



INTRODUCTION

For decades, institutional investors have used a combination of active and passive strategies when constructing a portfolio. Active funds were meant to provide exposure to returns in excess of the benchmark, or "alpha" in exchange for higher fees. Meanwhile, traditional, cap-weighted index strategies offered investors the ability to own the market portfolio in a way that is simple, low cost and transparent.

But in recent years, a "third approach" has emerged that blurs the boundaries between alpha and beta.

This set of strategies, which we call advanced beta, gives investors an alternative to the traditional cap-weighted model, often using different security weightings, in a way that enables specific risk factors to be pinpointed in addition to market beta. As part of a broader portfolio, this systematic, rules-based approach can help investors gain an exposure to a wide range of return opportunities that may align better with their investment objectives than traditional indexing.

The result is a more nuanced approach to portfolio construction. Investors no longer face a binary choice between active and passive, and can overlay these allocations with an additional category of investment strategies that combine the objectivity, consistency and transparency of passive with a more targeted exposure to certain risk factors or return drivers.

In this report, we explore the evolution of advanced beta strategies, and look at current appetites and awareness of this evolving investment approach. We also look at some of the barriers that are preventing quicker adoption of advanced beta, and examine some of the issues that investors may wish to consider when adding advanced beta to their portfolio.

Richard Lacaille, Global Chief Investment Officer, State Street Global Advisors

EXECUTIVE SUMMARY

About this research.

In October and November 2013, Longitude Research conducted a survey of 300 institutional investors on behalf of State Street Global Advisors (SSgA). Respondents were drawn from North America and Europe, and represented all main types of institutional investors, including public and private pension funds, endowments, foundations, insurance companies, private banks and consultants. Half of the respondents were chief investment officers, and the remainder were department heads, directors, partners and other senior executives. Half of the respondents represented institutions with more than US\$1B in assets under their control.

In addition to the survey, Longitude Research conducted a series of in-depth interviews with senior professionals in the institutional investor community. Our thanks are due to everyone who took part in this research for their valuable time and insight.

For the purposes of this report, we use the term "advanced beta" to refer to systematic, rules-based strategies that provide investors with a way to gain exposure to factors in addition to traditional market beta across both equities and fixed income.

Longitude Research is a leading global specialist in thought leadership, and works with corporate clients to produce insightful research-led content. The company has a strong track record of working extensively across financial services, consulting, technology and other sectors.

Investors see advanced beta as an alternative to active as well as passive.

Although it's often marketed as an alternative to cap-weighted indexing, respondents to our survey see advanced beta more as a replacement for active. When asked how they would fund an advanced beta allocation, investors are three times more likely to say that it will come from active than passive. In addition, almost two-thirds of respondents agree that advanced beta is a viable alternative to active management.

Most institutional investors surveyed have either committed a portion of their portfolios to advanced beta or intend to do so.

Our research finds strong appetites for advanced beta solutions among the institutional investor community. Among those surveyed, 42% say they have already committed a portion of their portfolios to advanced beta, while a further 24% say they intend to do so at some point in the future. Investors surveyed express interest in both equity and fixed income advanced beta products—and expect to increase their allocation to both over the next three years.

Advanced beta is increasingly viewed as an established part of an investor's portfolio, not an investment fad.

The majority of institutional investors see advanced beta as a powerful evolution in asset allocation strategies. Three-quarters of respondents say that advanced beta is a viable alternative to traditional index strategies, and two-thirds say that it is a viable alternative to active management. Investors have placed more emphasis on investment outcomes associated with certain factor exposures.

Although levels of awareness about advanced beta are high, investors lack an understanding of implementation.

Overall, institutional investors report high levels of awareness about advanced beta. Almost 70% report their knowledge of what different providers offer as good or excellent, and 66% say the same about their awareness of advanced beta as an investment concept. There are gaps in their knowledge, however. A much smaller portion of 40% say they have a good understanding of when to implement advanced beta, and just 33% say the same about their understanding of multi-factor advanced beta, which combines exposure to multiple risk factors.

Low-valuation and low-volatility strategies are generally the most popular in the advanced beta space.

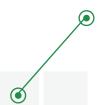
Investors who have already committed funds to advanced beta, or are planning to do so, are most likely to adopt low-valuation and/or low-volatility strategies. Overall, 39% of investors currently with an allocation to advanced beta are using one or both of these approaches. Low valuation is particularly popular among the largest investors in the survey, while low volatility has strong appeal among European investors. Other strategies, such as quality, momentum and multi-factor, are currently less popular, but many investors say they will consider them in the future. For example, just 9% are currently using multi-factor strategies, but 65% are considering them. The concept of multi-factor certainly holds appeal: 67% agree that combining several targeted market exposures as part of an advanced beta offering makes for a more refined product.

Investors look to historical performance as the key factor for selecting an advanced beta manager.

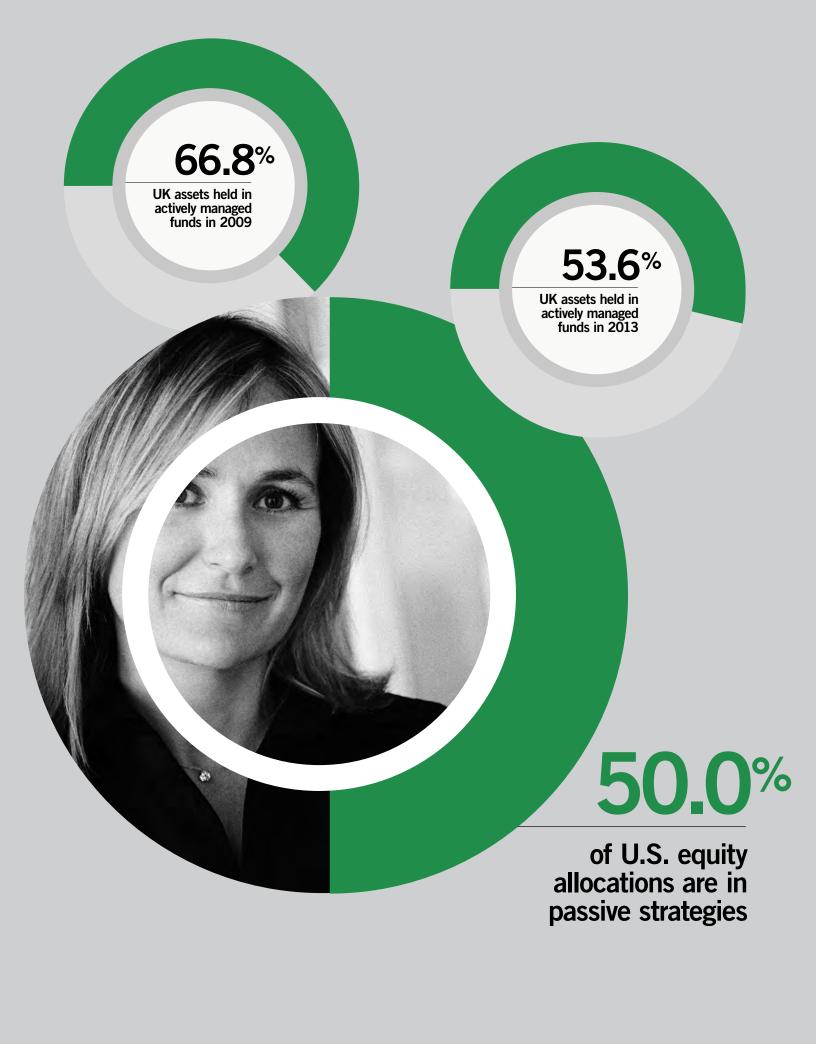
Asked what would influence their choice of manager for an advanced beta mandate, investors point to historical performance as the leading factor by a considerable margin. A recommendation from an investment consultant and the extent to which the provider is already providing services to the investor follow as other important factors.

Despite the appeal, significant hurdles remain to wider adoption of advanced beta strategies.

Respondents highlight a number of challenges, including difficulties benchmarking performance, lack of awareness (particularly among broader stakeholders) and the concern that strategies being applied are untested. To overcome these obstacles, investors need conviction, a long-term perspective, strong governance and a clear understanding of both risks and opportunities.



The current landscape



THE CURRENT LANDSCAPE

In 2009, the Norwegian Ministry of Finance commissioned a study¹ to investigate the performance of its public pension fund in the years leading up to and immediately after the financial crisis.

Like many institutional investors, the Norwegian government was disappointed with its active managers' response to the financial crisis. In 2008, the fund suffered an investment loss of 23.3%, compared with a loss of 19.9% versus their equity/fixed income benchmark. The government therefore wanted a better understanding of the contribution that active management made to the performance of its portfolio.

The findings of the investigation were startling. The academics who carried out the study concluded that active managers had made a negligible contribution to the fund's historical performance. For fixed income, the mean active return over the period studied was zero, and for equities, it was just 0.05% per month.

The study also concluded that a number of well-documented risk factors could largely explain the meager active performance that was generated. "Thus," wrote the authors, "the contribution of active management to the overall return that is genuinely idiosyncratic is extremely small indeed."

The Norwegian government is not alone in its assessment. Concerns about the performance of active managers have already encouraged many institutional investors to increase their allocation to passive. Between 2009 and 2013, for example, the portion of assets held in actively managed funds by UK pension funds fell from 66.8% to 53.6%, according to the Investment Management Association.² U.S. institutional investors currently have around 50% of their equity allocations in passive strategies.3

Per Moldrup, Head of Manager Selection at Sampension, which manages three of Denmark's largest occupational pension schemes, has terminated mandates with many active managers and reallocated to passive strategies. "We were very disappointed with the large correlations in 2008 between the alpha generated by our active managers," he says. "The diversification we were seeking had disappeared when it was most needed."

Investors consider disappointment with both the costs and performance of active management as among the key reasons driving a switch to advanced beta (see table 1). The scale of this disappointment varies, however, depending on the investor type. Smaller funds worry more about the costs of active management than larger ones. Meanwhile, concerns about the performance of active management are highest among foundations and public pension funds.

An increased allocation to passive is only one part of the solution, however. The cap-weighted model, while playing an important part in investment portfolios, is not without criticism. Some commentators point to the fact that a cap-weighted index will automatically give the most influence to the largest stocks—which may be overvalued. Capweighted indices can also be concentrated in a particular sector or, in small markets, give undue weight to a small number of very large companies. In fixed income indices, a market-weighted approach can mean that investors have greater exposure to companies or countries that are most indebted.

Three simple factor exposures.

Several of the simplest and most widely recognized equity risk premiums or factors that underlie outperformance are: Size: the tendency of smaller stocks to outperform larger stocks over the long term.

Value: the tendency of stocks with low valuations (defined by price to book value or similar price to fundamental measures) to produce higher returns over the long term.

Low-volatility: low-volatility stocks have historically produced higher risk-adjusted returns, according to the majority of studies.

A third approach.

This greater scrutiny on both active and passive is prompting institutional investors to explore a third approach that blurs the boundaries between alpha and beta. Advanced beta, sometimes also called alternative or smart beta, refers to a set of approaches that deviate from the traditional cap-weighted model and instead weight indices or select securities based on alternative methodologies. For example, stocks may be weighted by metrics such as sales, earnings or book value rather than market capitalization. Other approaches weight them according to volatility, momentum or price/earnings multiples. In the case of fixed income, corporates or sovereigns could be weighted by factors such as their fundamental financial strength.

¹ Evolution of Active Management of the Norwegian Government Pension Fund – Global (Ang, Goetzmann and Schaefer, 2009).

² Pension funds embrace passive strategies, Pensions Insight, September 6, 2013.

³ Breaking the passive paradox: the case for quantitative enhanced indexing, PineBridge Investments, 2012.

Table 1: Drivers of adoption.

Advanced beta portfolios offer investors the opportunity to experience the investment outcomes associated with certain factor exposures within a familiar, rules-based passive framework. The table below shows the key factors that investors in our survey say are encouraging them to adopt advanced beta strategies.

PUSH FACTORS

Concerns about construction of, or excessive concentration in, traditional cap-weighted indices



Some commentators point to a number of flaws in cap-weighted indices, including disproportionate exposure to highly favored stocks during bubbles, underweighting of "value" stocks and failure to pursue stocks with low volatilities. From a fixed income perspective, traditional indexing can lead to overexposure to the most indebted companies or countries.



Desire to reduce overall risk in portfolio



Disappointment with the costs of active management



Numerous studies have shown that investors have become increasingly dissatisfied with the costs of active management relative to the performance they deliver.



At the core of advanced beta's appeal is the strong empirical support highlighting the potential for improved riskadjusted returns in certain strategies.

Disappointment with the performance of active managers



Investors have lost confidence in the ability of active managers to deliver alpha consistently, and especially during the recent period of market turbulence.



Among those investors who are already investing in advanced beta, 51% say that advice from consultants has been among the main reasons driving increased allocation.

Advanced beta strategies are not new. The factors that underlie these approaches have been the topic of academic research for several decades, and the Standard & Poor's 500 equal-weighted index (which provides equal exposure to all 500 stocks in the index, thus providing smaller cap exposure rather than weighting them by market cap) has been around for more than 10 years.

But, in recent years, advanced beta has received much more widespread attention. Most Dutch, Belgian and German pension funds already use so-called "beta-efficient" strategies. The strategic equity portfolio run by PGGM, a pension fund based in the Netherlands, currently allocates 40% of its investments to advanced beta. The Danish fund PKA, the Taiwan Labor Pension Fund and the UK's Strathclyde Pension Fund have also apportioned part of their portfolios to advanced beta products.

Research conducted for this report finds substantial interest in advanced beta as an investment concept. The vast majority of institutional investors surveyed have either already committed a portion of their portfolio to advanced beta, or plan to do so. Just over 4 in 10 say they have already committed, while a further 24% say they intend to commit a portion of their portfolio to advanced beta. Seventeen percent say they may invest in the future but remain cautious, while only 17% say they are skeptical and unlikely to invest in these strategies at all (see figure 1).

"What's appealing to investors is that these strategies are generally very transparent," says Lynn Blake, CIO of Global Equity Beta Solutions at SSgA. "Advanced beta strategies are objective. They're usually very liquid and quite broad, so capacity constraints are typically not an issue."

FIGURE 1

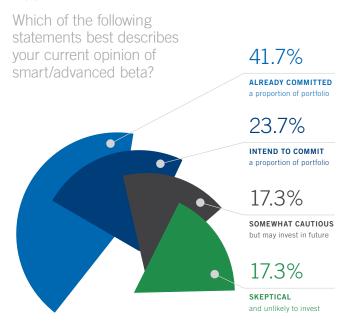
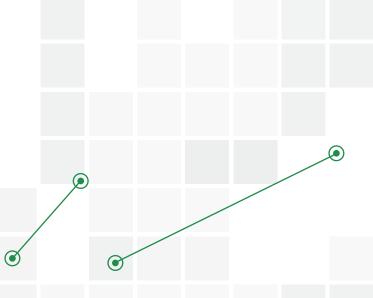


Figure Source: Longitude Research



Fixed income.

Our research finds that investors are interested not only in equity advanced beta, but fixed income as well. Among respondents, 56% say they would be interested in accessing advanced beta fixed income strategies.

In a traditional market-value fixed income index, investors can find that they are exposed to the most indebted corporates or sovereigns. In addition, they can be exposed to concentration risk, and this can lead to significant downside if a heavily indebted corporate or sovereign falls into default.

Advanced beta aims to address these perceived flaws. One approach is to implement a reweighting process that takes into account fundamental factors—such as GDP growth for sovereign debt—and underweights countries that are weak while overweighting those that are strong.

But Brian Kinney, Head of Fixed Income Advanced Beta at SSgA, advises that this fundamental reweighting may not be enough on its own. "If you look at fundamental factors alone, they don't tend to do a good job of identifying credits that are at risk of downgrades because they are not sufficiently sensitive or responsive to change," he explains. "By building in additional factors, such as the underlying volatility of credits and pricing volatility, investors can avoid some of the flaws of the market-value approach."

Awareness levels.

Most institutional investors have a high level of awareness about advanced beta. More than two-thirds say their awareness of advanced beta as a concept is excellent or good, while a similar portion say the same about their understanding of different advanced beta strategies (see figure 2). Investors in Europe, where advanced beta strategies are better established, are more familiar with the concept: 70% describe their awareness of advanced beta as excellent or good, compared with 57% in the U.S.

FIGURE 2

How would you rate your knowledge and understanding of the following aspects of smart/advanced beta?

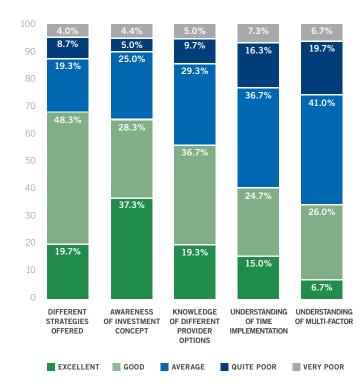
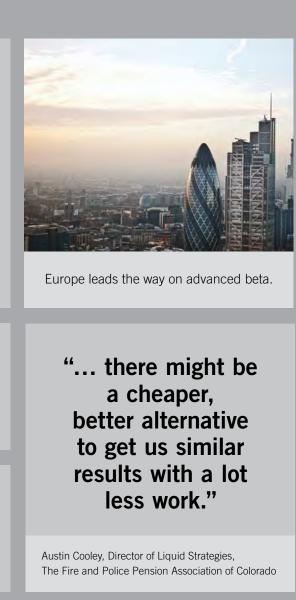


Figure Source: Longitude Research





in the U.S.

have a strong

awareness of

advanced beta

have a strong

awareness of advanced beta

in Europe.

25%

Almost one-quarter of European respondents have allocated 20% or more

of equities in their portfolio to advanced beta, compared with just 4% of those

from North America.

Knowledge about advanced beta also varies between different investor types. Public and private pension funds report high levels of awareness about advanced beta as an investment concept, while endowments and foundations say they are less familiar (see figure 3).

FIGURE 3

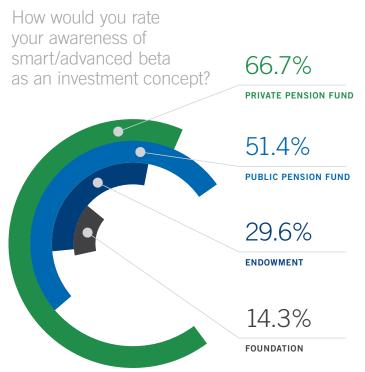


Figure shows respondents by sub-sector who rate their awareness as excellent. Figure Source: Longitude Research

There are some aspects of advanced beta, however, where even the most knowledgeable investors are struggling. In particular, only around one-third of investors say they are confident in their understanding of multi-factor strategies, which combine exposure to multiple factors, while only 40% are confident in their ability to time the implementation of advanced beta strategies.

Europe leads the way on advanced beta.

European institutional investors are outpacing their North American counterparts in the adoption of advanced beta strategies.

Almost one-quarter of European respondents have allocated 20% or more of equities in their portfolio to advanced beta, compared with just 4% of those from North America.

European investors are more likely than those from North America to have applied low-volatility, low-valuation, momentum and equal-weighting strategies.

More than 7 out of 10 European respondents have a strong awareness of advanced beta as an investment concept, compared with 57% from North America.

But while levels of awareness may still be lagging in some areas, there is no question that institutional investors see advanced beta not as an investment fad, but as a powerful evolution in asset allocation strategies. Three-quarters of respondents say that advanced beta is a viable alternative to traditional index strategies, and two-thirds say it is a viable alternative to active management (see figure 4).

Further survey findings emphasize the extent to which investors see advanced beta as a replacement for active. When investors were asked how they will fund their allocation to advanced beta, they were three times more likely to say they would be moving out of active than out of passive.

Mr. Kinney of SSgA argues that this is as true for fixed income as it is for equities. "Some investors are displeased with what they are getting from fixed income active managers," he says. "Very often, what they are getting is some form of systematic beta that they could get in a much more cost-efficient way from an advanced beta solution with the right rules in place."

The relatively low costs associated with advanced beta mean that, to make active worthwhile, the outperformance needs to be considerable to offset the higher fees. "Our job is to pick managers, and we need to consistently be able to pick the best, know when to fire those that are underperforming and find replacements," says Austin Cooley, Director of Liquid Strategies

at The Fire and Police Pension Association of Colorado. "I hope that we can do that, but there might be a cheaper, better alternative to get us similar results with a lot less work. If you look at some of the advanced beta funds and calculate the relative fee differences, then you really need several hundred basis points in manager selection to overcome them."

Active or passive?

In many ways, investing in advanced beta has much in common with pursuing an active strategy. Like any investment decision, it requires subjective assumptions and choices to be made. It requires extensive due diligence, which can be similar to the process used when selecting an active manager. Perhaps most importantly, advanced beta involves the transfer of risk to the in-house team, which must hold responsibility for the investment performance and therefore be judged in the same way as an active manager. That can be challenging, because performance can vary greatly from the traditional cap-weighted approach.

Yet while some aspects of advanced beta should be considered active, implementation is passive in nature. It is systematic and rules-based, with little need for active intervention. And, in common with traditional indexing, advanced beta is transparent, objective and relatively low cost, and has few or no capacity constraints.

FIGURE 4

Please indicate the extent to which you agree or disagree with the following statements.

- A. Smart beta strategies are a viable alternative to traditional index strategies
- B. Smart beta is here to stay as an evolution in indexing
- C. Smart beta is a viable alternative to active management

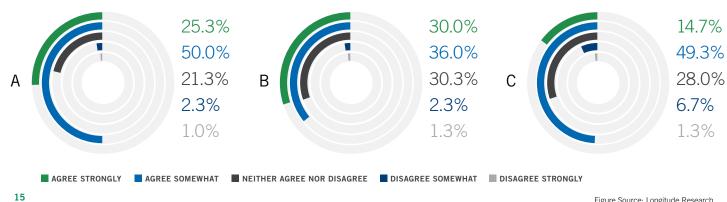


Figure Source: Longitude Research



Implementation



IMPLEMENTATION

Recent years have seen the introduction of a range of different advanced beta products from a number of providers—across both equities and fixed income.

Moving from a conceptual interest in advanced beta to a practical implementation is, however, a big step that requires careful consideration.

James Price, an Investment Consultant at Towers Watson, advises investors to think about their objectives and then assess how effectively advanced beta could help them achieve those alongside their traditional active and passive allocations. For example, investors might believe there is alpha in an asset class but may not be confident that they can select the best manager to extract it. Or, they may be confident in their selection but reluctant to monitor the manager. In both cases, advanced beta could be a useful solution.

"The appeal of advanced beta should be a function of how well it helps you solve the specific investment problem you have," says Mr. Price. "It's not just a question of filling the advanced beta bucket as well as the alpha bucket and the passive one."

Implementation, therefore, starts with a focus on the outcomes that the investor is trying to achieve. "It's essential to think about the key objectives and then determine the right exposures to meet those," says Andrew Astley, Head of Global Product and Marketing at SSgA. "Is your ultimate goal to beat the benchmark, or is it to limit downside and manage the portfolio in such a way that it delivers the kind of yield you need to support your liabilities? For most investors, it will be the latter that matters more, and that means that we need to start the conversation around the real drivers of the portfolio and the exposure that you currently have."

Regardless of factor preference, transparency around methodology is a fundamental requirement in an advanced beta product. Investors should be able to quantify easily the contribution of a particular factor to performance. Because many advanced beta strategies are new and are supported by longer-dated back-testing, the methodology should be freely available and detailed: If it is not or it is unclear, back-testing results should not be considered reliable. Holdings data is equally vital—in some cases, it must be bought through a license from the index provider.

Ms. Blake of SSgA emphasizes the importance for investors in understanding how the strategy departs from cap-weighted. "The investor needs to ensure that their investment objective is appropriately captured in the index—the devil can be in the details," she says. "If an investor is not clear that their objectives are being captured, then we would be concerned that they won't have the conviction to ride periods of underperformance. You need to believe in the long-term benefits and you need to have an explanation as to why they exist."

At the heart of the implementation challenge lies the fact that advanced beta involves transferring the risk of investment decision-making from the active manager to the in-house team. This turns on its head the established distinction between, on the one hand, choosing cap-weighted indices to track the market and, on the other, appointing active managers to outperform it. By blurring the boundaries between active and passive, advanced beta introduces new governance challenges for institutional investors. They must have confidence in their own decision-making—and the recommendations of their consultants, if appropriate—and they must have an investment board that is firmly committed to the advanced beta model.

This entails the investment staff having a strong conviction in their investment beliefs and selecting the strategies they consider right for them. "In this way, allocating to advanced beta should be thought of in the same light as allocating to an active manager, because you have to have a theory as to why these factors will provide a desired investment outcome," says Ric Thomas, Head of Strategy and Research in SSgA's

Investment Solutions Group. "Of course, you also need to be comfortable with the knowledge that, sometimes, they will underperform the benchmark."

Yet this can be a challenging transition to make, and investors will find it difficult to break the cycle of the comparison of performance with cap-weighted indices. The cap-weighted index remains the simplest reference point understood by all investors and stakeholders in the investment industry—from the most sophisticated trustees to the most occasional of retail investors. "Even the biggest critics of cap-weighted indices constantly refer to cap-weighted indices to evaluate the performance of their new indices," notes Felix Goltz, Head of Applied Research at EDHEC-Risk Institute.

Involvement of consultants.

The level of research needed to select the right advanced beta solution can be time consuming and costly, and many investment teams simply do not have the right resources or expertise to meet these demands. There is therefore an important role for consultants in guiding investors to the right solution. Among our respondents, 51% report that advice from consultants is influencing them to increase allocations to advanced beta.

Consultants can help investors understand the sources of risk and return from different factor exposures. They should also be able to identify which factor exposures investors' existing active managers are carrying by drilling into historical returns or the underlying holdings. This type of attribution is important because it will help investors test the representativeness of current performance. For example, emerging market valuation-tilted indices have not performed well recently, in part because of a high exposure to commodities and cyclically based sectors.

Construction issues.

Even after investors have selected the risk factors on which they want to focus, finding the best way to get exposure is not straightforward. One key challenge is a lack of consensus on how indices should be constructed. The index providers—including MSCI, S&P, Russell and FTSE—differ in how to implement the ideas just as much as the managers themselves. This can create challenges for investors seeking to select the most appropriate vehicle.

The diversity of methodologies available highlights the importance of understanding clearly both the benefits and risks of a given strategy. For example, a low-volatility product may appeal to investors because it seems like a good way to limit downside risk, but it can lead to significant concentration risk, with high proportions of the index allocated to just a handful of sectors.

Where strategies create concentrations of stocks in certain sectors or countries, investors must ensure that they are comfortable with these biases. For example, when Sampension was building strategies around value and low volatility, they were aware that both created biases across sectors and countries.

"We saw that both value and low-volatility strategies worked to alter concentrations from the market cap index," says Mr. Moldrup of Sampension. "But, if the most undervalued companies occurred in greater numbers in certain sectors or countries, we decided we were comfortable with the associated risk of pursuing them."

Choosing a provider.

Having worked through these methodological points, investors then need to select the right manager. The key factor influencing choice of manager, according to respondents, is historical performance, with 59% listing it as the most influential consideration (see figure 5). Another factor that is important in choosing a manager is the extent to which the manager offers unique solutions, with 47% naming this as important. Although fees are not a major issue in the survey overall, they are a much bigger concern among smaller plans, which may not have the same economies of scale as larger plans to absorb these.

Mr. Cooley of The Fire and Police Pension Association of Colorado emphasizes the need for providers to show a sophisticated approach and strong conviction to the investment concept. "We're not looking for the me-too player that comes to market and says, 'People want low-vol, so I'm just going to create a low-vol product and see if it sells'," he says. "We want the core concepts of advanced beta to really be ingrained in the philosophy and culture of the organization that's running it."

FIGURE 5

Which factors would be most important in influencing your choice of manager of an advanced beta mandate?

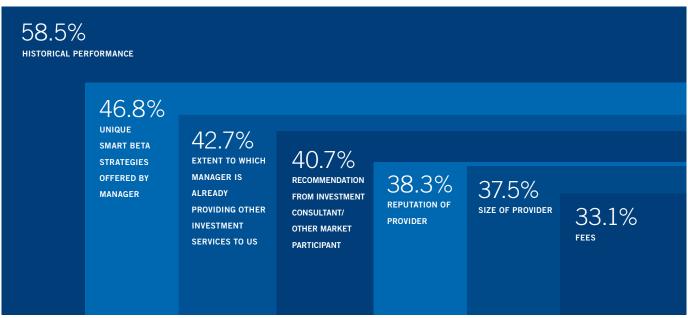


Figure Source: Longitude Research

(

Table 2: Popular advanced beta equity strategies.

The table below shows the advanced beta equity strategies that investors in our survey have either adopted or are considering. One point of interest is that strategies with the lowest levels of current adoption, such as high-quality and multi-factor, are also those that investors are most likely to be considering for future adoption.

ADVANCED BETA STRATEGY	ALREADY ADOPTED / ARE PLANNING TO ADOPT*	RATIONALE
Low valuation	39% 49%	Low-valuation indices attempt to address mispricing issues by rebalancing toward stocks that are priced at the largest discount. Along with low volatility, this is one of the most widely used strategies among survey respondents.
Low volatility	39% 53%	Low-volatility indices emphasize stocks that have exhibited low levels of risk over time. The concept is based on empirical evidence that stocks with lower volatility offer stronger, more consistent performance.
Equal weighting	34% 52%	This advanced beta strategy replaces weightings in an index determined by market cap with equal weightings across the entire index to provide greater small size factor exposure.
Momentum	24%/56%	Momentum strategies increase weightings to stocks that have performed well over a recent period. Although only around one-quarter have already adopted it, 56% are considering doing so.
Yield based	20%/52%	Yield-based strategies favor stocks that have attractive yield characteristics.
High quality	12% 58%	High-quality strategies focus on stocks that are believed to have strong, sustainable business models and genuine competitive advantages.
Multi-factor	9%/65%	Multi-factor strategies seek to address multiple factors simultaneously. Although few investors have currently adopted this approach, almost two-thirds say they are considering it.

^{*}Proportion of investors currently investing in or considering advanced beta that have already adopted/are planning to adopt a given strategy.

A multi-factor approach.

A broader way of controlling the risks inherent in advanced beta strategies is to combine them. Among our respondents, 67% agree that combining several targeted market exposures as part of an advanced beta offering makes for a more refined product. There is considerable interest in a multi-factor approach, but to date, investors have not adopted it widely. Just 9% of respondents have incorporated multi-factor into their portfolios, although 65% say they are considering it, suggesting that it will become more widespread in the future (see table 2).

FIGURE 6

Do you agree that combining several targeted market exposures as part of a smart/advanced beta offering makes for a more refined product?

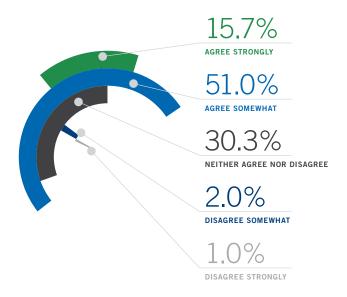
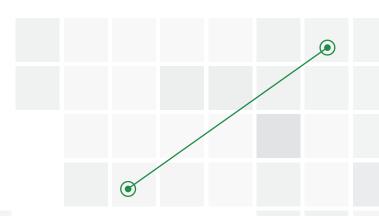


Figure Source: Longitude Research

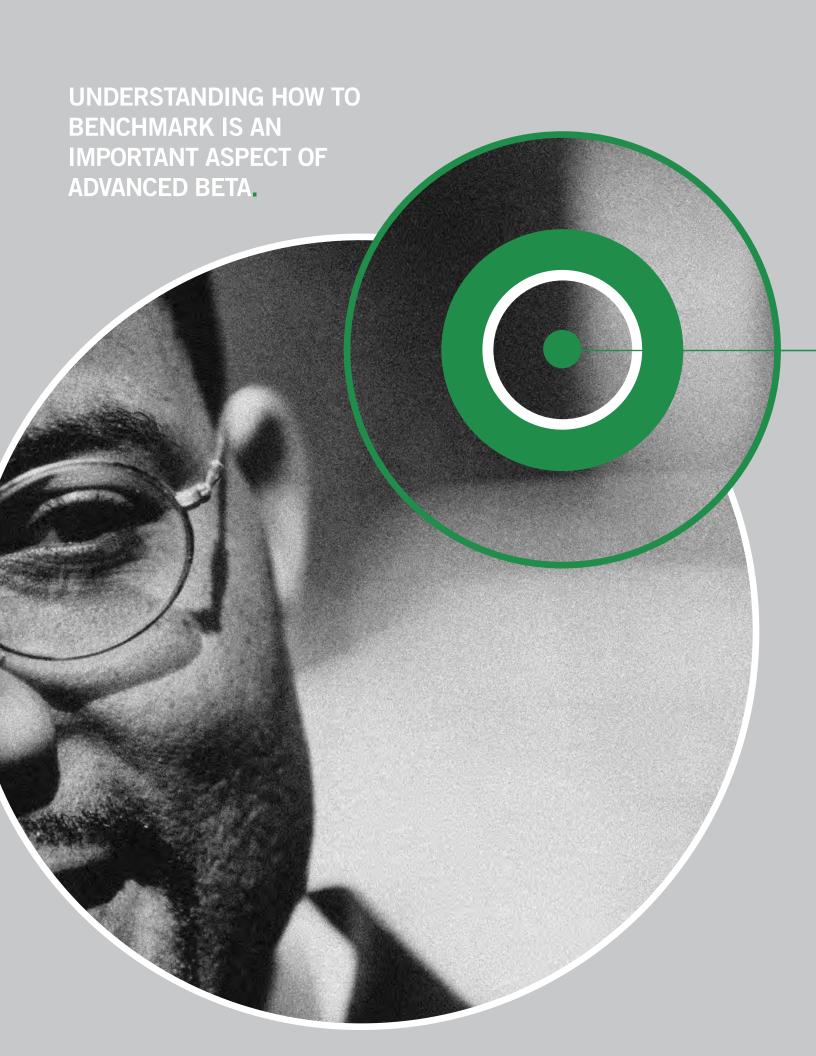
"Our decision to diversify through three factors—value, small cap and low volatility—derived from our concern for the potential of each to heavily underperform market cap over three to five years," says Sampension's Moldrup. "If I believed there were five or seven factors that were there to be harvested, we would certainly diversify further."

The basic argument for a multi-factor approach is the benefit achieved from diversification across factors. "There are clear benefits to combining factor tilts," says Ms. Blake of SSgA. "For example, valuation and volatility at times have negative correlation or very low correlation, so they can be combined and still may achieve strong performance with significantly lower risk."

This also softens the impact of strategies that can produce strong returns but are particularly sensitive to large drawdowns. "In past decades, low-volatility strategies have underperformed several times by around 20% over a 12-month window," says Mr. Price of Towers Watson. "If your objective is performance relative to a market cap benchmark, that is a tough experience to go through."



Risks and barriers



RISKS AND BARRIERS

Despite strong interest in advanced beta as an investment concept, there remain a number of barriers to preventing quicker adoption. The top four concerns, according to survey respondents, are as follows:

1. Difficulties benchmarking performance.

Understanding the appropriate benchmark and how to evaluate it is an important aspect of the decision to adopt advanced beta. Advanced beta solutions are expected to deliver a desired investment outcome over the long term, but in the short term, the returns may trail traditional cap-weighted benchmarks. This can put significant pressure on investment officers because boards and investment committees may question the decision to have selected the advanced beta strategy during periods when it underperforms the benchmark.

In recent years, several Nordic pension funds that adopted advanced beta strategies were forced to exit their holdings when the new strategies underperformed market cap. "Had they understood the risk, they would either have chosen not to make the move, they would have communicated the risks adequately to trustees that this could happen, or they would have adjusted the combination of strategies to manage it," says Mr. Goltz of EDHEC-Risk Institute.

Mr. Cooley of The Fire and Police Pension Association of Colorado points out that the time frames for performance evaluation need to be different with advanced beta. "These strategies need suitably long time periods for evaluation, particularly those that are extracting cyclical premia. You need to have a long enough horizon to evaluate them over an entire cycle," he says.

2. Lack of awareness.

Although most investors in this survey report high levels of awareness about advanced beta, the same may not be true of other stakeholders, such as scheme members or trustees. Poor understanding of the risks can lead to nasty surprises: The risks of drawdowns relative to market cap have caused some investors to avoid advanced beta investing styles altogether. It is crucial for investors to understand the risks of advanced beta strategies in the short and medium term—and be able to communicate those to stakeholders.

This is especially true because drawdowns sometimes work in combination as well as in isolation. "Over the past 20 years, at least two of the three main factors delivered, but there were some years when none of them did," notes Mr. David Blitz, Head of Quantitative Equities Research at Robeco. But the end of these periods is the worst time to sell, which highlights the importance of a disciplined approach to these systematic strategies. This focus requires an investment committee that can engage with the concepts and commit to them for a long period of time.

3. Concerns that strategies are untested.

As with any investment trend, investors naturally worry that advanced beta is untested and that it lacks a sufficient historical track record on which to base an analysis of performance over the long term. Back-testing can help, but investors must be careful when selecting an index on the basis of historical data. One potential problem is that an investor may be selecting an advanced beta strategy based on its recent outperformance when there is no guarantee that it will continue to do so in the future.

"Given the relatively short track record of most advanced beta strategies and indices, it is inevitable that investors will focus on the results of a longer-term back-test to support their decision to invest," says Richard Hannam, Head of Global Equity Beta Solutions, EMEA at SSgA. "And, of course, any published back-test is unlikely to show an inferior outcome. Investors therefore need to be confident that the factors that drove superior risk/ return characteristics in the past will continue to be rewarded in the future, particularly given the volatility and drawdowns experienced over the past 20 years."

4. Concerns that strategies are overly complex.

Investors also worry that advanced beta strategies may be too complex. While there is certainly the potential for obfuscation, advanced beta should not inherently be complex. Strategies such as equal weighting and low valuation are relatively straightforward to explain and implement.

Others, however, which may for example replicate a hedge fund strategy, are inherently more complex. This is not necessarily a drawback, but it does require investors to have the right level of education and expertise so that they can understand what they are buying and explain their choices to stakeholders. "Other things being equal, we would prefer a simple ranking approach for a given metric, which then overweights those stocks that score highly and vice versa," says Phil Tindall, Senior Investment Strategy Consultant at Towers Watson. "If it's more complicated than that, I need to see clearly the benefit."

In this respect, advanced beta does introduce some complexity in that it requires more robust governance and expertise to select strategies, integrate them with the broader investment portfolio and monitor their performance. "You need to understand what you are buying when you allocate to an advanced beta factor, and especially how that factor performs in various market environments," says Mr. Thomas of SSgA Investment Solutions Group. "It can get complex when you start adding more than one advanced beta strategy to your overall portfolio, which is why we often carry out scenario analysis before making a recommendation to our clients."

ADVANCED BETA STRATEGIES DO NOT NEED TO BE COMPLEX.



Key takeaways

KEY TAKEAWAYS

Advanced beta is becoming an established part of institutional investors' portfolios.

Investors are increasingly dissatisfied with the high fees and underperformance of active managers, and the perceived shortcomings of traditional cap-weighted indices. Although both active and passive will continue to play key roles in any portfolio, many investors are exploring advanced beta as a third option. Our research suggests that levels of adoption will continue to increase as advanced beta matures as a concept.

Advanced beta is challenging traditional distinctions between active and passive.

Advanced beta requires investors to transfer the risk of the investment decision-making from the active manager to the in-house team. This is a different type of engagement from selecting active funds or allocating a proportion of a portfolio to traditional passive strategies. Advanced beta should therefore be considered an active decision, even if the implementation is passive.

The investment outcomes matter most.

The positioning of advanced beta as an alternative to traditional indexing to some extent misses the point. The key issue for institutional investors is that they achieve investment performance in such a way that meets their liabilities or investment objectives. Advanced beta provides greater control because it enables investors to identify exposures they value and target them appropriately.

Investors must take a long-term view.

Investment in advanced beta has to be considered a long-term strategy. Factors may go through periods when they are out of favor, which means that evaluation needs to take place over a long time frame. This long-term perspective also means that investors need to accept that, at some times, advanced beta-based strategies will underperform the market cap benchmark. Investors therefore need strong support from investment committees and robust governance, as well as a disciplined belief in systematic strategies in which they are investing.

Consider a multi-factor approach.

Strategies based on multiple factors help to build resilience and diversification into a portfolio. For example, value and volatility can show negative correlation at certain times: By combining them at those points in the cycle, risk can be reduced and performance boosted.

Build awareness among broader stakeholders.

Our research shows fairly high levels of awareness among institutional investors. But investors also need to build support among their broader stakeholder groups. This means educating investment committees to explain the benefits—and risks—of the advanced beta approach.

Transparency is vital.

Transparency around methodology is a fundamental requirement in an advanced beta product. Investors should be able to quantify easily the contribution of a particular factor to performance—and this means having full access to a detailed methodology.

For more information on Advanced Beta in the U.S., please visit www.ssga.com/advancedbeta.

In Europe, please visit www.ssgainsight.com.

STATE STREET GLOBAL ADVISORS.



State Street Global Advisors is the investment management business of State Street Corporation (NYSE: STT), one of the world's leading providers of financial services to institutional investors.

State Street Global Advisors, One Lincoln Street, Boston, MA 02111-2900

SSgA Global Entities

Australia: State Street Global Advisors, Australia, Limited (ABN 42 003 914 225) is the holder of an Australian Financial Services Licence (AFSL Number 238276). Registered office: Level 17, 420 George Street, Sydney, NSW 2000, Australia Telephone: +612 9240-7600, Facsimile: +612 9240-7611.

Belgium: State Street Global Advisors Belgium: Office Park Nysdam, 92 Avenue Reine Astrid, B-1310 La Hulpe, Belgium. Telephone: 32 2 663 2036, Facsimile: 32 2 672 2077. SSgA Belgium is a branch office of State Street Global Advisors Limited. State Street Global Advisors Limited is authorised and regulated by the Financial Conduct Authority in the United Kingdom.

Canada: State Street Global Advisors, Ltd., 770 Sherbrooke Street West Suite 1200, Montreal, Quebec H3A 1G1 Canada and 30 Adelaide Street East, Suite 500, Toronto, Ontario, M5C 3G6 Canada.

Dubai: State Street Bank and Trust Company (Representative Office), Boulevard Plaza 1, 17th Floor, Office 1703 Near Dubai Mall & Burj Khalifa, P.O Box 26838, Dubai, United Arab Emirates. Telephone: 971 (0)4-4372800, Facsimile: 971 (0)4-4372818.

France: State Street Global Advisors France. Authorised and regulated by the Autorité des Marchés Financiers. Registered with the Register of Commerce and Companies of Nanterre under the number 412 052 680. Registered office: Immeuble Défense Plaza, 23-25 rue Delarivière-Lefoullon, 92064 Paris La Défense Cedex, France. Telephone: (+33) 1 44 45 40 00, Facsimile: (+33) 1 44 45 41 92.

Germany: State Street Global Advisors GmbH, Brienner Strasse 59, D-80333 Munich. Telephone +49 (0)89-55878-400, Facsimile: +49 (0)89-55878-440. Hong Kong: State Street Global Advisors Asia Limited, 68/F, Two International Finance Centre, 8 Finance Street, Central, Hong Kong, Telephone: +852 2103-0288, Facsimile: +852 2103-0200.

Ireland: State Street Global Advisors Ireland Limited is regulated by the Central Bank of Ireland. Incorporated and registered in Ireland at Two Park Place, Upper Hatch Street, Dublin 2. Registered number 145221. Member of the Irish Association of Investment Managers.

Italy: State Street Global Advisors Italy, Sede Secondaria di Milano - Via dei Bossi, 4 20121 Milan, Italy. Telephone: 39 02 32066 100, Facsimile: 39 02 32066 155. SSgA Italy is a branch office of State Street Global Advisors Limited. State Street Global Advisors Limited is authorised and regulated by the Financial Conduct Authority in the United Kingdom.

Japan: State Street Global Advisors, Japan, 9-7-1 Akasaka, Minato-ku, Tokyo Telephone +813 4530 7380. Financial Instruments Business Operator, Kanto Local Financial Bureau (Kinsho #345). Japan Securities Investment Advisers Association, Investment Trust Association, Japan Securities Dealers' Association.

Netherlands: State Street Global Advisors Netherlands, Adam Smith Building, Thomas Malthusstraat 1-3, 1066 JR Amsterdam, Netherlands. Telephone: 31 20 7085600, Facsimile 31 20 7085601. SSgA Netherlands is a branch office of State Street Global Advisors Limited. State Street Global Advisors Limited is authorised and regulated by the Financial Conduct Authority in the United Kingdom.

Singapore: State Street Global Advisors Singapore Limited, 168, Robinson Road, #33-01 Capital Tower, Singapore 068912 (Company Reg. No: 200002719D), Telephone: +65 6826-7500 • Facsimile: +65 6826-7501.

Switzerland: State Street Global Advisors AG, Beethovenstr. 19, CH-8027 Zurich. Telephone +41 (0)44 245 70 00, Facsimile +41 (0)44 245 70 16.

United Kingdom: State Street Global Advisors Limited. Authorised and regulated by the Financial Conduct Authority. Registered in England. Registered No. 2509928.

VAT No. 5776591 81. Registered office: 20 Churchill Place, Canary Wharf, London, E14 5HJ. Telephone: 020 3395 6000, Facsimile: 020 3395 6350.

United States: State Street Global Advisors, One Lincoln Street, Boston, MA 02111-2900. Web: ssga.com

This material is for your private information. The views expressed in this material are the views of the authors shown through the period ended December 31, 2013, and are subject to change based on market and other conditions. The information provided does not constitute investment advice and it should not be relied on as such. All material has been obtained from sources believed to be reliable, but its accuracy is not guaranteed. This document contains certain statements that may be deemed forward-looking statements. Please note that any such statements are not guarantees of any future performance, and actual results or developments may differ materially from those projected. Past performance is no guarantee of future results.

Risks associated with equity investing include stock values which may fluctuate in response to the activities of individual companies and general market and economic conditions. Although bonds generally present less short-term risk and volatility risk than stocks, bonds contain interest rate risks; the risk of issuer default; issuer credit risk; liquidity risk; and inflation risk. This effect is usually pronounced for longer-term securities. Any fixed income security sold or redeemed prior to maturity may be subject to a substantial gain or loss.

Diversification does not ensure a profit or guarantee against loss.

Asset Allocation is a method of diversification which positions assets among major investment categories. Asset Allocation may be used in an effort to manage risk and enhance returns. It does not, however, guarantee a profit or protect against loss.

MSCI is a trademark of MSCI Inc.

The information provided does not constitute investment advice and it should not be relied on as such. It should not be considered a solicitation to buy or an offer to sell a security. It does not take into account any investor's particular investment objectives, strategies, tax status or investment horizon. You should consult your tax and financial advisor. All material has been obtained from sources believed to be reliable. There is no representation or warranty as to the accuracy of the information and State Street shall have no liability for decisions based on such information.

 $@\ 2014$ State Street Global Advisors. All Rights Reserved. ID0587-INST-4458 Exp. Date: 1/31/2015