Getting real about factor-based investing

By Amanda White (https://investmentmagazine.com.au/author/amandawhite/) | 07/06/2017

Factor investing has become a topic du jour, with managers touting hundreds of different factor-based strategies. But according to four experts, only a handful are persistent and robust. If used strategically, they can be useful.

At the end of 2014, Campbell Harvey, professor of finance at Duke University's Fuqua School of Business, in the US state of North Carolina, reported that there were 316 supposed factors reported in top journals and working papers, with new ones being discovered at an accelerating pace – about 40 a year.

Luckily, he found most of the so-called factors can be ignored; in fact, Harvey described many of them as trading strategies rather than factors.

"There is confusion because there are hundreds that I would classify more as trading strategies; some are fleeting," he says.

So how can investors get their head around factors? And is it possible to identify one that can earn a premium over the long term?

According to Andrew Ang, managing director and head of factor investing at BlackRock, a factor is a broad, persistent source of return, seen across many different geographies and asset classes. To be properly called a factor, Ang – who is a prolific author and academic on the subject, writing 2014's Asset management: a systematic approach to factor investing – argues something must have been persistently rewarded for decades, and have been studied by academics and used in practice for decades.

This narrows the 316 factors Harvey discovered down to about four.

A precious handful

Experts agree that value and momentum are persistent and robust factors and, depending on one's perspective, the other two are carry and defensive.

More importantly, Ang says, a factor needs as its backbone an economically sensible source of return.

"Is there a risk premium and does it come about from a structural impediment or from investors' behavioural biases?" he asks.

For $187 billion investment manager AQR, there are two main criteria for identifying factors: robust empirical evidence across many different markets and contexts; and a strong economic theory to support why these returns existed in the past and therefore are likely to exist in the future.

"It's all about persistence," Ronen Israel, principal at AQR, says.

There are only a few that fit AQR's criteria, and that's value, momentum, carry and defensive (or low risk), he says.

Research on fundamental indexation, an alternative to market-cap-weighted indices, was first published in 2004 by Rob Arnott, now chair of Research Affiliates. Fundamental indexation, which uses equally weighted stocks, argues that cap weighting stocks systematically overweights overvalued stocks and underweights undervalued stocks. And for Arnott, the notion that a factor will produce positive alpha because it has produced positive alpha in the past is naïve.

"When Campbell published the paper showing there were 316 published factors, how many of them asked if the performance benefits from a tailwind of rising valuation? Did my factor get more expensive? No one asked that question. So the first robust test is whether a factor produces positive alpha net of valuation change. Nobody [checks] that."

The second question, Arnott says, is whether the factor works out of sample, across different time spans and geographies.

"We go through all of this and try to find factors that have legitimacy across many geographies net of valuation change, and there are very few," he says, citing size, value and momentum as fitting that criteria.

“We don’t think that low volatility and quality have alpha, but they do have attractive attributes that people value.”

Putting them to good use

So, given that those with the experience of studying and making money from factors over many years believe that only a few truly exist, the next logical question is how investors should use them. That, Ang says, depends on the outcome the investor wants to achieve.

“What they want to achieve goes into two buckets – to reduce risk (then use minimum volatility or quality), or explicitly enhance your return (use value, momentum or size),” Ang says. “The starting point is a strategic allocation to complement a portfolio, so you add factors you might want to have or hedge factors you may have unintended exposure to. I’d recommend a multi-factor benchmark for this.”

After that, you might consider tilting around a strategic allocation, he says, adding that tilting also means other considerations, such as concentration and turnover, need to be assessed in evaluating the attractiveness of each factor.

AQR’s Israel says: “Take a long-term strategic view and be balanced – investors are generally underexposed to these ideas. The first order is to get the long-term strategic exposures to these ideas and let timing, and tactical shifts, be secondary.”

Arnott also prefers to get factors as robust as possible and not to play too many games seeking to optimise against fast-changing correlations.

“We try to marry factors with the fundamental index and rely on the fundamental index to create the structural alpha, not the factors, which we think are too unreliable as a source of alpha,” he says.

So while these factor experts might agree there is a small group of factors that fit the criteria of being robust and earning a premium over a long period of time, the definition of each one is not clear.

For example, the underlying concept of value is to buy cheap, and price-to-book is the generally accepted way to implement that. However, Israel says there is no one perfect measure.

“You are trying to capture cheap assets outperforming expensive, in the case of value. But there is no theory to support [price-to-book] as the only metric to support that. Sales to price, or earnings to price, could be tests.”

Arnott agrees that using the generally accepted Fama-French price-to-book definition of value is way too simplistic.

“If you combine sales-to-price, cashflow-to-price and dividends-to-price, which are all robust individually, it will be more robust,” he says.

“Investors have a tough decision to make when choosing a manager… Ultimately, the proof is the result, but you need a decade of results before you can make a decision.”

Technological triumphs

The advancement of technology has allowed implementation and execution techniques to evolve, which Ang says leads to more applications for the general concepts.

“It’s like writing a play using a quill,” he says of using only price-to-book as a measure of value. “Technology is central to everything we do.”

Israel advises, however, that there are good and bad things that come out of technology advancements.

“If technology leads to more data mining and factors that aren’t truly there, that’s a bad thing,” he cautions. “But that’s not what we’re talking about here. Being able to trade more efficiently, risk management and without unintended risks – they are all good things.”

So where to from here?

BlackRock’s Ang says the “biggest bang for your buck” is looking at factors in illiquid markets.

“Modelling of a total portfolio in liquid and illiquid markets is a data and technology story and that is totally transformative,” he says.

Factors can be used to hedge unintended tilts or enhance returns across both liquid and illiquid markets. But as these four experts outline, factor investing is harder than it looks and should be approached through a long-term strategic lens.

> *The comments from Harvey, Ang, Israel and Arnott quoted in this article are taken from an* **Institutional Investor Journals (https://www.evensi.com/page/institutional-investor-journals/10000406831)** *webcast, “Factor Perspectives: Separating Factors from Fiction”. An* **extended version (http://www.top1000funds.com/analysis/2017/05/29/real-factors-and-how-to-use-them/)** *of this article first appeared at* **Top1000funds.com (http://www.top1000funds.com/)**

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