

# Vanguard's Investment Philosophy

## We Believe #4

Consistently outperforming the financial markets is extremely difficult.



**Vanguard**<sup>®</sup>

Successful investment management companies base their business on a core investment philosophy, and Vanguard is no different. Although we offer many strategies with both internally and externally managed funds, common themes run through the investment advice we provide our clients. Indeed, these tenets have been a part of the company since our inception and are embedded in Vanguard's culture. We've distilled our philosophy into nine statements, the fourth of which is presented here. For Vanguard, these nine statements represent both the past and the future—enduring principles that guide the investment decisions we help our clients make.

### Vanguard believes that . . .

#### 4. Consistently outperforming the financial markets is extremely difficult.

Although it is possible to outperform the markets over short periods, consistent long-term outperformance is rare. Table 1 (page 2) illustrates the challenge. The left-hand column ranks funds by their risk-adjusted return (alpha) during the five years ended December 31, 1997. Funds in the highest quintile produced the highest levels of alpha; those in the lowest quintile turned in the lowest levels of risk-adjusted return. The remaining columns show the performance of the original quintiles over the next five years (1998 through 2002).

As the table demonstrates, of the funds that produced the highest levels of alpha during the first five years, only 21% were top performers in the next five years. An almost equal proportion (19.6%) ranked among the worst. Of those funds that turned in the worst performance during the first five years, by contrast, 8.7% ranked among the best during the subsequent five.

Table 1. Persistent outperformance is difficult to find

Alpha rank: Five years ended 12/31/1997	Quintile rank in subsequent five years (1998 through 2002, percentage of funds)						Total
	Highest quintile	High	Medium	Low	Lowest quintile	Missing	
Highest quintile (1)	21.1%	19.6%	12.9%	13.9%	19.6%	12.9%	100.0%
High (2)	16.2%	13.4%	16.3%	18.7%	18.2%	17.2%	100.0%
Medium (3)	14.4%	15.3%	19.6%	17.2%	14.4%	19.1%	100.0%
Low (4)	7.1%	15.8%	20.1%	14.4%	15.8%	26.8%	100.0%
Lowest quintile (5)	8.5%	11.1%	15.9%	18.8%	14.4%	31.3%	100.0%

Source: Vanguard Investment Counseling & Research, based on data from Center for Research in Security Prices.

Note: Data include all nonindex U.S. equity funds (totaling 1,044) with a three-year history as of December 31, 1997.

*Past performance is no guarantee of future returns.*

## Barriers to outperformance

### Zero-sum game

One way to think about the difficulty of outperforming the market is to consider a competitive, efficient financial market as a “zero-sum game.” Before taking into account costs such as management fees and transaction costs, investors as a group are able to earn no more (or less) than the market return. If one investor outperforms, another must underperform. The average investor will usually earn the market return, because it is difficult for the average manager to consistently outperform. After costs, the average portfolio underperforms the market by the amount of its costs. This simple arithmetic is a particular challenge for high-cost portfolios, which must outperform by an amount sufficient to offset their higher costs. And in a zero-sum game, this relatively high degree of outperformance must be offset by a correspondingly high degree of underperformance by other investors.

### ‘Random walk’ of efficient markets

Of course, even in a zero-sum game, there are winners. Why don’t these winners tend to repeat? The efficient-market hypothesis posits that, at any given moment, security prices reflect all publicly available information. These markets offer little opportunity to outperform by purchasing underpriced and selling overpriced securities, because any mispricings are corrected quickly. There is an equal chance that the price of a security will rise or fall after it is purchased, in response to new (and by definition, unexpected) information. The unpredictable nature of returns creates a pattern of security price movements that can be characterized as a “random walk.” In this situation, the expected return of any investment is the market return.

## Academic research

Academic research has explored the opportunity for consistent outperformance from two related perspectives: skill and the persistence of skill. Empirical research confirms what a casual review of mutual fund performance data suggests. In efficient markets, investment skill—a prerequisite for superior performance—is difficult to identify. Identifying persistent skill is even more challenging.

### Skill

Skilled investors should be able to more accurately predict the performance of specific securities or asset classes than can the average investor. Yet, research indicates that individual investors fail to consistently outperform broad market indexes. For example, Barber and Odean (2000) examined the performance of more than 66,000 households holding common stock at a large discount broker from 1991 to 1996. They found that the average household earned a net annualized return of 16.4%, compared with a 17.9% return for the Standard & Poor's 500 Index.<sup>1</sup>

Research on institutional investor skill is mixed. Kosowski et al. (2001), for example, examined the performance of U.S. equity mutual funds from 1962 to 1994 to determine whether alpha was attributable to skill or luck.<sup>2</sup> Using a statistical sampling method to control for luck, the researchers found evidence of skill in a sizable minority of fund managers, a conclusion supported by other recent research.<sup>3</sup>

### Persistence

Even when skill exists, capitalizing on it to earn consistent outperformance is a separate challenge. Mutual fund buyers have struggled to identify skilled managers in advance. Zheng (1999) tracked investor cash flow into equity mutual funds from 1961 to 1993 to determine whether investors could identify the best and worst performers of the future. He found that the aggregate money flow into equity mutual funds provided a reliable forecast of short-term performance, but did not produce a long-term strategy for outperforming the market index.<sup>4</sup>

Studies of mutual fund performance (as opposed to individuals' ability to identify the top-performing funds of the future) have reached similar conclusions. In the 1990s, some studies found that superior performance persisted over short periods. More-recent studies have cast doubt on even short-term persistence. Carhart (1997), for example, attributed the persistence found in earlier studies to a one-year momentum effect.<sup>5</sup> Daniel et al. (1997) confirmed that performance persistence was primarily a momentum phenomenon.<sup>6</sup>

In general, the academic research concludes that although some managers possess skill, managers as a whole typically underperform the market, and even the most skillful investors struggle to produce consistent outperformance net of costs.

## Conclusion

Identifying those investments that have outperformed in the past is simple. Identifying those that will consistently outperform in the future is extremely difficult. The task is particularly challenging in efficient markets.

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1 Brad M. Barber and Terrance Odean, 2000, Trading is Hazardous to Your Wealth: The Common Stock Investment Performance of Individual Investors, *Journal of Finance* 45(2): 773–806.

2 R. Kosowski, A. Timmerman, H. White, and R. Wermers, 2001, Can Mutual Fund “Stars” Really Pick Stocks? New Evidence from a Bootstrap Analysis (Working Paper).

3 Chen Hsiu-Lang, N. Jegadeesh, and R. Wermers, 2000, The Value of Active Mutual Fund Management: An Examination of the Stockholdings and Trades of Fund Managers, *Journal of Financial and Quantitative Analysis* 35(3): 343–68.

4 L. Zheng, 1999, Is Money Smart? A Study of Mutual Fund Investors' Fund Selection Ability, *Journal of Finance* 54 (3): 901.

5 Mark Carhart, 1997, On Persistence in Mutual Fund Performance, *Journal of Finance* 52 (1): 57–81.

6 Kent Daniel, Mark Grinblatt, Sheridan Titman, and Russ Wermers, 1997, Measuring Mutual Fund Performance with Characteristic-Based Benchmarks, *Journal of Finance* 52(3): 1035–58. Also in *Papers and Proceedings, Fifty-Seventh Annual Meeting, American Finance Association*, New Orleans, January 4–6, 1997 (publ. July 1997).



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