

# Mutual Fund Performance: An Empirical Decomposition into Stock-Picking Talent, Style, Transactions Costs, and Expenses

**Russ Wermers**

*Journal of Finance*

vol. 55, no. 4 (August 2000):1655–1703

The author creates a new database and provides evidence showing that over the 1975–94 period, stocks held by mutual funds outperformed the market. This superior performance can be attributed to the characteristics of the stocks held by the funds as well as the stock-picking skills of fund managers. But because of funds' high transaction costs and expense ratios and their lower-performing nonequity holdings, the funds underperformed the index. The author finds that high-turnover funds exhibit stock-picking and timing skills and that they provide higher returns than low-turnover funds, even after accounting for higher transaction costs and expense ratios.

---

Whether fund managers possess stock-picking and timing skills and whether actively managed funds provide superior returns to investors continue to be topics of debate in academic circles. The author creates a new database to examine the performance of mutual funds and decomposes mutual fund performance into several components to provide a categorical analysis of the magnitude of returns and the costs of active versus passive management.

The author creates a new database by combining databases from CDA Investment Technologies and CRSP. The resulting database provides a complete record of the equity holdings, investment objectives, total net assets under management, turnover ratios, and expense ratios for all equity funds that existed between January 1, 1975, and December 31, 1994.

---

Russ Wermers is at the University of Maryland and the University of Colorado at Boulder. The summary was prepared by Rajiv Kalra, CFA, Minnesota State University at Moorhead.

To determine how the fund manager produced the level of net returns for the fund, the author develops several measures to separate the returns of the stocks held by a mutual fund into the following components: stock-picking ability, timing of the stock picking, stock attributes, fund transaction costs, fund expense ratio, and net return to shareholders.

The results show that for this 20-year period, the stocks held by an average mutual fund outperformed the S&P 500 Index and the CRSP value-weighted index. The average net and gross returns of average total net assets, however, were 14.6 percent and 16.9 percent, respectively. Thus, the net return of a fund was 2.3 percent a year less than the return of the stock holdings of the fund.

A fund's performance is partly the result of the characteristics of the stocks it holds. The author benchmark-adjusts the fund returns to isolate the ability of fund managers to pick stocks that outperform other stocks with the same characteristics. The stocks held by funds provided a gross annual return of 15.8 percent, which was 130 basis points (bps) higher than the 14.5 percent return for the CRSP value-weighted index. Of the 130 bps, 75 bps can be attributed to stock-selection skills. The funds did not exhibit significant timing abilities. Therefore, the remaining 55 bps a year can be ascribed to the returns related to the characteristics of stocks held by the funds.

Expenses increased from 65 bps a year in 1975 to 99 bps in 1994. The author attributes this increase in part to funds' substituting 12b-1 fees for load fees. Although the turnover increased from 35 percent in subperiod 1975–1979 to 70 percent in subperiod 1990–1994, the transaction costs declined from 104 bps to 48 bps. On average, the expense ratio and transaction costs each accounted for about 80 bps a year. Therefore, the remaining 70 bps of lower net performance can be attributed to the lower-performing nonequity holdings of the funds.

High-turnover funds are found to hold stocks with characteristics that provide higher returns than stocks held by lower-turnover funds. High-turnover funds also exhibit superior stock-picking and timing skills. Higher transaction costs and higher expense ratios, however, reduce their net return advantage, even though they still outperform the low-turnover funds.

**Keywords:** Performance Measurement and Evaluation: performance measurement; Portfolio Management: private client focus