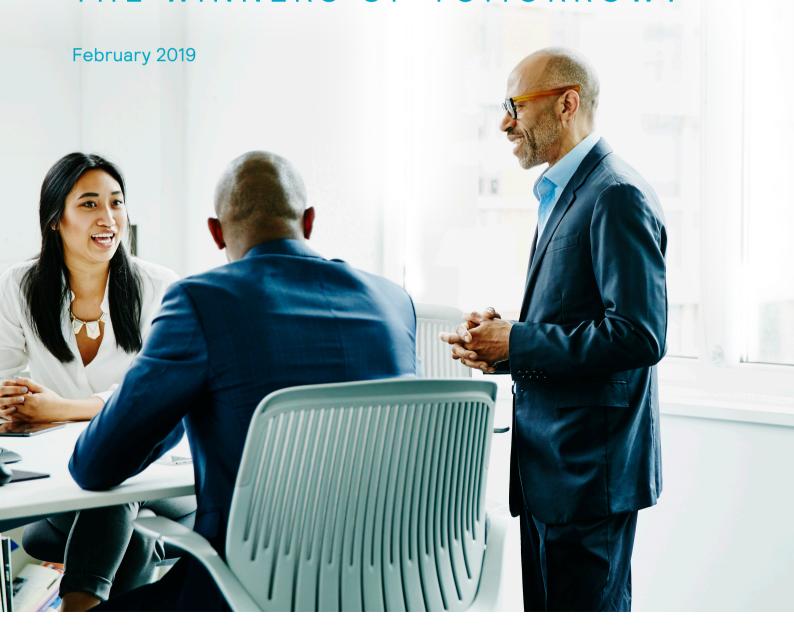
EQUITY MANAGER SELECTION

HOW RELEVANT IS PAST PERFORMANCE IN PICKING THE WINNERS OF TOMORROW?



EXECUTIVE SUMMARY

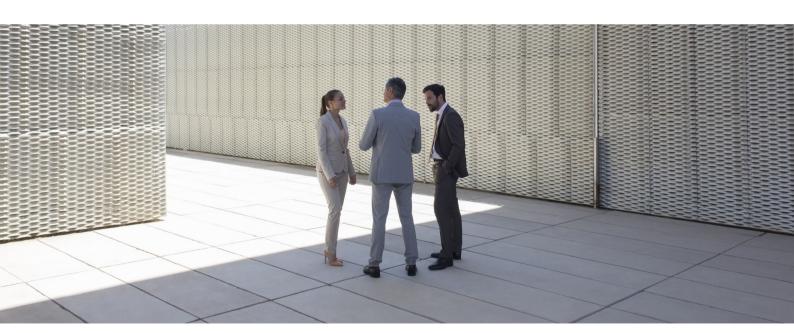
The dangers of focusing on past performance are well understood; however, the evidence suggests it remains a key driver of many investment decisions and asset flows. often resulting in poor outcomes for investors. In this short paper, we examine whether past performance is a good predictor of returns in a number of key equity universes. Perhaps unsurprisingly, we find no evidence for this - past performance appears to offer little information on future performance. Given this finding, Mercer suggests focusing instead on key fundamental elements of the investment process itself and taking necessary steps to eliminate past performance from the decisionmaking process.

THE INFLUENCE OF PAST PERFORMANCE ON MANAGER SELECTION

Any investor that has attended a meeting with an asset manager or even browsed the marketing material provided is well aware of the prominent role past performance plays in promoting asset managers' capabilities. Despite the ever-present health warning that "past performance is no guide to future performance," there are plenty of theories in behavioral finance literature to suggest that investors allow performance to influence their decisions.¹ This is entirely understandable. Often performance is one of the few pieces of easily available information from which regular investors can base their decision-making. Therefore, it is important to consider whether there is any meaningful information in past performance data that can assist investors in consistently selecting the winners of tomorrow.

Ultimately, the questions we seek to answer in this short paper are: Do past "outperformers" in one period have a higher probability of outperforming in the subsequent period, when compared with past "underperformers"? And, if so, is the margin of this outperformance significant?

To do so, we examine the subsequent performance of strategies ranked based on their past performance relative to their peers.² We consider performance over three- and five-year periods from December 1996 to September 2018 for four of our key long-only equity universes.³ In summary, we find that past performance is a very weak indicator of future performance over both three- and five-year time horizons, both in terms of the probability of future outperformance and the scale of the performance delivered.



¹ See, for example, Hsu J, Myers B and Whitby R. "Timing Poorly: A Guide to Generating Poor Returns While Investing in Successful Strategies," *The Journal of Portfolio Management*, Volume 42, Number 2 (2016): pp. 90–98.

² We use performance data submitted to MercerInsight by asset managers for Global Equities (Developed), International Equities (Developed), US Equity (Core) and Emerging Market Equities. Mercer does not independently verify the information submitted to MercerInsight by asset managers.

³ Strategies are only included in the analysis if they have a sufficiently long track record to cover both the lookback period upon which their performance is ranked and the subsequent performance anwalysis period.

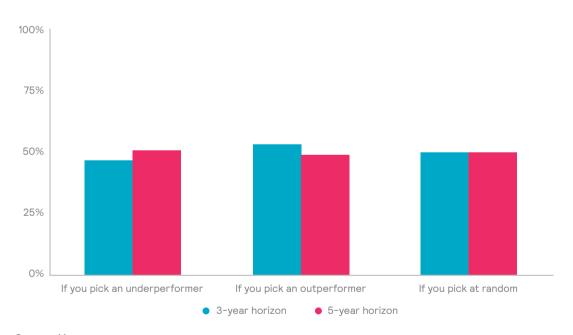
RESULTS OF OUR ANALYSIS

In terms of the probability of future outperformance, we find that past outperformers and past underperformers both have close to a random (50%) chance of outperforming in the future. This is broadly consistent across all of the four universes considered.

If we consider first the three-year time period, we find that previous outperformers offer a marginally better than random chance of future outperformance (52.2%), while past underperformers offer a slightly lower than

random chance (47.8%). The reverse is true for a five-year time period: Past underperformers have a marginally higher probability of future outperformance (51.3%) versus past outperformers (49.2%). Ultimately, the probability differentials between the past underperformers and outperformers over both three- and five-year time periods are not materially different from random (50%). This suggests that selecting managers on the basis of past performance (positive or negative) does not increase your chances of picking a winner on a consistent basis.

Figure 1: Probability of Picking an Outperforming Manager (Relative to Peer Group)



Source: Mercer

While the probabilities of future outperformance appear to be roughly equal, it could still be the case that the future performance differential between past winners and past losers is large. For example, it could be that when a past "winner" outperforms in the future they tend to do so to a greater margin than when a past "loser" does.

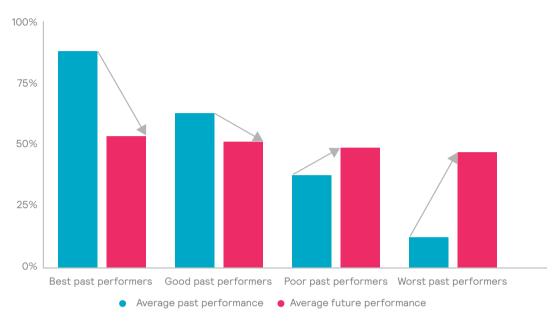
We analyze this by splitting the peer group into quartiles based on their past performance (best, good, poor, worst) in each period and then evaluating the performance achieved in the subsequent period.⁴

Our analysis indicates that there is no meaningful difference in the scale of the future performance achieved by the different quartiles. Performance differentials between the quartiles tend to narrow and, on average, all quartiles achieve performance in line with the median (50th percentile). There are minor discrepancies between the future performance achieved by each quartile, but to put these percentile differences into an annualized return context: The 52nd percentile performance within Global Equities has outperformed the 48th percentile performance by just 0.21% p.a. over the past three years. Even if one quartile were consistently outperforming at the margin, this doesn't represent a particularly appealing return premium.



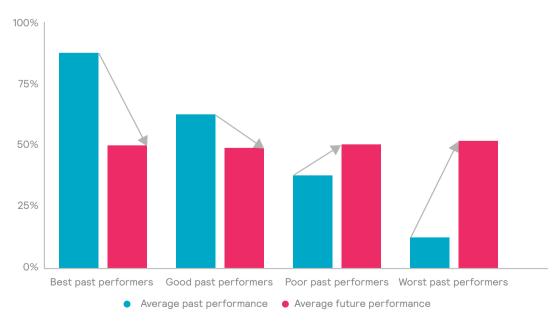
 $^{^4}$ Performance is expressed as a peer group percentile where 100th is the best performance, 50th is the median performance and zero is the worst performance.

Figure 2: Average Three-Year Past and Future Performance (Relative to Peer Group)



Source: Mercer

Figure 3: Average Five-Year Past and Future Performance (Relative to Peer Group)



Source: Mercer

We note that the dropout rate (the percentage of strategies with performance data for one period but not the subsequent period) varies by quartile and time period. Strategies can drop out of our performance universe for a number of reasons: The manager could stop reporting performance to us, or the strategy could be liquidated, move universe or merge with another.

In looking at the data, we find that underperformers appear more likely to drop out than outperformers. ⁵ This is not surprising — managers tend to find it harder to market strategies with weaker performance because they tend to receive less client interest, and this increases the probability that a manager gives up reporting performance or liquidates/merges the strategy. The dropout rate also tends to increase as the time period used for the analysis increases.

Some preliminary analysis on the impact of survivorship bias on our analysis suggests that it may have some influence, but it is relatively minor and is unlikely to undermine the conclusions presented — the strategies dropping out of the analysis tend to have only slightly underperformed the median in the period immediately prior to dropping out.



 $^{^5}$ Survival rates for past underperformers over three and five years are 69% and 57% respectively, while for survivorship rates for outperformers over three and five years are 81% and 72% respectively.

WHAT DOES THIS MEAN FOR INVESTORS WHEN SELECTING EQUITY STRATEGIES?

It is worth emphasizing that this analysis should not be interpreted as suggesting that there is no persistence in performance for equity strategies at all. The range of outcomes within each past performance group is broad, and invariably there will be some managers within each universe that do have the requisite capabilities to deliver performance that can persist over a long time frame. However, what this analysis does suggest is that, on average, allowing three- or five-year relative performance to influence manager selection is unlikely to improve outcomes for investors.

It is important that investors recognize that performance data, particularly shorter term, tends to contain significant elements of market noise, luck, and stylistic head- and tailwinds. Ultimately, performance attributed to these factors will be more susceptible to reversion in the future.

Investors may underestimate the role that these factors play in a track record and mistakenly interpret positive performance as a gauge for a managers' skill. In reality, skilled managers will experience periods of sustained underperformance due perhaps to an unfavorable style or bad fortune, while unskilled managers will have periods of strong performance for the opposite reasons.

Despite this, over the very long term skilled managers are able to deliver attractive relative returns because the alpha they generate through their investment acumen will persist, while luck, noise and investment styles tend to balance out over cycles.

To illustrate this point: Consider the eight top-performing Global Equity managers on our database over the past 15 years. These managers have, on average, outperformed the median strategy by 2.7% p.a. — an excellent outcome

for investors over such a long time horizon. Yet strikingly, despite their stellar long-term track records, these strategies have, on average, underperformed in nearly six of the 15 calendar years captured. An investor in these strategies would have been experiencing below-average returns 40% of the time, and those influenced by one-, three- or even five-year performance may have been inclined to give these strategies a wide berth at numerous points during those 15 years.

Despite the evidence outlined here and elsewhere, separating a strategy's track record from an assessment of the manager's skill remains a challenge. Investors' behavioral biases and the difficulties in interpreting performance data continue to drive assets to chase performance.

Being aware of one's behavioral biases is undoubtedly a good first step toward countering a natural tendency for performance chasing, and much has been written about this.

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A more effective step toward countering these biases, however, could be to implement processes that aim to tackle the influence these biases have on investors' decision-making. In the case of performance chasing during manager selection, investors could consider constructing manager short lists or undertaking beauty parades without any reference to performance. By doing so, investors are less likely to allow a track record to contaminate their perception of the

managers' skill. This may seem an extreme step to take, but given the lack of information about future outcomes contained in past performance, it would be an entirely rational one. Instead of analyzing performance, we recommend investors focus on a handful of appealing and relevant manager characteristics when building short lists and selecting managers. This could include characteristics such as the discipline of the investment process, the degree of active risk taken, the stability of the investment team and business, the level of exposure to a proven factor premium and/or the size and flow of assets managed.

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By doing so, investors are more likely to gain exposure to a varied pool of managers with different past performance patterns and are likely to increase the probability of selecting a winner of tomorrow.



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