

2021

Invesco Global Factor Investing Study

This document is not intended for members of the public or retail investors. Full audience information is available inside the front cover.



Executive summary

Welcome to Invesco's sixth annual Global Factor Investing Study. This study incorporates the views of 130 institutional investors and 111 wholesale investors, collectively responsible for managing over \$31 trillion in assets (as of 31 March, 2021). This makes it a uniquely large and comprehensive examination of global factor investing, a form of investing in which securities are chosen based on attributes (commonly termed 'factors') that have tended to offer favourable risk and return patterns over time. This study offers an opportunity to understand the drivers of factor investing, investor experiences, and methods of implementation.



Georg Elsaesser Senior Portfolio Manager Invesco Quantitative Strategies

georg.elsaesser@invesco.com T: +49 69 29 807 174

This presentation is for Professional Clients, Financial Advisers and Qualified Clients/Sophisticated Investors (as defined in the important information at the end); for Institutional Investors only in the United States; for Sophisticated or Professional Investors in Australia; in New Zealand for wholesale investors (as defined in the Financial Markets Conduct Act); for Professional Investors in Hong Kong; for Qualified Institutional Investors in Japan; in Taiwan for certain specific Qualified Institutions/Sophisticated Investors; in Singapore for Institutional/Accredited Investors; for Qualified Institutional Investors and/or certain specific institutional Investors and/or certain specific institutional investors in Thailand; for certain specific sovereign wealth funds and/or Qualified Professional Investors in Korea; for certain specific institutional investors in Brunei; for certain specific institutional Investors in Brunei; for certain specific institutional Investors in Malaysia upon request; for certain specific institutional investors in Indonesia and for qualified buyers in Philippines; in Canada, this document is restricted to Accredited Investors as defined under National Instrument 45-106. It is not intended for and should not be distributed to, or relied upon by, the public or retail investors. Please do not redistribute this document.

Theme 1 – Increasing focus on the potential benefits of ESG incorporation leads investors towards a factor-based approach

In our first theme, we focus on the synthesis between factor investing and ESG, with around half of global respondents (46% in Europe) using factors to help incorporate. We find that factor investing is seen as more compatible with ESG than a market-weighted approach but lagging fundamental active. Respondents expressed a widespread belief that ESG can potentially enhance performance, while there is a lack of consensus as to whether ESG itself should be defined as an investment factor.

Theme 2 – The rise of factor investing in fixed income continues

In our second theme, we explore the continued rise of factor investing in fixed income, with 55% of investors now using factors in this asset class, up from 40% in last year's study. Nearly half of global respondents (42% in Europe) indicated the low yield environment had made a factor approach in fixed income more attractive, offering an opportunity for uncovering untapped sources of return potential and additional diversification.

Theme 3 – Investors use multi-factor approaches and manage exposures more actively

In theme three, we take a deep dive into methods of factor implementation and explore how investors are using factors to navigate the market uncertainty and changing economic realities. Some 48% of global respondents (68% in Europe) report making long-term strategic adjustments to targeted factor exposures, for example based on expected performance at different points in the economic cycle. This dynamism looks set to accelerate, with 41% of investors expecting their approach to become more dynamic over the next two years.

Theme 4 – Factor allocations rise as postpandemic recovery attracts investors to value

In theme four, we explore the impact of the COVID-19 pandemic on factor allocations and performance. The pandemic was seen as a test of the factor approach, with the ability of factor allocations to keep pace in terms of performance during a volatile period viewed as important for imbuing longterm confidence in a factor approach. An increase in allocations to the value factor, first identified in last year's report, continued this year, with 40% of European respondents stating that they are increasing their allocations to the value factor. Growing factor allocations reflect broader adoption, as investors increasingly consider factors in the context of the whole portfolio and in asset classes beyond equities.

Theme 1

Increasing focus on the potential benefits of ESG incorporation leads investors towards a factor-based approach



Around half of factor investors are using factor investing to help incorporate ESG, driven by the pursuit of enhanced investment performance and control over exposures.



Factor investing is seen as more compatible with ESG than a marketweighted approach, but behind fundamental active. Despite this, ESG is more likely to be pushing investors towards factor investing than fundamental active.



Respondents expressed a widespread belief that ESG can potentially enhance performance, while there is a lack of consensus as to whether ESG itself should be defined as an investment factor. Investor demand for ESG factor products is clear. A lack of products and challenges around communication remain barriers to implementation.



This is the third year this study has examined the intersection of ESG and factor investing. Over those three years, we have recorded a rapid increase in appetite for incorporating ESG via factor methodologies, as well as an increased recognition of the benefits of this approach.

The trend continued in 2021, and as it takes hold, so too has recognition of the challenges to be navigated, including a limited supply of ESG factor products and uncertainty about the impact of ESG on factor exposure targets.

In 2021, 78% of respondents (all of them factor investors) indicated they incorporated ESG in their portfolio (Figure 1.1). Historically, the most important driver of ESG adoption has been demand from stakeholders and beneficiaries. However, this year there has been a shift, and now the most important driver is a belief that ESG enhances long-run investment performance (for example through the mitigation of long-term investment risk) (Figure 1.2). "We believe ESG leads to the selection of more resilient companies in the long-run" said one North American wholesale investor.

"

Over those three years, we have recorded a rapid increase in appetite for incorporating ESG via factor methodologies, as well as an increased recognition of the benefits of this approach.



Currently incorporate

Considering incorporating

Figure 1.1

Incorporation of ESG in overall portfolio, % citations

Advantages of quantitative ESG approach adds to factor investing uptake

Investors believe different investment approaches vary in their compatibility with ESG (Figure 1.3). More active approaches are favoured to passive. While fundamental active is preferred for its greater flexibility in implementation and greater suite of products to select from, factor investment is considered the next most compatible, and more so than a passive approach. Despite this, respondents reveal that ESG is more likely to be driving them towards a factor approach over fundamental active (Figure 1.4).

This belief, that ESG can enhance financial performance, supports a factor approach. Investors highlighted the role of factors in helping decompose the impact of ESG on sources of return, for example. Several other investment advantages were cited as being advantageous to a factor approach, including but not limited to, the ability to replicate a quantitative methodology across different parts of a portfolio.

Conversely, respondents noted the challenges associated with a factor approach, such as a lack of product, were gradually being overcome, as was the case for this European institutional investor: "Active investing looks more compatible with ESG in the short term, as you can select from the largest investment universe. In factor, the product range is still limited but we see new products emerging."

Factor investors accustomed to a systematic investing approach recognise the parallels that can be drawn in the implementation of ESG. Indeed, nearly half of the respondents are looking to exploit these synergies and say they use factor investing to help incorporate ESG (Figure 1.5). When incorporating ESG into factor portfolios, investors indicated they generally do so via both screening and model design (Figure 1.6). While screening is more common, over half of the respondents are applying ESG quantitatively through factor models or weighting, a methodology that plays to the particular strengths of a factor approach.

Figure 1.3 Compatibility of different forms of investing with ESG, scored 1 (incompatible) to 10 (very compatible)



To what extent do you think ESG is compatible with the following types of investing? Sample size: 186



Figure 1.4DisagreeESG as a driver towards active
and factor investing, % citationsNeutralAgree



To what extent do you agree with the following? Sample size: 232



Do you use factors to help incorporate ESG? Sample size: 236

If so, which of the following best characterises your approach? Sample size: 152

ESG linked to performance, but not yet considered as a factor

Despite widespread belief that the incorporation of ESG has the potential to enhance performance, there remains little consensus on whether ESG is itself an investment factor (Figure 1.7).

A significant minority (30%) of respondents believe ESG is an investment factor, replicating the characteristics of factors such as value and quality. However, 29% believe ESG overlaps with other investment factors and therefore shows indirectly through them. The most commonly held view is ESG is completely independent of investment factors (41%).

This partly explains the earlier finding that active investing is seen as potentially more compatible with ESG. Investors who are currently unsure whether ESG should be defined as a factor that can be targeted with a quantitative approach are also likely to be undecided on whether an active or a factor approach is better suited to integrate it.



To what extent do you view ESG as an investment factor? Sample size: 239



~

I think the way we describe ESG is more as an overlay in the context of factors rather than as a factor itself. You can apply ESG to any factor or any portfolio.

APAC-based wholesale investor



We have doubts that ESG is an investment factor, but it is an open question for future research. The metrics don't have a long track record and the empirical evidence is inconclusive.

APAC-based wholesale investor

ESG found to cause factor tilts, but concern is divided among investors and not all look to mitigate

Around two-fifths of investors (45% institutional and 37% wholesale) have investigated whether ESG is creating a factor bias in their portfolio (Figure 1.8). Those who have performed this analysis generally found ESG had created a bias and were attempting to mitigate this, often identifying that ESG had led to higher than intended weightings to quality over value. This was articulated by one European institutional investor: "We found a positive bias towards quality in our equity portfolio, and we have attempted to manage this through other parts of the portfolio."

When asked about unintended biases in an ESG portfolio, we found an interesting contradiction. Most (65%) who analysed their portfolio for factor biases in ESG found them and 78% of the respondents are concerned enough to mitigate the biases (Figure 1.8). The majority (59%) have not looked for factor biases and don't seem concerned (Figure 1.9).

Investors who have not conducted this analysis often cited a lack of concern, with some investors feeling acceptance of some degree of bias was necessary for the adoption of ESG. However, this does mean many investors may be unaware of how the incorporation of ESG affects their factor exposures and ultimately the return profile of the portfolio. Only one of these conflicting views is likely to be proven correct over time – how this plays out is yet to be determined.

"

It is not easy to explain factors to retail advisers. ESG is a wild west currently – everyone has their own way of applying it and this lack of standardisation adds to the complication.

North American wholesale investor

Unmet demand for ETFs that combine ESG and factors

Nearly half of investors say they would be more likely to invest in a factor ETF if it incorporated ESG (Figure 1.10). Respondents suggest such ETFs are difficult to source however, particularly for certain factors like value. Generally, the intersection of ESG and factor investing was seen to not yet yield a wide enough supply of ETF products, and 49% of asset owners agreed they sometimes struggle to find the right factor ETF to suit their needs.

While a quantitative approach to ESG was seen as highly desirable, the introduction of ESG into factor ETFs was also seen as creating additional complexity that could be challenging to explain to stakeholders (Figure 1.10).



Have you performed an analysis to see if incorporating ESG in your portfolio leads to bias towards certain factors? [If yes] Did you find a factor bias? [If yes] Have you attempted to manage or moderate those biases? Sample size: 226



[If have not performed analysis to see if incorporating ESG in your portfolio leads to bias towards certain factors] Why not? Sample size: 123

Do you agree or disagree with the following statements? Sample size: 171



The rise of factor investing in fixed income continues



Investors believe fixed income factor strategies are on par with active in targeting investment factors, but behind active in targeting macro factors. Fixed income factor allocations rise year on year, with investors incorporating both macro and investment factors, aiming for performance in a low yield market environment.



Respondents noted challenges related to a lack of product and technology. Use of fixed income factor ETFs is muted in comparison with equities. In last year's report, we found an almost universal belief that factor investing can be extended to fixed income. One year further on, significantly higher adoption has followed - 55% of investors are now using factors in fixed income, up from 40% in last year's study (Figure 2.1). For the majority (52%), factor investing in fixed income includes the use of both investment factors (such as value/quality) and macro factors (such as duration/inflation). However, 23% are only using investment factors and a quarter look at factors solely through a macro lens (Figure 2.2).

Investors adopting a systematic approach to their fixed income portfolios initially prioritised traditional drivers of return, such as duration and credit, before incorporating style factors such as value. A European wholesale investor explained: "Incorporating both macro and investment factors within fixed income helps us understand the drivers of performance." This variation in how factors in fixed income are defined and used partly explains why global assets allocated to fixed income factor funds lag reported levels of usage.

One year further on, significantly higher adoption has followed -55% of investors are now using factors in fixed income, up from 40% in last year's study.

66



Institutional

Total

2021

2020

32

47

Wholesale

Figure 2.3 illustrates factor investors are incorporating multiple investment factors within their portfolios, with value and quality preferred. However, terminology for factor strategies within fixed income is not yet well defined. For example, definitions of value (focused on low priced securities) often overlap with yield/carry and definitions for low volatility overlap with quality.

When looking at macro factors targeted, duration, liquidity, inflation, and credit risk are most cited (Figure 2.4). Duration was widely acknowledged as the most important driver of fixed income returns overall, while liquidity has been brought to the fore throughout the pandemic. Inflationary pressures are also front of mind for many, given the introduction of large fiscal packages in response to the pandemic and expectations of a possible post-pandemic consumer splurge.

Low yields support a factor approach

A significant reduction in yields since the onset of the COVID-19 pandemic has created additional challenges for fixed income investors in terms of both generating returns and hedging risk. Notably, investors believe this environment has made the case for using factors within their fixed income portfolios more attractive, offering an opportunity for uncovering untapped sources of return potential and additional diversification (Figure 2.5).

The yield spread has been compressed, and when looking at the market information it is difficult to understand what is meaningful. However, incorporating factors within our fixed income strategies has helped us find a way to navigate through this period.

66

North American institutional investor



How has the current market environment (very low interest rates with expectations of significant future increases) impacted the attractiveness of factor investing in fixed income? Sample size: 180

Factor investing overall is perceived as being largely on par with fundamental active management for exploiting investment factors. Factor investing is seen as having an edge for capturing risk premiums, while active management is favoured where behavioural biases are considered alpha drivers (Figure 2.6). One North American institutional investor explained: "Active managers, on the whole, have shorter investment horizons and so can react more quickly to market trends that are driven by behavioural rationales."

Active management is still seen as having an edge when looking at macro factors (Figure 2.7). While factor products are reviewed and potentially reweighted on a regular schedule, an active manager is seen as being able to react faster to black swan events or individual changes in securities. This was captured by a European institutional investor who suggested "an active manager can react immediately and so has the advantage in some scenarios." This result helps explain continued high allocations to active management in the fixed income asset class. Quantitative solutions that fully harness the power of both investment factors and macro factors are still uncommon.

When prioritising a factor approach over a passive approach in fixed income, investors point to the higher levels of control and the diversification of the sources of risk and return potential, whilst also noting transparency benefits (Figure 2.8). This has been further supported by the low yield environment with investors highlighting the ability to create a more balanced fixed income portfolio. "In a low vield environment it is even more important to diversify sources of risk and maximise returns by targeting different factor exposures" said one institutional investor based in APAC.





How important are the following in choosing a factor approach in fixed income (i.e. in comparison with a passive market index approach)? Sample size: 165

Active

Factor

7.0

Credit/default risk

7.3

ETF use lags

Despite increasing use, barriers to successful factor implementation in fixed income portfolios remain. For wholesale investors the limited availability of product is seen as the largest challenge, while for institutional investors data and technology shortcomings are more notable (Figure 2.9). "We try to use a factor lens but fixed income data is hard to get, and we lack the tools to measure it appropriately. We therefore look at returns (via regressions) not holdings to ascertain our factor exposures, so it is not as accurate as in equities," said a North American institutional investor.

Product availability challenges are neatly encapsulated within Figure 2.10, which indicates the difference in ETF take-up in equity and fixed income allocations. Equity factor portfolios are more likely to be invested via ETFs than the overall equity portfolio (26% vs 20%). However, the reverse is true for fixed income (11% vs 18%). This emphasises how product barriers are both a challenge for fixed income factor allocations and are also limiting fixed income factor ETF takeup. As one North American wholesale investor said, "we like fixed income factor ETF allocations conceptually: but the issues are that the liquidity and AUM for these products are still in their infancy."





What are the challenges of implementing factor investing in fixed income? Sample size: 183

Figure 2.10 ETF usage within portfolios vs factor allocations, by asset class, % citations Equity 20 Overall Portfolio 26 Factor allocation **Fixed Income** Overall Portfolio

What percentage of your equity portfolio and your fixed income portfolio is invested via ETFs? What percentage of your factor allocation within equities and fixed income is invested via ETFs? Sample size: 146

Factor allocation



Investors use multi-factor approaches and manage exposures more actively



Almost half of factor investors make long-term strategic adjustments to exposures, while 30% make short-run tactical adjustments.



Dynamism looks set to accelerate: 29% of investors say their approach in has become more dynamic over the past two years, while 41% expect to become more dynamic over the next two years.

Despite sophisticated implementation of analytics among some factor investors, there is appetite for better tools for monitoring exposures and attributing performance. Use of factor ETFs is accelerating rapidly, driven by the broad range of use-cases including tactical allocations as portfolio completion tools. Since this report's inception, we have seen a rapid advance in the sophistication of factor users. This has included rising use of multi-factor strategies. Investors have sought exposure to a greater range of factors over the past three years, with value, quality, and low volatility now the most prevalent (Figure 3.1).

The rapid uptake of multi-factor approaches has also seen factor investing become more dynamic. Only 22% of factor investors look to keep factor exposures completely fixed, while around half opt for an approach allowing for variation in exposures over the long run (for example making longterm strategic adjustments to exposures based on expected performance at different points in the economic cycle). A third of respondents look to change their exposures more regularly (for example to take advantage of mispricing opportunities) (Figure 3.2). Notably, European investors favour the ability to vary their exposures, with only 5% of respondents in this region saying that they prefer to keep exposures static.

Investors continue to take varying approaches in how they adjust their factor exposures in response to market conditions. According to one APAC-based wholesale investor, "Now we are in early stages of an expansionary period, so have tilted towards value. Over the last five years we had a strong bias to growth." However, while this approach is becoming much more common, dissenters remain, such as this Europe-based institutional investor: "Our approach is led entirely by the empirical evidence. We never try and time it as we don't believe it is possible to do it consistently."

Factor timing is a crucial aspect of our factor strategy, and we make long-term strategic adjustments based on the expected performance of factors at different points in the economic cycle. European wholesale investor

66



What investment factors do you explicitly seek / have exposure to within your portfolio (or client portfolios)? Sample size: 2016 = 56, 2017 = 98, 2018 = 260, 2019 = 236, 2020 = 237, 2021 = 232



Do you generally opt for multi-factor strategies that are static or dynamic? Sample size: 179

This approach means investors are now often dealing with a set of competing priorities when managing their factor portfolios, looking to weight towards preferred factors while at the same time balancing the characteristics of the overall portfolio (Figure 3.3). This challenge was articulated by one North American-based institutional investor: "We weight towards preferred factors but also look to manage our overall portfolio exposures, so we are using enhanced analytics to make sure everything lines up and we are not in danger of duplicating holdings unnecessarily."

For most, a dynamic approach also includes at least a semi-regular assessment of which factors to add or remove, with a change in forward risk/return expectations the most important driver for any changes (Figures 3.4 and 3.5). In practice, investors said that it was rare for them to completely stop targeting a factor once it had gone through a rigorous approval process, with a reduction in weighting a more likely outcome. In contrast, the addition of new factors was fairly common, based both on performance and the publication of additional research.







How often do you review which factors you should be targeting? Sample size: 219



This dynamic approach to the implementation of factor strategies is likely to accelerate – 29% of investors say their approach has become more dynamic over the past two years, and 41% expect to become more dynamic over the next two years (Figure 3.6). When factor definitions are changed, this is usually to incorporate the latest research or new data sources in an effort to better capture the factors being targeted (Figures 3.7 and 3.8).



We primarily depend on two factors, quality and value, and we regularly update our factor definitions to reflect the most recent data and avoid market traps.

66





Macro trends influence factor applicability

In this year's study, we found widespread belief that the applicability of factors can change due to macro or industry trends (Figure 3.9). The rise of technology and globalisation are already having an impact, while climate change is expected to be a significant influence going forwards (3.10). "We are currently looking at how anti-globalisation/protectionism might impact on the performance of certain factors," revealed a European institutional investor. "Central bank liquidity is driving distortions in equity markets and impacting the value factor," suggested another APAC-based wholesaler. Many investors make adjustments to accommodate these changes, with an adjustment to factor weightings the most common, but with investors sometimes also making changes to factor definitions (Figure 3.11).

Figure 3.9	Yes
Belief that applicability of different factors changes	No
over time, % citations	





Do you think the applicability of different factors changes due to changes over time (i.e. due to changes in society/industry/the underlying economy)? Sample size: 217

Which of the following do you think has already impacted the applicability of different factors? Which do you think might impact the applicability of different factors in the future? Sample size: 170



[If believe in changing applicability of factors] What modifications have you made to your factor strategy because of this? Sample size: 166

As factor use extends across portfolios, demand for tools increases

Most investors believe by now that they have a clear view of factor exposures in their equity portfolios. In contrast, factors are seen as more opaque in other asset classes (Figure 3.12). Highly experienced investors are more likely to deploy complex factor analytics across a range of uses, including performance attribution, monitoring, and allocations (Figure 3.13). "We use a machinelearning tool in our factor strategy which feeds directly into our allocations as we use dynamic factor timing strategies to change the weight of different factors, meaning that excess returns are maximised, and portfolio risk is minimised," revealed a European institutional investor.

Figure 3.12 Disagree Have clear view of factor Neutral Agree exposures, % citations 24 23 39 37 68 39 39 All assets Equity Fixed income portfolio portfolio

We have a clear view of our factor exposures across our entire equity portfolio/fixed income portfolio/across all our assets (including private markets) Sample size: 238



In which areas do use currently use factor tools/analytics? Sample size: 171



In which areas would you like to see more factor tools/analytics from external asset managers? Sample size: 143

Wide range of use cases drives uptake of factor ETFs

We found continued momentum this year around factor ETFs. These vehicles are now an important tool for implementing factor strategies among both wholesale and institutional investors.

For some, ETFs act as the cornerstone of an entire strategy. Others use them tactically or as portfolio completion tools. This wide range of use cases explains why institutional use of factor ETFs is accelerating rapidly, with 46% planning an increase in ETF use over the next three years, up from 31% over the past three years (Figure 3.15).

As investors have such a wide range of use cases, they employ a broad range of criteria in their selection decisions. For tactical traders or investors seeking to offset exposures in other parts of the portfolio, factor intensity is often a key consideration and indeed it was found to be crucial for three in five respondents (Figure 3.16).

For other investors, such as those looking to tilt towards preferred factors as part of a modified market-weighted strategy, returns relative to a benchmark (and associated levels of tracking error) is a more important criteria. This was found to be particularly true among a subset of wholesale investors, and was best articulated by one such investor based in Europe: "We use a sector neutral value ETF as we didn't want to take sector bets, just flatten our factor risk. When making the decision we look at performance as well as tracking error and we were pleasantly surprised that this product was available as there are certain sectors that we didn't want to buy at the top."



"

We take an active approach to our factor portfolio and use ETFs as an easy way to execute tactical opportunities.

Europe-based institutional investor

As a proportion of your factor portfolio, how has your allocation to ETFs changed over the last 3 years? As a proportion of your factor portfolio, how do you expect your allocation to ETFs to change over the next 3 years? Sample size: 167



When selecting a factor ETF, which of the following are most important in your assessment of an ETFs credentials? Sample size: 151

Theme 4

Factor allocations rise as post-pandemic recovery attracts investors to value



Factor allocations are continuing to rise, with 43% of respondents increasing allocations over the past year and 35% planning an increase in the next year, compared with just 8% planning a decrease.



This has been partly driven by increased allocations to value, as well as broader adoption of factors across portfolios.

The economic fallout from the COVID-19 pandemic has presented a range of challenges to investors, including high levels of volatility and record low yields. These challenges have also provided a test for factor approaches, with the ability to better control sources of risk and the possibility of increased returns being key drivers of adoption (Figure 4.1). On both of these criteria, the majority of investors say their expectations have been either met or exceeded (Figure 4.2), and indeed 40% of respondents say the pandemic has increased the appeal of a factor approach, while only 19% say the opposite (Figure 4.3).

With interviews for this study conducted in April and May 2021, respondents were asked to judge the performance of their factor allocations in the year to March 2021. 62% of respondents reported performance in line with or ahead of their marketweighted allocations (Figure 4.4). This is a period in which equity market performance was very strong, first paring back pandemic-induced losses and then going on to new record highs. It was also a period that saw strong shifts in the relative performance of different factors.

The ability of factor allocations to keep pace in such an environment was seen by investors as important for imbuing long-term confidence in their factor approach. This was articulated by one APAC-based institutional investor: "We have been pleased with performance. Factors have helped in controlling costs and volatility, and also helped in understanding what is driving performance during a volatile year".

Figure 4.1 Objectives for investing in factor strategies, % citations



84

48



37



Which of the following objectives are important to you in investing in factor strategies? Sample size: 234



Institutional

Wholesale

How have your factor strategies performed in terms of return relative to traditional active / market-weighted strategies over the past 12 months? Sample size: 206

22

Value

The value factor was a notable outperformer in the latter part of 2020, and this outperformance continued into the first quarter of 2021 (Figure 4.5). This rewarded investors who had kept faith in a factor that had experienced a challenging period, and was also taken advantage of by investors increasing allocations in response to the economic environment.

We noted rising allocations to value in last year's report, driven by attractive valuations by historical standards and a sense that a change in performance was likely, and it continued again this year. Some 42% of investors increased their allocation to the value factor in the previous 12 months, while 48% agreed that they were increasing their allocation to value in preparation for a post-pandemic recovery (Figures 4.6 and 4.7).

The rationale behind this move into value has shifted slightly. In 2020, there was a belief the pandemic effect was likely to be temporary. This was coupled with an overall conviction in the value factor despite a period of underperformance. While the latter justification remains important, this year investors also pointed to the recent value rally as a driver. "The value factor is performing now, so we've introduced it for the first time, and this has contributed to our higher factor allocation generally," revealed one European wholesale investor.



Figure 4.5

Factor Index performance (% return) to March 2021 (12 month, 3 month)



Source: MSCI. Indexes: ACWI, ACWI Enhanced Value, ACWI Momentum, ACWI Quality, ACWI Small Cap, ACWI Minimum Volatility (USD), ACWI High Dividend Yield. All in Gross USD Past performance is not a guarantee of future results.



Figure 4.7	Agree
Agreement with statement:	Neutral
"We are increasing our allocation to the value	Disagree
factor in preparation for the post-pandemic	
receiver," 9/ citations	





Over the last 12 months, have you increased, decreased or maintained your allocations to these factors? Sample size: 211

Do you agree with the following statement: We are increasing our allocation to the value factor in preparation for the post-pandemic recovery? Sample size: 233

Factor allocations continue to rise alongside expectations

Increased allocations to value partly account for rising factor allocations overall, with 43% of respondents increasing allocations over the past year and 35% planning an increase in the next year (Figure 4.8). At the same time, rising allocations reflect broader adoption of factors in the portfolio, including across additional asset classes (and in particular fixed income discussed in Theme 2). Meanwhile, a significant proportion of investors took advantage of lower equity prices in the earlier parts of the year to increase factor exposures via new money (Figure 4.9). "We increased our factor allocations in 2020 - stocks were down at that time so it was the right time to invest," said an institutional investor based in North America.

The post-pandemic period has presented challenges to factor investors and tested some of the assumptions around the benefits of a factor approach. On the whole, investors report that objectives for adopting a factor approach have been met or exceeded, and indeed the pandemic has increased the appeal of factor investing for many. As a result, allocations to factor strategies look set to continue rising. As discussed earlier in this study, the nature of factor investing is not standing still, with investors steadily moving towards more sophisticated multi-factor approaches across asset classes. As this approach evolves, investors are increasingly considering factors in the context of the whole portfolio, rather than in select sleeves or asset classes.



Over the last 12 months, have you increased, decreased or maintained your factor allocations (ignoring market movements)? Over the next 12 months, how do you plan to change your factor allocations (ignoring market movements)? Sample size: 210



Where would you fund the allocation from? Sample size: 101

Sample and methodology

The fieldwork for this study was conducted by NMG's strategy consulting practice. Invesco chose to engage a specialist independent firm to ensure high-quality objective results. Key components of the methodology include:





A focus on the key decision makers, conducting interviews using experienced consultants and offering market insights.

In-depth (typically one hour) faceto-face interviews using a structured strategy team with relevant questionnaire to ensure quantitative as well as qualitative analytics were collected.



Results interpreted by NMG's consulting experience in the global asset management sector.

Figure 5.1 Assets under management by segment (\$ trillion, as of 31 March 2021)



In 2021, the sixth year of the study, we conducted interviews with 241 different pension funds, insurers, sovereign investors, asset consultants, wealth managers and private banks globally. Together these investors are responsible for managing \$31.1 trillion in assets (as of 31 March 2021).

In this year's study, all respondents were 'factor users', defined as any respondent investing in a factor product across their entire portfolio and/or using factors to monitor exposures. We deliberately targeted a mix of investor profiles across multiple markets, with a preference for larger and more experienced factor users. The breakdown of the 2021 interview sample by investor segment and geographic region is displayed in Figures 5.1, 5.2 and 5.3.

Institutional investors are defined as pension funds (both defined benefit and defined contribution), sovereign wealth funds, insurers, endowments and foundations.

Wholesale investors are defined as discretionary managers or model portfolio constructors for pools of aggregated retail investor assets, including discretionary investment teams and fund selectors at private banks and financial advice providers, as well as discretionary fund managers serving those intermediaries.





Invesco is not affiliated with NMG Consulting.

Risk warnings

The value of investments and any income will fluctuate (this may partly be the result of exchange rate fluctuations) and investors may not get back the full amount invested.

Factor investing (as known as smart beta or active quant) is an investment strategy in which securities are chosen based on certain characteristics and attributes that may explain differences in returns. Factor investing represents an alternative and selection index-based methodology that seeks to outperform a benchmark or reduce portfolio risk, both in active or passive vehicles. There can be no assurance that performance will be enhanced or risk will be reduced for strategies that seek to provide exposure to certain factors. Exposure to such investment factors may detract from performance in some market environments, perhaps for extended periods. Factor investing may underperform cap-weighted benchmarks and increase portfolio risk. There is no assurance that the investment strategies discussed in this material will achieve their investment objectives.

Interest rate risk refers to the risk that bond prices generally fall as interest rates rise and vice versa. An issuer may be unable to meet interest and/or principal payments, thereby causing its instruments to decrease in value and lowering the issuer's credit rating.

In general, stock values fluctuate, sometimes widely, in response to activities specific to the company as well as general market, economic and political conditions.

There are risks involved with investing in ETFs, including possible loss of money. Index-based ETFs are not actively managed. Actively managed ETFs do not necessarily seek to replicate the performance of a specified index. Both index-based and actively managed ETFs are subject to risks similar to stocks, including those related to short selling and margin maintenance.

The use of environmental, social and governance factors to exclude certain investments for non-financial reasons may limit market opportunities available to funds not using these criteria. Further, information used to evaluate environmental, social and governance factors may not be readily available, complete or accurate, which could negatively impact the ability to apply environmental, social and governance standards.

Important information

This presentation is for Professional Clients and Financial Advisers in Continental Europe (as defined below); for Qualified Clients/Sophisticated Investors in Israel; for Professional Clients in Dubai, Guernsey, Jersey, Ireland, Isle of Man and the UK: for Institutional Investors only in the United States: for Sophisticated or Professional Investors in Australia: in New Zealand for wholesale investors (as defined in the Financial Markets Conduct Act): for Professional Investors in Hong Kong: for Qualified Institutional Investors in Japan; in Taiwan for certain specific Qualified Institutions/Sophisticated Investors; in Singapore for Institutional/ Accredited Investors: for Qualified Institutional Investors and/or certain specific institutional investors in Thailand: for certain specific sovereign wealth funds and/or Qualified Domestic Institutional Investors approved by local regulators only in the People's Republic of China; for Qualified Professional Investors in Korea; for certain specific institutional investors in Brunei: for certain specific institutional investors in Malaysia upon request: for certain specific institutional investors in Indonesia and for qualified buyers in Philippines; in Canada, this document is restricted to Accredited Investors as defined under National Instrument 45-106. It is not intended for and should not be distributed to, or relied upon by, the public or retail investors. Please do not redistribute this document. By accepting this material, you consent to communicate with us in English, unless you inform us otherwise.

This document is marketing material and is not intended as a recommendation to invest in any particular asset class, security or strategy. Regulatory requirements that require impartiality of investment/ investment strategy recommendations are therefore not applicable nor are any prohibitions to trade before publication. The information provided is for illustrative purposes only, it should not be relied upon as recommendations to buy or sell securities. All material presented is compiled from sources believed to be reliable and current, but accuracy cannot be guaranteed. This is not to be construed as an offer to buy or sell any financial instruments and should not be relied upon as the sole factor in an investment making decision. As with all investments there are associated inherent risks. This should not be considered a recommendation to purchase any investment product. This does not constitute a recommendation of any investment strategy for a particular investor. Investors should consult a financial professional before making any investment decisions if they are uncertain whether an investment is suitable for them. Please obtain and review all financial material carefully before investing. Past performance is not indicative of future results. The opinions expressed are those of the author, are based on current market conditions and are subject to change without notice. These opinions may differ from those of other Invesco investment professionals. Where individuals or the business have expressed opinions, they are based on current market conditions, they may differ from those of other investment professionals, they are subject to change without notice and not to be construed as investment advice.

These materials may contain statements that are not purely historical in nature but are "forward-looking statements." These include, among other things, projections, forecasts, estimates of income, yield or return or future performance targets. These forward-looking statements are based upon certain assumptions, some of which are described herein. Actual events are difficult to predict and may substantially differ from those assumed. All forward-looking statements included herein are based on information available on the date hereof and Invesco assumes no duty to update any forward-looking statement. Accordingly, there can be no assurance that estimated returns or projections can be realized, that forward-looking statements will materialize or that actual returns or results will not be materially lower than those presented.

For the distribution of this document, Continental Europe is defined as Austria, Belgium, Bulgaria, Croatia, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Italy, Kosovo, Liechtenstein, Luxembourg, The Netherlands, North Macedonia, Norway, Romania, Portugal, Spain, Sweden, and Switzerland.

A Invesco

Issuing Companies

Issued by Invesco Management S.A., President Building, 37A Avenue JF Kennedy, L-1855 Luxembourg, regulated by the Commission de Surveillance, du Secteur Financier, Luxembourg; Invesco Asset Management, (Schweiz) AG, Talacker 34, 8001 Zurich, Switzerland; Invesco Asset Management Limited, Perpetual Park, Perpetual Park Drive, Henleyon-Thames, Oxfordshire RG9 1HH, UK. Authorised and regulated by the Financial Conduct Authority; Invesco Asset Management Deutschland GmbH, An der Welle 5, 60322 Frankfurt am Main, Germany; Invesco Asset Management Limited, PO Box 506599, DIFC Precinct Building No 4, Level 3, Office 305, Dubai, United Arab Emirates. Regulated by the Dubai Financial Services Authority.

Israel: This document may not be reproduced or used for any other purpose, nor be furnished to any other person other than those to whom copies have been sent. Nothing in this document should be considered investment advice or investment marketing as defined in the Regulation of Investment Advice, Investment Marketing and Portfolio Management Law, 1995 ("the Investment Advice Law"). Investors are encouraged to seek competent investment advice from a locally licensed investment advisor prior to making any investment. Neither Invesco Ltd. nor its subsidiaries are licensed under the Investment Advice Law, nor does it carry the insurance as required of a licensee thereunder.

Australia: This document has been prepared only for those persons to whom Invesco has provided it. It should not be relied upon by anyone else. Information contained in this document may not have been prepared or tailored for an Australian audience and does not constitute an offer of a financial product in Australia. You may only reproduce, circulate and use this document (or any part of it) with the consent of Invesco. The information in this document has been prepared without taking into account any investor's investment objectives, financial situation or particular needs. Before acting on the information the investor should consider its appropriateness having regard to their investment objectives, financial situation and needs.

You should note that this information:

- may contain references to dollar amounts which are not Australian dollars;
- may contain financial information which is not prepared in accordance with Australian law or practices;
- may not address risks associated with investment in foreign currency denominated investments; and
- does not address Australian tax issues.

New Zealand: This document is issued only to wholesale investors (as defined in the Financial Markets Conduct Act) in New Zealand to whom disclosure is not required under Part 3 of the Financial Markets Conduct Act. This document has been prepared only for those persons to whom it has been provided by Invesco. It should not be relied upon by anyone else and must not be distributed to members of the public in New Zealand. Information contained in this document may not have been prepared or tailored for a New Zealand audience. You may only reproduce, circulate and use this document (or any part of it) with the consent of Invesco. This document does not constitute and should not be construed as an offer of, invitation or proposal to make an offer for, recommendation to apply for, an opinion or guidance on Interests to members of the public in New Zealand. Applications or any requests for information from persons who are members of the public in New Zealand will not be accepted. Applications or any requests for information from persons who are members of the public in New Zealand will not be accepted.

- Issued in Australia and New Zealand by Invesco Australia Limited (ABN 48 001 693 232), Level 26, 333 Collins Street, Melbourne, Victoria, 3000, Australia which holds an Australian Financial Services Licence number 239916
- Issued in Taiwan by Invesco Taiwan Limited, 22F, No.1, Songzhi Road, Taipei 11047, Taiwan (0800-045-066). Invesco Taiwan Limited is operated and managed independently.
- Issued in Hong Kong by Invesco Hong Kong Limited 景順投資管理有限公司, 41/F, Champion Tower, Three Garden Road, Central, Hong Kong.
- Issued in Singapore by Invesco Asset Management Singapore Ltd, 9 Raffles Place, #18-01 Republic Plaza, Singapore 048619.
- Issued in Japan by Invesco Asset Management (Japan) Limited, Roppongi Hills Mori Tower 14F, 6-10-1 Roppongi, Minato-ku, Tokyo 106-6114; Registration Number: The Director-General of Kanto Local Finance Bureau (*Kin-sho*) 306; Member of the Investment Trusts Association, Japan and the Japan Investment Advisers Association.
- Issued in Canada by Invesco Canada Ltd., 120 Bloor Street East, Suite 700, Toronto, Ontario M4W 1B7.
- Issued in the US by Invesco Advisers, Inc., Two Peachtree Pointe, 1555 Peachtree Street, N.E., Suite 1800, Atlanta, GA 30309.