Does Fund Size Erode Mutual Fund Performance? The Role of Liquidity and Organization

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American Economic Review
vol. 94, no. 5 (December 2004):1276–1302

The authors discuss explanations for how and why mutual fund size affects performance. As fund size grows, performance suffers. As small-cap funds grow, their performance suffers proportionally more than that of large-cap funds. As fund family size grows, however, fund performance actually improves. Liquidity affects small-cap funds about the same as large-cap funds, but large-sized small-cap funds fare worse than smaller small-cap funds. The organizational features of a fund's management style affect performance adversely. Rising bureaucracies and hierarchical decision-making processes (e.g., those of co-managed funds) suffer compared with those of solo-managed funds.

Many investors perceive that there are certain advantages and disadvantages related to the size of mutual funds. Common among these perceptions is that larger funds ought to have lower expenses resulting from economies of scale. Another perception is that performance suffers as funds increase in size, although fund managers hotly dispute this contention. The authors not only investigate these notions as other academics have but also extend the analysis to examine the impact of liquidity and organization.

To investigate fund size and performance, the authors use regression analysis and cross-sectional analysis and find that the common notions of declining expenses and returns are mostly true. Their analysis shows that a change in the size of a fund equal to a two-standard-deviation shock in the log of a fund's total assets yields a decline of 5.4 to 7.7 bps in monthly performance. This impact is approximately 65–96 bps annually before fees.

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The authors find that the relationship is not significantly affected when considering small-cap funds, for which trading liquidity is more difficult, but average investors would expect that small-cap funds would have worse performance. When comparing the performance of small-cap funds that have larger assets under management (AUM) with those with smaller assets, they find, however, that large small-cap funds have worse performance than small ones. Thus, although liquidity does not really matter when comparing small- and large-sized large-cap funds, it does matter when comparing small- and large-sized small-cap funds.

To analyze organizational factors, the authors examine fund family size and management structure. In regard to the size of fund families, they find that the performance for individual funds improves as the size of the overall fund family grows. Their analysis shows that for a two-standard-deviation shock to fund family size, an individual fund's performance rises by 4–6 bps monthly, which is about 48–72 bps annually. They surmise that efficiencies in trading commissions and higher revenues from stock lending are responsible. In extending their analysis to compare the performance of small-cap funds in large or small fund families, the authors find fund family size has no significant impact. Family size affects large-cap funds but has no effect on small-cap funds.

The authors' discussion of management structure centers on fund manager compensation. They seek to answer the question: If fund managers are compensated more for rising AUM rather than performance, will performance suffer as AUM rise? The authors do not find a direct link between compensation and AUM, but they do find that the bureaucratic and hierarchical structures and decision-making process are responsible. In other words, as AUM grow, it is more likely that funds will be co-managed, resulting in more-expensive and less-timely decisions. In their study, smaller solo-managed funds perform better than larger team-managed funds.

Keywords: Portfolio Management: portfolio construction, rebalancing, and implementation; Private Wealth Management: mutual fund studies