## FIS GROUP

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

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In an article entitled <u>The Morningstar Mirage</u>, The *Wall Street Journal* recently took aim at Morningstar with a disparaging article about the efficacy of their mutual fund rating system. Morningstar quickly fired back a rebuttal stating that the company never claimed that its rating system is predictive of future performance, despite its widespread use as a means for selecting mutual funds. Rather than opine on their debate, we thought this would be a good opportunity to share some of the results of our multi-year research on quantitative screening methods that have proven to be predictive.

For background, as a fund of funds, our job is to pick managers whom we expect to provide excess return. To do so, we have developed a robust manager selection process which incorporates both qualitative and quantitative analysis rather than rely on the assessments of third parties. On the qualitative side, we interview managers to understand their approach to investing; we dive deeply into their backgrounds and qualifications; we study how they manage risk; and we look at their organizations to ensure that they will be worthy stewards of capital. While this is not nearly a complete list, we cite these examples to illustrate that assessing a manager is a time consuming task. Given that there are thousands of investment managers in our investable universe, it would be impractical for us to spend the time and resources required to qualitatively assess all of them.

This is where our quantitative analysis comes into play. The role of quantitative screening is to shrink the universe into a manageable size so that we can focus our time and energy studying the right managers. So while quantitative analysis is only a portion of our (and most research staff's) manager selection process, it allows us to tip the scale in our favor by ensuring that we are looking at managers who give us the highest likelihood of success. Unfortunately, we (and many other researchers) have found that many commonly used quantitative methods (such as information ratio and alpha rankings and indeed, Morningstar ratings) fall short of this basic goal. We have found that while these measures are extremely useful for characterizing a manager's past performance, because of the cyclicality of style effects as well as the possibly outsized influence of pure luck, they have limited ability to predict future relative performance.

CHART 1 and CHART 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 Zscore of the manager's subsequent three year return, demonstrate limited predictive ability.





Source: FIS Group Professional Estimates and Factset

5 4 3 Z-score (forward 3yr return) 2 1 0 -1 -2 -3 -4 -5 0% 25% 50% 75% 100% Percent Rank (Trailing 3yr return)

CHART Peer Rank vs. Normalized Excess Return 2 Next 3 Year Performance (Normalized for Time Period)

Source: FIS Group Professional Estimates and Factset

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 *Petajisto* and *Cremers* which 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, if used in isolation it is not a good tool for choosing managers.

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.

Over the last 5 years, we have invested heavily to refine our quantitative process and have researched the predictive value of many statistics. As a result of this effort, we believe that we have uncovered a more predictive

Source: FIS Group Professional Estimates and Factset

quantitative screening method which is currently being implemented into our manager selection processes. 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.

CHART 4 (on the next page) provides a pictorial overview of the resultant methodology. 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. 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 our process of systematically extracting "true" alpha and characterizing it's sources and dimensions.





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 guintiles (which is indicated by the dashed red line). 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 guintile performers subsequently fell into the bottom 2 quintiles (i.e., the 4th and 5th quintiles).

These results represent a dramatic improvement over commonly used screening criteria such as Information Ratio and Morningstar Rankings. Again, we recognize that selecting a manager should also involve intensive organizational and portfolio analysis. But qualitative due diligence is by definition, time consuming and can be expensive. Therefore, it is critical to utilize a front-end





Source: FIS Group Professional Estimates and Factset

quantitative screening process that efficiently identifies a sub-set of managers which has a higher probability of relative outperformance and weeds out the managers who appear to be skilled but are really benefiting from style effects or luck.

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