

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 Guyan, *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:

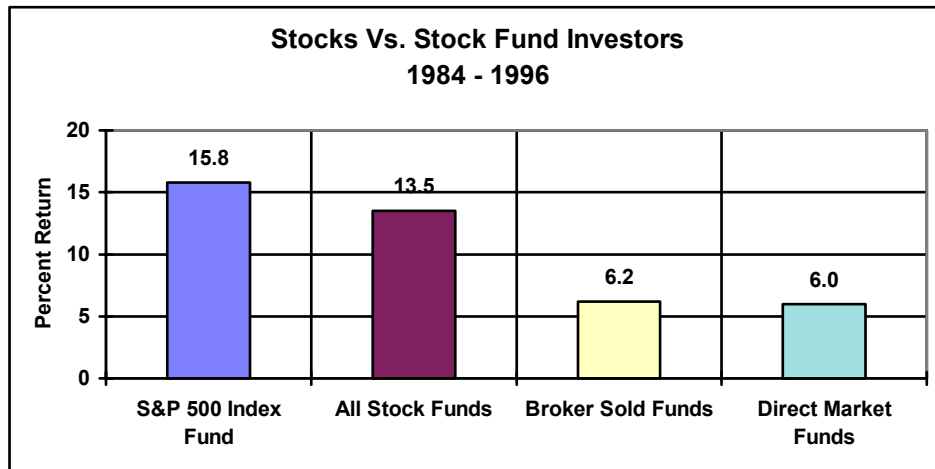


Figure 3-1: Source - DALBAR Financial Services

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.

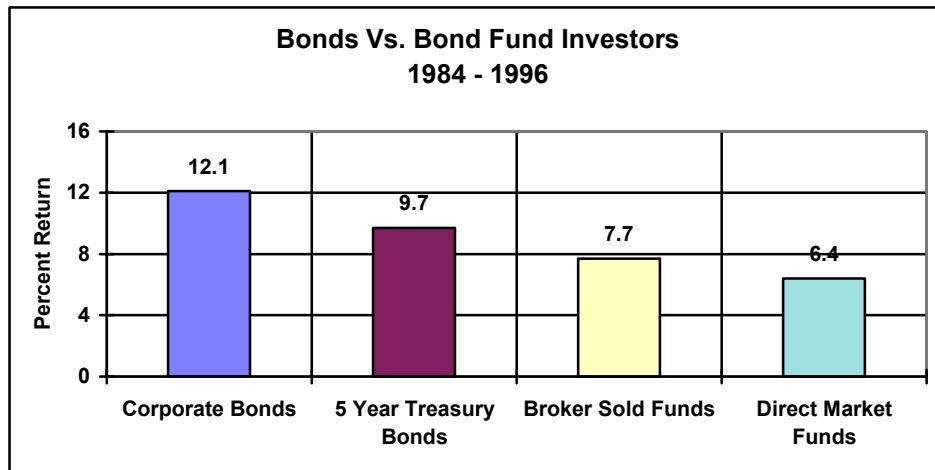


Figure 3-2: Source - DALBAR Financial Services, Ibbotson Associates

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.