

SEPARATING ALPHA FROM SMART BETA

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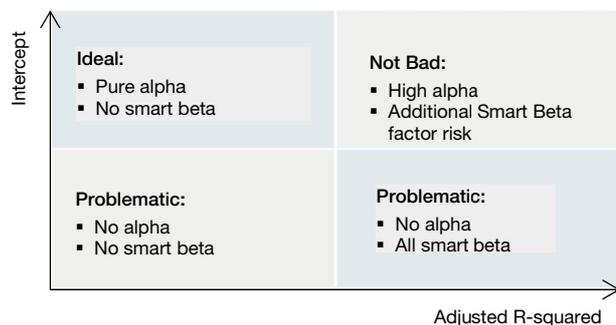
INTRODUCTION

The investment landscape has become more complicated lately, where asset owners are faced with deciding between passive, 'smart beta' (either single-factor or multi-factor), and fully active approaches, before selecting from a wide range of choices across the industry. As investors engage in these decisions, we believe it is important to understand the real drivers of active manager performance. We must determine whether or not an active manager's returns come from 'true skill' and idiosyncratic risk, or whether it can be more easily explained by exposure to broad market factors. Man Numeric has constructed a framework for analyzing the performance of active managers, which we believe can help isolate real alpha from factor-based exposures.

MAN NUMERIC'S FRAMEWORK

Our framework conducts regression analysis on a portfolio's active return against the market (beta), plus a number of smart beta factors, including Size, Value, Momentum and Quality. We calculate the exposure of a portfolio to each of these variables, allowing us to isolate pure alpha (the intercept in our equation) – using the R-squared of the regression to show how much of a strategy's return is attributable to these generic risk premium ETFs. Importantly, these factor exposures are only known ex-post, and we assume no timing skill. The interaction between the intercept (alpha) and the R-squared has significant implications, as illustrated in Figure 1.

Figure 1. Smart Beta Return Analysis: The Relationship between R-squared and the Intercept



Source: Man Numeric, 2017. For illustrative purposes only.

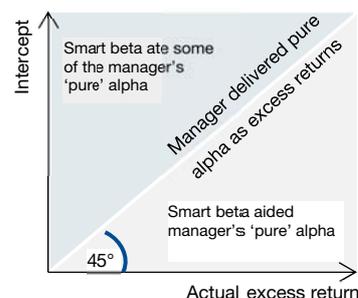
As this diagram shows, the optimal strategy for investors paying fees for active management would be a large intercept with low R-squared, positioned in the upper left-hand part of the diagram: where the level of alpha is high, but generic factor exposure is low. On the other hand, we would argue that investors should beware of active managers who fall within the lower right-hand quadrant, where alpha is low and portfolio returns are driven largely by smart

beta factors. These portfolios demonstrate limited added value by the active manager, and could be easily replicated by ETFs. The analysis is slightly less clear cut in the other quadrants, but still potentially helpful. In the lower left, the manager has low alpha, but performance is not explained by common factors – so performance is being driven by something other than market forces, even if it is not working out as planned. Meanwhile, those in the upper right have high levels of pure alpha, but this is explained predominantly by factor exposures – leaving a portfolio vulnerable to factor volatility compared to the manager in the top left. Overall, we believe that this framework provides a better starting point for comparing active managers than simply calculating gross returns minus benchmarks.

INTERCEPT VERSUS EXCESS RETURN

Another way our framework can help analyze managers is by looking at the relationship of the intercept and the actual excess return. This framework is laid out in Figure 2. Ideally, investors in active management would hope to see returns distributed along a 45 degree line, where actual reported alpha equals the intercept, or true independent alpha. Managers whose returns lie below the line are delivering "alpha" that is actually driven by smart beta factors. Those whose returns lie above the line are in an unenviable situation, with positive alpha but returns lower or even negative when measured by the traditional manager evaluation statistic: portfolio return versus benchmark. In this area, asset owners can potentially find a diamond in the rough – managers with real skill but who have suffered from (possibly sensible) decisions on style. In conducting the analysis in Figure 2, it is important to know where zero is on the Y axis and focus on managers with positive intercepts.

Figure 2. Smart beta return analysis reported alpha vs intercept

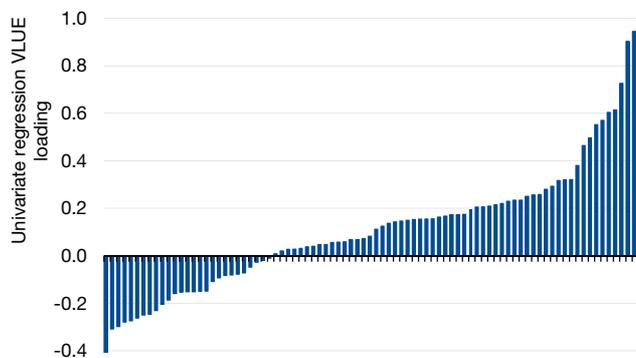


Source: Man Numeric, 2017. For illustrative purposes only.

INDIVIDUAL FACTORS – A CLOSER LOOK

While we believe that multivariate regressions can provide more comprehensive insight, there are also times when zooming in on individual factors can be helpful. We can apply our framework here, as shown in Figure 3, where univariate analysis helps us determine the US Large Cap Core group's exposure to a Value factor.

Figure 3: US Large Cap Core – VLUE Loading



Source: eVestement; Man Numeric, 2017. For illustrative purposes only.

This chart shows a skew among managers in this universe towards positive exposure to the Value factor. In this example, we can see that managers in this space tend to be more Value-orientated, which can help inform our analysis. Indeed, it can help us form views on a manager's exposure to factors over a given period (as above), and we can also use univariate regressions to analyze the consistency of a manager's own exposure over time. Whether or not a manager's performance has been stable, we can look for consistency in style – helping us separate the robust investment philosophies from the rest.

SUMMARY

Ultimately, Man Numeric's framework for analyzing active managers is designed to help investors decompose performance. By using multivariate and univariate regression analysis, we believe it is possible to isolate the contribution of idiosyncratic risks ('pure' alpha) from those of broader factor exposure. In a world where asset owners are rightly focused on achieving value for money from their investments, we believe that this lens of research can help identify active managers with the potential to generate performance from true skill, rather than riding the coattails of broader market movement.

This article is based on proprietary research by Man Numeric, published in a white paper for clients in May 2017. For a copy of the full research paper, please contact your local Man Numeric sales representative.



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Co-Chief Investment Officer

Rob was named chief investment officer of Man Numeric ("Numeric") in 2007 and serves as chairman of the Investment Committee. He is also a member of the Man Group Executive Committee. Rob joined Numeric in 1997 as director of international strategies and has designed and launched Numeric's Japanese, European and World strategies. In addition to his CIO role, Rob is the head of the U.S./Global Group. Prior to joining Numeric, he was a principal in the Active International Group at State Street Global Advisors. During his eight years there, Rob performed quantitative research on country, currency and stock-selection strategies in the international markets and was the principal architect of State Street's active emerging markets investment process. Previously, he worked at Harvard Management Company. Rob received a Bachelor of Business Administration degree in finance from the University of Michigan and earned a Master of Business Administration degree in finance at the University of Chicago. Rob is a CFA® charterholder.

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