gap in their portfolio. Although you may see similarities with your own situation, this is only an example and is not intended to be a model for the masses. Each case is unique.

Summary

Investing for retirement can be simple, profitable, and tax efficient. By ignoring Wall Street hype and investing in a sound portfolio of market matching investments, you will have a greater likelihood of achieving long-term success. It is the markets that make us wealthy, not complex strategies designed to beat them.

Chapter 12

Investing in the Stock Market

Most investors, both institutional and individual, will find the best way to own common stocks is through an index fund that charges minimal fees.

Warren Buffet¹

The Indexing Alternative

The stock market makes people wealthy, not complex strategies designed to beat the market. Why waste time and money trying to find a method that achieves superior returns when the return of the market does the job perfectly well? Investors who accept the return of the stock market are likely to achieve their financial goals sooner and safer than beat the market strategies.

Mutual funds are the most practical way for investors to participate in the stock market. There are two types of funds, *active* and *passive*. An active fund manager attempts to select securities based on their belief that the portfolio they create will deliver superior returns over the market. One example of an active fund is the Fidelity Magellan fund. Its goal is to beat the S&P 500 stock index. A passive fund manager tries to match the performance of a market by purchasing stocks in the same weightings as the market. Overwhelmingly, passive funds perform better than active funds. An example of a passive fund is the Vanguard Index 500 fund. It is designed to match the performance of the S&P 500.

The Performance of Active and Passive Funds

The market is full of people who think they can [beat it] and full of other people who believe them.

Daniel Kahneman

The evidence is conclusive and overwhelming; passive stock funds achieve higher returns than active funds. There are always exceptions, but this fact cannot be denied for a vast majority of active funds. One reason active managers perform poorly is the inherent cost of picking stocks. Most fund companies hire large analyst staffs, which cost a lot of money. That cost must be passed on to investors in the form of management fees that are five to six times higher than a passive fund, which does not require stock analysts. In addition, active managers buy and sell securities much more often than index fund managers, increasing the trading costs of the funds they manage.

¹ Warren Buffet, *Berkshire Hathaway 1996 Annual Report*, pg. 16

Why do people pay the extra cost of active funds? Many investors choose higher cost active mutual funds because they are lead to believe the people running the fund have superior stock picking ability and can make up the difference in cost plus extra. Unfortunately, most investors who pay attention to detail are disappointed with the results of their active funds. In the end, the fund managers do not make up the extra fees, and they certainly do not earn an extra return over the index.

Table 1
Return of General US Equity Funds
Ten Years Ending December 31, 1997

	Cumulative Rate	Annual Rate
Wilshire 5000 Equity Index*	392.4%	17.3%
Vanguard 500 Index Fund	399.1%	17.8%
Average General Equity Fund	323.1%	15.5%

*Wilshire 5000 less .30% to reflect an index fund
Source: Lipper Analytical Services

The lower return of an active fund could be justified if the risk of ownership was lower or there was a tax advantage, but neither is the case. The risk of owning active funds, as measured by monthly volatility, is about the same as the Wilshire 5000 index. So active funds are not “safer” than index funds. On an after-tax basis, the returns of most active funds are far lower than index funds. The average general equity fund distributes about five times the taxable income as a comparable index fund. From all aspects, costs, taxes, and performance stock index funds are the best way to capture the return of the stock market.

Who Uses Index Funds?

Large public pension plans and insurance companies have been using stock index funds for many years. The first index account was opened in 1974 by the *Samsonite Corporation* and managed by *Wells Fargo Bank*. The account attempted to equally weight all the stocks on the New York Stock Exchange. This means buy all the stocks in the same amount rather than according to their value. The strategy was difficult to manage, and the fund was eventually changed to indexing the S&P 500 according to market weightings. Using a market weighted strategy, the largest companies represented most of the fund and the smaller companies in the index were of far lesser value. Over the next few years, market weighted indexing became a main theme at Wells Fargo, and several large corporations started to convert their actively managed account to the less costly indexing alternative.

Index funds were not available to individual investors until 1976, when John Bogle of the Vanguard Group introduced the first public S&P 500 index fund. It was not an immediate success. The popular press bashed Vanguard for starting an index fund, and active fund companies laughed at the idea.

Fidelity's Chairman Ed Johnson scoffed at the concept. He insisted that the name of the game is to be the best, and the great mass of investors would not be satisfied with "just market returns". How times change. Today, Fidelity offers a wide and growing range of stock and bond index funds.

Marketing was difficult for the fledgling Vanguard 500 Index Fund in 1976. It had low management fees and a very small advertising budget. At first, the fund was offered through stockbrokers. But the sales commission offered to brokers by Vanguard was not up to the level of other mutual fund companies. So, the brokers ignored the fledgling index fund. After that miserable experience, Vanguard cut the brokerage firms off and established a direct no-sales charge distribution system. That meant spending more on advertising and distribution, which put the fund further behind schedule.

Word of the new Vanguard 500 fund spread slowly at first, mostly by word-of-mouth. Vanguard took enough in to survive, and by the mid-90s, the fund was thriving. In 1999, the Vanguard 500 fund was vying for the top spot as the largest mutual fund in the country, second only to the Fidelity Magellan fund. Still, less than 10% of the money in the stock index funds belongs to individual investors, and large institutions like banks and insurance companies control over 90%.

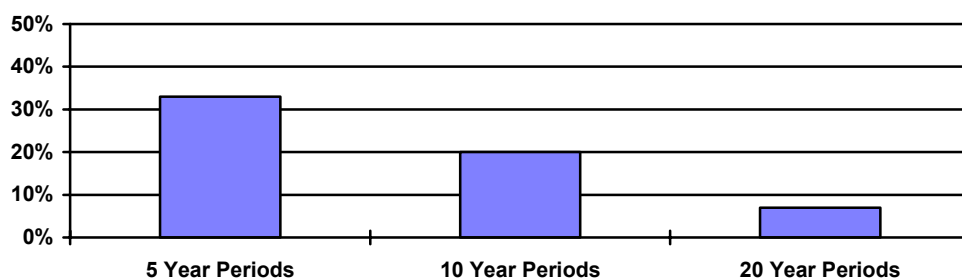
Structuring a Portfolio of Index Funds

A few years ago only a handful of index funds existed, and it was impossible for individual investors to develop a complete index fund portfolio. Times have changed. The number of index funds has grown by popular demand. As of this writing, there are over 265 index funds covering a wide variety of markets, including small-cap stocks and International markets. The wide availability of index funds has made most active management obsolete. Investors can now build portfolios of index funds that cater to their individual need without the hassle of trying to pick the next superstar fund. A portfolio of index funds is low cost and it eliminates the need to chase the hot dot. Thus, an indexing strategy helps shrink the performance gap between market returns and investor returns.

The US Stock Portion

The structure of the US stock market can be broken down by market capitalization. The largest and most successful companies in each industry make up the S&P 500 index, i.e. General Electric, Coca Cola, Microsoft. These companies have market values ranging from roughly seven billion dollars to several hundred billion. The S&P 500 companies made up over 70% of the entire stock market in 1998.

Chart#1
Percent of Active Large-cap Funds that Beat the Vanguard 500
1976 - 1998



Source: Morningstar Principia

The remaining 30% of the US stock market is made up of mid-cap and small-cap stocks. Companies with values between one billion and five billion are considered mid-cap stocks and account for roughly 20% of the market. The remaining 7000 or so small-cap stocks make up the final 10% of the market. Investors can purchase each segment of the market through a specific index fund, or they can purchase the entire market in the correct proportion through a total stock market index fund.

Indexing the US stock market has another inherent advantage called *style diversification*. Typically, stocks are divided into two broad styles, growth and value. Growth stocks include Microsoft and American Online and value stocks include companies like John Deere and Exxon. Index funds capture all styles of stock, so there is no need to chase a hot investment style. This helps reduce the performance gap.

One Fund Does it All for US Stocks

One mutual fund can cover all your US stock investments. A *total stock market index fund* mirrors the performance of the Wilshire 5000 index, which is a complete composite of all actively traded US stocks. About 70% of the Wilshire 5000 is made up of large stocks and the remainder is in small to mid-size stocks.

There are several advantages to purchasing a total stock market fund. The management fee is minimal and turnover of stocks in the fund is exceptionally low. This fund reduces the desire for investors to chase the hot dot, since they already own all the dots. The low turnover of stocks in the fund is also good for taxable accounts because it delays capital gains. If I were to choose one US stock fund for a lifetime, it would be a US total stock market fund.

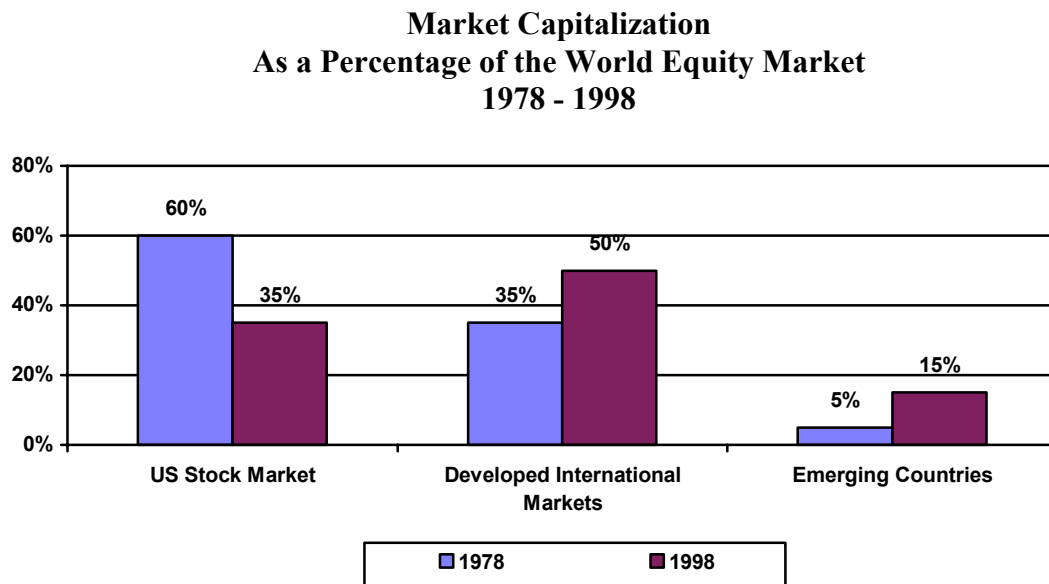
There are several total stock market funds on the market. The oldest is the Vanguard Total Stock Index Market fund. Competitors include the T. Rowe Price Total Stock Market fund and the Fidelity Total Stock Market fund. Other mutual fund companies are introducing total stock market funds in the near future.

Indexing Global Equity Markets

Since we live in the US and pay our bills in US dollars, it only makes sense to have a significant portion of our stock money in US stocks. In fact US stocks should make up about 70% of a portfolio. The other 30% should be invested in International stock market index funds.

The US market is one part of a growing global stock market. In fact, the US market is becoming a smaller portion of the global market every year. In the early 1970's the US stock market accounted for 60% of the value of all stocks traded around the world. By 1998, the US portion of the global market dropped to 35%. The growth in value of International stock markets occurred even though the US stock market went up ten-fold since the 1970's. The US share of the global market will continue to shrink as major countries like China, Russia, and India privatize large government controlled companies.

Chart 2



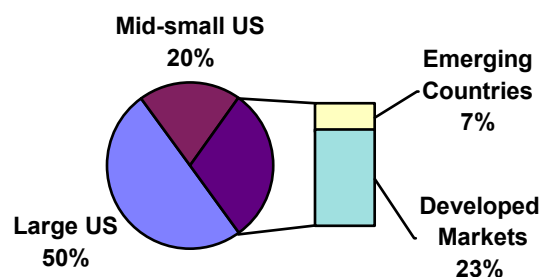
Investing in International stocks has several benefits. Over the long-term, global diversification proves to be an effective tool in reducing portfolio risk, which leads to slightly higher returns. It also gives you a hedge against a decline in the US dollar. About a 30% position in International equities rounds out a well diversified US stock portfolio. Some investors may prefer more or less in International stocks. Most research on this subject recommends between a 25% to 35% commitment. In either case, individuals

should participate in this growth by investing a portion of their retirement money in International index funds.

Generally, the international stock market is divided into developed markets, which cover countries such as Japan and Germany, and emerging markets, which cover growing economies such as Mexico and Korea. International Index funds are now available in a wide variety of those markets. You can invest in index fund specific to each market, or invest in the Vanguard International Stock Index Fund, which covers the entire spectrum.

Chart 3

Suggested Global Index Fund Portfolio



The Two Fund Portfolio

Every veteran of the military is familiar with the acronym KISS – *keep it simple stupid*. Indexing that portion of your portfolio devoted to stocks is a KISS strategy. By keeping it simple, you will achieve all the benefits the markets have to offer.

A portfolio of approximately 70% US index funds and 30% International index funds is an excellent lifetime portfolio for most investors, and there would be little need to change this mix over time. An investment in only two mutual funds can accomplish this goal. By placing 70% of your stock allocation in a Total Stock Market Index Fund and remainder in a Total International Stock Index Fund, no other stock investments are needed...ever.

Von Baron once said, “The way to win is by not losing”. Stock index funds are such a concept. By reducing the cost of investing and eliminating the desire to chase the hot dot, investors will greatly reduce the performance gap and greatly increase their retirement savings. It’s that simple.

Chapter 13

Investing in the Bond Market

There are only three ways to invest your money. You can buy real estate or other hard assets and hope that the price moves higher. You can buy a business or a portion of one and participate in the gains of the enterprise. Or, you can let someone borrow your money and collect interest. All other investments are derivatives of these three basic types. This chapter is all about the last choice, letting people borrow your money. Specifically, investing in the bond market.

Most people own bonds at some time or another during their life. If you buy a certificate of deposit at a bank, you own a bond. Investing in high quality bonds can help stabilize an otherwise risky portfolio.

People have two options when investing in bonds. They can buy individual bonds or purchase a bond mutual fund. In a few cases, buying bonds directly can lead to higher returns than investing in mutual funds. On the other hand, it is much simpler to buy a low cost bond mutual fund, especially if the type of bond you are buying is too complex or illiquid to buy directly. When a fund is the best alternative, look for one with the lowest fee and broadest diversification. There are several great bond funds offered through the Vanguard Group.

Bonds and Bond Mutual Funds

The US bond market is the largest in the world. Every day billions of dollars in bonds cross hundreds of trading desks all over the world. Corporations issue bonds to finance various projects or refund maturing issues. States and cities issue tax-free municipal bonds to help build the roads, hospitals, and schools. If you take a mortgage out on your home, your loan will likely become part of a mortgage pool traded in the bond market. All total, the US bond market is worth over twenty-five trillion dollars, of which five trillion dollars is in US Treasury bonds.

I highly recommend using Vanguard bond funds because the fees are low and the assortment of different bond funds is high. However, if you decide to buy individual bonds, they must be purchased through a brokerage firm. That means going to a broker, opening an account, and establishing a relationship. I recommend a large firm because they typically have a large inventory of bonds on hand. In addition, large firms underwrite new bond issues, which is a big advantage to you. The yields on new issue bonds are competitive, and all buyers get the same interest rate regardless of the amount purchased.

So, if you buy five thousand dollars worth of a new issue bond you will get the same rate and pay the same price per bond as a billion dollar mutual fund. Smith Barney, Paine Weber, Merrill Lynch, and Morgan Stanley Dean Witter are all good places to establish a bond account because they are all major underwriters of new bonds.

Some types of bonds are complex and should only be purchased through a mutual fund. GNMA mortgage bonds, foreign bonds, and low quality corporate “junk” bonds are a few examples of investments that should be purchased in a fund. Investing in these markets is best accomplished by someone with experience, and as part of a large, diversified portfolio. That is what a mutual fund is.

While brokerage companies are a good place to shop for individual bonds, they are not a good place to buy bond mutual funds. The commission cost and internal expense of broker sold products is much too high. On the other hand, there are mutual fund companies that cater to bond investors looking for low fees and expenses. The Vanguard Group is a great place to start your research.

Building a Simple Bond Portfolio

Building and managing a bond portfolio is a simple undertaking. Most large brokerage firms have an ample supply of high quality issues such as treasury bonds, municipal bonds, and investment grade corporate debt. With investment grade bonds you don't have to worry about default risk, and the resale market for investment grade bonds is fairly liquid. In addition, you have some control over the commission you pay the broker.

There are several good books on basic bond investing available at the local library. If you decide to build a bond portfolio, it would be a good idea to read one of these books and become familiar with the terminology of bonds such as coupon, yields, par value, and other terms.

The simplest type of portfolio to manage is called a *bond ladder*. A ladder is built by purchasing bonds that have equally staggered maturities from one to five years (or greater). An investor then holds the bonds until maturity while collecting interest along the way. When a bond matures, you buy another five-year bond to continue the ladder.

To initially establish a ladder, take the size of your account and divide it by the number of years in the ladder. For example, using a five-year ladder and a \$100,000 investment, you will buy a \$20,000 bond maturing each year for the next five years. The result is the sample portfolio below:

**Sample 5-Year Treasury Note Ladder
For a \$100,000 Account
2001-2005**

Quantity	Bond	Maturity	Coupon	Price Paid	Yield to Maturity
20	Treasury Note	May 2001	6.25%	102.14	5.00%
20	Treasury Note	Mar 2002	6.63%	104.02	5.12%
20	Treasury Note	Aug 2003	4.25%	96.10	5.14%
20	Treasury Note	Feb 2004	5.38%	97.17	5.24%
20	Treasury Note	Aug 2005	5.25%	99.75	5.30%

Average Yield 5.20%

In a bond ladder, you are looking for a yield to maturity (YTM) or total return. For all practical purposes, the *coupon* on the bond is not a consideration. It does not matter if the bond pays 4% or 6% interest, the *price* of the bond will adjust according to current interest rates.

Once the ladder is established, you simply hold the bonds and collect interest. When a bond matures, you reinvest the \$20,000 principal and \$5,000 accumulated interest into another five-year bond. The result is as follows:

**After the MAY 2001 Bond Matures
2002-2006**

Quantity	Bond	Maturity	Coupon	Price Paid	Yield to Maturity
20	Treasury Note	Mar 2002	6.63%	104.02	5.12%
20	Treasury Note	Aug 2003	4.25%	96.10	5.14%
20	Treasury Note	Feb 2004	5.38%	97.17	5.24%
20	Treasury Note	Aug 2005	5.25%	99.75	5.30%
25	Treasury Note	May 2006	5.31%	100.02	5.30%

Average Yield 5.22%

Notice how the yield to maturity of the portfolio increased from 5.20% to 5.22%. This is because the maturing bond had a 5.0% YTM and the new 2006 bond has a 5.3% YTM. All things being equal, the lowest yielding year in a bond ladder is the first year. If rates remain constant over the next several years, all the new bonds will be purchased at a 5.30% yield, and eventually the yield on the portfolio will also increase to 5.30%.

A bond ladder can be five years, seven years, ten years, or longer. I do not recommend building a ladder greater than ten years for a couple of reasons. First, the longer the length of the ladder, the more the portfolio is subject to interest rate risk. If interest rates move up, a long-term bond ladder will drop in value more than a short-term portfolio. Second, many bonds are callable after ten years, and this can make managing a portfolio confusing. If a bond is callable, you do not know if it will “mature” early.

Most individually managed bond portfolios perform better than bond mutual funds. The reason is the cost of bond funds. The average fee for a bond fund is 1%, which is very high considering a typical mutual fund only makes 6% in interest. There is no justification for paying more than 15% of your profits out in fees. I recommend managing investment grade bond portfolios on your own.

Different Bonds for Different Purposes

The type of bonds to buy for a portfolio depends on the type of account. Tax sheltered accounts such as an IRA, Profit Sharing, or Keogh should hold taxable bonds like Treasuries, government agency, corporate, mortgages, certificates of deposit, and asset backed securities. Personal accounts subject to annual income tax should consider tax-free municipal bonds. Chapter 15 discusses tax-efficient investing in greater detail.

Managing Retirement Accounts

Many retirement accounts are sheltered from current taxation. Income tax is due only when the funds are withdrawn from the account at retirement. As a result, investors should buy only taxable bonds in retirement accounts. An efficient mix of bonds to use in a tax-sheltered portfolio is 50% government bonds and 50% corporate bonds. Using our previous example of a \$100,000 portfolio and a five-year bond ladder, we could build a portfolio that looks like this hypothetical example:

**Five Year Tax-Sheltered Bond Ladder
For a \$100,000 Account
(Illustration only)**

Quantity	Bond	Maturity	Coupon	Price Paid	Yield to Maturity
10	Treasury Note	May 2001	6.25%	102.14	5.00%
10	<i>IBM Inc.</i>	Sep 2001	5.70%	100.20	5.50%
10	Federal Home Loan	Mar 2002	6.00%	103.02	5.35%
10	<i>Ford Motor Credit</i>	Jun 2002	5.80%	100.20	5.65%
10	FNMA Note	Mar 2003	4.60%	98.30	5.40%
10	<i>Merrill Lynch Co.</i>	Aug 2003	5.70%	100.00	5.70%
10	Fed. Farm Credit	Feb 2004	4.25%	97.10	5.50%
10	<i>Sears</i>	Oct 2004	5.50%	98.00	5.75%
10	Treasury Note	Aug 2005	5.25%	99.75	5.30%
10	<i>AT&T Inc.</i>	Mar 2005	5.80%	100.00	5.80%

Average Yield 5.50%

Each year an investor buys two \$10,000 bonds. One bond is a government issue and the other is corporate issue. It is important to buy only recognizable, high quality corporate bonds that have an S&P rating of “A” or better. There is no sense speculating on a lower quality bond for the sake of a little more

interest. By using government agency and corporate bonds, the initial yield of the portfolio jumps to 5.50%.

Of course, the easy way to mix corporate and government bonds is with a total bond market index fund, offered through Vanguard, Schwab, or Fidelity. This low cost bond funds do not need any maintenance and can be purchased commission free.

In addition to using government and high quality corporate bonds, you could purchase a small amount of a high yield corporate bond mutual fund to increase the yield. However, I do not recommend putting any more than 20% of your total bond holdings into a riskier high yield funds, and make sure you choose a mutual fund that is well diversified and charges a minimal fee. The Vanguard High-Yield Corporate Fund (VWEHX) is a good example, as is the TIAA-CREF High Yield Bond Fund (TCHYX). They are both low cost and well diversified.

Unfortunately, you will not be able to buy Vanguard or any other low cost bond funds through the same national brokerage firm you are buying your individual bonds from. With rare exceptions, large brokerage firms do not sell low-cost mutual funds. You will need to go directly to the mutual fund company and open a second account, or purchase the no-load fund through a mutual fund supermarket such as Schwab OneSource.

Managing Personal Accounts

Investments held in personal accounts are subject to annual income. In most cases, the best bonds to buy for taxable accounts are tax-free municipal bonds. Municipals bonds can put more money in your pocket than taxable bonds, especially if you are in a high tax bracket. Municipal bonds are not subject to federal or state income tax in the state where they are issued.

When comparing the yield on a muni bond to a taxable bond, you must compute the taxable equivalent yield (TEY). The formula is as follows:

Muni Bond Yield / (1 – tax rate)

For example: A muni bond yields 4.0% and your tax rate is 39.6%
 $0.04 / (1 - 0.396) = 0.066$ or 6.6% tax equivalent yield

A 4.0% municipal bond will give you the same after-tax income as a 6.6% taxable bond if you are in the 39% tax bracket. Chances are you will not find a taxable bond of the same quality and maturity that

yields 6.6% or higher. If you live in a state that has a state income tax, it is a good idea to use municipal bonds specific to the state you pay taxes in.

There are two types of municipal bonds, general obligation (GO) and revenue. GO bonds derive revenue from tax receipts and revenue bonds derive income from fee collection (such as a toll booth). Some bond issuers purchase insurance from private companies to guarantee the principle on their bonds. Insured bonds generally yield less than uninsured bonds of the same issue.

Beware of Alternative Minimum Tax bonds (AMT). If you have many itemized deductions on your tax returns, do not buy bonds whose interest is subject to the AMT. On the other hand, if you are not subject to AMT, the interest on AMT bonds is a little higher than comparable bonds of similar quality. Feel free to pick-up the extra yield.

**Sample Five Year Michigan Municipal Ladder
For a \$100,000 Account
Tax Bracket = 39.5%**

Quantity	Bond	Rating	Maturity	Coupon	Price Paid	YTM
20	City of Troy Schools	AA	Jun 2001	4.40%	101.40	3.25%
20	State of MI GO	AA	Aug 2002	3.60%	100.00	3.60%
20	MI State Highways	AAA Insured	Oct 2003	4.00%	100.80	3.80%
20	Ann Arbor GO	A	Feb 2004	3.90%	100.00	3.90%
20	Henry Ford Hospital	A	Jul 2005	4.50%	102.50	4.00%

Average Yield 3.71% Average Tax Equivalent Yield 6.15%

The tax-free yield on this portfolio is 3.71% and the TEY is 6.15%. Recall the yield on the taxable portfolio for retirement money was 5.50%. This gives high-income municipal investors a 0.65% advantage over the taxable portfolio. That equals \$650 per year in extra income. In the above example, Michigan has a state income tax of 4.4%, and a MI municipal portfolio will save a MI resident another \$100 in state income tax.

Helpful Hints for Bond Buyers

Wall Street's primary function is to issue new securities and create a liquid market for those securities. This includes billions of dollars in bond issues. As a result, large brokerage houses are the best place to shop for bonds, but there are some rules. When opening an account, talk to the office manager. Ask him or her to recommend a broker that does a significant portion of their business in the bond market. If you are building a municipal bond portfolio, ask for an experienced muni bond salesperson. Individual brokers that specialize in bonds have access to larger inventories and are in constant contact with the bond traders.

To ensure you are getting a fair yield on a bond, check a few sources for current interest rates. The Wall Street Journal is a good place to begin. It includes comprehensive bond listings where you can gauge the market. Bonds trade in relation to Treasury yields, so you will want to know what the T-bond yields are. If you are buying a municipal bond and have access to the Internet, check www.bloomberg.com for current yields. They have a web page devoted to the municipal bond market, and the data is free.

The advantage of buying through a large brokerage house is the access to new issues. I recommend buying new issues whenever possible. The yield on new offerings is always competitive, and every investor gets the same rate regardless of size. You do not have to worry about the broker juicing up the commission on a new issue trade. You can also use the rates on new issues to help price older bonds for sale. If a broker offers you a bond that was issued a few years ago, check the yield against new issues of similar quality.

Learn to negotiate commissions. Unless you are offered a new issue, the broker has some flexibility in the commission they charge. You should always ask the commission on a trade. Anything over \$50 per \$10,000 invested is high. Most people have no idea what commission they are paying in a bond since the fee is typically built into the price so it is hidden from the buyer (see Chapter 4).

If you have an account at a large firm such as Smith Barney (SB), it does not mean you are obligated to buy bonds only from that firm. You can buy bonds from other firms and have them automatically delivered into your SB account. This type of trade is called delivery verses payment (DVP). You simply open a DVP account at second firm, buy the bonds you want, and have them delivered into your account at SB. The money is then transferred from SB to the other firm to pay for the bonds. Using the DVP system, you can literally have a large bond account at Smith Barney and never buy a bond from them. DVP is very convenient for people who shop everywhere for deals.

The Index Fund Alternative

If you are not interested in buying individual bonds, the best alternative is to buy bond index funds. They offer immediate diversification into a wide variety of securities at a very low fee. I cannot emphasize enough that one place to shop for low cost bond funds is Vanguard. They have a wide variety of low cost taxable and tax-free funds.

One of the best bond index funds to use for retirement accounts is the Vanguard Intermediate-Term Bond Index Fund. The fund is made up of corporate debt, government agency bonds, and treasury bonds. The portfolio has an average maturity of about 7 years. If you prefer bonds with a shorter maturity,

opt for the Vanguard Short-term Bond Index Fund. The average maturity is only 2.7 years, about the same as a five-year bond ladder described earlier.

For municipal bond investors, Vanguard offers the Intermediate-Term Tax-Exempt Fund with an average maturity of 7 years and a Limited-Term Tax-Exempt Fund with an average maturity of 3 years. Neither fund is an index fund by definition, but the fees are just as low. The funds are not “state specific”, meaning the bonds are from several states. As a result, your state may charge income tax on the interest.

By this time you may be wondering if I work for Vanguard. The answer is no. Due largely to John Bogle’s vision, Vanguard is simply the premier supplier of index funds for individual investors. They offer the largest selection at low cost. The Vanguard Group is a not-for-profit company. By charter, the shareholders in the funds are the owners. That makes their cost structure hard to beat. According to Lipper, Inc., the average expense ratio for all Vanguard funds was 0.28% in 1998, far below the 1.25% average for the rest of the industry.

Chapter 14

Financial Goals and Asset Allocation

If you don't know where you're going, you'll end up somewhere else.

Yogi Berra

One critical decision each investor must make is to decide how much money to place in stocks and how much to place in bonds. This decision would be simple if we knew the future. If stocks are going up, place 100% position in stocks. If stocks are going down, a 100% bond portfolio is the only alternative. Unfortunately, life is not so simple. As we learned in Chapter 5, errors in market timing are partially responsible for part of the performance gap. Most people will find a safer solution is to place a portion of their money in stocks and a portion in bonds. This is called *strategic asset allocation decision*.

How do you determine the correct asset allocation for your account, without trying to time the markets? There is the right way and there is the wrong way to determine an appropriate allocation. The wrong way is what I call the Cosmopolitan Magazine method. It is based on a dumb questionnaire that is supposed to determine your investment psyche in 10 questions or less. Many stockbrokers and other investment advisors trying to sell products and service use the overly simplistic Cosmo approach. The second method of asset allocation is more scientific. Large pension plans and other institutional investors use a liability-based approach. This method calculates an asset allocation based on highest probability of meeting an investment goal, and ensures that allocation is not too risky for the client.

The Cosmo Method

Every issue of Cosmopolitan Magazine prints a questionnaire to determine what type of person you are. For example, “Are You a Workaholic? Answer these 10 questions and find out!” You take the quiz only to find out you have no life or real purpose for living. The investment industry has adopted a similar questionnaire to determine a fast, but terribly unreliable asset allocation for clients. Generally, a person is asked a series of simple questions, which the answers are plugged into “highly sophisticated computer model”. This canned computer program then spits out an allocation between stocks and bonds that is supposed to represent your true needs.

Unfortunately, the Cosmo method of asset allocation is inadequate. It oversimplifies the investment process and generates riskier portfolios that would otherwise be recommended. From a salespersons perspective, Cosmo models are great. They get people to invest more in stocks and other risky assets that pay higher commissions and fees. While there is no problem in having risky assets in a

portfolio, the canned models hide the short-term volatility that often occurs. This hidden risk becomes a big problem for investors when markets become volatile. A risky portfolio may sound appealing in a bull market, but history shows most investors will not hold on in deep bear market. Portfolios thrown together using a simple 10 question quiz will lead to inadvertent market timing mistakes in the future, which widens the performance gap.

William Sharpe, STANCO 25 Professor of Finance at Stanford University and a Nobel Prize winning economist, calls the mass-market approach to asset allocation “Financial Planning in Fantasyland”¹. There are so many problems with the popular Cosmo model that it was not possible to include them all in this chapter. As a result, I wrote Appendix 3 on the subject.

Back to Basics

Why do we invest in stocks and bonds? There is no point if we do not have investment goals. Though most people will say they have goals, they cannot define it. “Make a lot of money” is not a goal. “Do well” is not a goal. “Make one million dollars” is a goal. When retirement day comes, our goal is have enough saved so that the income from our nest egg will supplement social security and private pensions. Investors need to know how much money they need to save and how they will attain it.

Prior to joining the financial services industry, I spent eight years flying fighter aircraft in the Marine Corps. Every mission I flew began with a thorough pre-flight plan. Although no mission flew exactly as planned, no mission flew without a plan. Investing is the same. Investment planning instills confidence that leads to greater wealth. According to a recent survey, if two people have the same income, but one has accumulated significantly more wealth than the other, the wealthier person likely spent twice as much time planning their investments as the less wealthy person².

For less than \$50 you can buy a top-of-the-line financial planning software to assist you in creating a plan. These off-the-shelf programs offer step-by-step instructions. The financial plan will help you understand where you are, where you would like to go, and how to get there. The process will lead you to a greater understanding of your personal mission that needs to be accomplished.

¹ William F. Sharpe, “Financial Planning in Fantasyland”. This paper is an expanded version of a dinner speech presented at a conference sponsored by the University of California, Davis Graduate School of Management on October 17, 1997. It can be found on Sharpe’s personal web page.

² Thomas J. Stanley, Ph.D. and William D. Danko, Ph.D., *The Millionaire Next Door*, Pocket Books, New York, NY, 1996, pg 97

Calculating a Minimum Rate of Return

One of the benefits of working a financial plan is that it isolates the *minimum required return* needed on your investments to achieve your goals. This figure is easy to calculate and will help you decide the proper asset allocation mix of stocks and bonds to have in your portfolio. Sometimes a financial plan needs to be revised if the minimum required return is not feasible, or if the asset mix is too risky for the investor. The minimum rate of return is a mathematically derived number based on four factors:

1. The amount of money you have already saved
2. The amount you expect to save annually in the future
3. The number of years you have until retirement
4. A minimum amount needed at retirement

Once you have the information above, a minimum return can be derived using a simple annuity calculation found on any financial calculator, spreadsheet, or financial planning program. Most people can come up with the first three points, but they have trouble understanding when they have enough to retire. This is not difficult to figure out, as long as your lifestyle is not going to change radically in retirement. To find the amount you need at retirement, following these simple steps:

- 1) Take your average annual income before tax and subtract the amount you save each year. That is the amount you spend.
- 2) Multiply your spending amount by 20 to come to your initial minimum retirement amount.
- 3) Adjust the amount for inflation.

Here is an example of the process:

1. A 50-year-old man earns \$100,000 per year and has \$700,000 in savings. He spends \$85,000 per year (including taxes) and saves \$15,000. He would like to retire at age 65 and live the same lifestyle.
2. Multiply \$85,000 times 20 to find the initial minimum retirement amount of \$1,700,000. Adjust for a 2% inflation rate over the next 15 years and the *inflation adjusted* minimum amount needed at retirement is \$2,300,000.
3. Using a financial calculator, plug in a \$700,000 present value, a \$2,300,00 ending value, deposit \$15,000 per year, and run for 15 years. The result is an implied rate of return of 7%.

4. If the man's account compounds at 7% over the next 15 years, he will reach his goal at retirement. He can then withdraw 5% of the account each year for the rest of his life. Any extra earnings will stay in the account as an inflation hedge.

In the example above, we have left out a few things. We assumed the man has only income from savings and no other at retirement. In reality, he will probably receive Social Security and possibly a pension. He may also receive an inheritance or sell real estate. These adjustments could be factored into the model as well.

Calculating Maximum Risk Tolerance

In our example above, we calculated the minimum required return of 7%. What asset allocation between stocks and bonds has a high probability of reaching this goal? Recall from Chapter 11 the following data:

**Future Estimates of
Stocks, Bonds, and Inflation**

Benchmark	<i>Estimate 2000-2030</i>
Inflation Rate	2%
Bond Returns (nominal)	5%
Bonds – Inflation adjusted	3%
Stock Returns (nominal)	8%
Stocks – Inflation adjusted	6%

Using the information in the table, a 7% return implies about a 65% position in the stock market earning 8% and a 35% position in the bond market earning 5%. Mathematically this works out to 7%. Theoretically, a 65/35 split would be the correct allocation, but is that a reasonable portfolio for a 50-year-old man with 15 years to retirement? Can the man handle the risk implied in 65% stock position? Does the level of risk implied by the required 7% return match his personality? It depends on his tolerance for risk.

If a person invests heavy in stocks because it is what they *think* they need to make their retirement account work, they may be doing themselves more harm than good. If an asset allocation is beyond the envelope of a person's risk tolerance, there is a strong potential they will sell out of stocks during a bear market. That destroys the entire plan and significantly reduces return.

Stress Testing an Asset Allocation

Frequently, I meet people who say another advisor recommended a more aggressive asset allocation than I have. Normally, the other advisor has used the *typical Cosmo questions* and came up with a greater allocation toward stocks, which of course pays that advisor higher commissions and fees. To show the client there is more to an asset allocation than a simple questionnaire, I use the 73-74 Stress Test.

Imagine holding a majority of your portfolio in stocks during the 1973-74 bear market when the averages fell over 40% and inflation was raging? Would you have stayed in? Most investors didn't. Using the 1973-74 time period to stress test a portfolio is a great tool. Every financial advisor should learn to use this method or something similar so they have an idea of their client's potential reaction to a bear market.

In this example, we will use a portfolio of 65% stock and 35% bonds. Historically that allocation has a good chance of producing a 7% required return over a 15-year period. Let us assume it is the beginning of 1973, and our "client" agrees to our 65/35 allocation. Using the data from our example above, our client invests \$700,000 and he will add \$15,000 per year going forward. Here is the initial allocation:

**Initial Portfolio Allocation
January 1973**

Stocks (65%) S&P 500	Bond (35%) 5 yr. Treasury	Total Account
\$450,000	\$250,000	\$700,000

1973 was a terrible year. The stock market fell almost 15% and the economy was on shaky ground. Our client lost over \$50,000. It was time to balance the portfolio and add another \$15,000 for this year's contribution to the plan.

**Portfolio Value
December 1973**

Stocks S&P 500	Bond 5 yr. Treasury	Total Account
\$384,000	\$262,000	\$646,000
	Plus new cash	+15,000
	Total at year end	\$661,000

The asset allocation of the portfolio is out of kilter. In order to go back to a 65% stock 35% bond position, our client needs to buy \$46,000 worth of stocks and sell \$31,000 worth of bonds. He is reluctant, but decides to go along with the plan.

**New Portfolio Allocation
January 1974**

Stocks (65%) S&P 500	Bond (35%) 5 yr. Treasury	Total Account
\$430,000	\$231,000	\$661,000

1974 was worse than the 1973. The stock market fell over 26% and the economy was flat on its back. Not to mention the President resigned, and the Arab oil embargo was in full swing. Our client lost over \$100,000 in 1974. It was time to balance the portfolio and add another \$15,000 for this year's contribution.

**Portfolio Value
December 1974**

Stocks S&P 500	Bond 5 yr. Treasury	Total Account
\$316,000	\$244,000	\$560,000
	Plus new cash	+15,000
	Total at year end	\$575,000

The portfolio needs to be balanced again. In order to put it back to a 65% stock 35% bond position, our client needs to buy \$59,000 worth of stocks and sell \$44,000 worth of bonds. So far he has lost \$155,000 since he started with our strategy, and he is two years closer to retirement.

**Proposed New Portfolio Allocation
January 1975**

Stocks (65%) S&P 500	Bond (35%) 5 yr. Treasury	Total Account
\$375,000	\$200,000	\$575,000

This year, you do not need to call the client because he called you! He no longer wants to have so much in stocks, they are too risky and he is losing too much money. He wants you to put most of the money in a safe Treasury bond portfolio. He will consider leaving \$100,000 or so in the market when it goes up. *Click!* The Cosmo approach to asset allocation does not work.

A More Conservative Approach

Let's go back to the beginning of 1973. Instead of choosing a portfolio of 65% stocks and 35% bonds we recommend the opposite, a portfolio of 35% stock and 65% bonds. Our client agreed to our allocation and we invest his \$700,000 as follows:

**Initial Portfolio Allocation
January 1973**

Stocks (35%) S&P 500	Bond (65%) 5 yr. Treasury	Total Account
\$245,000	\$455,000	\$700,000

Recall that 1973 was a terrible year. The stock market fell almost 15% and the economy was poor. Our client lost a little. It was time to call the client to discuss his options and add another \$15,000 for this year's contribution.

**Portfolio Value
December 1973**

Stocks S&P 500	Bond 5 yr. Treasury	Total Account
\$209,000	\$470,000	\$679,000
	Plus new cash	+15,000
	Total at year end	\$694,000

In order to put it back to a 35% stock 65% bond position, our client needs to buy \$34,000 worth of stocks and sell \$19,000 worth of bonds. We call the client and he agrees.

**New Portfolio Allocation
January 1974**

Stocks S&P 500	Bond 5 yr. Treasury	Total Account
\$243,000	\$451,000	\$694,000

1974 was worse than the 1973 and the stock market fell over 26%.

**Portfolio Value
December 1974**

Stocks S&P 500	Bond 5 yr. Treasury	Total Account
\$178,000	\$477,000	\$655,000
	Plus new cash	+15,000
	Total at year end	\$670,000

**Proposed New Portfolio Allocation
January 1975**

Stocks S&P 500	Bond 5 yr. Treasury	Total Account
\$235,000	\$435,000	\$670,000

We call the client for his \$15,000 contribution and explain that it is time to balance the portfolio back to 35% stock, 65% bond position. The client is reluctant, but eventually decides to stick with the plan. He gives us permission to re-balance the portfolio. **The 35% stock, 65% bond allocation worked for this client because it is was not beyond his risk tolerance.** It passes the 73-74 Stress Test.

The portfolio with an initial 65% in stocks was too risky for the client, and he used market timing to reduce his allocation to stocks at *precisely the wrong time*. A better allocation was 35% stocks because the client stayed with the portfolio during the entire period, even during the worst market conditions. In 1975, stocks were up 37% and in 1976 the market gained another 24%. As a result, the conservative portfolio made more money than the aggressive one!

The Moral of the Story

*Risk comes from not knowing what you are doing.*³

Warren Buffett

A large position in stocks may sound appealing after a strong bull market, but most people find it difficult to stick with the high allocation during a bear market. It is very important to understand the risks in the market and how you will handle the risks. Asset allocations work over long periods of time only if investors keep the same allocation during the entire period. The asset allocation you should choose is the one you can stick with during all market conditions and over a very long time. The highest yielding portfolio is not the one with the most stocks. It is the one that is within the risk tolerance of the investor. A lower allocation to stocks will yield a higher long-term return if investors behave correctly in a bear market.

³ James Rassmussen, "Buffett Talks Strategy with Students", Omaha World-Herald, Jan 2, 1994, pg 17s

Chapter 15

Tax Efficient Investing

For all long-term investors, there is only one objective – maximum total real return after taxes.

John Templeton¹

Uncle Sam wants you...to pay income taxes. But you don't have to pay him right away. In fact, you can legally delay most income taxes on investment gains indefinitely, even after death. The longer you delay paying income tax, the more money you have working for you and the more you will accumulate. A good investment plan always puts heavy emphasis on tax-efficient investing.

How Taxes Affect Market Returns

If you ask someone how much money they made last year, they will likely quote a figure based on their annual salary. This figure may be a fair indication of gross income, but it is not how much they kept. Our silent partners take a large cut. They are the Federal government, most State Governments, and some local governments. Net income is what we keep after paying income tax.

Like your pay, most investment gains are also eventually subject to income tax. Tax is due each year if the income or gain is realized in a personal account, and it is due when funds are withdrawn from tax-sheltered retirement accounts. Uncle Sam will a cut of everything you make one way or another.

In a personal account, the rate you pay on investment gains depends on the nature of the income. Interest, dividends, and short-term capital gains are subject to ordinary income tax at your tax rate. If you have a realized gain on assets held for more than one year, a lower capital gains tax is applied. On a year over year basis, the payment of taxes on investment returns can significantly lower your investment performance.

¹ Excerpts from *The Templeton Touch* by William Proctor, quoted in *Classics*, ed. Charles D. Ellis (Homewood, Ill.: Dow Jones-Erwin, 1989), p. 738

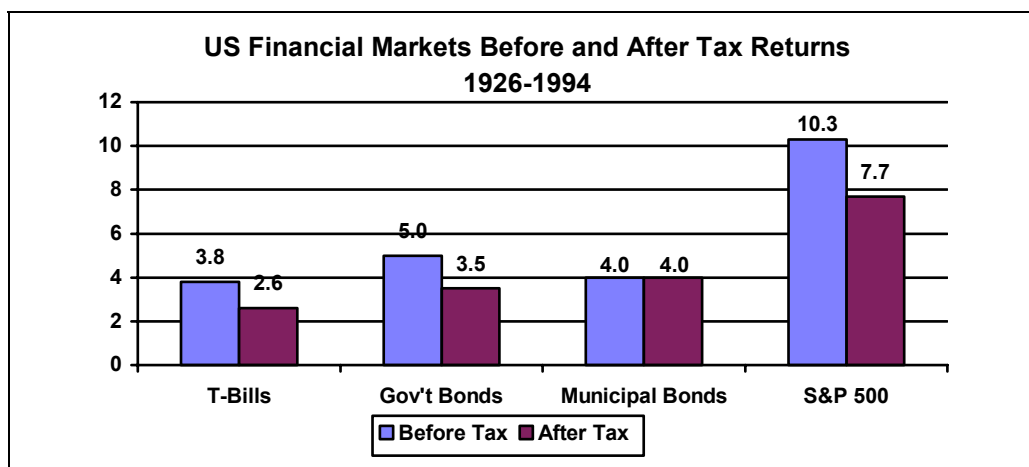


Chart 1, Source: Siegal & Montgomery, *Journal of Portfolio Management*, Winter 1995

There are a few taxes not reflected in the chart above, one of them is the inflation tax. Poor government monetary and fiscal policy creates inflation, which erodes the purchasing power of our dollars earned and cripples the real value of our retirement savings. Although government policy created inflation, Congress does not allow us to recognize it when figuring our taxable income. As a result, we pay tax on investment gain as though no inflation exists. Since 1926, the inflation rate has averaged about 3% and the after tax return on Treasury bills was about 2.6%. But after adjusting for inflation, all the gains from t-bills was lost and then some.

Taxes and Mutual Fund Returns

There are those who make money in the market, and those who keep it.

Benjamin Graham

Taxes can have a devastating effect on mutual fund returns. In Part I of this book, we measured the performance gap of mutual fund investors on a pre-tax basis. If we were to measure the gap on an after-tax basis, it would be much larger. Over a 20-year period, less than 10% of surviving large-cap mutual funds had performed better than the S&P 500 on a pre-tax basis. On an after tax basis, the number drops much lower. Perhaps only one or two funds beat the market. John Bogle, Chairman of the *Vanguard Group*, in a speech during the summer of 1997 stated the problem clearly:

Portfolio managers, fund sponsors, and distributors know that fund [*managers*] don't pay much, if any, attention to tax concerns. This important fact should be stated in the prospectus: "This fund is managed without regard to tax considerations, and, given its expected rate of portfolio turnover, is likely to realize and distribute a high portion of its capital return in the form of capital gains which are

taxable annually, a substantial portion of which is likely to be realized in the form of short-term gains subject to full income tax rates”.

In a 1998 presentation for the Association for Investment Management and Research (AIMR), Bogle compared the returns of actively managed stock funds to index funds on a pre-tax and after tax basis. Bogle used an average turnover rate of 80% for active funds in his example. This was the average turnover for all US equity funds in 1997 as reported by Morningstar. His example assumes a market return of 10%:

Index Funds After-tax Verse Active Funds After-tax

	Gross Return	Expenses	Pre-tax	Taxes	After Fees & Tax
Average Actively Mgd Fund	10%	2.0%	8.0%	1.5%	6.5%
Buy and Hold Index Fund	10%	0.2%	9.8%	0.8%	9.0%

Bogle’s example clearly shows a hidden advantage of index funds. Fees and taxes reduced the return of the average actively managed fund by 3.5%. That is a full 35% of the total gain lost to fees and expenses. On the other hand, index fund returned 9.0% after fees and taxes. Only 10% of the total gain was lost.

The problem of mutual fund taxation can be very shocking to investors. In 1997, some people got caught in the volatile overseas markets. Mutual funds with a high concentration of stocks in Asian economies lost significant value. But that wasn’t the end of the story. Many investors who lost money were also hit with significant capital gains distributions at the end of the year. This means they had to pay taxes even though they lost money on their investment. For example, Investco Asian Growth Fund distributed 21% of its net asset value during December 1997, after losing 38.5% during that year. If an investor put \$10,000 in the fund at the beginning of the year they would have lost \$3,850 by December 31 and they still had to pay tax on a \$1,300 capital gain distribution! Talk about adding insult to injury.

Tax Strategies You can Use

There are a number of strategies you can use to limit the income on investment gains. Here is a partial list:

1. Use tax-sheltered retirement accounts such as an IRA and 401(k)
2. Use tax friendly investments in personal accounts
3. Dollar cost average index funds in personal accounts to establish different tax-lots
4. Stay away from high cost tax shelters such as variable annuities and other packaged products
5. Spend taxable money first in retirement

Tax Sheltered Accounts

The Government wants the public to save for retirement, so Congress has established a number of qualified accounts doing so. If you put money into these accounts each year, you can deduct the amount from taxable income. Investors should participate to the fullest extent in all the tax-sheltered accounts set up by Congress. These include IRA, 401(k), Roth IRA, and similar qualified savings vehicles. They do not include high cost variable annuities and other insurance products. If you own a business or are self-employed, consider opening prototype pension offered through a low cost provider such as Vanguard, Schwab, or other no-load mutual fund company.

Use Tax-friendly Investments in Personal Accounts

The chapter on fixed income investing discussed the advantages of tax-free municipal bonds in a personal account. For most people, municipals make the most money on an after-tax basis.

For the stock portion of your taxable portfolio, the low turnover of a stock index fund is a huge benefit. The dividend and capital gain distribution of the average index fund is about one-fifth the average actively managed stock fund. This means less tax to pay each year. Over the last five years, Vanguard has introduced a number of tax managed index funds. These popular portfolios are even more tax-efficient than a standard S&P 500 index fund. They use a variety of tax-efficient management techniques to ensure distributions are held to a minimum.

Dollar Cost Average into Index Funds and Use Tax-swaps

In a personal account, I recommend buying stock index funds over a period of time, rather than jumping in the market all at once. This concept has nothing to do with the direction of the market, or a market timing strategy. It has to do with establishing different tax-lots for your mutual fund shares. It is very likely that sometime during the year the stock market will trade at a lower value than the price of some of your tax-lots. You could use the opportunity to tax-swap from one index fund to another and establish a permanent tax loss without ever leaving the market.

The IRS does not allow you to do a tax-wash with individual stocks. You cannot sell a stock at a loss, take the tax deduction, and immediately buy the same stock back. You must wait 30 days to buy it back. However, in an index fund tax-swaps are different. Since there are so many index funds offered by different companies, you can swap out of one company's index fund and into another and it is not a tax-wash. For example, assume you sell a tax-lot in the Vanguard Total Stock Market Index Fund and immediately buy the TIAA-CREF Equity Index Fund. Both funds are offered by different mutual fund companies and follow a slightly different index. Therefore, they are not considered "virtually identical" securities and a tax-swap is perfectly legal. Using this strategy, you can take a tax loss while remaining fully invested in the US stock market.

Tax-swaps on municipal bonds are similar to index fund swaps. You can sell one bond at a loss and buy another with the same yield to maturity. Be careful with all tax swaps because the rules are somewhat complex. I recommend consulting your tax accountant before proceeding.

Stay Away from High Cost Tax Shelters such as Limited Partnerships, Variable Annuities, and other Packaged Products

If you like permanent frustration and want to go years without seeing your money, if ever, buy a tax shelter limited partnership. Many high commissioned, low potential tax shelters should only be bought by the very knowledgeable, but are frequently sold to the very naive. I have only heard of a few tax-shelter partnerships that actually worked the way it was supposed to. Congress loves to close loopholes on tax shelters just about the time the public embraces the idea. I highly recommend staying away from limited partnerships with your retirement money.

Do not buy a variable annuity unless it is unavoidable. The insurance aspect of the variable annuity is certainly not worth the price you pay. In fact, it is the most expensive life insurance you will ever own. There are hundreds of thousands of stockbrokers, insurance salespeople, and independent advisors on the prowl selling these high cost products. They are doing it strictly for commission. There are better ways to invest. A stock index fund generates greater wealth in the long-term, and the income tax and estate tax are much lower.

If you already own a variable annuity, do a 1035 transfer to the Vanguard Variable Annuity Plan. They offer a product that has index funds within an annuity, so the fees are much lower than the typical broker sold product. In addition, there is no commission built into the price of the insurance, so the fees are only a fraction of the broker sold products.

Stay away from “investing” in other insurance products as well. This includes Variable Life, Whole Life, and other high cost insurance that disguises itself as an investment. If you need insurance, “buy term and invest the rest” in tax-efficient index funds and municipal bonds.

Spend Taxable Money First in Retirement

When you finally retire, your savings will likely be in two forms, tax-sheltered accounts and personal accounts. The government requires minimum distributions from tax-sheltered accounts once you turn age 70 ½. The minimum distribution is based on your life expectancy. Ordinary income tax is due when the money is distributed.

If you retire prior to age 70 ½, spend your personal savings first. You have already paid tax on this money and will not be taxed again. To the extent you need to liquidate stocks or index funds to meet

current obligations, the tax rate on long-term capital gains is lower than ordinary income tax charged to retirement plan distributions. As a result, in most cases it makes sense to draw down personal savings first before taking a taxable distribution from a retirement account.

The Laws are Always Changing

The tax code is always changing. Congress tinkers with the tax rates and methods of collecting tax almost every year. The investment strategies discussed in this book are flexible and can be easily adapted when changes do occur. It is always wise to stay abreast of tax law changes and to seek the help of a qualified tax accountant.

Chapter 16

Putting it All Together

I would rather be certain of a good return than hopeful of a great one.

Warren Buffett

It requires a great deal of boldness and a great deal of caution to make a great fortune; and when you have it, it requires ten times as much wit to keep it.

Meyer Rothschild

Old habits die hard. It is not easy to abandon a method of investing that you may have been using for years. The illusion of high returns is hard to turn away from. After all, we have been programmed all our lives to seek superior performance through a “beat the market” approach. The world is full of salespeople who make a living dangling the “you can beat the market” illusion in front of you. Wise investors peer through the sales hype, and look at the real risks and returns. Granted, a few lucky investors will beat the odds by beating the market, but the other 99% fall far short.

The concepts presented in this book are simple and straightforward, but may take a few years to implement. People act slowly when embracing a new investment philosophy. Money tends to suffer from inertia, and ending a relationship with a friendly broker or advisor is often difficult. Just remember that the broker or advisor has been well paid for their services in the past, and it is simply time for you to move to greener pastures.

If you take time to define your investment goals, select a proper asset allocation, plan a tax strategy, and make a long-term commitment to low-cost investing, you have the greatest chance for success. Once this new strategy is implemented, it only takes a few hours each year to maintain. There is no need to waste valuable time and money trying to find strategies that might do better than a passive strategy because all you need is to make a market return for investment success. Your rewards for following this approach will be greater wealth, lower cost, lower risk, lower frustration, and lower taxes.

Case Study

This chapter sums up the important concepts in the book with a case study. A middle-aged couple has been successful in their chosen occupation, but not very successful investing the fruits of their labor. After a review of the couple’s current strategy, several changes are suggested to put their portfolio on track. You

may see similarities with your own situation. However, this is only an example and is not intended to be a model for the masses.

Bob and Betty Barnet are married and have two children ages 19 and 21, both in college. They have enough income to cover their children's education, and are now focusing on saving for retirement. The Barnet's would like to retire in 20 years when they both reach age 65. They own a medium size business that generates about \$150,000 per year before tax.

Bob and Betty have recently established a pension and profit sharing plan for their business at a local bank. It is invested in the bank's proprietary mutual funds and a money market fund. So far they accumulated \$30,000 for themselves in the plan and they believe they can invest \$30,000 each year going forward. They also have \$150,000 in personal savings most of which is in a savings account at the bank and in a few stocks Mr. Barnet bought through the years.

The Barnet's currently spend about \$8,000 per month or \$96,000 per year, although \$24,000 per year is going to tuition and other college costs. When the children are finished with school and on their own, the Barnet's figure they will need a monthly income of \$6,000 per month to cover all their needs.

Step 1. Defining the Barnet's Position and Goals

- The Barnet's would like to sell their business and retire in twenty years at age 65. This means saving enough while working so that he can draw a reasonable income while in retirement. They feel \$6,000 per month would be sufficient.
- The Barnet's do not believe their business is worth much once they retire. Since it is a consulting business, when Bob and Betty go the clients will likely move on. For this reason, they value the book of business at one times earnings, or roughly \$100,000.
- So far the Barnet's have saved \$180,000 for retirement, and believe they can put away \$30,000 annually going forward. They also think they will be able save more once the children are out of college and out of the house.

Step 2. Adjusting the Numbers for Inflation

- The Barnet's believe inflation will average about 2% over the remainder of their life. Adjusting \$6,000 by 2% inflation equals about \$9,000 per month needed at retirement in twenty years. That's an annual inflation adjusted income \$107,000 per year.

- Assume a portion of this income will come from Social Security. Let's guess Social Security pays the Barnet's a total of \$2,000 per month at age 65. This figure is lower than the current rate, and it is not adjusted for inflation, but it is probably closer to reality than what the Social Security Administration is quoting.
- Less Social Security income, the Barnet's will need to withdraw \$7,000 per month, from savings to meet their \$9,000 income goal. If we multiply \$7,000 by 12 months, it comes to \$84,000 per year.
- To find the total savings needed at retirement, multiply \$84,000 by 20. This means at age 65 the Barnet's need a nest egg of approximately \$1,700,000. For the purpose of this illustration, assume their business does not have any value once the Barnet's retire. Also assume they do not increase their \$30,000 savings rate in the future.
- By withdrawing 5% per year from their \$1,700,000 account, the Barnet's will have income of \$85,000 per year adjusted for inflation, plus \$24,000 from Social Security. This gives them the \$9,000 per month they desire.

Part 2. Determine the Minimum Required Rate of Return

- The next step is to calculate minimum required rate of return on the Barnet's investment portfolio. Using a spreadsheet program like Microsoft Excel, or financial planning software like Quicken®, you can calculate the return they need to meet their financial goal.
- The Barnet's currently have \$180,000 in savings and need to accumulate a minimum of \$1,700,000 over the next 20 years. They can put away \$30,000 per year. Using software of a financial calculator, input \$180,000 as a present value of the investment, add contributions of \$30,000 per year, put in 20 years for time, and input an ending value of \$1,700,000. Your computer or calculator should produce a required return of 6.1%
- If the Barnet's save exactly as planned, and the account grows at a rate of 6.1% per year, they will have the \$1,700,000 needed at retirement.

In simple model we found the Barnet's have a future liability of \$1,700,000. Using the data provided to us, we calculated a minimum required rate of return on their savings to match the liability. This method is very close to the model used by large pension funds to calculate their required return.

If a person's money flow can be determined in advance, as well as an assumption about inflation, then a required rate of return can be easily found. Obviously, the situation may change, and the plan is based on everything we know about the Barnet's today. In the future they could buy another business, lose their current business, retire early, win the lottery, get sick, get divorced, inherit money, etc. Life can be unpredictable, but we still need to plan.

This case study is not over. Next we need to find an asset allocation that fits the required rate of return and the Barnett's tolerance toward risk.

Market Expectations and Asset Allocation

We calculated Barnett's required return to be a 6.1% while assuming a 2% inflation rate. Now it is time to choose actual investments to meet their goals. We are looking for an investment portfolio that has the highest probability of achieving at least a 6.1% rate of return over 20 years, with the lowest risk factor.

- If there was a risk-free way to earn 6.1% annual return, the Barnett's should seriously consider that option. There is no reason to take more risk than is necessary to match an investment goal. We are only seeking an investment plan that will give the Barnett's what they truly desire, a stable and secure retirement.

Over the long-term, risk-free Treasury bonds returned only about 3% over inflation. This means a portfolio of Treasury bonds will return about 5% over the next 20 years. A portfolio of t-bonds leaves the Barnett's short of the goal retirement. They must assume some risk in order to increase his probability of reaching a 6.1% return.

Suggested Portfolio for the Barnett's

Expected Return of Bonds and S&P 500
20 Year Inflation Adjusted Returns

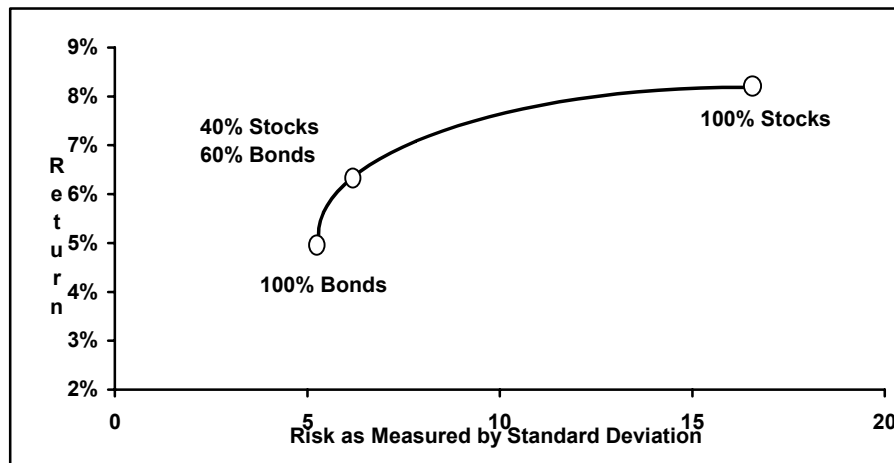


Chart #1

Using the expected return of the markets discussed in chapter 11, the a portfolio invested in 40% stocks and 60% bonds has a high probability of producing a 6.1% return in the future. Assuming a 2%

inflation rate, Chart #1 reflects this allocation. This chart also assumes the portfolio is re-balanced back to a 40/60 mix each year.

Notice the return “efficient frontier” line from bonds to stocks is not straight. It is curved. This is a “free lunch” from asset allocation. Your return (left scale) moves up as you add stocks to a 100% bond portfolio, but the risk level (bottom scale) does not move in the same proportion. Because stocks and bonds are two different asset classes, you can increase your portfolio return by adding some stocks to an all bond portfolio, with very little increase in risk.

Risk Tolerance

In order for an account to grow after-tax and inflation, the portfolio must take some risk. History shows the long-term return from a risk-free t-bill portfolio is negative after taxes and inflation¹. While some risk is necessary, if a person assumes too much risk, they tend to abandon a plan at the wrong moment, causing poor performance over the long-term. Added risk means added volatility. There are times when a portfolio will go down in value. Investors must be prepared to see their account value go down once in a while. How a person reacts to the loss is extremely important.

There are two questions every investor needs to answer. First, how much risk do you need to take? Second, how much risk are you capable of taking? If an investor takes more risk than they need, or they assume more risk than they can handle, they are making a critical mistake. A portfolio should have a low enough risk level so the investor will not be compelled to change their asset allocation during adverse market conditions.

In our example, if the Barnet's hold a 40% stock, 60% bond portfolio throughout their working years, there is a good chance they will reach their financial goal at retirement. As a result, they need to be prepared to buy stocks during poor market conditions and sell stocks when the market moves higher. As a competent investment advisor we must determine to the best of our ability if the Barnet's can handle the risk implied in a 40% stock, 60% bond allocation.

- There is no easy way to assess risk. Most people claim they are risk takers, but history has proven otherwise. One way to gauge the risk tolerance of an investor is to work the 73-74 Stress Test explained in Chapter 14. Using the test would determine if the Barnet's could hold onto a 40/60

¹ According to Ibbotson Associates, since 1926 an investor in 100% Treasury bill would have compounded at a -0.9% return after tax and inflation.

allocation during the 73-74 bear market. If they do hold their position, there is a good chance this allocation will work for them in the future.

All successful investors know their personal risk limits, though they may describe them differently. Warren Buffet invests within his circle of competence. Benjamin Graham only bought stocks that had a high margin of safety. International investor John Templeton does not invest in a country until there is blood in the streets. These people thought long and hard about controlling risk. As Warren Buffet reminds us, “risk comes from not knowing what you are doing.”

Case Study Recommendations

Here is my recommendation for the Barnet's:

- Save \$30,000 per year in the sheltered retirement plan to avoid current income tax. It is always better to save with pre-tax dollars than after-tax dollars. See Chapter 15.
- Move the pension account from the bank to a low cost fund mutual fund company. This has several advantages. First, it will save thousands of dollars in bank fees over the years, second, it gets the plan out of the banks proprietary (high fee) mutual funds and into a company that has low cost index funds.
- Once the pension account is reestablished at the mutual fund company, the Barnet's should invest 60% in an intermediate term bond index fund, 25% in a US total stock market index fund, and 15% in a total International stock index fund. This is a great mix for long-term investors. Each year, after a new contribution is made, they should balance the portfolio back to it's original weighting. See Chapter 12.
- With \$100,000 in personal money, build a five-year municipal bond ladder. Place \$20,000 per year in high quality bonds that mature in each of the next five years. The Barnet's should use a broker at a large, established brokerage firm and ask for only new issue municipals. See Chapter 13.
- Place \$30,000 of personal money in a market fund at a brokerage house. This is emergency money. Money market funds at brokerage houses pay higher interest rates than the banks. Almost every brokerage house offers checking. It helps to have checks for quick access to your money and in case you need cash on a weekend.
- Finally, leave Bob \$20,000 in personal money to play the stock market. He enjoys following the market and picking a few stock now and then. I recommend buying stocks in a personal account because the losses can provide tax deductions. For planning purposes, the account should *not* be expected to grow over the years, or counted on in retire. See Appendix #2.

The recommendations in this case study focus on the four rules of a solid retirement savings plan:

- 1) Keep investment costs low with stock index funds and straight bonds
- 2) Diversify stocks holdings across a wide spectrum of index funds
- 3) Use a consistent asset allocation and do not try to time the market
- 4) Implement a sound tax strategy

These four rules will add more wealth to more retirement savers than anything Wall Street has to offer. The more you think about these rules, the more they become clear. Following them will make your investment plan a success.

Concluding Remarks

Truth must be repeated again and again, because error is constantly being preached around it.

Johann Wolfgang Von Goethe

I hope you have enjoyed reading *Serious Money*. As each day passes, the information in this book becomes more relevant. During his 1999 State of the Union Address, President Clinton acknowledged the impending crisis in Social Security. As we become more responsible for our own retirement income, costs must come down and investment skills must improve.

Contrary to popular belief, there is no secret formula to saving for retirement. It is a long-term commitment. The concept in this book promotes an investment philosophy that has a high probability of success because it ignores Wall Street hype and cuts costs. Indexing the markets work because it is simply, low cost, and is not speculative.

The markets make people wealthy, not complex strategies designed to beat the markets.

Appendix #1

Calculating Your Investment Performance

The Association of Investment Management and Research (AIMR) in Charlottesville, Virginia develops and maintains performance presentation standards for the investment industry. The Security and Exchange Commission has final approval over the standards. The information in this appendix is derived from the AIMR Performance Presentation Standards Handbook available through AIMR.¹

You can measure the performance of an account in many different ways, but *time weighting* is the industry standard. A time-weighted-return (TWR) measures the performance of an account over a specific period of time. These units of time are linked together to form longer returns. For example, monthly returns are linked together to establish quarterly returns, which are linked to establish annual returns, and so forth.

Starting in the year 2000, AIMR requires performance to be calculated monthly. However, a quarterly calculation works fine for the average investor that does not make large deposits or withdrawals. For quarters with large deposits or withdrawals, a person should calculate monthly. Daily calculations of return are the most accurate, however, it can be costly and requires a fairly sophisticated methodology.

It is important to understand exactly what a TWR measures, so you will not be misled. A TWR accurately measures the performance of an account over a specific period of time, and not the amount of money gained or lost in the account. A TWR is strictly an accounting measure used to compare one account against another. It does tell you actual dollars gained or lost. Nevertheless, it will help you keep track of your investments and your investment advisors.

The following guide will help you calculate your personal TWR:

1. Assume you begin the year with \$100 in an account and by the end of the first quarter (March 31) the account's value is \$110.
2. The basic formula is fairly straightforward. Take the ending balance minus beginning balance divided by the beginning balance. For example, the balance was \$100 on January 1 and ended at \$110 on March 31. The \$10 gain is divided by \$100 for a return of 10%. This assumes no contributions or withdrawals were made during the quarter.

¹ The Association of Investment Management and Research is located in Charlottesville, Virginia. A copy of the AIMR Performance Presentation Standard Handbook is available from AIMR at a nominal fee. Phone 804-980-3668 or visit the AIMR web site at <http://www.aimr.com>.

Beginning Balance (BB)	Ending Balance (EB)	(EB – BB) / BB	Quarterly Return
\$100	\$110	(110 – 100) / 100	.10 = 10.0%

3. The calculation becomes more complex if money is added or subtracted from the account. The formula now expands to the (ending balance – ½ contributions + ½ withdrawals) divided by (beginning balance + ½ contribution – ½ withdrawals) minus 1. Assume your beginning balance was \$100, the ending balance was 110, and you added \$5 in the middle of the period.

Beginning Balance (BB)	Contribution [C] or Withdrawal (W)	Ending Balance (EB)	$[(EB - \frac{1}{2}C + \frac{1}{2}W) / (BB + \frac{1}{2}C - \frac{1}{2}W)] - 1$	Quarterly Return
\$100	\$5	\$110	$[(110 - 2.5) / (100 + 2.5)] - 1$.049 = 4.9%

4. Calculating annual return requires linking quarterly returns together. This is accomplished by adding a “1” to each quarterly return and multiplying them together, then subtracting “1” at the end. Assume the first quarter return was 4.9%, second quarter was 1.1%, third quarter was –1.6%, and fourth quarter was 2.0%. The return for the year is as follows:

Linking Quarterly Returns

Quarter	Percent Return	Change to Decimal	Add “1”	Multiply
First	4.9%	.049	1.049	1.049
Second	1.1%	.011	1.011	x 1.011
Third	-1.6%	-.016	0.984	x 0.984
Fourth	2.0%	.020	1.020	x 1.020
Multiply four quarters and subtract 1				

Multiply and subtract “1” = $(1.049 \times 1.011 \times 0.984 \times 1.020) - 1 = .0644$ or 6.44%.

5. The annual return for the example is 6.44%. This figure should be compared to an appropriate index to determine if the account was performing up to expectations. If the account was invested in large US stocks, an appropriate benchmark may be the S&P 500. A complete list of index returns can be found in Barrons at the end of each quarter. Barrons also lists Lipper Mutual Fund returns to help you compare the performance of your fund to the average mutual fund in its category.

Finding Annual Returns Using Quarterly Data

Beginning Quarterly Balance (BB)	Contributions or Withdrawals (CW)	Ending Quarterly Balance (EB)	Quarterly Return $(EB - \frac{1}{2}C + \frac{1}{2}W) / (BB + \frac{1}{2}C - \frac{1}{2}W)$	Multiply Quarterly Returns
1 st Quarter				
2 nd Quarter				X
3 rd Quarter				X
4 th Quarter				X
				Subtract “1” from total =

In some quarters, large a contribution or withdrawal can distort returns. During periods of large cash flows, it is better to link returns monthly to find an accurate quarterly return. To do this, calculate the quarterly return (do not subtract 1) then link the three monthly returns together and then subtract 1.

Finding Quarterly Returns Using Monthly Data

Beginning Monthly Balance (BB)	Contributions or Withdrawals (CW)	Ending Monthly Balance (EB)	Monthly Return $(EB - \frac{1}{2}C + \frac{1}{2}W) / (BB + \frac{1}{2}C - \frac{1}{2}W)$	Multiply Monthly Returns
Month 1				
Month 2				X
Month 3				X
			Subtract "1" from total =	

I recommend calculating a return for your account in aggregate. This means adding all your accounts together and treating them as one account for the purpose of a return calculation. This gives you an idea of the total performance of the portfolio, not just the performance of specific accounts. It is in the aggregate where the performance gap is most prevalent.

Appendix #2

Stock Picking as a Hobby

This book has taken all the fun out of investing in the stock market, so now let's put some back in.

Appendix #2 refers to stock picking as a hobby, which I believe it should be. To make stock picking a hobby, you need a small brokerage account funded with money that will not make or break you. It is just as exciting and more fun playing the market with a little bit of money than with a large portion of your savings.

I have a small account that I call "bingo money" in memory of my late Grandma Ferri. While washing clothes, she frequently found spare change in my grandfather's pants. That money went into a special jar labeled BINGO MONEY. Every Monday night she took the jar to the local church to play bingo. She never won a lot, she never lost a lot, but she had a great time.

Your BINGO account should be funded specifically for the purpose of choosing stocks. And playing the market should be limited to the small amount of money in the account. I suggest opening an account with a witty stockbroker, someone who is pleasant to talk to and will pick up the phone when you call. Don't worry about paying regular commissions rates. The cost of commission is your least worry in this account. You will have a hard enough time trying to pick a few winners. Inform your broker you have no interest in buying packaged products or insurance. That way you will not be approached with the latest limited partnership or other investment gimmick.

When you are ready to invest there are thousands of stock strategies to try. You can buy growth, value, small-cap, momentum, it really does not matter, and chances are you will flip from one strategy to another over time. Of course it is always better to stick with one strategy. That is how truly gifted stock investors become wealthy. But 99.9% of stock investors are not gifted, and their chance of success in any strategy is slim. Therefore, I recommend trying different ideas until you find a style you enjoy and understand. I do not recommend trading futures or options since the money can disappear quickly.

Tips on Using Brokerage Firm Stock Research

When you start working with a brokerage house, you will likely be introduced to stock ideas that have recently been touted by the firm's analysts. Unless these are household names like AT&T, Cola-Cola, or Microsoft, there are a few things you need to know about Wall Street recommendations.

Investment Banking Fees

Assume your broker called and recommended a certain small stock his firm just placed on their “buy list”. The broker says the firm believes the stock offers superior investment potential, and that the analyst is highly recommending the company. Should you believe this story? Maybe, and maybe not. Before we go any further, you need to know something about the real job of stock analysts and brokerage firms.

Stock analysts at brokerage firms wear many hats and serve many masters, but the one master that speaks louder than all others is the Investment Banking master. When a brokerage firm acts as an underwriter for a company issuing new securities, the firm makes a very handsome fee. The analyst plays an important roll in bringing in the investment banking business and selling the idea to brokers.

During a typical day, analysts attend meetings, write research reports, talk to the press, speak at various functions, and do a variety of other things. They also keep up on the companies they follow. As a rule, analysts are obligated to cover the biggest companies in their industry, such as those in the S&P 500. After covering the big boy, they don’t have a lot of time to look for promising young companies. Generally, analysts will not recommend a small company just because they think the stock price will go up. The way an analyst selects one small company over another is based on their firms’ investment banking relationship, or potential relationship.

As a rule, when it comes to covering a small company, there must be an investment banking relationship or potential relationship for an analyst to take notice. As small firm may have a wonderful income statement, a fantastic balance sheet, tremendous potential for growth, but if they are not looking to Wall Street for money, few analysts bother to issue research reports or put them on the buy list.

In addition, stock analysts tend to increase their coverage of companies who are currently in need of investment banking. A study by Columbia University concluded that Wall Street analysts generally provide greater coverage to investment banking clients and give them higher ratings overall¹. Paying for coverage and high ratings through investment banking fees is the nature of Wall Street. It has always been this way, and will always be this way.

How does the conflict of interest affect individual investors? Don’t buy a stock if your brokerage firm is involved in the underwriting. Those buy recommendations substantially trailed the stock market. One study found that stock recommendations relating to an investment banking relationships underperformed the market by a 14% over a two-year period following the offering. In contrast,

¹ Warren Boeker and Matthew Hayward, *Columbia University Graduate School of Business*, 1996

recommendations of analysts not involved in the relationship outperformed the market by 32% over the same period².

When a broker calls and pitches an unfamiliar stock, experienced investors learn to ask if an investment banking relationship exists. The broker is obligated to disclose the relationship if it is there. Unless you are familiar with the company from some other unbiased source, I recommend avoiding stocks where a relationship exists.

How good is Wall Street research? According to *The Wall Street Journal*, most analysts might as well be throwing darts. The Journal tracks the performance of analyst recommendations from various brokerage firms and publishes the results on a regular basis. For a five-year period ending June 30, 1998, ten out of fifteen brokerage firms surveyed were not able to achieve the returns of the S&P 500³. These results did not include trading costs, which would have lower the actual returns.

Summary

Picking stocks should be a hobby, and hobby money should be used. Your serious stock money should be in index funds as discussed in Chapter 12. If you are interested in learning about stocks, read a few good books on the subject and take a couple of college courses. Have fun, be safe, and don't confuse brains with a bull market.

² Roni Michaely and Kent L. Womack, "Conflict of Interest and the Credibility of Underwriters Analysts' Recommendation," preliminary paper Sunriver Oregon, June 19-22, 1996

³ Gorgette Jason, "The Pros Give Up Some Bragging Rights", Wall Street Journal, July 21, 1998, C1, Stock returns were based on each firms recommended list.

Appendix #3

Beware of Asset Allocation Advice

Asset allocation models are a relatively simple idea based on sound academic theory. By diversifying a portfolio into several asset classes, such as stocks and bonds, you can increase your return and control risk. But this is not an infallible approach. There are limitations that need to be addressed when using an asset allocation model. Many of these limitations are not readily apparent, especially to the large number of financial advisors who use the models to sell investment products.

**Typical 15 year Asset Allocation Model
1983 - 1997**

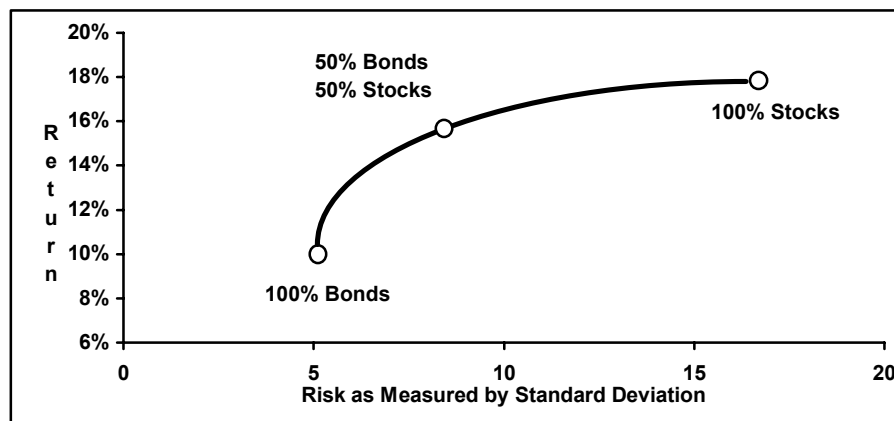


Chart 1

Model Risk and Investor Risk

Chart #1 is a sample asset allocation model. It shows the risk and return of different stock and bond market mixes over the last fifteen years. On the left side of the model is the rate of return, and on the bottom is a measure of portfolio risk. The strong bull market of the 1980s and 90s have caused people to focus on the left side of this asset allocation model, namely the rate of return. Equally as important, though often neglected in a bull market, is the risk of the portfolio. The concept of risk is one of the most misunderstood and mismanaged areas in the investment advice industry.

Asset allocation theory has become deeply imbedded in the mass market for financial products. Nearly every financial advisor has some form of model at their fingertips. Asset allocation theory was originally developed for use by institutional investors. For this reason, the measure of risk was fairly complex. Institutions measure risk by standard deviation, or the variability of portfolios returns over long-periods of time.

Institutional investors understand the basic concept using standard deviation as a measure of risk. Unfortunately, the public does not. Standard deviation does not adequately reflect short-term volatility that occurs in the markets, which is precisely the kind of risk that effects individual investor behavior. When the markets become volatile in the short-term, people lose money. Since the average investor thinks about risk in terms of losing money, or running out of money during retirement, they tend to act impulsively to change their allocation¹. Long-term models, such as the one in Chart #1, assume an investor does not change their allocation over a very long period of time. If an investor does not maintain a stable asset mix, there are in danger of reducing their exposure to stocks at the wrong time. In other words, they start trying to time the markets.

Other Institutional Terms

Statistical numbers like standard deviation, optimization, and utility are important theoretical concepts used at high levels of academic research. However, many advisors who use these terms to sell investment products misunderstand the concepts. One reason for their lack of understanding is due to a lack of training in the investment industry. Statistical concepts are taught at colleges and universities, and as we learned in Chapter 7, most advisors have a limited education outside of their firm. If an advisor does not fully understand the statistical concepts in the model, they tend to recommend portfolios that are too risky for a client. This leaves the investor open to poor portfolio returns as they bail out of a bad market.

Nominal Returns and Real Returns

Most asset allocation models used in marketing brochure and other sales material look like Chart #1. They use *nominal* rates of returns. The returns are not adjusted for *inflation*. This means the model includes the inflation rate as part of the return, which causes investors to have unrealistic expectations about their future returns. For example, from 1973 to 1997 a conservative portfolio of 50% stocks and 50% bonds would have earned a return of 11%. However, adjusted for inflation the return was reduced to 5.5%. Using nominal returns distort reality. Investor and advisors should be using an asset allocation model that adjusts for the inflation rate, such as the one in Chart #2.

¹ John L. Maginn and Donald L. Tuttle, *Managing Investment Portfolios*, 2nd Edition, Warren, Gorham, & Lamont, 1990, pg. 3-2

Inflation Adjusted Market Returns

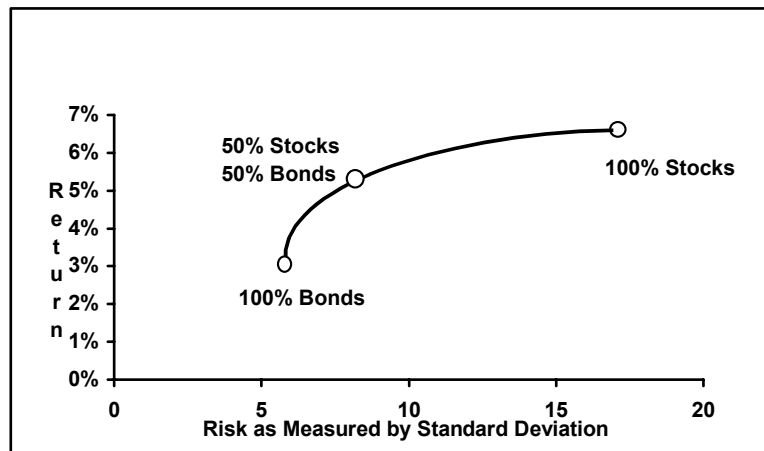


Chart #2

I have one final criticism of advisors who use asset allocation models to sell investment products. Most models are based on the return of a market index, not the returns of actively managed products sold by advisors. As a result, the model in no way reflects the return an investor would have achieved in an actively managed account, especially after fees. Although index funds are a logical fit for portfolios based on asset allocation models, most advisors want no part of them. There is little or compensation for an advisor to sell index funds.

I believe using index returns to sell active products is unethical. Advisors bait investors with models showing index fund returns, then switch to high cost active management. This tactic once again shows that most people in the industry exist to make money from you, not for you.

In summary, the returns of asset allocation models overstate the return to investors and understate the risks. Many advisors who use the models to sell investment products don't really understand the statistics behind them, but use them anyway to push products with higher fees. In a bear market, most portfolios based on faulty allocation assumptions break down as investors true risk tolerance levels are exposed.