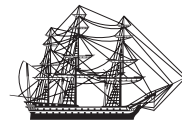


Vanguard's Investment Philosophy

We Believe #3

An investor's most important decision is selecting the mix of assets to be held in a portfolio, not selecting the individual investments themselves.



Vanguard[®]

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 third 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 . . .

3. An investor's most important decision is selecting the mix of assets to be held in a portfolio, not selecting the individual investments themselves.

Three primary factors influence portfolio performance—asset allocation, security selection, and market-timing. Over time, strategic asset allocation, or policy allocation, is the most important determinant of total return and risk for a broadly diversified portfolio. Vanguard's studies, as well as prior work, support empirically the dominance of strategic

asset allocation in determining total return and return variability (see Table 1, page 3, for a brief outline of these studies). Market-timing and security selection—basic features of active investment strategies—can also account for some percentage of portfolio return and return variability over time, but the impact of these factors is, on average, smaller and negative.¹

¹ See The Vanguard Group, 2003, *Sources of Portfolio Performance: The Enduring Importance of Asset Allocation* (Valley Forge, Pa.: Investment Counseling & Research, The Vanguard Group). Prior work by other researchers includes Gary P. Brinson, L. Randolph Hood, and Gilbert L. Beebower, 1986, Determinants of Portfolio Performance, *Financial Analysts Journal* 42(4): 39–48 (reprint, 1995, *Financial Analysts Journal* 51(1): 133–38, 50th Anniversary Issue); Gary P. Brinson, Brian D. Singer, and Gilbert L. Beebower, 1991, Determinants of Portfolio Performance II: An Update, *Financial Analysts Journal* 47(3):40–48; Roger G. Ibbotson and Paul D. Kaplan, 2000, Does Asset Allocation Policy Explain 40, 90, or 100 Percent of Performance? *Financial Analysts Journal* 56(1):26–33.

Intuitive analysis of performance factors

An intuitive evaluation of the sources of performance suggests that asset allocation is the most significant determinant of performance. Following are key points to consider:

- The return an investor can receive from each asset class is circumscribed by the best- and worst-performing securities in the asset class.
- For security selection to be a dominant force in determining portfolio returns, an investor must either consistently pick better-than-average securities or worse-than-average securities within an asset class.
- Although such security selection is possible, it is rarely, if ever, done with consistency in efficient markets. This is because markets trade on information, and in broadly traded markets, virtually all information is quickly and efficiently made public, leaving little opportunity for an investor to gain a significant advantage.
- In efficient markets, investors can more likely expect to receive the average returns of the asset classes.
- Over time, asset-class returns will converge toward their long-term averages, but in any interim period the different asset classes can produce different degrees of out- or underperformance relative to one another. As a result, another way investors can seek to influence their returns is to predict which assets will be the top performers over a specific time period—in effect, they can attempt to market-time asset classes.
- Market-timing of asset classes requires adroit skill in determining both when to invest in an asset class and when to back out. Given that markets can change with remarkable velocity, effectively executing this strategy over a sustained period is difficult, and the price of being wrong can be substantial.

Stocks have historically returned an annual average of about 10%; bonds, roughly 6%; and money market instruments, about 4%. Over time, portfolio returns have been driven by these asset-class returns.²

For example, a portfolio with 80% of its assets in a stock fund and 20% in a bond fund will have a very different return path than one with 20% in stocks and 80% in bonds. Why? Because the long-term returns of stocks and bonds are driven by the systematic, or market, risk of each asset class. It is virtually impossible for even the most successful bond fund manager to select bonds that will consistently outperform the stock market.

Empirical analysis

As stated, research has consistently confirmed this intuitive analysis (major studies are outlined in Table 1, covering the period from 1962 through 2003). These studies used regression analysis to compute the adjusted R-squared, a measure of portfolio return variability explained by the asset-class returns of broad market indexes.

Brinson, Hood, and Beebower (1986) conducted the seminal study on the topic, which compared the returns that would have been produced by the policy asset allocations (represented by broad market indexes) of various pension funds with the funds' actual actively managed returns. This framework allowed the researchers to measure the impact of security selection and market-timing on performance. The results showed that the index portfolios consistently outperformed the actively managed portfolios, indicating that, on average, security selection and market-timing added no value over time. Moreover, Brinson and colleagues also found that, on average, the returns of index portfolios were less volatile than those of the actual funds (results are highlighted in Table 1).

² For stock market returns, we use the Standard & Poor's 500 Index from 1926 through 1970, the Dow Jones Wilshire 5000 Index from 1971 through April 22, 2005, and the MSCI US Broad Market Index thereafter. For bond market returns, we use the Standard & Poor's High Grade Corporate Index from 1926 through 1968, the Citigroup High Grade Index from 1969 through 1972, and the Lehman Brothers U.S. Government/Credit Bond Index from 1973 through 2005. For the returns on cash investments, we use the Citigroup 3-Month Treasury Bill Index.

Table 1. Studies of effect of asset allocation versus security selection and market-timing on portfolio performance: 1962 through 2003 (various periods)

	Data set	Period	Average policy return/average actual return	Effect on return variability over time
Brinson et al. (1986)	91 pension funds	1974–1983	112%	93.6%
Brinson et al. (1991)	82 pension funds	1978–1987	101%	91.5%
Ibbotson and Kaplan (2000)	58 pension funds	1993–1997	99%	88.0%
	94 U.S. “balanced” mutual funds	1988–1998	104%	81.4%
Vanguard (2003)	507 U.S. “balanced” mutual funds	1962–2001	114%	76.6%
	68 U.S. “balanced” mutual funds	Bear markets	100%	69.7%

Notes: Full reference cites to studies in this table are in footnote 1, page 1. “Policy return” refers to return from long-term strategic asset allocation. In the Vanguard (2003) study, funds with a given percentage of assets in more than one asset class were classified as “balanced.”

Past performance is no guarantee of future returns.

Subsequent studies—Brinson, Singer, and Beebower (1991), Ibbotson and Kaplan (2000), and most recently, Vanguard (2003)—have confirmed these results using both pension and mutual funds during various times periods from 1962 through 2003 (see Table 1).

Conclusion

Empirical studies demonstrate that the vast majority of investment returns can be attributed to the asset allocation decision. Active investment decisions such as market-timing and/or security selection have a more modest impact and, on average, reduce portfolio return.



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