



Evaluating Unconstrained Managers

August 31, 2010

The following is in response to the article [When Active Management Matters](#), by Ken Solow and Michael Kitces, which appeared on August 10. Solow and Kitces' response is provided as well.

Dear Editor:

Solow and Kitces present some very good concepts in their attempt to rebuke Ibbotson, et al.'s recent asset allocation studies; however, the authors wrongly place blame on style analysis instead of the process of applying the information provided by the style analysis.

I have problems with the following of their conclusions (the page and paragraph numbers refer to the [PDF version](#) of the article):

1. Solow and Kitces state, "Unfortunately, a returns-based style analysis like Ibbotson's may mask the benefits of active management when there are significant changes in exposure to various asset classes" (Page 3, Paragraph 2)

Style Analysis can be conducted with returns (RBSA) or holdings-based style analysis (HBSA). Both approaches are designed to capture the style blend of an investment product.

While HBSA is highly accurate, it is often difficult to obtain a manager's holdings in a timely manner. To overcome this problem, Nobel Laureate William Sharpe introduced RBSA, which uses the returns of a family of style indexes and the portfolio itself to determine a manager's effective style mix.

Although RBSA has gained tremendous popularity because of its ease-of-use, the user must understand the underlying sophisticated regression analysis being performed. Like any statistical process, users may not recognize nor comprehend data flaws.

When introducing his method in his 1988 paper, "Determining a Fund's Effective Asset Mix," (Investment Management Review, December, pp. 59-69) Sharpe clearly set forth requirements for the selected family of style indexes:

- Mutually exclusive (no security can be assigned to more than one style)
- Exhaustive (all securities are assigned to a style)

Because Ibbotson used a mix of Russell Indexes, I question the accuracy of their style analysis. Russell (as well as S&P and MSCI) should not be used for RBSA



because their indexes are neither mutually exclusive nor exhaustive. This is the only real fault that I have with Ibbotson's style analysis. (If a stock does not demonstrate a strong value or growth bias, Russell and others place these stocks in *both* value and growth indexes. This produces a statistical phenomenon known as multi-collinearity and creates results radically different from the fund's true effective mix. Further, the results are questionable because none of these index families is exhaustive.)

It appears that Solow & Kitces believe style analysis incorporates some sort of skill rating, which it does not. Ibbotson's use of RBSA may have problems, but claiming that it is able to mask or unmask benefits of active or passive management cannot be inferred.

2. Solow and Kitces conclude, "Style Analysis along the lines described above – because it is measured on a retrospective basis – unfairly changes a manager's benchmark itself, after the fact, based on his or her skillful changes to the fund's asset allocation over time. In other words, returns-based style analysis implicitly assumes that a manager's *benchmark* is the same as the manager's regression-based asset allocation." (Page 3, paragraph 5)

Returns-based style analysis only reveals the styles where the manager is invested; it cannot magically update a manager's prospectus or style *ex ante* at Morningstar or Lipper. Many academics, including Sharpe and Ibbotson, have suggested that a manager's style allocation should be the manager's custom index for a more accurate assessment of skill.

The only assumption made by style analysis is that the operator chose the appropriate family of style indexes.

While I clearly agree with Solow and Kitces that Ibbotson's work undervalues a manager's allocation decisions, style analysis is not to blame.

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Dear Editor,

We appreciate Mr. Bentrin's response to our letter. In point of fact, it appears that our conclusions are actually quite close – as Bentrin states, "I clearly agree with Solow and Kitces that Ibbotson's work undervalues a manager's allocation decisions..." – it may be helpful to clarify a few points further regarding our comments about style analysis.

First and foremost, all of our comments about Return-Based Style Analysis (RSBA) pertained only to their application *in the Ibbotson studies*. Accordingly, RSBA itself is not a "bad" methodology, but instead Ibbotson's use of RSBA to determine the amount of a fund manager's "excess" returns attributable to portfolio policy (versus active management) is problematic. Ibbotson's methodology causes RSBA to become a *de facto* benchmark for determining the return of the fund due to its investment policy, such that any deviation of returns is attributable to active management. However, as we tried to illustrate – and Bentrin agrees – RSBA is not necessarily an effective means to determine a benchmark to measure active management.

The reason that RSBA can become a poor benchmark, in turn, was something we attempted to illustrate using the Hussman Fund as an example of a broader problem – that RSBA will, by definition and by virtue of how it is applied in the Ibbotson study, characterize a fund manager's active management decisions that alter the asset allocation as returns attributable to policy (because they will be present in the RSBA) instead of returns attributable to active management.

To take a more specific and extreme example for illustrative purposes, imagine two investment managers. The first is a cash manager, who is allowed to own only cash. For the past 10 years, manager #1 has held cash, and not surprisingly has generated cash returns. Manager #2, on the other hand, is a stock manager who has the discretion to own either a market portfolio of stocks or to own cash, based on his outlook for the markets. The decision of manager #2 for the past 10 years, due to an extreme bearish market forecast, was to invest in cash in early 2000 and, for every year since that point, to remain invested in cash and make an active management decision not purchase the market. Although he would have missed the market rally from 2002 to 2008, manager #2 also avoided all market losses in the 2000-2002 bear market and the 2008 financial crisis, and on a cumulative basis would have generated a positive (cash) return, instead of experiencing capital losses in the market.

If both managers were analyzed using RSBA, both managers would be assessed as cash managers. Under the Ibbotson methodology, both managers would attribute their returns to the investment policy which led them to hold cash, and both managers would likely exhibit very little active management impact at all since their returns will not have materially deviated from cash returns. The RSBA results – that both managers held cash for the past 10 years – would accurately reflect their holdings and say nothing more than that (per Bentrin's comments as well). Using Ibbotson's methodology, however, of



applying the RSBA results would significantly understate the impact that active management decisions actually had for manager #2. In point of fact, manager #2 generated significant deviations in returns virtually every year, by making a series of year-long decisions to own cash instead of stocks in each of those years, even though the manager was nominally a stock investor (albeit a remarkably bearish one in this example). Depending on the time horizon chosen over this decade, manager #2 would have alternated between generating significant excess returns (outperforming from 2000-2002 by holding cash during a stock market decline) and significant underperformance (holding cash during the stock market rally from 2002-2008), and alternating again with the 2008-2010 market cycle. Nonetheless, the Ibbotson methodology, using RSBA to determine the returns attributable to policy, would evaluate manager #2 as an inactive cash manager whose active management decisions have little impact, when in reality manager #2 was making bold stock/non-stock investment decisions that, for better or for worse, were a powerful force in the fund's ultimate returns. Simply put, we believe that to simply view manager #1 and manager #2 as "the same" in their asset allocation policy, because RSBA shows that they both held cash and generated cash returns for the past 10 years, grossly understates the extent that active management decisions influenced the results of manager #2.

As Bentrin notes – and this example illustrates – "Returns-based style analysis only reveals the styles where the manager is invested." Our concern is the use of RSBA to create an *ex post* benchmark for a fund, that will by virtue of Ibbotson's methodology attribute significant active management decisions about asset allocation to the impliedly passive aspect of portfolio policy, instead of where it belongs: attributed to the manager's investment decisions.

In a world where managers are predominantly style constrained, this may prove to be a reasonable way to determine an appropriate customized benchmark. But when an asset manager is unconstrained, RSBA may yield a low r-squared determination of the fund's asset allocation that is more reflective of the manager's active management decisions than the fund's returns attributable to portfolio policy.

Respectfully,

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<http://www.advisorperspectives.com/subscribers/subscribe.php>

ⁱ Currently, only Morningstar and Surz Indexes meet Sharpe's criteria for domestic equities and Surz is the only provider who meets the criteria on a Foreign and Global basis.