



## Discipline: An Important Determinant of Returns

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**Overview:** Academic evidence has long argued that a crucial determinant of portfolio performance is asset allocation. Following is a discussion of several findings that suggest another important determinant of portfolio performance is an investor's discipline to adhere to his or her chosen asset allocation.

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### Introduction

As the acceptance of passive asset class investing continues to grow, investors have benefited from an increase in the availability of a broader range of passive investment vehicles, providing access to more asset classes, as well as more ways to seek reduced costs and improved tax efficiency. In recent years, for example, investment giant Fidelity has competed against the traditional index-fund leader Vanguard by offering low-cost index funds. And there has been a proliferation of passively managed exchange-traded funds (ETFs).

Unfortunately, most do-it-yourself investors don't appear to be fully benefiting from the growing availability and flexibility of passively managed funds. The reason is that following such a strategy has two requirements: 1) the investment vehicles must be passive and 2) investors themselves must be disciplined.

Evidence has shown that the average do-it-yourself index fund investors are not disciplined. Instead, they allow the "noise of the market," and emotions caused by that noise (such as greed and envy in bull markets, and fear and panic in bear markets) to convince them to become active in their asset allocation decisions. They may also make another mistake known as *recency*: buying whatever asset class or index is "hot" and selling whichever is "cold." And they may even abandon index funds for the latest hot money manager. For many, these tendencies have proven to be very expensive.

### Fund Returns Versus Investor Returns

It is probably safe to say that, when asked about returns, most people would guess that investors earn the same returns as do the funds in which they invest. Unfortunately, that is far from the truth.

For example, a Morningstar study evaluated 199 mutual funds for which they had performance data for the period 1989–1994. "The average total return for the 199 funds over this six-year period was 12.01 percent."<sup>1</sup> The individual owners of those same funds (keeping in mind that the average no-load mutual-fund investor holds his or her funds for only 21 months) for their various periods of ownership received a return, however, of just 2 percent. Either market timing or chasing the hot manager turned their potential 12 percent returns into 2 percent.

What about index fund investors? In their *2005 Indexes Yearbook*, Morningstar compared the time-weighted return of all no-load index funds with the dollar-weighted return that investors in these funds actually earned for the 10-year period ending December 31, 2005.<sup>2</sup>

One might think that by choosing to invest in index funds this group of investors would also be disciplined in their asset allocations, and thus not experience a negative variance between the returns of their funds and the returns they earned. Unfortunately, that was not the case. For the 10-year period that Morningstar studied, while the time-weighted return of the index funds was 8.94 percent, the dollar-weighted return earned by investors was 7.06 percent.<sup>3</sup> Investors lost 1.88 percent of the returns earned by the funds; they earned 85 percent of the returns available to them. Better than the preceding study's investor results, but still indicative that best results are achieved when an individual remains disciplined and the funds are passive.

### **Passive Funds, Disciplined Investors**

Consider Morningstar's findings about investors in the passive asset class funds managed by Dimensional Fund Advisors (DFA) for the same 10-year period. By and large, DFA provides individual investors access to their funds only through fee-only advisors who must undergo training on the merits of passive asset class investing. These advisors also commit to DFA that they will seek to keep their clients investing in a disciplined manner. (It is important to note that rebalancing the portfolio — restoring the portfolio to each chosen asset allocation — is part of a prudent strategy.)

How did the returns the DFA fund investors earn compare to the returns of funds in which they had invested? According to Morningstar's *2005 Indexes Yearbook*, while the time-weighted return of the DFA funds was 12.37 percent, the dollar-weighted return earned by investors in these very funds was actually 12.81 percent.<sup>4</sup>

Thus, DFA fund investors actually **outperformed** the very funds in which they invested by 0.44 percent. They earned 106 percent of the returns earned by the very funds in which they invested.

How can this be? A plausible explanation is that the advisors encouraged disciplined rebalancing: buying more of the out-of-favor asset classes and selling some of the hot performers. This style of investor behavior is exactly the opposite behavior of the typical do-it-yourself investor. The DFA fund, advisor-assisted investors gained a cumulative advantage of 2.32 percent per annum relative to the returns of the overall sampling of index investors.<sup>5</sup>

This study demonstrates that there are two critical components of the winning investment strategy. Investing in passively managed funds is only one part of that strategy. The second component is having the discipline to adhere to a carefully developed plan, ignoring the noise of the market and the emotions it causes.

Could a do-it-yourself investor have avoided those mistakes? It certainly is possible. Unfortunately, psychologists have long known that humans are subject to overconfidence. Most people overestimate their abilities, be it as drivers (such as the 1981 Swedish study that found about 90 percent of respondents believed they were above average drivers<sup>6</sup>) or as investors. Thus, the academic evidence indicates that there is typically a significant difference between investors' perception of their abilities and their actual abilities.

## Summary

Academic evidence has demonstrated that the most important determinant of the returns of a diversified portfolio is its asset allocation — with very little of the outcome determined by market timing and stock selection efforts. In addition, active management efforts are highly likely to prove counterproductive, reducing returns because of the added expenses. Thus, investing in passive asset class funds remains the prudent strategy we advise. The findings discussed above provide us with another vital insight: An important determinant of the returns actually earned is the investor's own discipline to adhere to his or her chosen asset allocation.

<sup>1</sup> John Merrill, **Beyond Stocks**, Tanglewood Publishing, 1997.

<sup>2</sup> Don Phillips, **Indexing Goes Hollywood**, *2005 Morningstar Indexes Yearbook*, 2006. To obtain an electronic copy or to learn more about Morningstar indexes in general, visit [www.global.morningstar.com/indexes](http://www.global.morningstar.com/indexes).

<sup>3</sup> Ibid.

<sup>4</sup> Ibid.

<sup>5</sup> Ibid.

<sup>6</sup> Gary Belsky and Thomas Gilovich, **Why Smart People Make Big Money Mistakes**. Simon & Schuster, 1999.

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