

Finding smart beta in the factor zoo

Angela Ashton | PortfolioConstruction Forum | 16 September 2014

"Finding Smart Beta in the Factor Zoo" by Jason Hsu and Vitali Kalesnik, Research Affiliates, July 2014

PortfolioConstruction Forum defines smart beta as being any approach that refers to any index-based investment approach that uses a method other than market capitalisation to build its benchmark.

The basis for these approaches is that market cap weighted indices may not be optimal. For example, some would assert that they systematically overweight expensive stocks and underweight cheap stocks. Smart beta strategies, then, have been described as approaches that "aim at adding value in the presence of possibly efficient markets but severely inefficient cap-weighted benchmarks".¹ This is because they believe cap weighted indices get values wrong systematically. So from that perspective, smart beta is one of the most important developments in investment management for a number of years.

Examples of simple smart beta approaches include equally-weighted portfolios, while more complex approaches include fundamental indexing. Many smart beta approaches systematically expose portfolios to "factors" that might potentially provide excess returns. For example, equally-weighted portfolios will by definition overweight small caps and value stocks compared to the index, thus providing simple tilts to those factors.

Over the years, finding potential factors has become big business. From the simple three factor models that French and Fama first proposed, there are a number of quantitative investment managers, some with products available in Australia, using a lot of factors in an attempt to wring return out of every trade. And, many of these factors are backed up by a journal paper somewhere.

This study by Hsu and Kalesnik (both of Research Affiliates, provider of the RAFI smart beta products), reviews some of the literature that has tested the plethora of factors. Much of the literature finds that many identified factors probably don't exist, they are more likely just anomalies at certain time periods or even the result of data errors. Many disappear once their definition is changed marginally. Others, including small cap, only seem to work in the US.

To be considered robust, Hsu and Kalesnik write that a factor needs to:

- Have worked in many markets;
- Have worked over many years;

- Be replicable;
- Remain robust in the face of small definition changes;
- Have some reason to exist (whether it be economic, behavioural or something else); and,
- Show high levels of statistical significance.

Under that definition, Hsu and Kalesnik find only three "robust" factors – value, low beta and momentum. Even the well-accepted small cap premium is left out in the cold. According to Hsu and Kalesnik, it does not exist.

The authors go on to suggest that the best way to access value and low beta premia are through low cost smart beta products of some type, because these signals decay slowly. I am sure you will not be surprised to learn that there is a RAFI product for that. With momentum, however, Hsu and Kalesnik suggest that it might be wise to use good active managers because timeliness is more of an issue.

Although I may display some cynicism about the application of Hsu and Kalesnik's findings, some researchers identify new factors ad nauseam, but I have no doubt that Hsu and Kalesnik's findings are more likely to be closer to the truth.

This debate is far from over, though. While people believe there might be a potential systematic return enhancer out there somewhere, they will keep coming up with new factors. And others will keep knocking them down.

[Read "Finding Smart Beta in the Factor Zoo"](#)

ENDNOTES

1. Khan, I. in Hayat, U, "[Can Passivity Be Enhanced? Why Smart Beta Strategies Are Suddenly in Vogue](#)", Enterprising Investor, August 2013