



Benchmarking: Assessing Your Ability As a Manager of Fund Managers

By John Markese

You may have hired portfolio managers by investing in mutual funds, but you are the manager of your portfolio of mutual funds. In that capacity, you've monitored your portfolio managers by monitoring the individual funds, comparing them against other funds with similar investment objectives, making decisions on whether to stay with the individual funds or jump ship.

So, how well have you done managing the managers? Benchmarking your performance as manager of your mutual fund portfolio will help you to assess the success of your approach and aid in your financial planning.

Selecting the appropriate form of the benchmarks is the first step. Do you want to know how your portfolio of funds performed in comparison to an actively managed mutual fund portfolio, where funds are managed by fund portfolio managers making decisions on security selection, the timing of purchases and sales of individual securities, and market timing decisions on the overall commitment to stocks relative to cash? Or are you interested in comparing your fund portfolio to passively managed index benchmarks where there are no selection or timing decisions made? (Index funds hold a designated portfolio of securities and maintain a fully invested position.)

Comparing your portfolio of funds to a portfolio of actively managed funds will give you insight into how well you select funds, while comparing your overall portfolio against a portfolio of index funds will reveal additionally how well your funds are managed individually.

To illustrate benchmarking approaches, a hypothetical portfolio of mutual funds is detailed in Table 1. These are real funds and the rates of return reported are total returns for the calendar year 1995, assuming that all distributions have been reinvested. The returns are also before taxes, because the goal is to benchmark the performance of the funds and the overall mutual fund portfolio on both a fund and a portfolio management basis. In addition, returns are reported for the investment

category average and for an appropriate index fund. The portfolio percentage weights for this hypothetical case are given for the beginning of the period and are based upon market value. Beginning period portfolio weights are used because they do not incorporate the changes in weights due to the performance of the funds over the period, which would be reflected if ending period weights were used, thus avoiding double-counting of performance.

The key to effective benchmarking is simple—you must find the right benchmarks, and the first step involves delving into the securities held by each fund and the investment approaches employed by each mutual fund manager.

Actively Managed Benchmarks

In Table 1, the example portfolio returned 24.7%. Weighting the average returns for the matching investment categories results in a benchmark return of 22.8%. Was this a sound drubbing by the sample portfolio of the benchmark? An examination of the individual performance indicates that almost all the difference is from the performance of one fund, the aggressive growth fund PBHG Growth. And a closer look at the investment strategy revealed in the prospectus and the stocks and industries detailed in the annual report of PBHG Growth reveals a heavy concentration in two sectors: Close to two thirds of the PBHG Growth portfolio is in technology and health stocks, both very volatile sectors. If the investment category were narrowed down to health and technology sector funds, PBHG would have appeared average. PBHG Growth is probably half again as volatile (see AAI's 1996 "Individual Investor's Guide to Low-Load Mutual Funds") as the average aggressive growth fund. Adjusting intuitively for these differences, the example portfolio kept pace with an average actively managed portfolio of funds with the same investment objective allocation.

The conclusion: As a manager of your fund portfolio, your fund selection is average for the year.

But take one more step back to get another more generalized view of the actively managed universe of funds and your choice

John Markese is president of AAIL. This article was researched by Marie Swick, AAIL's research analyst.

Table 1.
Benchmarking a Portfolio of Mutual Funds

Mutual Fund	Investment Category	Benchmark Index Fund	Percentage of Portfolio in Fund* (%)	1995 Total Return		
				Each Fund (%)	Investment Category Average (%)	Benchmark Index Fund (%)
PBHG Growth	aggressive growth	Schwab Small-Cap Index	10	50.3	33.4	27.6
Fidelity Blue Chip Growth	growth	Vanguard Index Trust Growth	20	28.3	29.8	38.0
Twentieth Century Value	growth & income	T. Rowe Price Equity Index	30	32.7	30.2	37.1
Loomis Sayles Int'l Equity	international stock	Schwab International Index	20	8.6	8.5	14.2
Fidelity Intermediate Bond	general bond	Vanguard Bond Index Intermed Term	20	12.8	14.0	21.0
Total Fund Portfolio Returns			100	24.7	22.8	28.5

$$\text{Portfolio Return } (0.10 \times 50.3\%) + (0.20 \times 28.3\%) + (0.30 \times 32.7\%) + (0.20 \times 8.6\%) + (0.20 \times 12.8\%) = 24.78\%$$

* Percentage of portfolio in funds at beginning of benchmark period

Source: "Individual Investor's Guide to Low-Load Mutual Funds," 15th edition, American Association of Individual Investors, 1996.

of funds. Using the 80%/20% stock/bond mix of the example portfolio and ignoring international equities, domestic stock funds averaged 30.9% and domestic taxable bond funds averaged 16.2% last year, for a weighted benchmark of 27.96% $[(0.80 \times 30.9\%) + (0.20 \times 16.2\%)]$. The particular mix of funds and fund investment categories in the example portfolio, holding asset allocation constant, was just below the performance of the broadest actively managed fund asset categories.

Passive Benchmarking

Another approach to benchmarking your mutual fund portfolio uses index mutual funds to establish a performance mark. Table 2 lists the major index funds grouped by investment index type (see the 1996 "Individual Investor's Guide to Low-Load Mutual Funds" and AAIL's *Quarterly Low-Load Mutual Fund Update* for details). Because of their nature, their expense ratios are extremely low—an average of 0.25% versus 1.0% or more for an actively managed fund—and because they do not actively trade the securities in the portfolio, their brokerage costs are also comparatively low.

Index funds are not available for all the pieces into which the stock and bond markets can be chopped. But large stocks (S&P 500), mid-sized stocks (S&P 400), small stocks (Russell 2000) and the entire market (Wilshire 5000) are all covered separately. And a large-capitalization value approach index (Vanguard Index Trust Value Portfolio), which is a low stock-price-to-book-value ratio approach, is available, as is a large-capitaliza-

tion growth approach (Vanguard Index Trust Growth Portfolio), which selects stocks that are priced on earnings growth rather than assets or dividends. The gold stock sector also has an index mutual fund benchmark in the Benham Gold Equities Index fund of North American gold stocks.

Internationally, there are fewer index fund choices given the complexity of the markets, and some international segments—emerging markets, for example—are not represented. Schwab covers the largest 350 international stocks, stocks of non-U.S. companies, and Vanguard has both a European index and a Pacific index. But international regional index funds can be tricky—country weightings may differ significantly from your actively managed international mutual funds—so take the time to request an annual report for the index fund and compare the weightings to your fund before using the index as a benchmark.

The bond index mutual funds may be tougher to use as benchmarks without some careful matching. First, maturity is important—a short-term (up to three years maturity) bond fund, for example, should not be matched against an intermediate (three to 10 years maturity) bond index or a long-term (over 10 years weighted average maturity) bond index. In 1995, Vanguard Bond Index Intermediate Term returned 21%, while the Vanguard Bond Index Short-Term returned 12.8%. Because of maturity, these two indexes have very different sensitivities to interest rate changes and therefore sometimes produce dramatically different capital gains or losses.

Secondly, corporate bonds, governments and mortgage-backed bonds act differently even when maturities are equal. Sources such as the Wall Street Journal report, on occasion, the performance of bond indexes sponsored by major investment banking firms. And if you hold municipal bond funds, because of the fragmented municipal bond market and the infrequent trading in many issues, no satisfactory municipal bond index mutual fund is available.

The index mutual funds selected for use in the Table 1 example are judgment calls and should be viewed as such. The approximately 4% higher return for the index fund benchmarks

Sources for Mutual Fund Category Averages

Barron's	Investor's Business Daily
Business Week	Money
Financial World	Morningstar Mutual Funds
Forbes	Quarterly Low-Load Mutual
Fortune	Fund Update
Individual Investor's Guide to	Value Line Mutual Funds
Low-Load Mutual Funds, AAIL	Wall Street Journal

may be due more to composition differences than the failure of your actively managed funds to beat passively managed indexes, but they do give you a benchmark for an alternative approach to mutual fund investing—index everything. However, indexing everything will certainly not be a superior approach in every market environment. Index funds make sense when active management is unlikely to add enough value to cover the additional costs of active management. The large stock segment of the market is a reasonable example, as is a U.S. government bond index fund. On the other side are actively

managed small stock funds and international funds, where a portfolio manager has ample opportunity to create value over a passive index fund.

Keeping Your Portfolio in Shape


Periodic mutual fund portfolio benchmarking from different angles is a valuable exercise. It will point out strengths and weaknesses and offer alternatives to your current strategy and critique your success as the ultimate manager of your funds. 

Table 2.
Index Funds

Fund	Category*	Holdings	1995 Total Return (%)
<u>Large-Cap Stock</u>			
CoreFund Equity Index	GI	S&P 500 composite of large, indus'l, transportation, utility and financial stocks	36.6
Dreyfus S&P 500 Index	GI	S&P 500 composite of large, indus'l, transportation, utility and financial stocks	36.7
Fidelity Market Index	GI	S&P 500 composite of large, indus'l, transportation, utility and financial stocks	36.9
Galaxy II Large Company Index Retail	GI	S&P 500 composite of large, indus'l, transportation, utility and financial stocks	37.0
Schwab 1000	GI	1,000 largest stocks	36.6
Seven Seas Series S&P 500 Index	GI	S&P 500 composite of large, indus'l, transportation, utility and financial stocks	37.0
T. Rowe Price Equity Index	GI	S&P 500 composite of large, indus'l, transportation, utility and financial stocks	37.1
Vanguard Index Trust 500	GI	S&P 500 composite of large, indus'l, transportation, utility and financial stocks	37.4
Vanguard Index Trust Growth	Grth	Standard & Poor's growth index, 250 of 500 stocks with growth emphasis	38.0
Vanguard Index Trust Value	GI	Standard & Poor's value index, 250 of 500 stocks with value emphasis	37.0
Woodward Equity Index	GI	S&P 500 composite of large, indus'l, transportation, utility and financial stocks	37.3
<u>Mid- and Small-Cap Stock</u>			
Dreyfus S&P MidCap Index	Grth	S&P MidCap 400 index, medium-sized indus'l, transportation, utility and financial stocks	30.3
Schwab Small-Cap Index	AG	Second 1,000 largest stocks	27.6
Vanguard Index Trust Ext. Market	Grth	Wilshire 4500 index, does not include the S&P 500	33.7
Vanguard Index Trust Small Cap. Stock	AG	Russell 2000 small stock index, largest 3,000 stocks less the largest 1,000	28.7
<u>All-Encompassing Stock</u>			
Vanguard Index Trust Total Stock Mkt	GI	Wilshire 5000 index	35.7
<u>Balanced</u>			
Vanguard Balanced Index	Bal	Wilshire 5000 index 60%, Lehman Brothers aggregate bond index 40%	28.6
<u>Gold</u>			
Benham Gold Equities Index	Gld	North American gold stocks	9.2
<u>International</u>			
Schwab International Index	IntlS	350 largest stocks issued by companies outside of the U.S.	14.2
Vanguard Int'l Equity Index Europe	IntlS	Morgan Stanley capital international Europe index	22.2
Vanguard Int'l Equity Index Pacific	IntlS	Morgan Stanley capital international Pacific index	2.8
<u>Bond</u>			
Galaxy II U.S. Treas. Index Retail	B-Gov	U.S. Treasury component of the Salomon Brothers broad investment-grade bond index	18.0
Vanguard Bond Index Interm Term	B-Gen	Lehman Brothers mutual fund intermediate gov't/corporate index	21.0
Vanguard Bond Index Short-Term	B-Gen	Lehman Brothers short gov't/corporate index	12.8
Vanguard Total Bond Market	B-Gen	Lehman Brothers aggregate bond index	18.1

*Category Key:

AG = aggressive growth

Bal = balanced

B-Gen = general bond

B-Gov = government bond

G = growth

GI = growth & income

Gld = gold

IntlS = international stock

Source: "Individual Investor's Guide to Low-Load Mutual Funds," 15th edition, American Association of Individual Investors, 1996.