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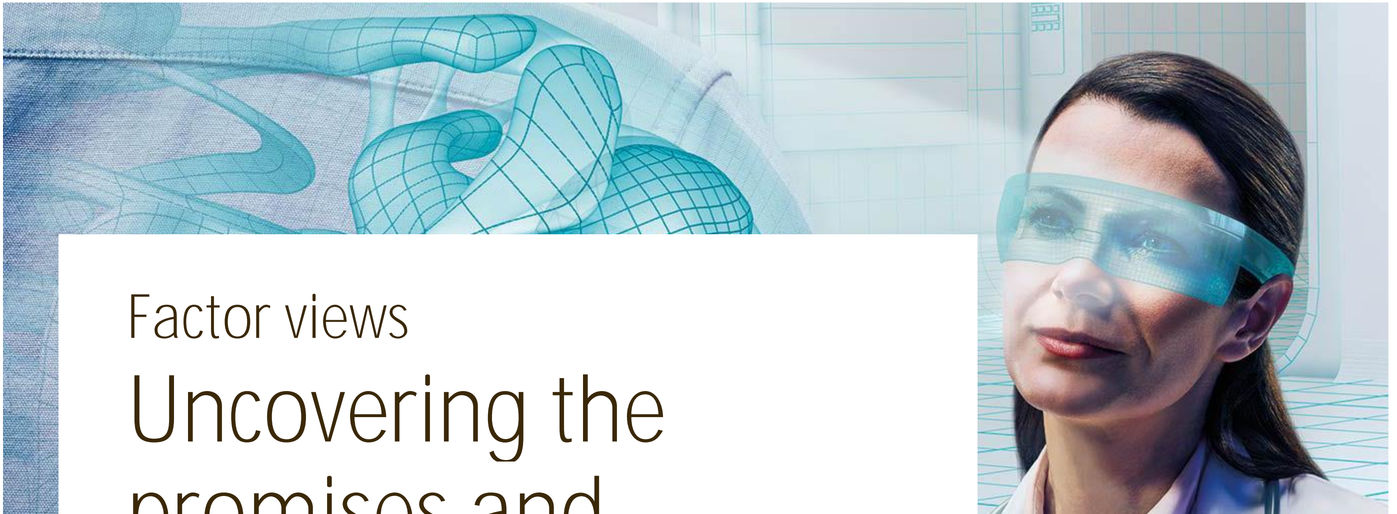

Factor views

Uncovering the promises and challenges of factor investing

- Two Allianz GI and Robeco experts exchange views on factor investing
- They address key issues, such as recent performance, capacity and costs
- They also discuss rising demand for sustainability integration

After years of rapid commercial success, the move towards factor investing seems to be pausing for breath. Will the factor investing adoption trend persist? What should investors really expect from this kind of approach? What makes a factor strategy efficient? How can that be measured? To what extent is factor investing compatible with the sustainability tide that is currently reshaping the asset management landscape?

In this joint interview, Benedikt Henne, from Allianz Global Investors, and Robeco's Joop Huij discuss these pressing issues and provide some insights on what could be on the horizon for factor investing.

On the coming of age of factor investing

After several years of rapid adoption, factor investing seems to be going through a rougher patch at the moment. How do you explain that? Is the tide reversing?

Benedikt Henne: "I would put your question into a long-term perspective. The earliest factor-based investments were made decades ago in the US, mostly in value and high dividend strategies. Later on, came minimum

Interview
For professional investors
October 2019

Benedikt Henne & Joop Huij
Allianz GI & Robeco

volatility and minimum variance investing. These strategies played a crucial role in the rise of factor investing in Europe."

"But, in a way, many of these products were oversold at the time. Clients were told that minimum volatility would enable much higher returns at lower levels of risk than the market index. But they were not told that, far from being a core investment, these are actually low beta products that come with all kinds of macroeconomic sensitivities that might be unintended or might be unknown to the investor."

"Logically, some of these early adopters have been disappointed. This is particularly the case for those who focused their investments on just one, two or three smart beta ETFs, high dividend and minimum volatility. The long-term performance of these products, over the last ten years or so, has actually been a little bit disappointing and more volatile than expected."

"The real breakthrough of factor investing only occurred a few years ago, when investors started to become interested in multi-factor investing. This move was driven by large institutional investors, who were struggling to find enough successful high-conviction stock pickers to take all the liquidity they needed to invest. That's because high-conviction managers tend to be capacity constrained."

"Large institutions such as sovereign wealth funds and large pension funds were very much interested in high-capacity strategies such as factor investing, as these enabled them to get away from the benchmark. Moreover, when they looked at their overall portfolio, adding up all their high-conviction portfolios, they often discovered that the aggregate positions were actually quite close to the index. Getting active exposure was a tremendous challenge for these large institutional investors."

'Even if we go through a disappointing period, the relative performance of portfolios will remain driven by factors'

"But they did their homework and analyzed their portfolios, and found that they had implicit factor exposures and tended to be 'underdiversified'. They concluded, therefore, that they should be actively managing these exposures. This is why, contrary to what we've seen with single-factor smart beta investing, this move towards multi-factor investing will continue."

"Even if we go through a disappointing period, the relative performance of portfolios will remain driven by factors. For large institutions, this means there is no escape from factors and, therefore, from factor investing – either implicitly or explicitly. First, because allocating to high-conviction 'alpha' managers is not an option, as their capacity is just too limited. Second, because the factors will inevitably come back at them at the aggregate portfolio level."

Benedikt Henne

Benedikt Henne is Co-CIO Systematic Equity with Allianz Global Investors, which he joined in 1998. He is based in Frankfurt am Main. As the co-chief investment officer of the Systematic Equity team, he oversees more than USD 45 billion in assets under management. He previously managed equity-enhanced products for the firm. Benedikt Henne has a master's degree in mathematics from the University Pierre et Marie Curie in France, and a PhD in mathematics from the University of Bonn in Germany. He also is a CFA charterholder.

Joop Huij: "Another very important aspect I'd like to mention is that most of the rougher patch has had to do with the poor performance of value strategies in developed markets. Value is one of best-known and most vastly documented factors. Empirical studies point to a large long-term premium for value stocks."

"But what we have seen over the past couple of years or so has been a very strong outperformance by growth stocks instead. Naturally, this streak of poor performance was not anticipated by most active asset managers. But, from a historical perspective, it is not really surprising. We've seen similar periods of growth-stock outperformance in times of benign economic and monetary conditions."

"This was the case a century ago in the aftermath of the Great Depression in the 1930s and right after World War II. This was also the case during the tech bubble of the 1990s. So, we have seen similar situations in the past and I would not consider the recent underperformance as a black swan for value investing."

"The only unusual thing this time is that we are in a fairly late phase of the economic and market cycles compared to previous episodes of poor value performance. This is perhaps the most surprising element."

"To follow up on one of the points Benedikt Henne raised, I also think the disappointment of some investors has been caused by the fact that early adopters often focused on single-factor, rather than multi-factor investing. As it is so well documented and so intuitive, value has logically been a favorite among investors. And those who embraced this as a single-factor approach some years ago have been suffering over the past years."

"Meanwhile, multi-factor investing has only gained in popularity over the past four or five years. And those investors who chose to diversify their exposures across multiple factors such as low volatility, quality, and momentum have been able to weather the recent underperformance of the value factor much better."

To a large extent, the rise of factor investing has been driven by flows into smart beta ETFs, which became extremely popular among retail investors. Many of these investors now also seem to be affected by recent disappointing performance. Can institutional investors be considered more enduring in terms of their factor allocation?

Joop Huij: "This is a very interesting question that relates to the topic of 'performance-chasing behavior', a phenomenon that has also been discussed extensively in the academic literature. Undoubtedly, the evidence shows that investors tend to chase performance. In short, they take money from investment strategies that recently underperformed and put money into strategies that have done really well, instead."

"So, the big question is whether that is a smart thing to do. And the empirical evidence suggests that the answer is clearly no. In a paper[1] I co-authored with Georgi Kyosev and Eduard van Gelderen – former chief executive at Dutch APG and now CIO at the Canadian Public Sector Pension Investment Board – which was recently published in The Journal of Portfolio Management, we looked at the extent to which factor investors also tend to chase performance."

"What we found was that most investors do. For example, if the value factor performs poorly for some time, they will tend to withdraw money from value strategies and invest it in momentum strategies that may be doing better at a given point in time. Most importantly, we found that this has a very negative impact on performance."

"The negative impact is so large that even when investors invest in a strategy that generates long-run outperformance after costs, they lose out on all this outperformance because of their performance-chasing behavior. In other words, investors make poor timing decisions."

"In this study, we also tested whether there are any fundamental differences between institutional and retail investors in terms of performance-chasing tendency. And the fact is that, despite some anecdotal evidence pointing to a more pronounced herding behavior for individuals relative to large institutions, we could not find any significant difference between these two types of investors."

"Other empirical studies[2] have shown that institutions are prone to performance-chasing. So, while retail investors may be more prone to fad and disappointment at first sight, empirical evidence shows that institutions tend to do the same."

Joop Huij

Joop Huij is Head of Factor Investing Equities and Head of Factor Index Research at Robeco, based in Rotterdam. As head of both teams, he coordinates portfolio management, factor index research and development of customized factor investing solutions. Joop Huij also holds a part-time position as Associate Professor (with tenure) of Finance at the Rotterdam School of Management. Joop Huij started his career as a researcher in 2007. He holds a PhD in Finance from the Rotterdam School of Management and a Master's degree in Informatics and Economics (cum laude) from Erasmus University Rotterdam.

Benedikt Henne: "From a practical perspective, I think the big difference between large institutions and, say, investors with less resources is that the former have their

[1] Van Gelderen, E., Huij, J. and Kyosev, G., 2019, 'Factor investing from concept to implementation', The Journal of Portfolio Management.
[2] See, for example, Dichev, I. D. and Gwen Y., 2011. 'Higher risk, lower returns: what hedge fund investors really earn', Journal of Financial Economics. See also Hsu, J., Myers, B. W. and Whitby, R., 2015. 'Timing poorly: a guide to generating poor returns while investing in successful strategies', The Journal of Portfolio Management.

own analytics people, who look at factor exposures. As a result, they tend to be less surprised when factors perform poorly. They've seen the data and they know this has happened in the past."

"Institutional investors also know that it is very difficult to escape factors. They know that when they look at their aggregate portfolios, they always end up seeing the factors. This is something they want to monitor and manage, which is why even those who have been recently disappointed are not really considering other factors – nor giving up entirely on factor investing."

"Clients are not necessarily asking for new factors, or better factors, or better factor allocation. Instead, some of them are thinking about reducing their overall allocation to multi-factor strategies and investing these funds into purely passive strategies. For them, it seems more logical to allocate to the broad market index and wait until factors are at a low point and then get back into multi-factor."

"But that can also be tricky because nobody knows when the value factor will stage a comeback, for example. So institutional investors are still reluctant to do this. Only if they're put under excessive pressure internally will they go for a purely passive approach."

I take it you're not overly worried about the fact that factor investing has lost its shine recently in the investment community?

Joop Huij: "We obviously take this very seriously. Performance has been below long-run expectations but fully in line with our expectations, based on what we have witnessed recently. And we do our best to explain the drivers behind this to our clients. At the same time, however, we remain convinced that the products we've designed will deliver on their objectives in the long run. Moreover, I don't think it is necessarily a bad thing when people start thinking critically about an industry or an investment approach like factor investing."

'The current environment could lead to the demise of lower-quality propositions'

"Over the past couple of years, we've seen an enormous increase in the number of factor-based products being launched. And while many of these products can be considered high-quality propositions, some of them clearly lack the necessary methodological rigor, in my view. These lower-quality solutions should disappear over time, while the best strategies will continue to thrive. The current environment could lead to the demise of lower-quality propositions. A survival of the fittest, most rigorous factor managers, so to speak."

Benedikt Henne: "I think this 'loss of shine', as you put it, is a problem for our clients as well as for us as our interests are aligned, of course. But I don't think that the large institutional investors will lose faith."

"As I said, they know from experience that factors will remain a major driver of relative returns, no matter what they do. So, while they may wonder whether factor timing is worth the effort – which is a fair question – I think the more experienced among them know this is very difficult to do. And our personal experience gives us the impression that the vast majority prefers factor diversification over factor timing."

A more technical question now. Given these periods of lagging factor performance relative to the broad market, what should the correct benchmark be for a factor investing manager? The market-cap weighted index? A peer group, perhaps?

Benedikt Henne: "Factor investing strategies are active strategies. And we, as active managers, must convince our clients that we add value beyond the basic exposure to factor premiums offered by generic factor ETFs. How can we prove that? I think the fairest way is to compare the performance of both active and public index-based factor products to the returns of the broad market. So, the market should be the benchmark for all factor products."

"Why? Because what you will then discover is that the track records of active multi-factor strategies, such as Allianz GI's, tend to be much more stable versus the broad benchmark than that of a basket of single-factor ETFs or a multi-factor ETF. That's because at Allianz GI, we strive to harvest factor premiums in a much more efficient way compared to generic strategies."

"Unfortunately, if people use a multi-factor index as the benchmark, all of a sudden our added value as active managers will seem to disappear, distorting the perspective. The reason is that while our performance is relatively stable versus the broad market, it will look much more erratic relative to the shakier public factor index."

"Active factor strategies will show a high tracking error compared with something that already has a high tracking error relative to the broader market. This creates

the false impression that we do not add value. Worse still, people might even think we are actually the reason for the additional volatility, whereas in reality it's the generic multi-factor ETFs that cause all the ups and downs versus the market."

"Having said that, it might be a smart idea for investors to also use a multi-factor index to analyze parallel performance. This could spare you a lot of questions and criticism in the event that factors underperform temporarily, as they did last year. Of course, we have to beat the multi-factor indices as well, not just the broad market indices. At Robeco and Allianz GI, we have long-term live track records as opposed to the quite short 'real life' ones of newly developed smart beta indices."

Joop Huij: "My answer to this question is that the performance of active factor managers should simply be evaluated against both broad market capitalization-weighted indices and public factor indices, such as MSCI's factor indices for example. Why? Because, when you are an active factor manager, you have two main obligations to your client."

"First, since you allocate to factors, you should definitely outperform a passive strategy based on a market capitalization-weighted index. And, second, because there is no single way of implementing factor strategies, you should outperform generic approaches based on public factor indices. So, you should do better than both types of benchmarks over a full economic cycle. This benchmarking against generic factor indices also helps in explaining performance when a specific factor appears to outperform or underperform temporarily."

On capacity issues

You mentioned earlier the capacity constraints of high-conviction managers. But what about factor investing strategies? Some people have been warning about potential capacity issues leading, for example, to **phenomena such as overcrowding. What's your view?**

Joop Huij: "Obviously, factor investing strategies have a much higher capacity than typical high-conviction stock-picking strategies. And if your question is about a potential crowding of factors and whether some factor premiums could be arbitraged away, then you have to consider the reasons why factors exist in the first place. This is a very fundamental debate."

"Are factors risk factors? In other words, are factor premiums a reward for risk? If the answer is yes, factor premiums shouldn't disappear, because they are rational compensation for risk. The premium might evolve over time, but that would have more to do with, for example, a change in an investor's utility function."

"Another possible interpretation is that factor premiums are the product of investors' behavioral biases, specifically irrational behavior. And, in that case, once these irrational behavioral patterns have been documented, investors should be able to learn and adjust their practices. Then, factor premiums might fade and even disappear."

"In practice, however, we find very little evidence supporting risk-based or irrational behavioral explanations. On the contrary, we find these patterns can better be explained by rational investor behavior. For example, investment managers are likely to avoid low-beta stocks as their compensation package better matches strategies that increase their portfolio's up-capture potential (high beta) rather than lowering the down-capture potential (low beta)."

"This so called 'agency theory' clearly indicates how rational behavior can be a source of factor premiums. And, most importantly, we don't see this behavior disappearing. In fact, in some cases, we even see it becoming stronger and stronger. Therefore, we don't expect anomalies to fade away."

"I don't mean that behaviors don't change. We do see some changes. For example, some large institutions have adjusted their investment strategies in order to benefit from these behavioral patterns. But the amount of money that is allocated to this kind of strategy remains extremely small for now. In absolute terms, it might seem like a lot of money, but in relative terms this is very little."

"That might change, like with passive investing, which has grown tremendously over the past three decades. But we're not there yet, by far. So, while overcrowding is something you definitely want to take seriously, for now this phenomenon has more to do with the way you implement factor investing than with the potential disappearance of factors."

Benedikt Henne: "Generally speaking, I also think the capacity of most factors is quite large, provided you don't restrict yourself to a small set of factors and you are flexible enough to buy a large number of smaller names that may not be included in the large-cap factor indices but also provide exposure to the factor."

"Moreover, I think one should keep in mind that traditional fund managers are, by far, the largest buyers

of factors that are currently in fashion. For example, they are by far the most important buyers of high-quality stocks – much more than the high-quality ETFs available in the market – and they generate the bulk of transaction volumes."

"They also tend to focus on a relatively small number of stocks, because covering and analyzing stocks from a fundamental perspective is costly and time consuming. This, in turn, causes capacity issues. But it's not the factor investors' fault. It's just because, in today's uncertain macroeconomic environment, too many people are focusing on a very limited number of stocks."

'Broad-based factor strategies have the highest capacity that is available for any strategy in the equity market'

"Meanwhile, broad-based factor strategies have the highest capacity that is available for any strategy in the equity market. This is actually one of the main reasons why large institutional investors look for a broad-based implementation of factor strategies. As I said earlier, in a way, this is the only means for them to place large amounts of money into active strategies."

What about public factor index-based products? In other words, those based on popular factor indices. These products have faced the most capacity issues.

Joop Huij: "Yes, there are clear overcrowding effects that are specific to public factor indices. Many investors like these strategies not just because of the low fees but also due to their transparency. However, they seem to ignore the fact that this transparency is public, meaning that everybody can follow the index and use the same methodology. And this can have critical consequences for end investors."

"For instance, we see a lot of overcrowding when the well-known factor indices rebalance. That's because products based on public factor indices concentrate all their trades on just a handful of rebalancing dates every year. We also see that stocks increase in price ahead of their inclusion in an index, which subsequently leads to lower returns."

Benedikt Henne: "It also depends on which factor you consider. Take value, for example. First, there are many value indices available in the market, with different definitions and methodologies. Products based on these indices can definitely go a long way to soaking up the demand. Second, value is 'underowned'. If you look at the active positions of investors, the current tendency is to underweight value stocks."

"Therefore, value is definitely not overcrowded. It has a huge capacity, there are many ways to invest in it and investors are currently avoiding it. So, capacity is definitely not the reason why value is performing poorly at the moment. In other words, value has not been arbitraged away by too much demand. That is simply not the case. Yet, in some segments of the market, there are clear signs of crowding."

"In Europe, for example, there is a very limited availability of bond-proxy stocks: stocks with very stable earnings that pay out a very stable dividend in the range of 3 to 4%. Of course, there is some crowding for these stocks, because everybody wants to buy them, not least traditional portfolio managers. So, yes, there can be crowding in some selected factors. But that is definitely not the reason behind the recent underperformance of factors such as value or momentum. Being able to cover a large set of stocks is the key to liquidity."

Yes, but what about the debate concerning public versus proprietary strategies?

Benedikt Henne: "Of course, if you publish your positions, there can also be problems, including capacity issues. If trading volumes become too large once you have determined which names you want to invest in, the smaller names will be flooded with liquidity and prices will be distorted."

"With a proprietary approach, you can always increase the size of the set of stocks in order to somehow soak up the liquidity. In that case, you could, for example, buy other small stocks with similar factor characteristics and they can take up this additional liquidity. This is, of course, not possible with a public index, because its rules and rebalancing moments are fixed."

Joop Huij: "What people really need to realize is that public transparency comes at a cost for investors, through arbitrage. Clients tend to underestimate this phenomenon. That may have to do with the fact that very little empirical research has been carried out in this area.

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So, to get a better picture, we analyzed[3] trades related to some well-known factor indices."

"And we were shocked by the results. We found clear evidence that arbitrage is happening. Many market participants anticipate trades in public factor-based indices, at the cost of those who invest based on these indices. For the end investor of a fund tracking the MSCI Minimum Volatility index, we estimated the cost of transparency to be 16.5 basis points per year. This is about twice as high as what institutional investors pay annually in management fees for an ETF that tracks such an index. In other words, your total cost of ownership just tripled."

So much for crowding issues. Aren't there also other types of issues, more related to the way some factor products are designed?

Benedikt Henne: "Yes, indeed. But I would break your question down in two parts. The first concerns combining factors: could there be over-simplistic ways to do this that lead to crowding? Of course, there are many ways to combine factors and there is no such thing as a single, correct way. But they all should share the same objective: to optimize the risk return-profile of the investment product."

"The second is about how to then generate the highest performance for the lowest risk. Obviously, this requires some flexibility. If you consider multi-factor ETFs, or basic factor solutions, you will see that they often take naive approaches. Factors scores tend to be simply added to one another, irrespective of the diversification potential of the factors, irrespective of the correlation structure and without considering potential, unintended risks that might arise."

"Combining factors carelessly, such as simply buying a basket of smart beta ETFs, can lead to significant risk. It also raises the issue of factor overlaps. These overlaps are a living thing that evolve depending on where we are in the cycle. Consider, for example, value and momentum. The overlap between these two factors can become quite large. Most of the time, this is not a problem. But when the going gets tough, it is much better to use the full diversification potential of the factors."

"To achieve this diversification over factors, naive and hard and fast rules are clearly insufficient. You need to be able to adjust individual positions within your portfolio. This is not possible if you follow off-the-shelf indices. You might do a little bit better with a multi-factor ETF, where several factors are already integrated in the strategy."

"But, again, you would have the problem that the rules have been set once and for all, irrespective of the current risk environment. Removing unrewarded risk is a significant added value of active quantitative portfolio management. While, at Allianz GI, we do think that harvesting the factor premiums requires taking factor risk, we distinguish between rewarding and non-rewarding risk. As the factor premiums are not being generated by distress risk or macroeconomic sensitivities, it is advisable to remove those risks as much as possible."

Joop Huij: "At Robeco, we don't believe that factor premiums are compensation for risk. As we said earlier, we have found very little evidence supporting risk-based explanations for the existence of factor premiums. Therefore, I think that taking additional risks to get exposure to a premium that can't be explained by risk is not a wise thing to do, as this risk will go unrewarded. The decades of research we have carried out at Robeco have enabled us to develop effective tools and methods to avoid unrewarded risks and enhance factor exposures."

"Also, bear in mind that while there is a vast amount of empirical research documenting factor premiums, around 99.9% of that research does not take into account the impact of explicit (e.g. taxes) and implicit (e.g. market impact) trading costs on performance. And we know for a fact that incorporating these costs is crucially important. So, trading costs must also be considered when designing a strategy, which as active managers is what we do."

On cost issues

And yet despite all the drawbacks we've just discussed, seemingly cheap index-based generic products have become extremely popular, mainly due to their very low fees. What is your take on the cost debate between **'active' factor investing and so**-called passive-like smart beta index tracking? What role should fees have in the selection process?

Benedikt Henne: "Based on what happened with the rise of passive investing, I anticipate that basic access to the factor premiums will be available for a very low cost in the future. However, our conversation so far has had a lot to do with the added value that we, as active factor premium managers, can offer the client, beyond basic access to different factor premiums."

[3] Huij, J. and Kyosev, G., 2016. 'Price response to factor index additions and deletions', working paper.

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"I think active managers can provide better factor combinations, leading to better risk management, improved diversification and lower unrewarded risks, which are typically associated with the intended exposures. Then, we must show our clients that shortcuts, such as buying a basket of single-factor ETFs or a multi-factor ETF, have their drawbacks. And, for the added value over commoditized approaches, active managers should be able to charge a fee."

"I am pretty confident that clients will be willing to pay for a well-designed, well-diversified product. For one, many of the early adopters of factor strategies, like those who invested in high-dividend or minimum volatility products ten years ago, have since found out that managing all the risks associated with these strategies is not a trivial thing."

"In addition, I think we should also be fair with our clients in terms of pricing, in the sense that we should offer them performance fee-based solutions, which is what we do now for all Allianz GI products. If a client wishes to have an outperformance fee-based solution, we can offer our product at a very low fixed fee, similar to that of an ETF."

"If we manage to do better than the cheap quasi-passive solution, we will share the outperformance with the client. So investors who are skeptical about the value of our additional risk management can simply take a wait-and-see approach, and just pay a very small fee for basic access to the premiums."

Joop Huij: "As regards your very last question – the role fees should play in the selection process – I would stress that factor strategies do not all produce the same results. Back in 2014, I co-authored a study[4] in which we analyzed the performance of US equity mutual funds with significant exposure to one or more proven factors. We found a huge dispersion in the performance of these funds."

'One way to look at the fee question is to consider how much factor exposure you get per basis point of fee'

"We didn't expect the dispersion to be so large. In fact, the dispersion in the performance of factor managers is probably as large as the dispersion in the performance of traditional active managers. And this feels a bit awkward, because when you compare factor strategies, they normally tap the same sources of returns and they often look the same at first sight, with similar formulas and similar variables."

"In a way, this reminds me of cooking. Even if you give two cooks exactly the same ingredients and ask them to follow the same recipe, you might end up with very different dishes. In the end, the expertise of the chef will remain fundamental to achieving a satisfactory result. The same applies for factor investing – experience and expertise matter."

"One way to look at the fee question is to consider how much factor exposure you get per basis point of fee. Some product providers may charge you 50% less, but also end up giving you only a quarter of the factor exposure. Of course, while it might be easy to compare fees, measuring and comparing the level of factor exposure provided is much more complicated. You need time and you need the right tools. It's very difficult to assess. To help clients, we have developed things like the Robeco Factor Exposure Monitor, which provides clients with insight into the factor exposures of their portfolio."

On sustainability

One issue that has become crucial in recent years is sustainability and the integration of sustainability considerations in the investment process. How do you think this change will affect the factor investing space?

Joop Huij: "At Robeco, we believe that factor investing and sustainability get along very well. When you have a quant investment process, it is relatively straightforward to combine this with additional sustainability criteria. In a way, factor investing can be considered a very efficient way to implement sustainable investing."

"In fact, all of Robeco's factor investing solutions have been integrating ESG considerations for many years. Our portfolios all have a higher ESG score than their respective benchmarks and exclude sustainability laggards such as tobacco companies. Over the years, and in partnership with our affiliate RobecoSAM, we have carried out extensive research into how we can best integrate ESG into our rules-based investment processes."

[4] Van Gelderen, E. and Huij, J., 2014. 'Academic knowledge dissemination in the mutual fund industry: can mutual funds successfully adopt factor investing strategies?', The Journal of Portfolio Management.

"Only a few years ago, clients and prospects were merely interested in sustainability and asked questions about it. They did not necessarily want, let alone know how to implement it. Then, investors became more confident and started asking for sustainability to be integrated. Today, we see that clients really want to implement sustainability."

"One example of a factor investing solution that we manage specifically targets an improvement on labor rights. Another one targets a reduction of the environmental footprint in terms of carbon emissions, waste generation, water and electricity consumption. At Robeco, we also have quite a large Active Ownership team that votes and engages with portfolio holdings. This has become increasingly relevant for clients."

"Sustainability has become a top priority for them and they want sustainability to have a significant impact on their investments. In my view, this trend will continue to grow, also supported by the advent of the Sustainable Development Goals. This is also reflected in the way regulators have stepped up their game and are increasingly considering sustainability as part of the fiduciary responsibility of the investment community."

Benedikt Henne: "Robeco and Allianz GI share the same view on this, too. And all of our strategies take ESG criteria into account. I would just like to add something and that's that we also look at sustainability from a risk perspective. Our company takes an integrated approach to ESG. "

"Portfolio managers make sure that each and every position we hold is screened for E, S and G criteria, and they avoid the worst-rated stocks. They still have the possibility to override the screening, if they think that the original E, S or G rating is inaccurate due to different views or methodology. But, in that case, they must prove their objections are actually justified."

"The idea is not to vastly improve on the ESG score for all our products, but rather to be 'ESG aware' and consider the worst ratings as a kind of measure of risk. For example, regulators around the world are becoming tougher on companies with a huge carbon footprint, which could potentially threaten their business models."

What do you think about the current sustainable investing space?

Joop Huij: "As I just said, things are evolving quite fast. People used to be interested in sustainability integration but reluctant to make any significant changes, but this has now changed dramatically. For instance, some of our most recent clients really have very ambitious goals in terms of sustainability."
"Again, there is no one-size-fits all solution. Whereas the pension fund of a labor union might be interested in improving the positioning of a portfolio in terms of labor rights, other investors might be interested in reducing carbon emissions. However, here too we are seeing a move towards more multi-dimensional solutions, aided by the SDG framework."

"Asset managers are adjusting their products and strategies to address this rising demand. Together with RobecoSAM, we have ample experience in building solutions that really make a difference, but clients need be careful about window dressing and greenwashing in the market."

Benedikt Henne: "Indeed. Most asset managers nowadays have a view on sustainability and somehow integrate ESG scores. I share the view that this can be done very effectively using a rules-based investment strategy. Having said that, we must also keep in mind that the focus of ESG regulations has shifted from investments to investors. More ESG stewardship will be required of asset managers by the regulator in the future, a development that we welcome"

Now a question on factor products that also aim for a significant improvement in terms of sustainability. Does this improvement have to be to the detriment of factor exposures? Or is it actually a free lunch?

Benedikt Henne: "No, this is definitely not a free lunch. It really depends on how much improvement your sustainability statistics should show. And there is limit to what you can do as a factor investor, because you need a broad-based implementation. Targeting only the best ESG-rated stocks can soon make your investable universe far too small for factor investing to be effective."

Joop Huij: "Yes, I agree. The interesting thing is that you can make some sustainability improvements 'for free', but only to a point. When constraints become too stringent, it gets very complicated to integrate sustainability and this might be to the detriment of performance. We have carried out in-depth research into the implications of ESG integration in factor investing strategies, which we share with clients. This makes for very insightful conversations."

And it also depends on the amount of factor exposure you are targeting, right?

Benedikt Henne: "Yes. It depends on the benchmark, it depends on how much a client would like to tilt the

portfolio and it depends on how strict the client wants to be about sustainability. Let me explain this last point. Imagine, for example, that you take part in a no-plastics initiative, but you have in your portfolio a company for which plastics represent 1% of sales. This will be acceptable for some investors, but others will want to get rid of the position. If you adopt such a strict approach in many dimensions, you may quickly run out of road."

Joop Huij: "All this underscores the importance of having a large investment universe and smart, research-based portfolio construction rules. And it actually explains why I said that factor investing can be considered a very efficient way to implement sustainability, because the size of an asset manager's opportunity set is one of the key elements that determines its ability to deliver alpha."

"As a fundamental investor, you may be able to analyze and consider a few dozen companies, out of which only a small number will meet the required sustainability criteria. In this case, implementing ESG can therefore have huge impact on your process. Meanwhile, with factor investing, the quantitative selection model is able to consider hundreds and even thousands of stocks, so even if you add constraints in terms of sustainability, you should still be able to have a sufficiently broad investable universe."

You make quantitative factor investing strategies and sustainable investing seem like a match made in heaven. Would you agree with this statement?

Both: "Yes, completely."

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