



Bev Durston, Managing Director, Edgehaven

## The Problem with Factor Investing

BY [WOUTER KLIJN](#) | NOVEMBER 15, 2017 [ASSET ALLOCATION](#)

**The appeal of factor-based investing is easy to understand: by following a set of academically proven rules, investors are able to add return above a given market capitalisation-based index.**

When done passively, these smart beta strategies offer a solution to both this requirement to (marginally) beat the market and the need to put pressure on investment management fees.

It is, therefore, no surprise factor-based investment strategies have become increasingly popular. According to The Economist Intelligence Unit, more than US\$300 billion of assets were invested in alternative risk premia strategies globally as of 2016.

But all that glitters is not gold, says Bev Durston, Managing Director at alternative assets advisory firm Edgehaven.

Durston is concerned the popularity of these strategies will cause some investors to overlook the potential pitfalls and avoid the amount of work that is required to run these strategies successfully.

“Be careful of what you believe in; investors often aren’t sceptical enough,” she says in an interview with *[13] Insights*.

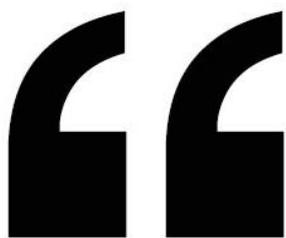
“There are a number of issues with factor investing, ranging from softer issues – such as who is marketing the product – to more technical issues, including spurious correlations and performance in regime changes.”

She says investors would do well to remember where many of these strategies came from and how they were originally used.

“A lot of factor-based strategies, including risk arbitrage and convertible arbitrage strategies, originated in proprietary trading desks within investment banks and they were done for the profit of the bank only,” she says.

“Then when people left these prop desks and joined hedge funds, they took those strategies with them. Risk arbitrage is a classic example of a strategy that started at prop desks and was embraced by hedge funds.

“Were these strategies ever implemented passively and systematically? No, not usually; they were opportunistic. They weren’t put on across the whole universe of European M&A stocks or convertibles issuance and just left there. They were put on in a pure long/short form and actively traded.”



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But after the global financial crisis, The Dodd–Frank Wall Street Reform and Consumer Protection Act put an end to investment banks trading for their own account. This then paved the way for many of these strategies to be repackaged and sold to institutional investors.

“The investment banks started to package them up and sell them. They turned what was an active management strategy into a passive management back-test. And technological improvements mean that you can now spread them across all asset classes,” Durston says.

“If you were cynical, you could say that investment banks turned a profit-making strategy at the prop desk into a commission-based and asset-gathering-based opportunity. And now they also provide the leverage, as well as the strategy.”

She notes too that although these strategies are now sold as passive strategies, they often require many implementation decisions and high ongoing maintenance efforts.

“To do this strategy yourself, it is almost like an active strategy. It is almost active management in disguise,” she says.

“You have to select which factors to employ: is it price to book, price to cash flow, PE, value, momentum? Then you have to select the universe: is it small cap, large cap, Europe, US or Japan? Then you have to decide how to weight the different factors.

“You also have to maintain a covariance matrix, which is key to how you move between these factors’ positions. Then you have to apply leverage, control counterparty risk, you’ve got to rebalance, you might have to implement on/off switches. And then you’ve got to continue to monitor these factors to ensure when there is a regime change, these things still perform.

“That sounds like an active strategy to me.”

Often factors provide only a small measure of outperformance over a market capitalisation index, which means investors will likely need to leverage their positions to make any meaningful return, thereby assuming a greater level of risk.

“Leverage exacerbates things. Many of these factor returns are small value-add, like risk arbitrage is approximately a few percentage points per annum. You need to leverage it five times to get reasonable return, so a lot of these things are very leveraged and people might not always appreciate that,” Durston says.

She doesn’t dispute the usefulness of a handful of academically proven factors, including momentum, value and carry, but is more cynical about the wide range of strategies currently on offer.

The popularity of factor investing has led to the discovery of many ‘new’ factors in recent years and researchers put the number of currently known factors at about 300.

Yet, many of these involve a good deal of data-mining, making their robustness going forward questionable.

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“I was looking at the list of factor investing and smart beta strategies today and it is all labelled ‘cross-sectional this’ and ‘momentum that’; there are hundreds of varieties these days. I think, we have gone down to a level today where people are looking at relationships that are spurious,” Durston says.

She refers to a classic paper on spurious correlations by David Leinweber, the founder of the Center for Innovative Financial Technology at the Lawrence Berkeley National Laboratory, who wanted to show his students the perils of confusing correlation and causation.

Using data from the United Nations, Leinweber showed how between 1981 and 1993 the S&P 500 Index showed a correlation of 0.75 with the production of butter in Bangladesh.

Further refining his case with other meaningless data, he found that including cheese production in the United States and the sheep population in both countries further increased the R-square to 0.99.

But of course applying these measures outside of the chosen period resulted in no correlation at all because he had reverse engineered the correlation and there was no economic rationale for these data sets to be related.

Many of the 300 'discovered' factors are likely to fit into this category, Durston suspects.

Besides, of the factors that do show a level of robustness, the question is how many will continue to perform well under a regime change.

Central bank policy has dominated much of the activity in financial markets over the past 10 years as central banks have tried to kickstart the global economy. But as we are nearing the end of their stimulus programs, strategies that worked in the past 10 years might not do so well going forward.

"We are now nearly 10 years after the 2008 crisis and things may stop working. So if you're trading on an automated factor basis, would they continue to work? I think it is time to be cautious now," Durston says.

As an example, she points to exchange-traded funds that are selling volatility. These strategies have made a mint over the past 10 years, but these types of instruments might not work so well going forward.

"You need to have on/off switches for these things, so you can switch them off when they stop working and you need to be able to do that quickly," she points out.

"For investors to let these things run automatically and passively by themselves, not appreciating their complexity, is dangerous."

Online Article: [https://i3-invest.com/2017/11/problem-factor-investing/?utm\\_source=%5Bi3%5D+Insights+%28Fund+Managers%29&utm\\_campaign=3febed78d4-EMAIL\\_CAMPAIGN\\_2017\\_11\\_15&utm\\_medium=email&utm\\_term=0\\_af2d0d6403-3febed78d4-130962085](https://i3-invest.com/2017/11/problem-factor-investing/?utm_source=%5Bi3%5D+Insights+%28Fund+Managers%29&utm_campaign=3febed78d4-EMAIL_CAMPAIGN_2017_11_15&utm_medium=email&utm_term=0_af2d0d6403-3febed78d4-130962085)