

Three ways to successfully implement factors

A CLOSER LOOK AT SMART BETA AND FACTOR-BASED SOLUTIONS





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KEY CONCEPTS

Quant investing

Quant investing can be defined as the use of quantitative data analysis and rules-based securities selection models to build portfolios in a systematic way.

Factor investing

Factor investing is based on the exploitation of academically-proven factor premiums. Factors represent certain stock-specific attributes that explain the return and risk of a group of securities in the long run.

Smart beta

Smart beta strategies target factor premiums in a systematic way. In this sense, they represent a better alternative to traditional market capitalization-weighted indices.

Introduction

The rise of computational power and the ability to store and process an ever greater amount of market data at low cost are profoundly changing the way financial markets operate. One of the most important transformations is the emergence of quantitative investment techniques, often referred to as 'quant'. Over the past decade, quant has become increasingly popular and widely available.

The rise of quant, in turn, enabled the emergence of new breeds of rules-based selection approaches, including smart beta. This last concept has recently become very popular, in particular due to the success of exchange traded funds (ETFs) based on so-called smart beta indices.

Smart beta has its roots in factor investing, which itself is founded on the existence of various academically-documented factor premiums. These premiums can be systematically harvested in order to achieve higher risk-adjusted returns and better diversification than traditional market cap-weighted indexes. In this sense, factor-based strategies represent an alternative that is superior to classic market exposure (beta), which explains the term smart beta.

A growing number of academic studies have been advocating the use of factors, over the past decades, both for equity and fixed income markets. Concepts such as 'value investing' or 'low-risk investing' have become popular buzzwords, and now appear frequently in mainstream financial media. Prominent institutional investors have publicly embraced more systematic approaches to portfolio allocation and securities selection.

Meanwhile, asset managers and market index providers have also dived in. Over the years, they have increased their offering in this field dramatically.

But despite growing awareness as to the potential benefits of adopting factor-based, many investors are still struggling to find an optimal way to actually implement them.

There are multiple reasons for this. To find an appropriate factor-based solution, investors must make an effort to ensure they fully understand what the use of factors means for their investment portfolios. For example, there is quite a lot of confusion around what factor investing really is. The abundance of – more or less efficient – smart beta-labelled strategies available in the market is another reason.

In this booklet, we intend to provide investors a clearer picture of what factor-based investing actually is and how to approach it, focusing specifically on the equity segment where most of the recent product buildup has taken place. To this end, we take a closer look at the changes in the investment industry driven by the expansion of quant and factor-based investing and highlight several major trends.

We also expose some of the key challenges for investors considering the use of factors and how these can be tackled. Finally, we suggest three ways investors can implement quantitative strategies to improve the risk-return profile of their portfolios.



FACTORS ARE GAINING TRACTION

Technology and innovation have led to profound changes in the asset management industry over the past decade. Among the most emblematic transformations is the advent of factor-based investing. In recent years, it has become a popular concept and integrated multi-factor and low volatility strategies have enjoyed strong commercial success. More than half of European institutional investors say they are currently allocating to smart beta, according to a recent survey carried out by FTSE Russell.



The current frenzy around factor-based investing aside, there are logical reasons to consider it an attractive option, the most obvious one being the scientific rationale supporting factor-based investing. For example, numerous academic research papers have shown that allocation to well-documented factor premiums, such as value or momentum, provide significant diversification benefits. It can also generate better riskadjusted returns, compared to the more traditional approaches that explicitly allocate to countries and sectors. Moreover, these studies suggest that the existence of these premiums is a persistent phenomenon.

Increasing pressure on costs is another reason. The use of rules-based stock selection models can help bring down traditional research costs, at macroeconomic, sector and stock levels, that are incurred in a classic fundamental active investment process.

Thanks to improvements in information technology and dynamic product innovation, investors can access a wide variety of factor-based strategies, from those following passively a designated stock index to more sophisticated proprietary approaches, designed to systematically exploit certain market inefficiencies.

The advent of quant and factor-based investing can actually be considered a major driver of some of the most profound changes in the investment landscape. We highlight three important trends that illustrate this slow revolution: the success of passive investing, the rise of allocation to factors and the growing popularity of low risk.

A. Success of passive investing

Passive investment products are not new. As early as the 1970s, US investor and entrepreneur John Bogle was advocating broad exposure to the stock market and limited trading. In 1975, he launched the world's first index mutual fund.

However, these instruments have only come into widespread use over the past couple of decades, particularly over the last few years. From 2011 to 2015, global flows into passive products reached USD 1.35 trillion, a figure 3.1 times higher than the USD 442 billion in capital going into all actively managed products, according to a Citi Business Advisory Services report published in 2016. Moreover, the pace of flows moving from active to passive is currently accelerating.

Several forces have fueled this trend, including a relatively unimpressive performance - net of fees - of most active managers in recent years, increased cost awareness on the part of clients and growing market liquidity concerns, in a context of significant reduction in banks' balance sheets after the global financial crisis.

Successive waves of product innovation, in particular the rapid expansion of ETFs, have also played a crucial role, making it easier for investors to trade a growing number of indices at lower costs.

These different forces currently at work are likely to keep turning the tide towards passive investment vehicles. In the next five years, 43% of the industry's net new assets will find their way into passively managed portfolios, according to a 2016 report by consulting firm Casey Quirk.

B. The rise of factor-based allocation

The concept of factor-based allocation, which has been gaining traction over the past few years, also dates back to the 1970s. At the time, several academics recognized that assets have a number of inherent risk and reward 'attributes' or 'factors', in addition to their traditional asset-class labels. Technical improvements in computing power and the availability of high-quality datasets in the 1990s allowed for factors to be tested and researched in far greater detail, in multiple regions and for several asset classes over a wider range of time frames.

An important milestone was reached in 1993, when future Nobel prize laureate Eugene Fama and fellow researcher Kenneth French argued that the size and value factors capture a dimension of systematic risk that is not captured by market beta in the Capital Asset Pricing Model (CAPM). The CAPM is a theoretical model that establishes the relationship between systematic risk and expected return for financial assets. It is widely used as a base to estimate expected returns for certain securities given their

'IT and product innovation have granted investors access to a wide variety of factorbased strategies'

level of risk. Fama and French proposed extending the CAPM, which resulted in their famous three-factor model.

Over 20 years later, in 2015, Fama and French proposed to further extend the model with two additional factors, namely profitability (stocks of companies with a high operating profitability perform better) and investment (stocks of companies with high total asset growth have below average returns). Both new factors are concrete examples of what are popularly known as quality factors.

But the real breakthrough came after the 2009 publication of a research report by professors Andrew Ang, William Goetzmann, and Stephen Schaefer. Analyzing the performance of one of the world's largest sovereign wealth funds which invests Norwegian oil revenues, the authors showed that the added value of the fund's active management does not reflect true skill, but could in fact be explained by implicit exposures to systematic factors. They also recommended the adoption of a factor investing strategy because of the long investment horizons of factor premiums.

The idea of factor investing rapidly gained popularity among professional investors around the world who were faced with similar portfolio diversification issues and sought an efficient and prudent way to systematically capture factor premiums.

C. Growing popularity of low risk

A little-known approach a decade ago, low risk investing has also been on the rise in recent years. Successive market wobbles in the 2000s raised awareness about the need to preserve capital in down markets, in order to ensure long term outperformance and wealth accumulation. Low risk securities are those that tend to generate relatively stable returns compared to the broader market. Price variations can be measured either in absolute terms with volatility (the standard deviation of past returns), or relative to the market with beta. Research shows these lower-risk securities, because they usually fall less in down markets, tend to generate higher risk-adjusted returns over the longer term. This counterintuitive phenomenon was first documented more than forty years ago.

According to the CAPM, investors' decisions are rational. They reason that higher risk, in this case higher volatility, will always entail higher returns. But in 1972, a study by Robert Haugen and James Heins showed that low-beta stocks in the United States outperformed in the period 1929-1971. Further research confirmed this 'low beta effect' for other equity markets and Robeco researchers documented a similar 'low volatility effect': lower volatility stocks generate higher risk-adjusted returns. Further academic research demonstrated that the volatility effect is growing stronger in the European, Japanese and Emerging equity markets.

Following the success of low risk strategies launched by several active managers, many index providers and passive managers have also jumped on the bandwagon by introducing low volatility indices and ETFs. Various terms are used to describe these products, ranging from minimum volatility to managed volatility or minimum variance. Ultimately, all of these approaches seek to exploit the low-volatility anomaly, in one way or another.

FACTORS REMAIN A CHALLENGE FOR MANY INVESTORS

Investor awareness as to the benefits of targeting factor premiums in a portfolio has been growing over the past few years. Nonetheless, many still struggle to find a way to efficiently put such strategies into practice in their portfolios.



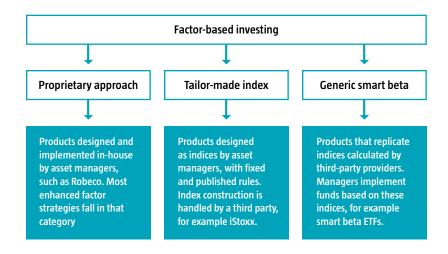
But understanding the theory is only the preliminary step. Before long, investors are usually faced with a series of practical challenges. First, they need a clear picture of the current factor-based offering and of the multiple ways it can be integrated in a portfolio. The smart beta label encompasses a wide variety of investment solutions that can be put to work in many different ways, depending on the investment objective of the client.

Moreover, as mentioned above, the number of products available has skyrocketed, making it even more complicated for investors to determine the best course of action. There are currently hundreds of factor-related products available in the market, from basic single factor ETFs to sophisticated multi-factor strategies. Some live up to their promises, but many others prove inadequate for capturing factor premiums efficiently.

Challenge 1: finding the appropriate kind of strategy

Finding the appropriate kind of strategy in the factor jungle is no bed of roses, given the extent and diversity of the current offering. Still, a few simple reference points can be provided to help investors find their way.

Broadly speaking, investors can choose between either the replication of third-party smart beta indices, a rules-based tailor-made index designed in-house by an asset manager, or a pure asset manager-led approach. In terms of design, the first of these is similar to classic passive strategies, while the last can be considered a variation of a traditional active strategy.



With these different options in mind, the first fundamental question investors will need to address is their ability and willingness to deviate more or less from a designated market index. This may often determine the level of activeness of the chosen strategy. Loosely-constrained clients will be able to capture premiums in a more efficient way, for example with asset manager-led proprietary low risk or multi-factor solution. Conversely, investors seeking limited tacking error will sometimes have to give up on some factor exposure.

Regardless of the level of activeness, factor-related products can also be classified into two major categories: those designed to generate enhanced returns, through explicit exposure to well-rewarded factor premiums, and those with a clear focus on risk reduction.

Within the enhanced returns category, investors will typically find diversified multifactor strategies, seeking a balanced exposure to several premiums, designed to build portfolios that generate higher long-term returns. There are also single factor strategies, that focus for example on value or momentum, that offer clients greater freedom to manage individual factor exposures in their portfolios, frequently at a lower cost. Meanwhile, risk-oriented products aim to achieve higher risk-adjusted returns, most of the time through volatility reduction.

Challenge 2: Targeting the relevant factors

A second challenge with factors, is to determine which premiums one intends to exploit and to define them precisely. There is no single ideal approach to factor allocation. Depending on their individual profile, investors may seek a different kind of performance, and may be willing to take on varying degrees of risk. They may also choose themselves which factor or set of factors to target, or delegate that decision to an asset manager.

'Understanding the theory is the preliminary step. Before long, investors must face practical challenges'

The debate about which factors are really worth consideration is still ongoing among academics. Over time, hundreds of different premiums have been documented in the academic literature, but only a handful seem worth exploiting. The relevant factors should show a strong and proven premium. They should also remain relatively constant over time and across various geographic regions. In addition, they should be supported by a convincing economic rationale, with strong academic underpinnings, and be workable in practice.

The most frequently targeted factors are value and size, which were described in Fama and French's influential three-factor model, back in 1993, as well as momentum. This last factor was first documented and proposed also in 1993 by Narasimhan Jegadeesh and Sheridan Titman. The value premium is based on the finding that 'cheap' securities, according to their valuation multiples, tend to outperform 'expensive' ones. Similarly, the size premium reflects the fact that smaller companies tend to generate higher returns. Meanwhile, the momentum factor is based on the observation that stocks or bonds that have performed well recently, for example during the preceding months, tend to continue to perform well.

On top of these factors, many academics and product providers also strongly advocate exposure to low risk (see the low risk effect described part one) and quality. The quality effect was described more recently in the academic literature and illustrates the tendency of high quality stocks (as measured by the profitability of a firm, its leverage metrics, etc.) to outperform low quality ones.

When considering factor targeting, investors must ensure the resulting exposures are consistent with their investment beliefs and preferences. They also need to bear in mind that their existing portfolios may already have significant exposure to factors, and therefore ensure they have a complete picture of their exposure to the different premiums.

For example, if a client's holdings already have an unintentionally significant tilt, the factor strategy targeting a lower explicit weight for this specific factor may be the best choice. Dedicated tools, that enable quantitative factor exposure and performance attribution analysis, are available in the market, and the academic literature has covered the subject extensively.

Challenge 3: avoiding pitfalls

A third challenge for investors is to avoid those products with major pitfalls, as is the case with numerous generic strategies based on popular smart beta indices. Even though these solutions have proven effective at capturing factor premiums, they also frequently embed exposure to unrewarded risks and do not prevent certain factor premiums from clashing with each other, as some individual factors can have negative exposure to one another. As a result, many of these strategies do not offer the most efficient exposure to the targeted factor premium.

Research has shown that many index-based products still involve a significant amount of market index exposure as well as unexpected negative exposures to other factors. For example, most generic value strategies do not avoid stocks that are cheap for a reason, such as those of financially distressed companies. This is a typical case of the value factor clashing with quality.

Moreover, the use of smart beta indices also often implies inefficient portfolio construction processes, that may lead to unnecessary turnover, high concentration on some countries or business sectors or to an excessive exposure to large capitalization stocks. The S&P 500 Low-volatility index is a good example. It does not constrain sector weights, which can result in a huge sector concentration. As a result, in December 2012 around 60% of this index was invested in only two sectors: utilities and consumer staples.

Strategies based on smart beta indices are also prone to overcrowding and arbitrage. The simplicity and transparency of these indices mean that other investors can figure out in advance which trades are going to be executed, and can opportunistically take advantage of this.

Finally, the fact that most generic smart beta products do not take sustainability into account is becoming a major issue, both for institutional and retail investors. Indeed, clients increasingly ask for ESG considerations to be fully integrated in the investment process. All these different drawbacks can be avoided, but this typically requires a more sophisticated approach than simply using smart beta indices.

THREE WAYS FACTORS CAN IMPROVE YOUR PORTFOLIO

Once identified the potential benefits and major challenges associated with the use factor-based strategies, many investors will still be looking for very practical examples of how they can be put to work.



While the diversity and breadth of the current factor-related offering obviously make choosing a solution more difficult for newcomers, they also mean the more sophisticated investors have almost infinite options to choose from. This is important as their needs and priorities, in terms of factor exposures or flexibility with regard to a reference index, for example, can differ greatly. For example, while some clients may be willing to fully embrace factor investing, others may only be looking to reduce downside risk in their overall equity portfolio. And while some investors may already be considering risk from an absolute perspective, others may not be ready to abandon their benchmarked investment approach.

In any case, investors should be able to find an appropriate strategy. Below we describe three concrete ways in which investors can use them to improve the profile of their portfolios.

A. Enhanced indexing: an alternative to purely passive strategies

Decades of underwhelming active manager performance, liquidity concerns and increasing cost awareness have pushed large numbers of investors into passive strategies, often through the use of ETFs. Buying and holding the capitalization-weighted market portfolio is often considered to be a way of ensuring diversification is broad enough and preventing potential unpleasant surprises that tend to occur when active managers make the wrong calls. However, going passive also leads to chronic modest underperformance, once management costs are taken into account.

Factors provide a solution to this dilemma: enhanced indexing. Efficient enhanced indexing strategies are designed to systematically capture the market return and, in addition, benefit from well-rewarded factor premiums. They typically deliver moderate outperformance, or at least market-like returns after costs, depending on how much portfolios are allowed to deviate from their benchmark. Portfolios with greater tracking error flexibility are more suitable for investors who aim to capture more of the factor premiums in a consistent way. Our research shows that the looser the tracking error criteria, the higher the expected returns tend to be.

Enhanced indexing portfolios take the capitalization-weighted index as a starting point. Then they give slightly more weight to stocks with favorable factor characteristics and slightly less weight to stocks with unfavorable factor characteristics, using proprietary investment models. This enables both relative cost effectiveness and prevents overcrowding and arbitrage. The key performance indicator for this kind of product is the information ratio, which measures the excess returns of a portfolio relative to its benchmark.

Enhanced indexing also enables comprehensive ESG integration. For example, ranking methodologies based on sustainability scores can be introduced in the portfolio construction process. Meanwhile, passive investors either completely ignore ESG considerations or limit their efforts to rigid exclusion lists.

Robeco's Core Quant equity strategies follow this enhanced indexing approach. They exploit proven factor premiums such as value, quality and momentum, combined within a transparent portfolio algorithm designed to consistently outperform the market. Moreover, our proprietary portfolio construction algorithm features a flexible set-up, so we can easily adapt mandates to a variety of individual requirements concerning, for example, the investable universe, the risk-return profile and the integration of stricter sustainability criteria.

B. Multi-factor solutions: flexible diversification

The growing awareness regarding the benefits of allocating strategically to the wellrewarded factors has in recent years led increasing numbers of investors to consider this option. But while single factor-tilted portfolios have proven they can produce significantly higher Sharpe ratios than those of the market over the long term, they can also experience periods of disappointing performance relative to classic market-capweighted benchmarks.

These periods of relative underperformance can last multiple consecutive years, testing the patience of many investors. Moreover, numerous academic papers suggest it is impossible to successfully time factors and to predict which are going to do well or lag

'Client needs in terms of factor exposures or flexibility with regard to a reference index can differ greatly'

in the near future. All this supports the use of diversification across the different factors, instead of tactically trying to identify the best one at any given moment. Investors interested in a truly balanced approach to factor investing, but also ready to deviate significantly from market benchmarks and take on higher tracking error, may therefore consider a multi-factor strategy. Efficient multi-factor solutions provide broad exposure to some of the best-rewarded premiums, while avoiding the common pitfalls associated with generic smart beta. These strategies are largely benchmark-agnostic and aim at high and efficient factor exposure, resulting in a strong Sharpe ratio.

Robeco's Factor Investing Solutions usually imply a default factor mix consisting of a 30% allocation to each of the value, momentum and low volatility factors, as well as a 10% allocation to quality. From there, and depending on the client's own preferences and goals, we can assign more or less weight to the individual Robeco factor strategies. For all combinations we select securities that provide efficient exposure to one factor while avoiding negative exposure to others.

For example, if a client wishes to consistently outperform the broader market, we recommend reducing exposure to low volatility, since this factor usually leads to a substantial higher tracking error without necessarily providing additional return on top of the market portfolio in the short term, especially during bull periods. Conversely, if a client – say a pension fund – primarily targets funding-ratio stability, higher allocation to low volatility will be the way forward, in order to reduce downside potential and increase the Sharpe ratio.

There are many other possibilities. For example, some of our clients opt to allocate to only one or two Robeco factor strategies, while choosing other asset managers for other factors. Other clients have a clear preference for income, and therefore allocate more to our value or low volatility strategies, which provide high dividends. Other clients prefer to limit turnover in their factor mix, and choose not to allocate to momentum as a result.

C. Low volatility strategies: smart risk reduction

Growing concerns about the ageing bull market and increasingly stretched valuation multiples in some segments have led many investors to consider alternative ways to reduce risk in their portfolios without hampering returns. In this context, low-risk portfolios that tend to fall less during downturns and to generate higher risk-adjusted returns than the market over the longer term, have been considered as an attractive option.

But this requires more than a generic approach based on existing low-risk indices, such as the MSCI Min Vol for example. Efficient low-risk strategies exploit the low volatility anomaly while avoiding pitfalls generally associated with generic smart beta, in order to ensure optimal factor exposure, as well as an enhanced risk-return profile.

Robeco's Conservative Equities strategies are designed to identify the most attractive low volatility stocks that also offer strong upside potential and have an appealing valuation. We make sure that exposure to the low risk premium does not clash with other proven factors, such as value and momentum. To this end, we apply a multi-dimensional risk methodology, that also includes forward-looking risk measures.

Our proprietary ranking method and sell-driven investment discipline, used for portfolio construction, also ensure limited turnover. In addition, we apply strict concentration limits, in order to avoid oversized exposure to certain countries, business sectors or individual stocks. Ultimately, our Conservative Equities strategies target long term full-cycle performance equal to, or greater than, the equity market with substantially lower downside risk and significantly reduced volatility over time.

Within an existing portfolio, they can be combined with benchmark-driven products or high-dividend funds, in order to provide diversification benefits thanks to their relatively less volatile return pattern. Conservative equities can also be used to reduce overall portfolio volatility and provide additional room for investors to accept higher risk in other segments of their holdings.

ROBECO'S QUANT CAPABILITIES

Core Quant

Global Enhanced Indexing
Global Sustainable Quant
Emerging Enhanced Indexing
Emerging Markets Active
Sustainable Emerging Markets Active
Asia-Pacific Active

Core Quant strategies focus on delivering stable alphas by utilizing an integrated multi-factor approach that exploits proven factor premiums such as value, quality and momentum within a risk-controlled framework. They combine the outcome of our stock selection model with a disciplined proprietary transparent portfolio construction algorithm and a unique set of risk controls, designed to consistently outperform the market, after costs. Core Quant equity offers a proven and valid alternative for passive investors looking to apply integrated multi-factor investing in their core portfolios: Enhanced Indexing. Emerging Markets investors who are aiming for stable alpha created by an integrated multi-factor stock selection model we offer Active Quant Emerging Markets, Sustainable Emerging Markets or Asia-Pacific Active Quant.

Factor Investing Solutions

Momentum
Quant Value
Quality
Multi-Factor
Factor Solutions

Robeco's Factor Investing Solutions are fully quantitative and exploit four proven factors: value, momentum, low volatility and quality. They use enhanced factor definitions, rather than generic definitions, to strip out unintended risk and maximize its return potential. We use a building-block approach based on allocations to enhanced standalone factor strategies that avoid the various pitfalls that generic factor strategies involve. We have designed these standalone factor strategies so that they can be combined in our multifactor solutions. Factor Investing Solutions aim to achieve higher risk-adjusted returns than both the broad market and generic factor indices over a full business cycle by taking efficient, well-diversified exposure to these enhanced factors.

Conservative Equities

Developed
Global
Global Sustainable
Europe
Continental Europe
US
Emerging

Conservative Equities capture the low-risk anomaly. They target a long-term full-cycle performance equal to or greater than the equity market with substantially lower downside risk.Robeco's innovative stock selection model combines the beta and volatility effects in one low-risk theme. It focuses on low-risk stocks that also have low distress risk, attractive valuation and positive momentum have a better risk-return profile, in order to maximize Sharpe ratio. The strategies are managed according to a transparent and disciplined investment process. It combines the signals of the stock-selection model with a unique portfolio-construction algorithm and a set of risk controls, including human overview by a dedicated team of portfolio managers.

On top of these three equity-focused capabilities, Robeco has also developed a broad range of fixed income and multi-asset strategies that also rely on the systematic harvesting of well-rewarded factor premiums.

CONCLUSION

Academic research and many years of practice have shown that factorbased solutions can help to significantly improve the profile of a portfolio, for example by reducing downside risk or enhancing long term returns. Finding the right kind of strategy, defining and targeting the relevant factors and avoiding the serious pitfalls associated with many smart beta products, in particular the most generic ones, are the key challenges faced by investors wishing to exploit factors.

The current offering is already very large and there are many ways to implement these strategies in a broader portfolio. However, with a little effort, investors should be able to find appropriate ways to use factor premiums in their portfolios.

As a pioneer in quantitative investing, Robeco has been at the forefront of factor-based investing innovation. For more than two decades now, we have developed models that exploit inefficiencies in both equity and fixed income markets.

A quantitative research department was formally introduced in the late 1980s and the first models were developed in the early 1990s. In 1994, more than 20 years ago, the first stock selection models were introduced in the investment process of Robeco's equity strategies. That same year, Robeco also introduced its duration model, a purely quantitative tool that forecasts bond yield changes. For equity markets, we have developed three main capabilities: Core Quant, Conservative Equities and, more recently, Factor investing solutions. All these

strategies have been designed to systematically exploit market inefficiencies, but with a specific focus for each one of them.

While our Core Quant strategies focus on delivering stable alpha with limited tracking error, using an integrated multi-factor stock selection model, our factor solutions seek to capture four proven factors premiums – value, momentum, low volatility and quality – in a more flexible way. Meanwhile, Conservative Equities strategies aim at delivering higher risk-adjusted returns in the long run by losing less in down markets. Their focus on absolute risk may however lead to significant tracking error.

All our quantitative equity solutions use robust portfolio construction algorithms that reduce transaction costs and enable fully explainable positions. In addition, they integrate a positive ESG screening process, based on RobecoSAM's Corporate Sustainability Assessments.

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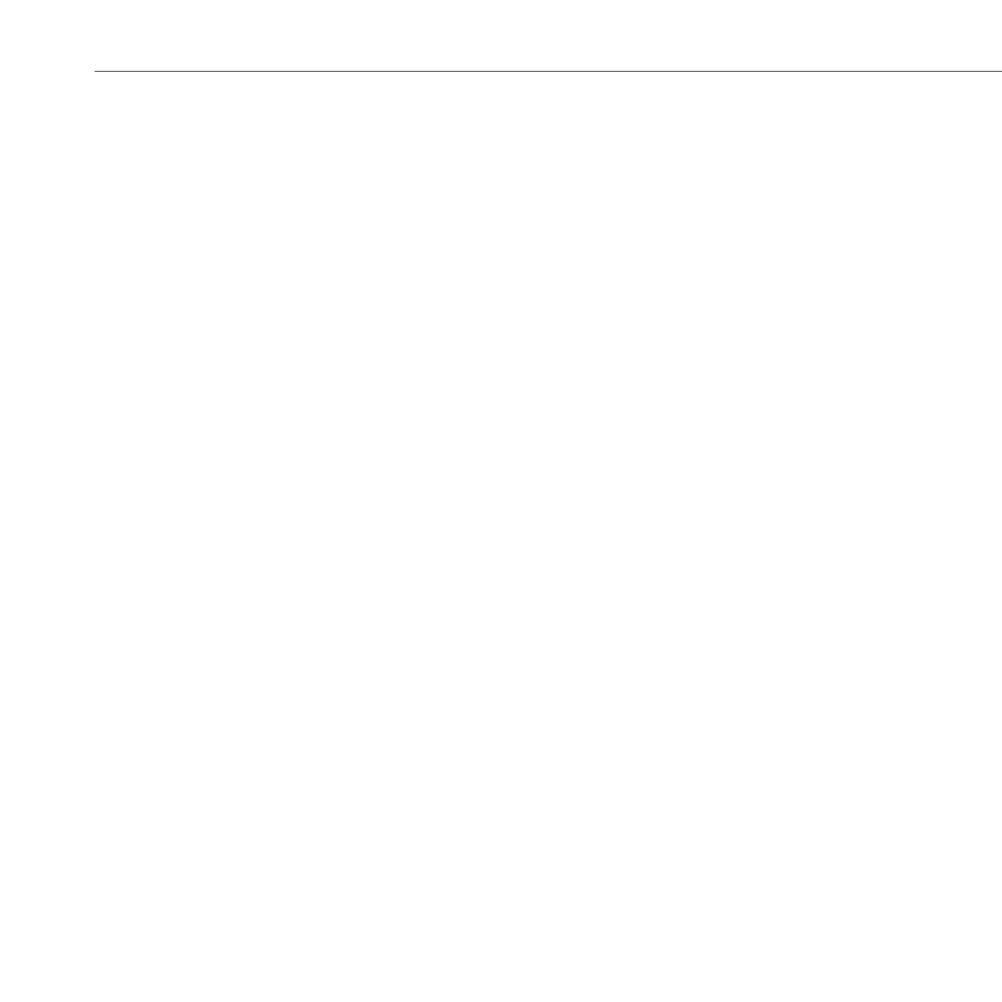
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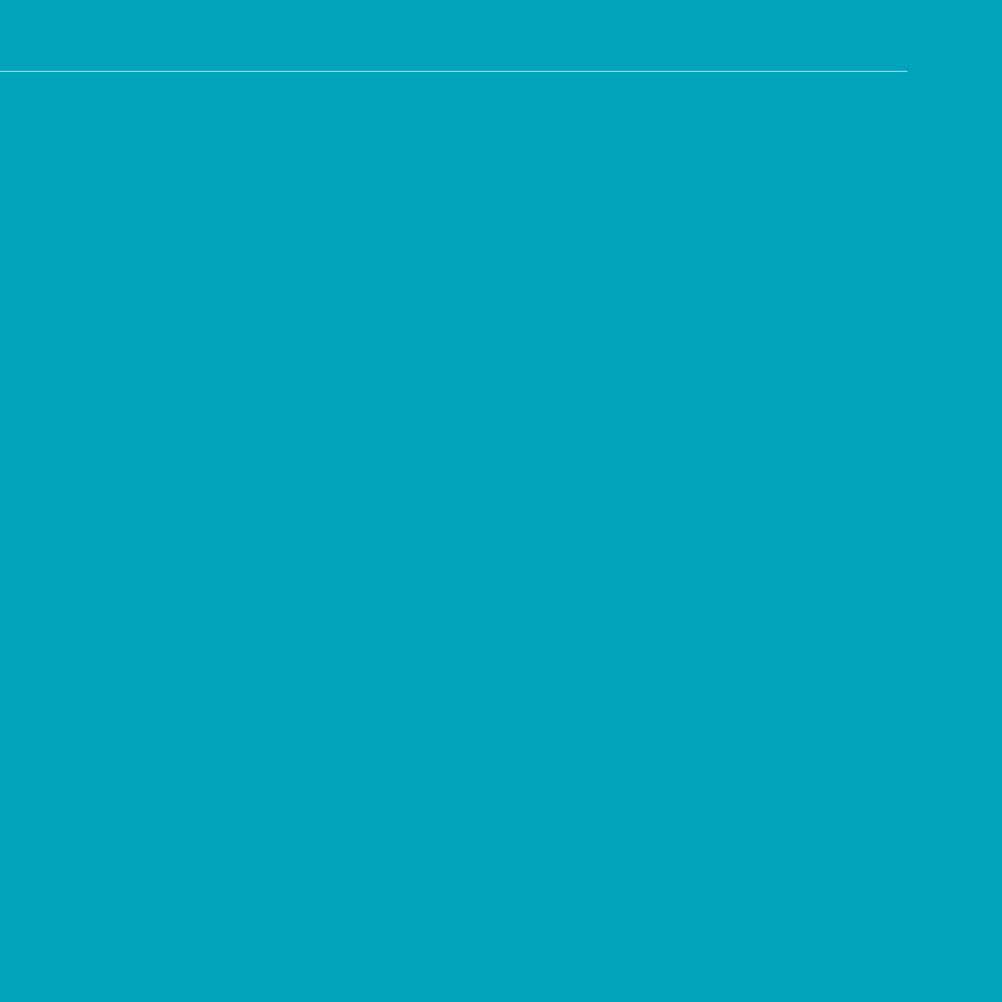
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Contact

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