Performance Persistence Matters

By C. Thomas Howard and Lambert Bunker, 1/30/23

Advisor Perspectives *welcomes guest contributions. The views presented here do not necessarily represent those of* Advisor Perspectives.


C. Thomas Howard


Lambert Bunker

Conventional wisdom has it that active investment managers, while capable of outperforming at times, are unable to generate persistent alpha. Among the studies supporting this belief was one conducted by the *Wall Street Journal.* Its 2017 article, The Morningstar Mirage, was based on Morningstar's "star" ratings of active mutual funds.

Examining star ratings for nearly 11,000 funds over a 14-year period, the authors concluded:

> When funds picked up a fifth star for the first time during the period included in the *Journal's* analysis, half of them held on to it for just three months before their performance and rating weakened… The findings were especially stark among U.S.-based domestic equity funds. Of those that merited the five-star badge, a mere 10% earned five stars for their performance over the following three years. Only 7% merited five stars for the following five years, and 6% did for 10 years.

While this study alluded to the fact that both ratings and performance decline after a fund first receives a five-star rating, it failed to clarify the importance of performance persistence as a prerequisite for delivering long-term alpha for investors.

Are persistent outperformance and long-term alpha closely linked or is it possible to deliver alpha without being persistent?

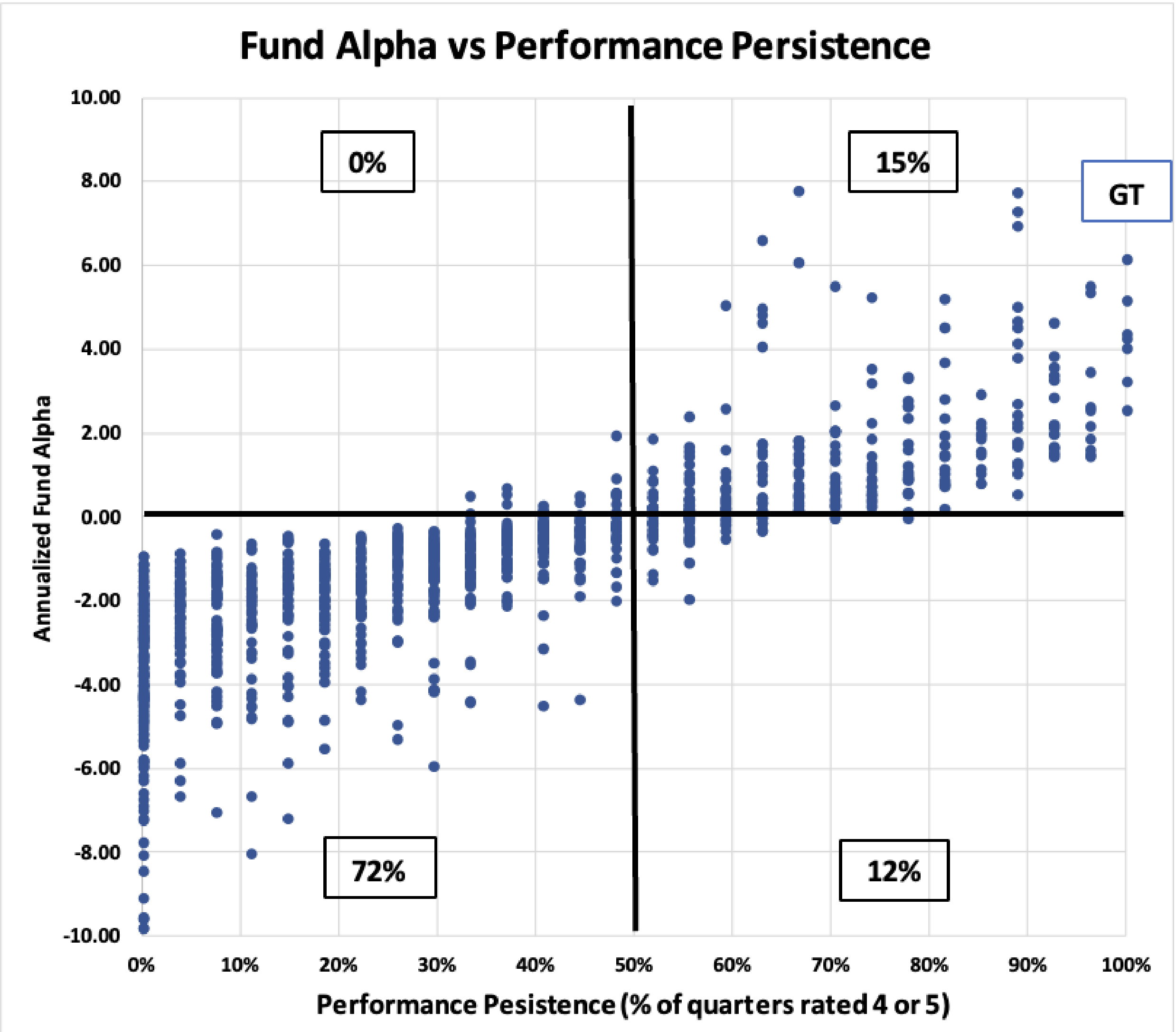
It turns out that they are closely linked.

The evidence

To address this question, we gathered, from Morningstar, the monthly returns net of fees for the nearly 1,100 U.S. active equity mutual funds which were in existence over the entire period Q4 2010 through Q2 2020. Monthly alpha was calculated by subtracting the return for the best trailing three-month R-square fit among five broad indices.

A fund's performance persistence was rated each quarter as 1 through 5 based on a fund's trailing three-year alpha. A fund rating of 1 means the trailing alpha was among the lowest 10% for that quarter, 2 the next lowest 22.5%, 3 the next 35%, 4 the next 22.5%, and 5 the top 10%. This is the same ratings breakpoints used by Morningstar for determining its star ratings. The fund ratings in this article differ in that they are based exclusively on trailing unadjusted three-year alphas, while Morningstar adjusted alphas and included five- and 10-year fund alphas when available.

Below is a plot of each fund's long-term annualized alpha versus its performance persistence, as measured by the percentage of quarters the fund received a rating of 4 or 5 (top one third of fund alphas).



Sample includes 1,087 U.S. active equity funds that existed every quarter from Q4 2010 through Q2 2020. Source: Morningstar

The graph reveals a positive relationship between persistence and fund alpha. The more persistent a fund is in delivering alpha, the higher is its long-term alpha. The four quadrants also portray a positive relationship, with the lower left quadrant (persistence < 50% and negative alpha) capturing 72% of the funds and the upper right (persistence > 50%, positive alpha) with 15% of the funds. The off-diagonal quadrants capture the remaining 13%. Generating positive alpha is fairly rare and occurs almost exclusively in combination with higher levels of persistence.

One problem with the above analysis is that both persistence and alpha are reported contemporaneously, so it is unclear which is driving which. To address this concern, we also measured persistence as the trailing four-quarter average rating and alpha as the subsequent quarter fund alpha. Each quarter's alphas were regressed on trailing persistence, thus avoiding the persistence and alpha overlap.

On average, a one-unit rating increase (i.e., trailing average rating increases by 1) leads to a 1.4% increase in annual alpha (e.g., an increase in alpha from 2% to 3.4%) and is highly statistically significant (t-value = 16.5). Greater alpha persistence is predictive of higher fund alpha.

An example of performance persistence and long-term alpha

Our firm, AthenaInvest, launched Global Tactical ETFs in 2010. The strategy is driven by investor behavioral response to the 10 investment strategies being pursued by active equity mutual fund investors. Depending upon the strength and scope of the behavioral response, the fund invests in one of seven U.S. and International broad market ETFs. The specifics of how the strategy is implemented can be found here.

Global Tactical's (GT) persistence and alpha are calculated in the same manner as for the nearly 1,100 funds discussed earlier and is plotted in the upper right quadrant of the earlier graph. This positioning reveals GT to be the top performing strategy within this large universe of funds.

The five funds closest to GT in the graph are Fidelity Select Semiconductors, T. Rowe Price New Horizons, Columbia Technology, Invesco Diversified Dividend, and Fidelity Select Software & IT Services.

Alpha persistence exists and matters

Not only is alpha persistence preferred by investors, but it is predictive of fund performance. The more persistent, the higher is the fund's expected alpha. As we have shown, 15% of funds deliver persistence and long-term alpha. Persistence analysis may be a valuable tool to evaluate funds. A portfolio of such funds could deliver more consistent and better long-term performance.

C. Thomas Howard, PhD, is CEO and chief investment officer and Lambert Bunker is vice president of business development at AthenaInvest, Inc.