Beyond the "Mirage" to a Predictive Investment Manager Ranking System

With over ten thousand mutual funds and separately managed accounts to choose from, investment allocators have their work cut out for them. They need to choose a few managers to meet their investment needs from an almost unimaginably large universe. The first step they often employ is quantitative screening.

The role of quantitative screening is to shrink the universe into a manageable size so that allocators can focus their time and energy studying the right managers. While quantitative analysis is only a portion of a firm's manager selection process, it allows allocators to tip the scale in their favor by ensuring that they are looking at managers who give them the highest likelihood of success.

Unfortunately, many commonly used quantitative methods (such as information ratio and alpha rankings) fall short of this basic goal. While these measures are extremely useful for characterizing a manager's past performance, whether because of the cyclicality of style effects or the possible outsized influence of pure luck, they have limited ability to predict future relative performance.

Charts 1 and 2 below illustrate this point using two commonly used statistics, *information ratio and peer group ranking*. The charts, which respectively evaluate manager rankings for these measures relative to the Z-score of the manager's subsequent three year return, demonstrate the limited predictive ability of these statistics.

CHART 1 | IR vs Normalized Excess Return

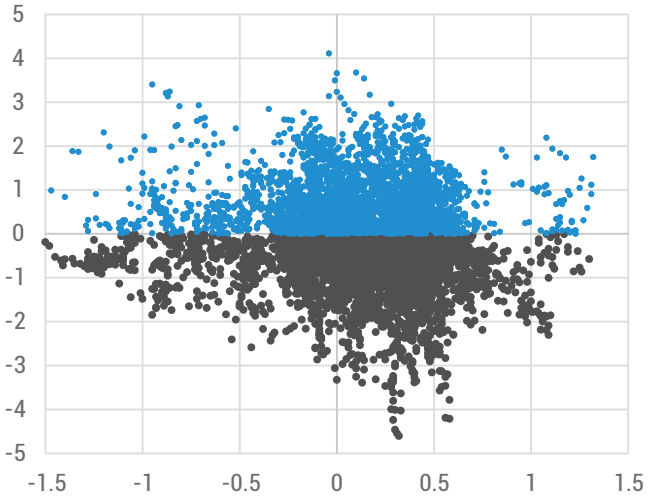
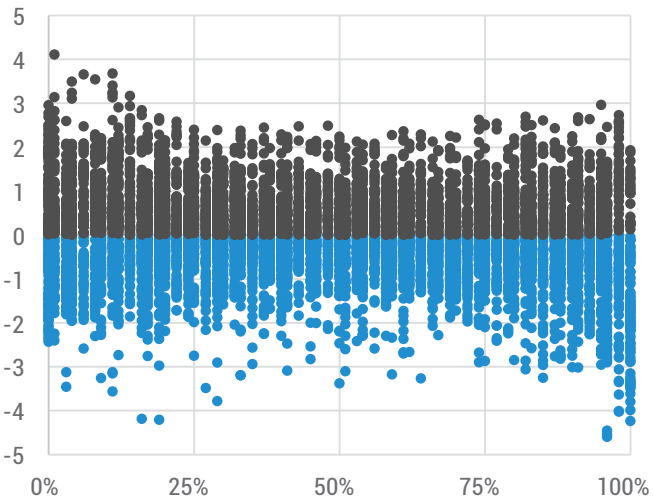


CHART 2 | Peer Rank vs Normalized Excess Return



Another example of a statistic which is too often simplistically equated with manager skill is *Active Share*. Active Share is a relatively recent quantitative innovation popularized by Petjisto and Cremer in their seminal (PUT YEAR HERE) research paper that identifies managers that are meaningfully different than their index. A high Active Share score implies that a manager invests outside the index while a low score implies that the manager may invest very similarly to the index. While a high Active Share is necessary to significantly outperform an index, it is not, by itself, predictive of outperformance. As shown on **Chart 3**, a high Active Share is most likely to predict either top or bottom performing managers. So while Active Share can be used as a method of eliminating index huggers from an investable universe, it is not a good tool for choosing managers when used in isolation.

CHART 3 | Active Share vs Normalized Excess Return*

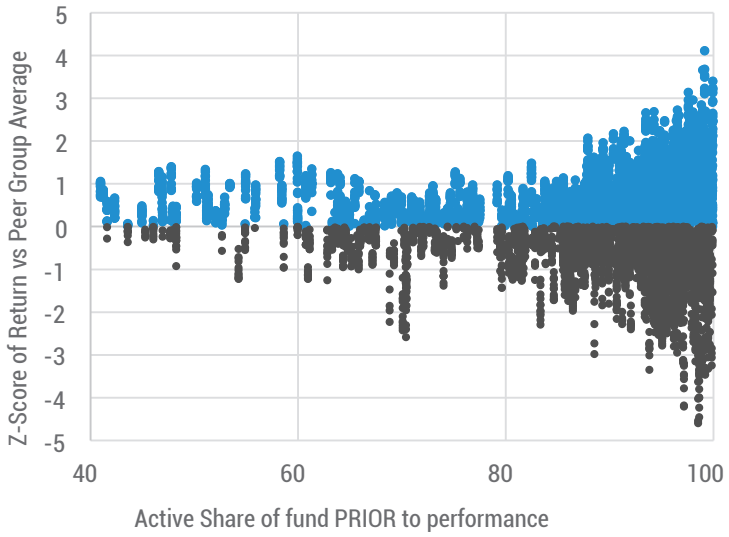
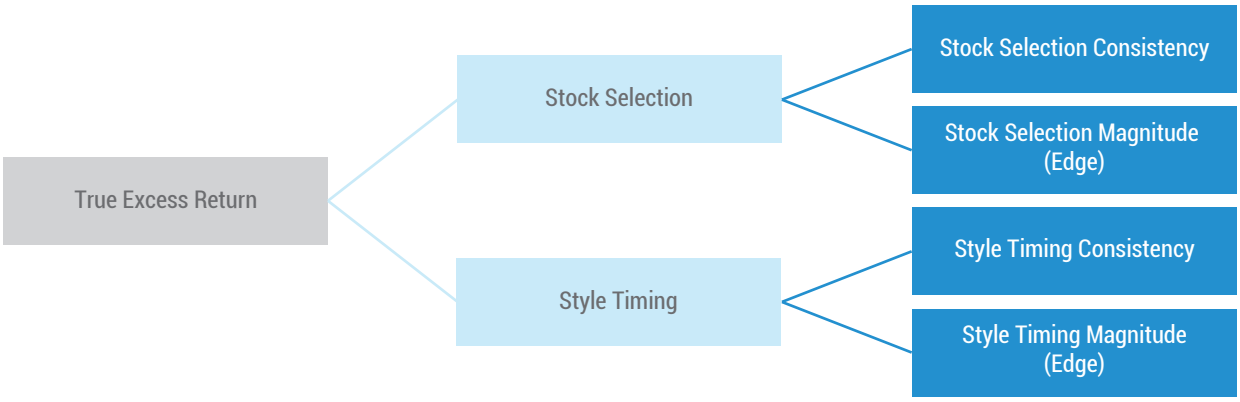


CHART 4



We are highlighting these examples to make two main points. First, that many of the statistics gathered on managers, while useful in judging a manager's performance, are not predictive of future performance. Second, while no one can perfectly predict the future, a statistical measure's ability to predict future performance can be back tested. In fact, predictability is the basis for any quantitative process and testing is the only way in which a process can have a rational basis.

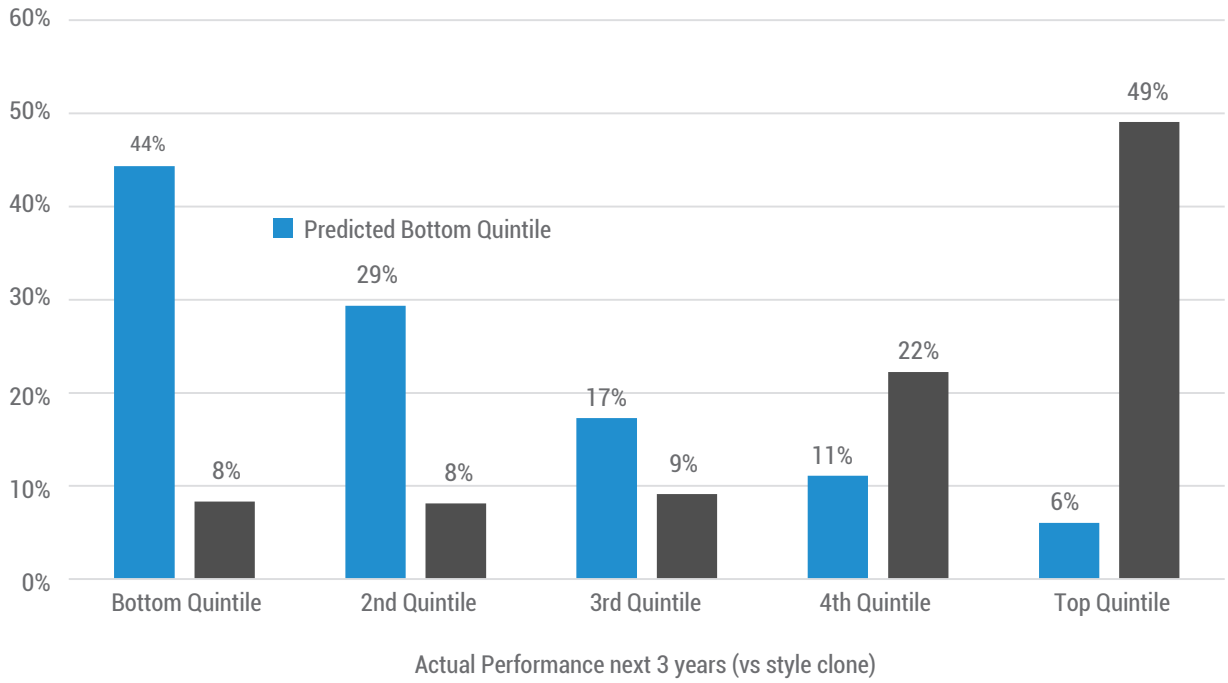
It is from these points from which Aapryl was developed. Based on years of research and back tested results, Aapryl focuses on the predictive value of statistics with the goal of providing investment allocators with a more predictive quantitative screening method. In the coming months, we plan to publish a paper that more fully explains our research findings, but in the interim, we thought this would be a good opportunity to highlight some key aspects of our research findings.

Our goal is to identify managers that are most likely to provide true excess return in the future. To do so, we systematically create a "clone" portfolio which is most representative of a manager's style, and dissect the resulting excess return (manager's return less the clone portfolio return) into components to better understand the drivers of performance. We also analyze the manager's return texture by measuring the consistency and magnitude of excess return with respect to both stock selection and style (or factor) timing. **Chart 4** provides a pictorial overview of the resultant methodology. It is only through the quantitative sifting afforded by this process, that concepts such as Active Share (though our methodology substitutes Active Share with a proprietary adaptation called the Active Opportunity Score,

which helps correct for the benchmark specification and cyclicality challenges of Active Share) become useful for predictive performance forecasting. Simply put, the degree to which a manager makes active bets is necessary for outperformance; but is only valuable as a predictor of skill when combined with other analysis such as systematically extracting the manager's style effects and examining their edge and consistency for both stock selection and style (or factor) timing.

This may sound complicated, but as can be seen on **Chart 5**, the process allows us to substantially exceed the results that one would expect from a random or less predictive process. To explain, one would expect that a manager performance forecasting exercise which is devoid of skill to, over time, result in around 20% of the managers' actual performance to fall into each of the 5 quintiles (which is indicated by the dashed red line).

CHART 5



Using our process, close to 50% of the managers that ranked in the top (or 1st) quintile over the subsequent 3 years were forecasted to do so; and 71% of the managers who were forecasted to be top quintile performers actually ranked in the top two quintiles (i.e., the 1st and 2nd quintiles). Equally importantly, 44% of those that fell into the bottom (or 5th) quintile over the subsequent 3 years were forecasted to do so; and 73% of the managers that were forecasted to be bottom quintile performers subsequently fell into the bottom 2 quintiles (i.e., the 4th and 5th quintiles).

For more information on how Aapryl's proprietary methodologies can be used please contact us at **info@aapryl.com**