The Importance of Being Active

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Abstract

A number of research studies conclude that active US equity open-end mutual funds underperform on average and that overall manager skill is diminishing. This contrasts with other studies documenting systematic ways investors can identify managers who subsequently outperform. In this study, involving all active US equity mutual funds over the period February 1980 through February 2009 (resulting in 403,577 observations), I show that both return and the chance of beating the market decline with the age of the average fund. Buying and holding the typical active US equity fund is a recipe for underperformance. On the other hand, I show that funds actively placing stock selection bets and enjoying recent return success earn increasingly superior returns and experience an improved likelihood of beating the market as the fund ages. This argues for the importance of being truly active as a fund manager. Manager skill increases with fund age as long as the manager continues to actively place stock bets.

The importance of being active

Considerable evidence (see Baker et. al 2004, Brands et. al. 2006, Cohen et. al. 2009, Kosowski et. al. 2006, Wermers et. al. 2000, and Wermers et. al. 2007, among others) shows that active US equity open end mutual fund managers are skilled stock pickers. However, it is difficult for investors to benefit from this skill as long-term studies (see Barras et. al. 2008 and Fama and French 2008, among others) show the average active fund underperforming an appropriately selected benchmark after fees. What's more, these same studies show performance declining as the fund ages and average fund performance deteriorating in recent years.

In contrast, other studies (see Amihud and Goyenko 2008, Cohen et. al. 2005, Cremers and Petajisto 2008, Howard and Callahan 2006, Kacperczyk et. al. 2005, and Wermers 2002, among others) document systematic ways to identify funds that subsequently outperform net of fees. These studies show funds that 1) actively place stock bets (as measured by a low benchmark R^2, high active share, large tracking error, or high "style

drift") and 2) have enjoyed recent success, subsequently outperform for up to four quarters.

In an attempt to explain these seemingly contradictory results, I compare the performance of the average active US equity open-end mutual fund to a sub-sample of funds selected using the recent methodology of Amihud and Goyenko (2008). They show that the funds with the lowest quintile trailing one-year market R^2 and the highest quintile trailing one-year return significantly outperform over the subsequent year. In other words, funds with strong performance that don't hug indices (low R^2) are more likely to perform well in the future. Amihud and Goyenko further demonstrate that each of these selection criteria contributes to the subsequent superior performance.

Based on the results reported below, I come to two conclusions:

1. The typical fund starts out life underperforming after fees and gets worse with age. The declining performance is most likely the result of powerful industry incentives to get large, to replace solo managers with teams, and to stay in a specific style box as the fund manager becomes a fund distributor. The evidence reported below reveals these incentives dictate a typical time path of declining fund performance.

2. On the other hand, if a fund continues to place active stock bets, performance starts out strong and gets stronger with age. This means that a subset of fund managers are skilled enough stock pickers to more that cover their fees, while stock picking skill improves with fund age (and more than likely with manger experience). The average 26-30 year old fund that continues to actively place stock bets generates an excess net of fees return exceeding 1% monthly while beating the market an astounding 84% of the time.

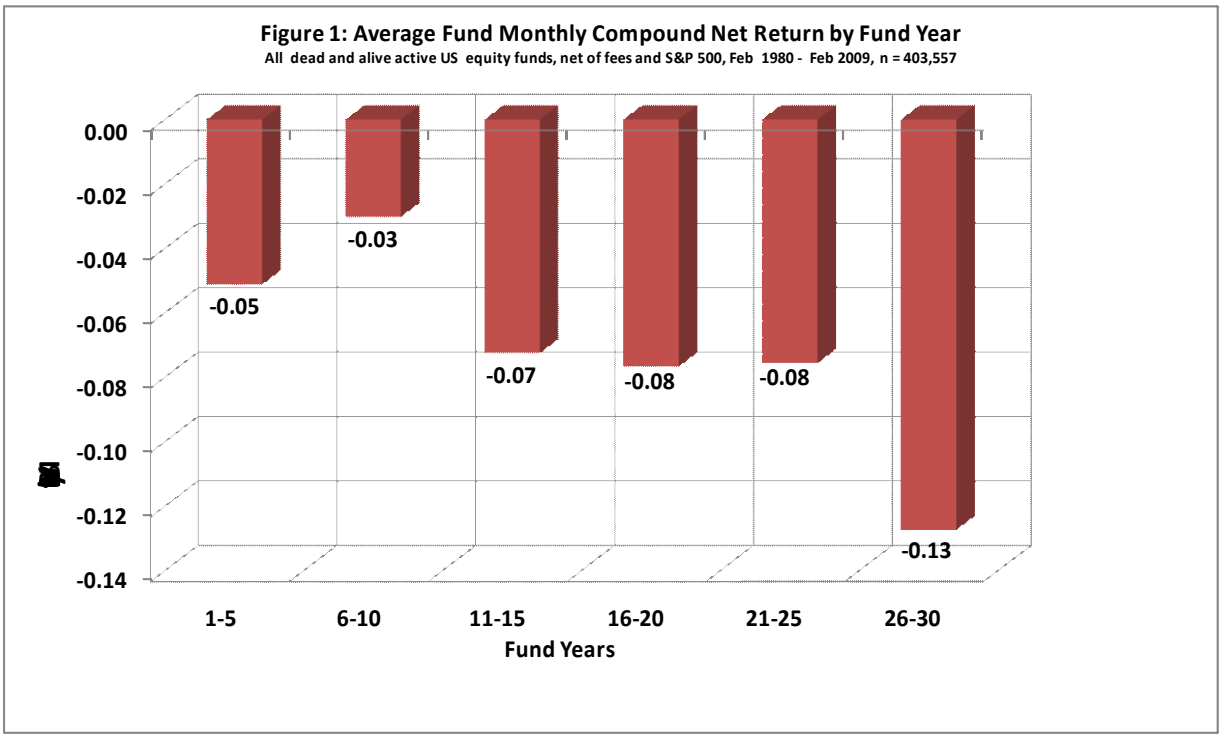
The implication for investors is that it is very difficult to buy and hold so-called "active" funds and generate superior returns, since average fund returns diminish over time. Instead, it is necessary to ensure that a fund continues to actively place stock bets. Diligence in this regard is rewarded with superior returns.

Test methodology

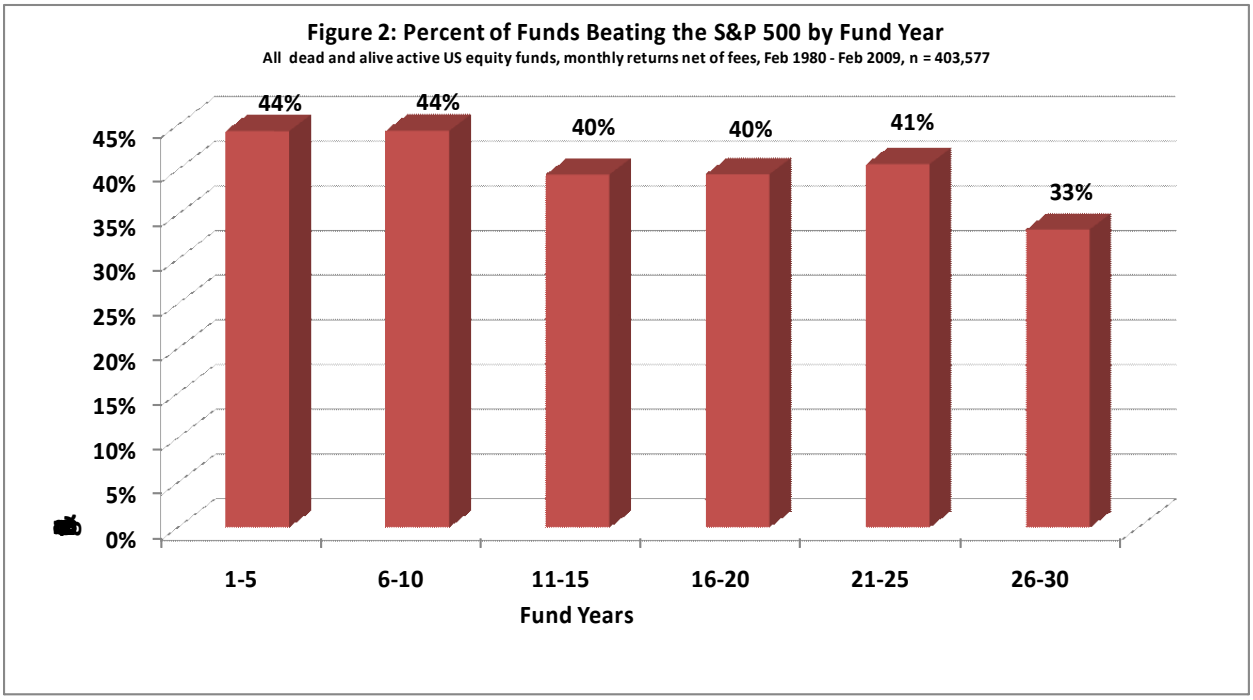
The sample includes all active US equity open-end mutual funds over the period from February 1980 through February 2009. Index, lifecycle, target date, allocation, balanced, and 529 funds are excluded. This results in a sample of 4070 funds, with half still in existence in February 2009, for a total of 403,577 fund-month observations. The sample is survivor bias free since it includes all active US equity funds that existed in any month during this sample period. Excess monthly returns are net of the monthly S&P 500 return as well as automatically deducted management, trading, 12B-1 and

other fees. Reported results are simple averages across funds. Monthly fund returns were obtained from Thomson Financial.

The first test examines the compound monthly net excess return performance of the average active US equity fund. The results reported in Figure 1 below are organized by fund year, that is, the number of years since the inception of the fund. It reveals that the average compound monthly return is -5 basis points for fund years 1 through 5 and declines to -13 basis points for fund years 26 through 30. This is consistent with a number of studies that show the average fund underperforming, with performance declining with age. Furthermore, the underperformance of the typical 26-30 year old fund is roughly equal to the average monthly management fee of 11 basis points, which implies that, before fees, such funds earn index returns.

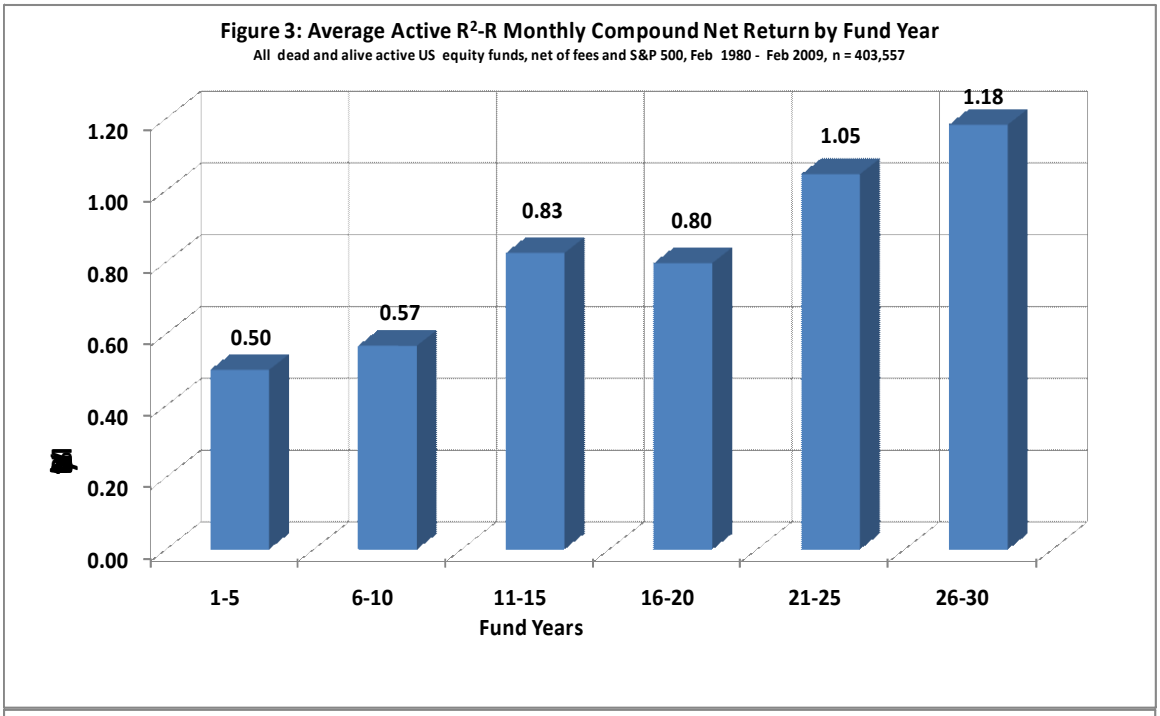


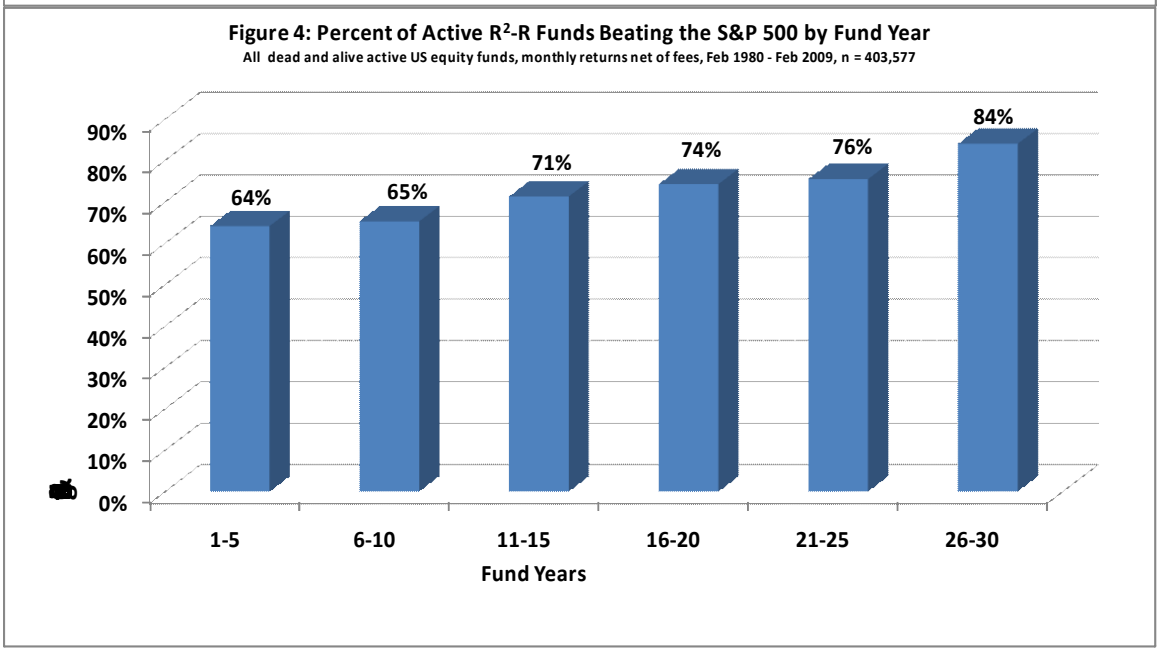
These conclusions are further supported by the results shown in Figure 2 below. The percent of funds beating the S&P 500 drops from 44% for fund years 1 - 5 to 33% for fund years 26 - 30. That is, a majority of active funds fail to beat the market, while performance worsens with fund age. Thus investing in active managers requires something beyond simply buying and holding a fund over time.



Luckily, a number of promising approaches are able to select truly active managers who outperform. The "Active R^2-R" approach, proposed by Amihud and Goyenko, is one such approach. At the beginning of each month, from January 1981 through January 2009, funds are sorted by trailing one year S&P 500 R^2 and independently by the trailing one year return. The funds with the lowest quintile R^2 and the highest quintile return are held for the subsequent month, thus avoiding a look-ahead bias. The compound monthly excess return is calculated using continuous, trailing monthly excess returns for all months in which the fund is designated Active R^2- R. Slightly fewer than half of the funds are so designated at one time or another during the sample period, with such funds remaining Active R^2-R an average of 11% of the months over which the fund exists. On average, 7% of funds are Active R^2-R in any particular month.

Active R^2-R performance is much better than that generated by the buy-and-hold approach, as is shown in Figure 3 below. The average compound monthly excess return increases from 50 basis points for fund years 1 through 5 to a very impressive 118 basis points for fund years 26 through 30. Furthermore, Figure 4 below shows the chance of beating the S&P 500 increases from 64% for fund years 1 through 5 to an astounding 84% for fund years 26 through 30. These results reveal superior average fund performance which improves with age. This latter result is consistent with the proposition that experienced managers are better stock pickers.





Conclusions

Managers who continue to actively place stock bets outperform and get better over time. Looking carefully at “active” US equity funds is necessary to ensure managers continue to be truly active. Remaining active is evidenced by a small number of stocks, sector tilts, high active share, high tracking error, high style drift, or, in the case of this

study, low market index R^2. Such funds generate positive excess returns net of fees, on average, with performance improving with age.

Reassuringly, funds get better with age if they continue to actively place stock bets. Skilled managers indeed get better with age. In fact, by expanding Active R^2-R to include those funds in the bottom three R^2 quintiles and the top three return quintiles (about half of the funds), the average excess return remains positive. So, half of US equity managers are truly active and demonstrate strong stock picking skills.

On the contrary, the average "active" US equity fund underperforms and gets worse with age. A large number of funds can survive in the face of declining performance by effectively plugging into the current style grid-based distribution system and becoming a fund distributor rather than a fund manager. Style grids constrain managers to style boxes, making it extremely difficult to remain active. On the other hand, the style grid facilitates distribution across multiple fund sales channels. Powerful industry forces destroy fund performance.

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