Factor Investing Guide 2018: Oiling the wheels of returns

Featuring:

- The popularity of factor investing
- Unfounded overcrowding concerns
- Transparent fund comparisons
- The evolution of factor investing

Sponsored by

Legal & General Investment Management
StyleAnalytics
BlackRock
PENSIONSAge

Summary
• Factor investing and smart beta strategies have become increasingly popular in the pension fund industry over the past year or so.
• Equity-based factor investing strategies often relate to factors such as value, quality, momentum, size and low volatility.
• Some observers suggest that the increased popularity in factor investing is down to clear demand from institutional investors to achieve increased transparency into the systematic drivers behind risk and return.

Growing in popularity

Over the past year or so, factor investing and smart beta have emerged as subjects of particular interest in the pension fund industry. So, what exactly is factor investing and smart beta? Why has interest in such approaches increased amongst pension funds in recent years? And has this interest translated into action?

In basic terms, Style Analytics CEO, Sebastien Roussotte, explains that factor-based investing relates to the use of well-defined company characteristics to explain differences in stock returns. As such, it is an investment approach "guided by a body of academic research pointing to higher risk-adjusted returns from portfolios with greater weightings towards stocks with certain key characteristics".

For equities, these characteristics tend to relate to factors such as: value, quality, momentum, size, and low volatility, he explains.

According to BlackRock's managing director and head of factor investing, Andrew Ang, factor investing directly targets broad and persistent drivers of return – those fundamental drivers that have proven to endure over many decades and many economic cycles.

"Macro factors, such as inflation and economic growth, are observed across asset classes. Within asset classes, we also can select securities using rewarded style factors, such as value and quality," he says.

As Ang explains, smart beta is an index-driven, transparent and low cost approach to factor investing that applies style insights to screen for securities with attractive characteristics – like high quality, strong momentum or attractive value – and is often implemented with smart beta ETFs.

"Institutions can often extend these factor concepts to multiple asset classes and investing both long and short, rather than just long-only in smart beta, in more sophisticated versions of factor investing," he adds.

Meanwhile, although he believes smart beta is a "great buzzword", Roussotte believes it is ultimately just a term describing long-only indices or funds that are systematically biased to factors by virtue of a weighting scheme based on fundamentals or risk, such as revenues or dividends or volatility, rather than market capitalisation.

"The fees are typically lower than traditional active products reflecting a lower cost non-discretionary approach and also because the portfolio is usually well diversified to reduce the impact of individual stock selection on performance," he says.

Increasing interest

Roussotte also notes that factor investing and smart beta are currently enjoying a time of growing popularity, due to a clear demand from institutional investors to achieve increased transparency into the systematic drivers behind risk and return. In his view, investors are also becoming increasingly sensitive to the fees associated with active management.

"Factor investing and smart beta often provide a lower fee option for many investors," he says.

Elsewhere, Ang argues the main reason for increasing adoption of both factor investing and smart beta is that institutions need more diverse sources of return to meet growth targets in a challenging market environment, with reduced cost, and greater transparency to plan participants.

Meanwhile, Cambridge Associates' managing director, Himanshu Chaturvedi, believes that factor investing has consistently gained interest over the past few years for pension funds as a cheaper way to implement active management as opposed to passive management based on traditional market cap weighted indices. He also points out that investor confidence in these strategies has been shored up by widespread academic support, the transparency of the investment process and the emergence of credible products.

"With fees converging towards those available on pure passive market cap weighted index linked products, it is a compelling proposition to at least make toehold investments in factor products. This enables asset owners to access one form of excess return potential, which is especially important in an environment where stretched valuations make prospective market returns look poor," he says.

Multi-factor strategy

BlackRock's *Global Pensions Survey*, released in March 2018, suggests 50 per cent of schemes currently use factor views to make asset allocation decisions, demonstrating that factors have been taken up across pensions in a relatively short period of time, a trend the company expects to accelerate.

According to Ang, investors are becoming increasingly aware that factors and smart beta sit between index and active investing. He points out that many active managers have historically delivered returns that today can be obtained from factor portfolios – for example, value – for much lower fees. This has resulted in increasing allocations to a range of smart beta strategies such as fundamental indexation, minimum volatility and others.

"Given high market valuations and an uncertain outlook, we believe pensions should be looking to diversify into investments that can provide returns with low exposure to markets," says Ang.

"An exciting benefit of factors is that they are persistent drivers of returns that are not correlated to traditional beta, and, by investing in long/short portfolios of factors, pension schemes have accessed returns independent from other market sources," he adds.

Meanwhile, Roussotte explains that multi-factor index-based strategies are reported as the most commonly evaluated and the most widely adopted smart beta equity strategies, especially among more recent adopters of smart beta.

"Allocating to a single multi-factor product is far more common than allocating to multiple individual factor products. Among single factor strategies, value and low volatility persist as the most widely used and evaluated," he says.

"Environmental, social and corporate governance (ESG) issues are also key extra-financial factors that can influence corporate performance over time," he adds.

In terms of concrete examples of factor investing, Roussotte also singles out the HSBC Bank (UK) Pension Scheme – one of the largest corporate pension funds in the UK – as a "really good example of a pension fund adopting factor investing as an approach". The scheme has selected Legal & General Investment Management's Future World Fund for its equity default option, worth £1.85 billion, in its DC scheme. As he explains, the fund is a multi-factor global equities index fund that incorporates a climate 'tilt' as well as a smart beta approach, which factor tilts to value, quality, low volatility, and size.

"This is one of the first schemes to adopt a multi-factor investment strategy incorporating a degree of climate change protection as its default fund," he adds.

Cambridge Associates' senior research consultant, Martin White, also notes that the company's clients have actively allocated to factor products for a number of years – and that it continues to evaluate new products in this space.

"For example, in one case, a client has invested in a factor-based product as a replacement for traditional active equity. In addition to the reasons cited *[by Chaturvedi]*, this was also driven by the perceived lower governance requirement, as one product was able to incorporate exposure to a number of factors while multiple traditional active managers would have been required previously," he says.

Dynamic factor allocations

Looking ahead, Ang argues that the frontier of activity in this area will focus on moving factor concepts from equities to fixed income and other asset classes – and he expects pension funds to consider broader, less constrained, and more dynamic factor allocations in their portfolios. For example, BlackRock expects trends toward multi-factor smart beta – which blends several style insights in security selection – from single-factor, and toward multi-asset rather than single asset class strategies to continue.

"We also see greater use of long-short implementations – where premium returns from style can be targeted without taking on market risk – going forward," adds Ang.

Meanwhile, Chaturvedi stresses that factor investing is only one form of what he describes as 'systematic investing' and, with the rapid development afforded by technology, he believes that the broader class of systematic investment strategies will evolve and offer ever more nuanced implementations of rules based investing.

"Investors will be able to customise their investment strategies, extracting better value for their fees and enjoying more choice, should they wish," he says.

Written by Andrew Williams, a freelance journalist

Overcrowding and capacity in factor-based investing: Should we be worried?

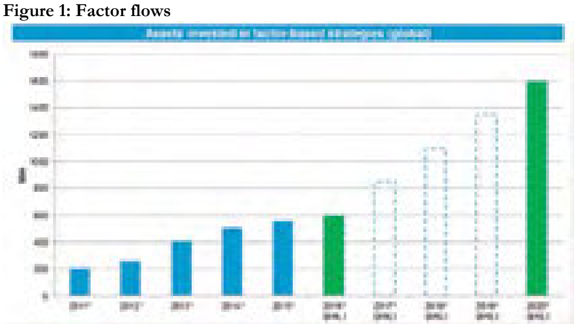
David Barron assesses the overcrowding hypothesis and urges calm

The difference between definitions is nuanced but critical. Capacity tends to be more rooted in fact, whereas overcrowding is subjective. As such, the general trend is to talk of overcrowding of a market, or factors on the whole, and capacity of a fund or specific strategy.

Evaluating overcrowding

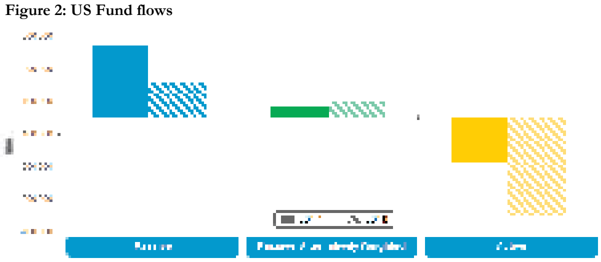
Those attempting to establish a basis for factor crowding predictions look to valuations as the metric of choice, typically using price-to-earnings measures. Logic dictates that all else equal, if the price-to-earnings ratio of a group of stocks is higher today than it was a year ago, those stocks are more 'expensive'. If we link in inflows (i.e. additional demand) for a factor exposure, as has been the case in passive factor-based products (Figure 1) then the conclusion that the proliferation of these products has caused stretched valuations is also logical. For the risk-averse, this fact may be the only burden of proof necessary to steer clear of further investment and perhaps even warrant divestment.

Figure 1: Factor flows



Source: Morningstar, Citi, LGIM. (1) Morningstar (2) Citi projections. (3) LGIM projections – filling in linearly for 2017,2018,2019 (based on Citi projections for 2016 and 2020).

Figure 2: US Fund flows



Source: LGIM, EPFR Global Fund Data

But are factors overcrowded?

Stock valuations are one method of evaluating the relative 'richness/cheapness' of a stock or group of stocks. If we can link a state of richness with excess demand via factor-based product proliferation, then we're on our way to a more informed state of factor valuations. The emphasis on excess is to highlight that flows into a factor or strategy only tells us half of the story, the demand. Figure 2 adds two important data points to Figure 1. First, active management outflows. In aggregate, outflows from active managers are many times larger than inflows into factor-based products in the time period analysed. Assuming the majority of those active managers were not closet benchmark huggers, they likely had significant factor exposures (explicitly or implicitly). This is our factor supply. The second data point is the flow into market cap-weighted passive products, which by definition have limited factor exposure. In aggregate, we get a picture of active manager outflow moving into passive products, most of which are cap-weighted. Valuations aside, the current state of the market does not appear to support the overcrowded hypothesis.

Bottom line

On the basis of valuations, more risk-averse investors may believe that factors are overcrowded. We believe though that much of the outflows from active managers are invested in market cap-weighted index portfolios rather than factor-based ones, negating the fear of overcrowding.

Written by David Barron, head of index equity and factor-based investing, LGIM

In association with

Legal & General
INVESTMENT MANAGEMENT

Like for like

Anett Galosfai reveals a winning factor framework for transparent fund comparisons

It is undeniable that the rise of factor and smart beta products has introduced a new layer of opportunities and complexities to today's investment world. Most smart beta funds use proprietary factor definitions and custom index construction, whilst applying standard sounding labels such as; value; quality; low volatility; and momentum. Multifactor combinations are also on the rise as vendors seek to differentiate with a diversity of factor premia.

No wonder institutional investors are demanding more visibility into the funds they are buying and holding. The asset owner community requires simpler comparison tools to be able to monitor and compare equity products across the board, including side-by-side comparisons of smart beta and more traditional discretionary active approaches.

When it comes to understanding a fund's factor exposures many investors have relied on the traditional style box with its simple 3 x 3 type of partitioning of categories such as 'large value' and 'small growth' to delineate equity funds. However, this is much too blunt a tool to differentiate current smart beta products, which combine quality, low volatility and momentum factor categories.

As a result, active quant managers or smart beta fund providers often choose to showcase their funds' factor exposures based on proprietary statistical models, and proclaim their own factor blends as the 'definitive' combination of factors such as value, momentum, and quality. Some approaches also consider factors within sectors while others, including index providers, may allow a technology sector bias to define 'growth' or feature a heavy weight in financials to define 'value'. Essentially, funds that are classified as having style attributes might just be by-products of sector biases.

How then are fund buyers supposed to understand which factors and style categories will be relevant when comparing thousands of equity funds? The investment industry clearly needs a neutral playing field to assess key style and factor attributes across all equity portfolios. Any assessment framework needs to be independent, objective, and easy to communicate, with recognisable investment terms. But it should also be robust enough to highlight the key nuances of each product. There also needs to be flexibility within style categories to avoid portfolios being constrained by yet another box, albeit with more factors or dimensions.

For almost 20 years, Style Analytics has been asserting the importance of factor choice within individual style categories. With the advent of smart beta products, we hear more about style 'factors' such as value and quality. However, we still think of these as style categories rather than factors since the underlying factor choice within these categories can and often does vary.

Consider the value style where underlying factors are often regarded as being more similar than other styles. Even within value there are many factors that perform significantly differently, for example high free cashflow yield versus high book to price. Assessing funds factor by factor can therefore help differentiate products within the same style category. An independent factor assessment framework should recognise these important differentiators. Of course, it would be easy to open the floodgates and allow every investment metric, financial ratio and piece of fundamental and market data to become a style factor candidate. However, the often cited 'factor zoo' of hundreds of factors would likely overwhelm any practical applications for fund comparison. Often many of these newly discovered factors have faltered under the closer scrutiny of more rigorous back tests.

Our view is that we need a careful choice of style categories together with the right factors within those categories to enable clear, detailed comparisons between investment products so that funds can be evaluated on an 'apples-to-apples' basis. We need factors that reflect the researched factor premia but which are also transparent and used in the real world of an equity investment analyst. We need a framework that fairly describes traditional active funds, still in the majority, alongside more quantitative factor approaches. The factor framework to do this must also integrate other aspects of portfolio construction including sectors, countries, and practical assessment of the active risk of the portfolio versus a reference benchmark.

This will allow fund sellers and asset owners to understand the critical differences between funds, even those that appear highly similar on the surface.

Style Analytics recommends three core pillars of an effective factor framework for smarter fund identification, comparison, and analysis.

Written by Anett Galosfai, senior client manager, Style Analytics

Quantifying intuition: The evolution of factor-based investing

Factor-based investing leverages insights about the broad, persistent forces that drive investment returns to help investors enhance performance, manage risk, and seek genuine diversification. It's becoming increasingly popular. A 2016 survey from BlackRock found that 87 per cent of institutional investors used factors as part of their investment process, and that nearly two-thirds increased their use of factors over the previous three years.

To find out where factor investing fits into the current landscape, how it works for clients and how it can add value, we talked to BlackRock's Andrew Ang, head of factor investing, and Sara Shores, head of factor-based investment strategy

Why is factor investing such a relevant theme for investors today?

Andrew Ang: This is a difficult environment. There are low yields, increasing interest rates, geopolitical uncertainty, and anomalously low volatility. Factors present a well known, academically rigorous and efficient source of potential returns. That makes factor investing particularly attractive for investors seeking performance greater than market benchmarks or looking for additional diversification.

Using factors to help navigate these difficult investment times allows us to build more robust investment portfolios, mitigate risk on the downside, and seek the returns that investors need in the long term.

How can investors start to incorporate factors into their overall allocation?

Sara Shores: Bringing factors into asset allocation represents the quantification of investor intuition. We know that there are commonalities across asset classes. When most investors embark upon their strategic asset allocation, they think about allocating capital across stocks, bonds, and alternatives. They might divide that universe into US equity, global equity, investment grade bonds, high-yield bonds, private equity, and real estate. We pretend as if those labels create a distinction between the behaviours of the asset classes. But we know that there are linkages across them.

For instance, if the Fed unexpectedly increased rates tomorrow, you would see the effects ripple through the prices of equities, fixed income, real estate, and hedge funds. Factors help quantify those linkages across both public and private asset classes.

Many investors have done this in a heuristic way for a long time. For instance, they will categorise elements of their portfolio as either safe or risky assets. Now we have the tools to analyse factor exposures across asset classes.

We know that there are common sources of risk. Factor analysis helps us quantify them.

Are there sources of risk that investors are overlooking?

Ang: Yes. Many portfolios aren't as balanced as you'd think. Economic growth, for example, tends to dominate many portfolios as that factor drives the majority of risk across many widely held asset classes. *[See the different assets, common risks chart].*

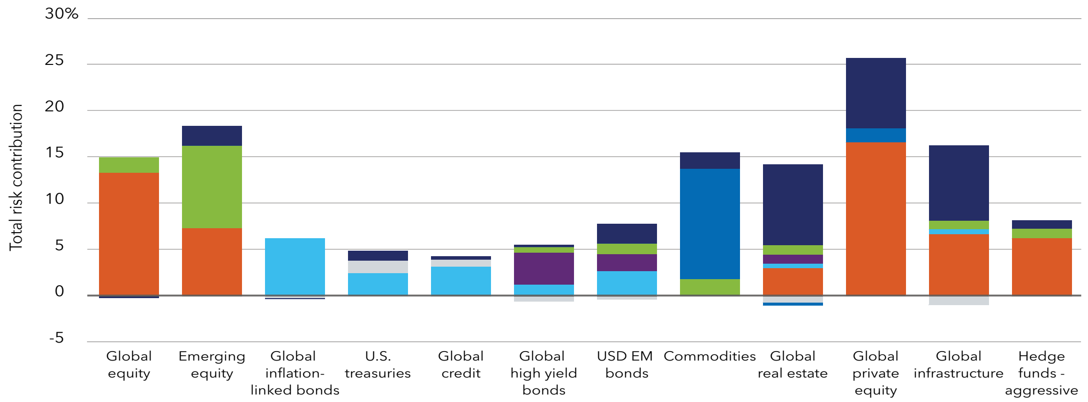
That growth bias means that many portfolios are dominated by exposure to the economic cycle. If growth is stronger than expected, those portfolios tend to do well. If growth is weaker than expected, they tend to do less well. Plus, there are many components of our private lives – salaries, bonuses, house prices – that are also heavily linked to the economic cycle. One of the common themes we hear today is that investors want to diversify their portfolios away from economic growth into other rewarded factors.

We have developed a tool called Aladdin Factor Workbench that allows us to view asset allocation through a factor lens. It helps us think about adding more balanced sources of return that have the potential to add diversification while seeking to improve long-run results.

How is factor-based investing evolving? What are some new ideas you're seeing gain traction?

FOR PROFESSIONAL CLIENTS AND QUALIFIED INVESTORS ONLY

Different assets, common risks: macro factor decomposition of different asset classes



Source: Aladdin Factor Workbench, June, 2017. Global asset classes are all hedged to USD. Risk contribution is the risk decomposition of the portfolio by factor, taking into account the correlations between the factors and the benefits of diversification, using a lookback period of 15 years. 'Other' includes risk contributions from style factor exposures and idiosyncratic risks. Asset classes are represented by the following indices: Global equity, MSCI All Country World Index; Emerging equity, MSCI Emerging Marets; Global inflation-linked bonds, BofA ML Global Governments Inflation-Linked Index; U.S. Treasuries, Bloomberg Barclays Government Index; Global credit, Bloomberg Barclays Global Aggregate Corporate Index; Global high yield bonds, Bloomberg Barclays Global High Yield Index; USD EM Bonds, JP Morgan EMBI Global Diversified Index; Commodities, Bloomberg Commodity Index Total Return; Global real estate, BlackRock Proxy; Global private equity, BlackRock Proxy; Global infrastructure, BlackRock Proxy; Hedge funds — aggressive, HFRI Equity Hedge Index.

Shores: Many investors start with a form of smart beta – the long-only, index-driven form of factor-based investing – to achieve the potential benefits of passive investing, while maintaining the possibility of outperforming the benchmark. Smart beta is about making elements already present in cap-weighted indices work harder to seek enhanced performance.

From there, investors may think about using factors to complement the active strategies in their portfolios. Say you have an active manager who tends to have a value bias. You may want to complement that manager with some exposure to quality or momentum, to build a more diversified portfolio.

In our experience, once investors become accustomed to factor investing, they're often interested in a fuller expression of it. Instead of just looking at US value, they look at value globally. They look at value not just in equities, but also in fixed income, currencies, and commodities.

Taking it one step further, if we construct a portfolio with both long and short positions, we can create a potential source of liquid absolute returns which, ideally, has no correlation to the broader stock/bond portfolio. That may provide a diversified and resilient source of returns. As hedge funds fees have come under increasing scrutiny, we've seen many investors use long/short factor strategies as a lower-cost replacement.

Andrew, you've mentioned that the fundamental ideas behind factor-based investing have been consistent – what has changed?

Ang: Factors have been around a long time. It's the applications that have changed, and technology has enabled that. You can read about value and quality in Graham and Dodd's *Security Analysis* from 1934. But today, we can analyse thousands of investments, across multiple assets, to identify value, quality and other factors, and we can trade those securities efficiently to help meet our investment objectives.

So the conversations we're having today are not so much about what factors are or why they're important. They're more about how we can use them effectively in our portfolios, whether as standalone strategies to help enhance returns or mitigate risk, as overlays to offset factor exposures already in the portfolios, or as a diversifying, low-correlation alternative allocation. The conversation has really changed to how we can use factors to help investors in a difficult environment.

Written by Andrew Ang, head of factor investing and Sara Shores, head of factor-based investing strategy, BlackRock

Company Profiles

Legal & General Investment Management (LGIM)

Legal & General Investment Management (LGIM) is one of Europe's largest asset managers and a major global investor, with total assets under management of £983 billion*. We work with a wide range of global clients, including pension schemes, sovereign wealth funds, fund distributors, retail investors and direct investors.

Throughout the past 45 years we have built our business through understanding what matters most to our clients and transforming this insight into valuable, accessible investment products and solutions. We provide investment expertise across the full spectrum of asset classes, including fixed income, equities, multi-asset, real assets and cash. Our capabilities range from index-tracking, active and exchange-traded strategies to liquidity management and liability-driven risk management solutions.

We are one of the world's leading providers of index fund management and a major investor in global fixed income markets. We are at the forefront of developments in liability-driven risk management solutions for defined benefit pension schemes, as well as a leading provider of defined contribution solutions. In recent years, LGIM has additionally developed a market-leading profile in the retail investment space through strong relationships with financial advisers.

More than 80 per cent of our new business comes from established clients, a record that demonstrates our belief in growing with our clients and serving them well. Industry-leading client service means being accessible and delivering investment expertise consistently. Whether that means reliably providing a market return through our index funds, or establishing a bespoke actively managed solution that fits a client's needs, we have one key focus: to provide what our clients tell us they need most.

* Source: LGIM internal data as at 31 December 2017. These figures include assets managed by LGIMA, an SEC Registered Investment Advisor. Data includes derivative positions.

Style Analytics

Style Analytics is an independent, global software provider for investment professionals. We enable asset owners, consultants and asset managers to build objective and comprehensive factor analysis on markets, peers and portfolios.

By creating transparency through factor exposures - the systematic drivers of portfolio risk and return - we help investment professionals validate and make strong investment decisions.

Previously known as Style Research, Style Analytics has over 20 years' experience in factor analysis and serves over 280 investment institutions across 30 countries. Our breadth and depth of industry knowledge and expertise continues to bring superior tools and innovations to support our clients.

BlackRock

BlackRock helps people around the world, as well as the world's largest institutions and governments, pursue their investing goals and overcome challenges through:

• A comprehensive set of innovative solutions
• Global market and investment insights
• Sophisticated risk and portfolio analytics

We combine a focus on performance with a deep understanding of the wider challenges our clients face, from rapidly changing markets to increased regulatory and societal demands. The depth of our investment resources means clients benefit from the collective experience of 135 investment teams located in 30 countries, who are closely connected through a common culture and operating platform*. We harness the scale of our infrastructure to maximise investment performance potential, while the breadth of our capabilities allows us to create outcome-based solutions tailored to individual client objectives. As an independent manager we only work for our clients, who have entrusted us with managing $6.317 trillion**, earning BlackRock the distinction of being trusted to manage more money than any other investment firm in the world.

* As of 31 March 2018
** AUM in USD as at 31 March 2018

Capital at risk. All financial investments involve an element of risk. Therefore, the value of the investment and the income from it will vary and the initial investment amount cannot be guaranteed. There is no guarantee that a positive investment outcome will be achieved.

Pensions Age

Pensions Age is the leading title targeting UK pension funds and their consultants. Published monthly in print since 1996, and daily online, we invest heavily in our circulation and content to ensure we are the clear market leading title. Our in-house editorial team of Francesca Fabrizi (Editor in Chief), Laura Blows (Editor), Natalie Tuck (News Editor) and Theo Andrew (Reporter) ensure we cover the latest news and topical industry issues to help our readers make the best informed decisions.

www.pensionsage.com is the leading website for pension funds, and we look to cover the breaking stories as they happen. With over 24,000 subscribers to our email newsletter service; we offer our readers an unrivalled service. At the core of this is high quality, news-breaking journalism combined with in-depth knowledge of the target market and heavy research into data.

Pensions Age also runs highly successful conferences, and the Pensions Age Awards.

We also publish *European Pensions*, which targets pensions funds across Europe, as well as running the European Pensions Awards and the Irish Pensions Awards.