

Aon Investment Research and Insights

# The Rise of Factor Investing

*March 2018*

# Table of contents

Key conclusions. . . . .	3
Factor investing – what is it? . . . . .	3
Where does factor investing fit in equity portfolios? . . . . .	4
We recommend four primary factors — value, momentum, low volatility and quality . . . . .	5
Combining these factors into a multi-factor portfolio is an efficient approach . . . . .	6
Why is now an appropriate time to consider factor investing? . . . . .	7
Conclusion . . . . .	7

## About Aon Investment Research and Insights

Aon's robust portfolio of ideas, tools and researched solutions support trustees and sponsors to anticipate their future investment requirements.

By beginning to identify investment research and communicate ideas before they are needed we can shorten the implementation times for our clients and act in a timely way when opportunities are correctly priced.

To learn more and to access other research and insights from Aon's investment experts, visit [aon.com/investment](https://aon.com/investment)

# Key conclusions

In our paper *Putting DC Members Front and Centre*, we recommended that Trustees and Governance bodies look to address the relatively undiversified equity allocations that are a common occurrence in DC portfolios, particularly the early stages of lifestyle/glidepath strategies. We recommended the diversification of equity portfolios across regions, styles and return drivers whilst also considering the currency risks that members were exposed to.

In this paper we provide further insight into achieving “style” diversification, in particular, the role that factor investing can play in improving your equity portfolio. Factor investing has experienced a sharp rise in prominence in recent years.

- Factor investing, also commonly called “smart beta”, is a low-cost approach which could help DC schemes to improve member outcomes.

- We have identified four preferred equity factors that all offer the potential for long-term return enhancement and/or risk reduction:
  - Low volatility
  - Value
  - Quality
  - Momentum
- Our analysis shows that for many clients the best approach is to create, or use, a multi-factor portfolio containing the four factors identified.
- An equally weighted portfolio, concentrating on global developed markets and controlling for regional weights, is our preferred approach.
- Held alongside a market capitalisation weighted global equity index, factor investing can be expected to offer enhanced risk adjusted returns.
- Factor investing is becoming increasingly accessible to DC schemes. A number of platforms already offer factor funds and we expect further growth.

## Factor investing – what is it?

In its simplest form, a factor is a persistent, robust and well-documented driver of risk and return which, if appropriately harnessed, has the potential for long-term return enhancement and/or risk reduction. Factor investing aims to capture this outperformance through rules-based, transparent strategies, at a lower cost than traditional active management.

Whilst factor investing has become prominent in recent years, it dates as far back as the 1960s. Many traditional active managers already make use of these factors, but a key benefit of utilising factor indices is that they offer transparency and lower fees than active management.

This is particularly important for DC schemes where the default is constrained by the 0.75% charge cap.

Factor investing can be a murky world, where any number of things can be called a factor. Investors need to be careful that a factor is robust and not merely the product of a favourable backward looking performance simulation (also known as a back test).

Using a well-known framework<sup>1</sup>, we believe that a “true” factor should be:

- **Persistent** – we can see evidence of excess risk-adjusted returns compared to relevant benchmarks over very long periods and in different economic environments;
- **Pervasive** – we can see it across different countries and investment universes, including different asset classes in some cases;
- **Robust** – we can still see it if we use different selection criteria, such as earnings yield instead of the book value to price ratio in the case of value stocks, for example;
- **Intuitive** – we can naturally explain, either based on economic theory or relying on investor behaviour; and
- **Implementable** – it isn’t just a concept on paper and DC members can actually invest!

But there are also some important risks to factor investing:

- **Long periods of underperformance** – individual factors don’t always produce excess returns relative to market cap benchmarks, they can underperform for multi-year periods.
- **Unintended exposures** – some factor portfolios can be highly concentrated or significantly overweight in specific sectors and countries.

<sup>1</sup> This framework was introduced in the book, *Your complete guide to factor-based investing: The way smart money invests today* by Andrew Berkin and Larry Swedroe, 2016

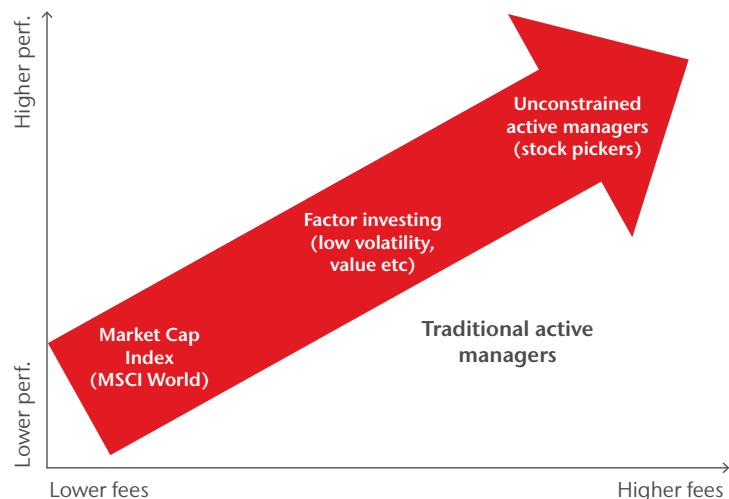
# Where does factor investing fit in equity portfolios?

The chart to the right shows how outperformance potential and costs rise as we move further away from the benchmark market capitalisation weighted index. Historically, there has been a wide gap in fees between passively tracking the benchmark and employing active managers with the aim of outperforming.

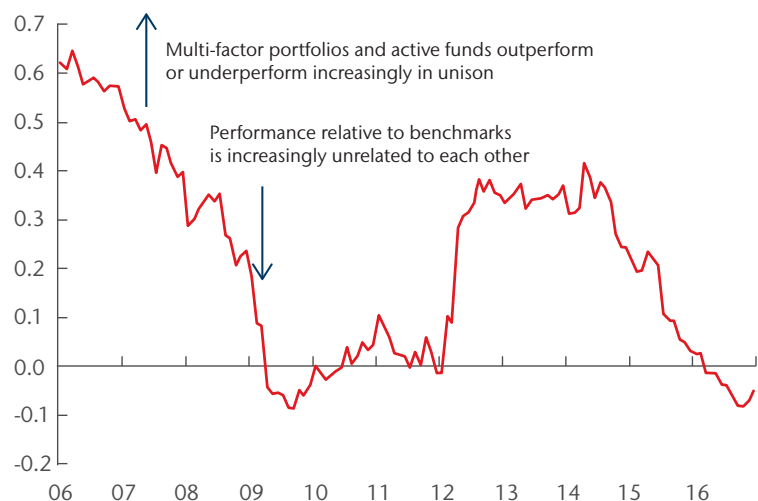
Factor investing narrows this gap significantly. DC schemes that have opted for passive management should consider whether a multi-factor portfolio better suits their needs and could be expected to offer superior outcomes for members.

We believe factor investing can offer valuable opportunities:

- For those with market capitalisation weighted passive equity, factor investing provides an opportunity to; enhance returns, diversification and reduce the expected volatility within the equity portfolio.
- For those with an allocation to active equity, we found that the outperformance of multi-factor equity portfolios had a low correlation to the performance of our actively managed unconstrained equity funds. Implying that even a portfolio of skilful active equity managers may benefit from an allocation to multi-factor equity.



Low correlation between the performance of multi-factor portfolios and traditional active managers



Source: Aon

Note: This chart shows the correlation of the performances of a representative multi-factor portfolio and of our buy list of unconstrained global actively managed funds relative to their benchmarks over rolling three year periods.

# We recommend four primary factors – value, momentum, low volatility and quality

Following detailed and in-depth analysis, we have identified four factors that we believe offer the most robust performance enhancements. These are set out in the following table.

	Value	Momentum	Low volatility	Quality
<b>What is it?</b>	Cheaper than average stocks have delivered higher returns than expensive stocks	Stocks with strong recent performance continue to earn returns above those with weak recent performance	Stocks with low volatility have earned higher risk adjusted returns than those with high volatility	Stocks of higher quality companies have earned a premium over stocks of lower quality companies
<b>Reasons why it works</b>	Cheaper stocks respond quickest to an upturn in the economy and profits	Tendency of investors to chase winners	These stocks are often ignored: low return expectations make it difficult for institutional investors to meet return targets	Do not have the highest growth expectations and so are less favoured in bull markets
	Investors prefer the higher return prospects of companies with strong growth, which can often disappoint	Under-reacting to incoming new information about stocks	Low volatility stocks suffer much less in downturns	Stable earnings mean they suffer less in market downturns

On the next page we consider how to efficiently construct a multi-factor portfolio.

# Combining these factors into a multi-factor portfolio is an efficient approach

A crucial finding from our research was that, although individual factors can underperform for multi-year periods, they aren't synchronised. In other words, the economic conditions that trigger the underperformance of value stocks are rarely the same conditions that would trigger the underperformance of low volatility stocks.

We therefore recommend that DC schemes, consider combining the four factors into a multi-factor equity portfolio in order to smooth returns and mitigate the risk of underperformance from any one factor. Moreover, with the appropriate governance structure and oversight, implementing medium term asset allocation views can enhance returns.

There are a number of important considerations when constructing a multi-factor portfolio and our analysis has led to these recommendations:

- Concentrate on global developed markets;
- Begin by equally weighting the factors; and
- Neutralise the regional weights.

The below table sets out the risk and return results of our preferred multi-factor portfolio, over 1997 – 2016, and since the global financial crisis (2009 – 2016). Figures adjusted for estimated transaction costs.

Key return and risk results from our multi-factor portfolio back test

	Dec 1997 – Dec 2016	Mar 2009 – Dec 2016
Annualised return (% p.a.)	8.9	15.2
Outperformance relative to the benchmark (% p.a.)*	3.6	2.4
Information ratio**	0.82	0.90
Sensitivity to the market (beta)***	0.93	0.96

\* The benchmark is the MSCI World Index, \*\* The IR measures the excess return against the benchmark divided by tracking error. The higher the information ratio, the better, \*\*\* A figure less than 1 indicates lower sensitivity to market movements.

From the above we can see that our modelled portfolio has outperformed on both a relative (versus MSCI World) and risk adjusted basis, the latter measured by the Information Ratio ("IR").

# Why is now an appropriate time to consider factor investing?

In today's market environment, as the world's equity indices continue their upward trajectory, diversification is increasingly desirable. We are reaching the point in the market cycle where dangers are surfacing with market cap approaches that congregate around existing winners with potentially stretched valuations. By nature factor indices, with the exception of the Momentum factor, allocate the

portfolio across holdings based on a company's underlying fundamentals, and have the potential to help alleviate sector, style, size and stock concentration risks. With today's high equity market valuations, the greater diversification offered by these factor investments, and projected lower volatility, appear an attractive solution for DC members looking to lock in as much of the equity market's recent gains as possible.

## Conclusion

Given the results of our research, we recommend that DC schemes consider:

- Investing in a multi-factor portfolio that consists of our preferred factors (value, low volatility, quality and momentum) in order to improve the investment efficiency of their equity portfolio and the retirement outcomes for members.
- An equally weighted approach to combining the four preferred factors, concentrating on the global developed markets and controlling for regional weights.
- Holding a factor portfolio alongside existing equity exposure:
  - passive market cap equity to enhance risk adjusted returns, net of fees, whilst not significantly increasing investment costs for members.
  - active equity to provide a diversified return source with low correlation to the performance of actively managed unconstrained equity funds.

## Final thought

In 'Putting DC members front and centre', we highlighted a need to return to first principles and ask "what are we trying to achieve?" While the regulatory response of "good member outcomes" is a nice starting point and difficult to disagree with, a true 'member focus' is not a "one-size fits all" scenario and investment strategies need to be tailored to the evolving membership profile of each DC scheme.

Factor investing is an important consideration for improving member outcomes.

Please ask your Aon consultant for more details.

# Contacts

**John Belgrove**

Senior Partner

john.belgrove@aon.com

+44 (0)20 7086 9021

**Kate Charsley**

Partner

kate.charsley@aon.com

+44 (0)117 900 4414

**Sion Cole**

Senior Partner and Head of Client Solutions

sion.cole.2@aon.com

+44 (0)20 7086 9432

Follow me on twitter – @PensionsSion

**Tim Giles**

Head of UK Investment Consulting

tim.giles@aon.com

+44 (0)20 7086 9115

---

With thanks to our author

**Koray Yesildag**

Principal and Asset Allocation  
Specialist

**George Carvounes**

Principal and Equity Researcher



## About Aon

Aon plc (NYSE:AON) is a leading global professional services firm providing a broad range of risk, retirement and health solutions. Our 50,000 colleagues in 120 countries empower results for clients by using proprietary data and analytics to deliver insights that reduce volatility and improve performance.

For further information on our capabilities and to learn how we empower results for clients, please visit <http://aon.mediaroom.com>.

© Aon plc 2018. All rights reserved.

This document and any enclosures or attachments are prepared on the understanding that it is solely for the benefit of the addressee(s). Unless we provide express prior written consent, no part of this document should be reproduced, distributed or communicated to anyone else and, in providing this document, we do not accept or assume any responsibility for any other purpose or to anyone other than the addressee(s) of this document.

Notwithstanding the level of skill and care used in conducting due diligence into any organisation that is the subject of a rating in this document, it is not always possible to detect the negligence, fraud, or other misconduct of the organisation being assessed or any weaknesses in that organisation's systems and controls or operations.

This document and any due diligence conducted is based upon information available to us at the date of this document and takes no account of subsequent developments. In preparing this document we may have relied upon data supplied to us by third parties (including those that are the subject of due diligence) and therefore no warranty or guarantee of accuracy or completeness is provided. We cannot be held accountable for any error, omission or misrepresentation of any data provided to us by third parties (including those that are the subject of due diligence). This document is not intended by us to form a basis of any decision by any third party to do or omit to do anything.

Any opinions or assumptions in this document have been derived by us through a blend of economic theory, historical analysis and/or other sources. Any opinion or assumption may contain elements of subjective judgement and are not intended to imply, nor should be interpreted as conveying, any form of guarantee or assurance by us of any future performance. Views are derived from our research process and it should be noted in particular that we can not research legal, regulatory, administrative or accounting procedures and accordingly make no warranty and accept no responsibility for consequences arising from relying on this document in this regard.

Calculations may be derived from our proprietary models in use at that time. Models may be based on historical analysis of data and other methodologies and we may have incorporated their subjective judgement to complement such data as is available. It should be noted that models may change over time and they should not be relied upon to capture future uncertainty or events.

Aon Limited is authorised and regulated by the Financial Conduct Authority. Registered in England & Wales.  
Registered No: 4396810.

Registered Office:  
The Aon Centre  
The Leadenhall Building  
122 Leadenhall Street  
London EC3V 4AN

Copyright © 2018 Aon plc

**aon.com**