STOXX

PULSE

VOL 4/ISSUE 4 – **FALL 2015/WINTER 2016**

» The Art and Science of Smart Beta

» Smart-Beta Index to Capture "Abenomics" Returns

» How Much Longer can Europe's Recovery be Extended?

» Bright Future for Structured Products

WELCOME TO THE FALL 2015/WINTER 2016 EDITION OF STOXX PULSE

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MEET STOXX AT A CONFERENCE

» Jan. 24 – 27, Hollywood, FL/USA
STOXX will participate at the INSIDE ETFS CONFERENCE hosted by ETF.com. Rod Jones, Head of North America, will speak at the event.

» Feb. 3 – 4, Zurich, Switzerland
Angelika Bolliger, Head of Market Development, will speak at FINANZ '16.

"WITH PULSE ONLINE, WE WILL CAPTURE MARKET TRENDS AND DEVELOPMENTS AS THEY HAPPEN."

Hartmut Graf
CEO, STOXX Limited

Dear readers,

Welcome to a new issue of STOXX PULSE. In this issue we focus on the universe of smart beta, the development of the iSTOXX® MUTB Japan Quality 150 Index in collaboration with one of Japan's largest trust banks, the slow recovery of the European economy and the new ways structured products are put to use by investors.

BlackRock's Sara Shores takes us through the art and science of smart beta, giving us some history into the rise of smart beta and its recent popularity: "At last count there are more than 700 smart-beta exchange-traded products in existence, and growing!" Sara goes on to explain the key elements that an investor should consider when evaluating smart-beta products: "Factor exposures, portfolio construction rules and implementation."

Overall, Sara sees great potential in smart beta. "At their best, smart-beta strategies empower investors, providing efficient and affordable access to time-tested investment strategies," she told PULSE.

We follow the theme of smart beta over to Japan, with an interview with Yoshiyuki Masuda from Mitsubishi UFJ Trust & Banking (MUTB). STOXX and MUTB have jointly developed the iSTOXX MUTB Japan Quality 150 Index, a benchmark that selects companies based on their "high quality" factor, with a focus on returns to shareholders and profitability.

The new index focuses on return on equities (ROE) as one of its main factors. As Masuda-san says: "With the increasing number of companies consistently able to realize a higher ROE than investors expect, the setting is becoming increasingly favorable to earn returns from ROE as a stable factor."

Bart van Ark, Chief Economist & Chief Strategy Officer at The Conference Board, gives us an update on the outlook for Europe. Bart tells us that "the next five years are likely to show a moderate recovery path for Europe," but warns that in the medium term "growth won't be strong, which means any major unforeseen calamities could threaten to derail it."

We end this issue with a look at the history, current use and potential for structured products. We are joined by Julien Bieren from Credit Suisse and Guillaume Flamarion from JPMorgan Chase & Co, who speak to us about the innovations and uses they are seeing in the structured products market, and how they may be overlooked by investors.

Before I close, I want to highlight that in October we launched our new online news channel, PULSE ONLINE, which is complementing our quarterly magazine.

With PULSE ONLINE, we will capture market trends and developments as they happen and analyze their wider implications for the industry. In this way, we aim to provide the market with added transparency and help our clients conquer complexity.

I hope you enjoy this issue and would also encourage you to visit stoxx.com/pulseonline for more timely updates. For comments and/or suggestions, please contact pulse@stoxx.com.

Regards,

Hartmut Graf
CEO, STOXX Limited

Sara Shores, CFA
Managing Director BlackRock
Global Head of Smart Beta

THE ART AND SCIENCE OF SMART BETA

The rise of data and technology is transforming the investment industry, just as it is transforming our everyday lives. Look no further than your own pocket for evidence – 30 years ago, the 7.5 kg Apple Macintosh revolutionized the home computer industry with mouse capability, a paint feature, and the ability to connect to a printer. Today, the computer that you carry in your pocket can give you the shortest route to a destination by crowdsourcing traffic data in real time, control your TV, and give you a satellite image of anywhere on the planet. All the while firing off as many emails as your fingers can type up. The investment industry has experienced a similar transformation; 30 years ago, it took a sea of analysts and a room full of super computers to gather and analyze basic fundamental data like dividend yield or price to book. That information is now freely available from the very same 5-inch computer that woke you up this morning.

Our lives are changing, and so is the way we can build portfolios. The availability of computing power and the sheer breadth of data now available has shifted the balance of power in the investment world. Insights around valuation and sentiment were once only available to investment insiders, providing a meaningful informational advantage that could be exploited as alpha. However, technology and regulatory reform has leveled the playing field and shifted the balance of power. Today we can build portfolios in ways that simply were not possible in the past; the widespread availability of reliable data and the insights on how to apply it have redefined the notion of passive investing. We can now deliver a wider range of outcomes – not just cap-weighted index portfolios, but index-like portfolios that capture proven drivers of returns that have historically outperformed cap weighted indices – otherwise known as smart beta.

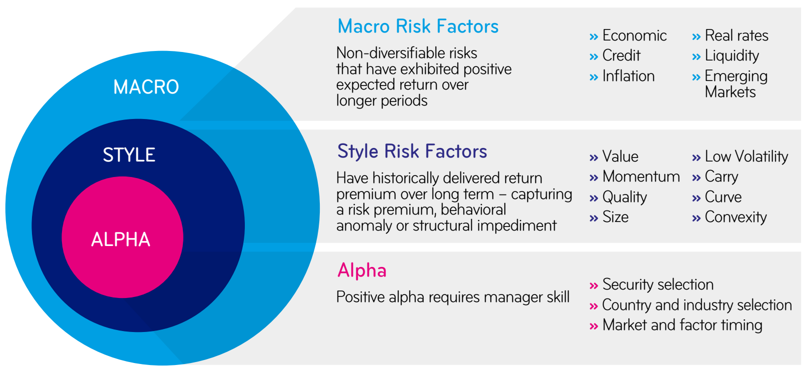
"OUR LIVES ARE CHANGING, AND SO IS THE WAY WE CAN BUILD PORTFOLIOS."

Indeed, smart-beta strategies seem to have taken the investment industry by storm in the last few years. Smart-beta assets under management (AUM) have grown at an annualized growth rate of 36% since the beginning of 2012 – about twice the rate for the broader exchange-traded products (ETP) industry. Smart beta is an increasingly global phenomenon, with adoption increasing across all regions, particularly in Europe. Dividend-focused funds represent close to half of global smart-beta assets, but growth is fastest in minimum volatility and multi-factor funds.

The growth in smart beta has led to a proliferation of different investment strategies – at last count there are more than 700 smart-beta ETPs in existence, and growing! How do investors choose among the plethora of offerings? While data and technology have powered the smart-beta revolution, there are many human choices that are required in strategy development and implementation to ensure the end result is actually a smart investment. So when evaluating smart-beta strategies, here are three things that matter:

1. Factor exposures
2. Portfolio construction rules
3. Implementation

FIGURE 1: SOURCES OF PORTFOLIO RISK AND RETURN



Source: Siegel, Jeremy J., Future for Investors, 2006 with updates to 2012

1. Factor exposures

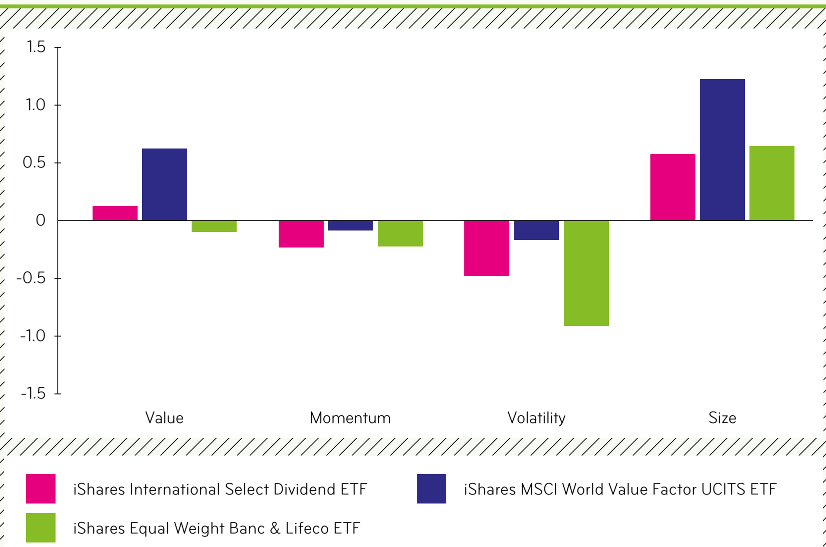
First and foremost, factor exposures matter. Factors are nothing more than broad, persistent drivers of returns – the true economic building blocks of all portfolios. You might compare factors in asset classes to the nutrients in food – both milk and steak contain fat and protein, just as economic risk is present in public equities, private equities, high yield bonds and most hedge funds. Healthy diners look through the foods they eat to the nutrients those foods contain, just as factors allow us to cut across asset classes and identify the true sources of risk and return in any portfolio. Of course, the nutrients or the factors you want will differ depending on your goals – if you're training for a marathon, you can eat a lot more strudel and spätzle than someone trying to lose weight on a low-carb diet.

Finding the right mix of assets isn't possible without understanding the economics of these underlying factors. Armed with a better understanding of these return drivers, we can build more robust, better diversified portfolios.

If factors are important, which factors matter? Figure 1 describes a set of factors that are based upon strong economic rationale, backed by a wide body of academic and empirical evidence. Each of these factors has historically outperformed the market over long periods of time, and have been practiced by the best investment managers for decades. They are so broad that these patterns of outperformance are seen in domestic and overseas equities markets, as well as fixed income, commodities and other asset classes. They are so persistent

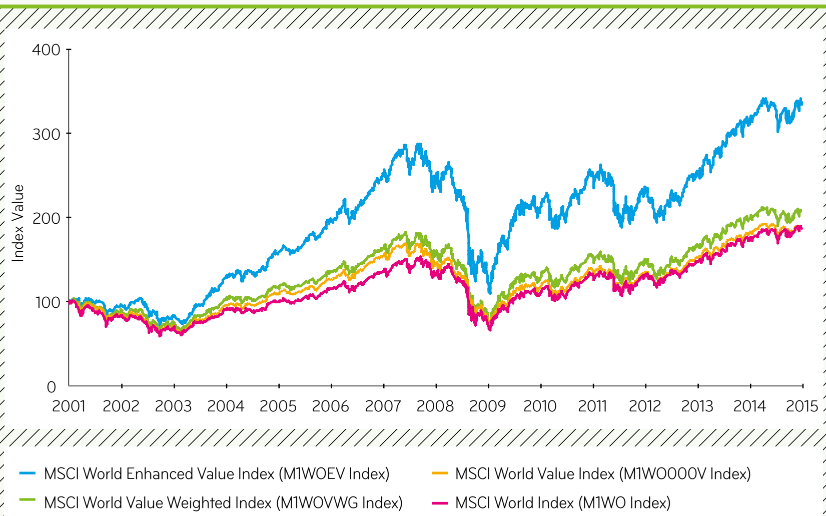
"SMART-BETA STRATEGIES PROVIDE AFFORDABLE ACCESS TO TIME-TESTED INVESTMENT STRATEGIES."

FIGURE 2: Z-SCORE FOR STYLE EXPOSURES



Source: BlackRock Fundamental Equity Risk Model, as of Jul. 31, 2015

FIGURE 3: CUMULATIVE PERFORMANCE COMPARISON FOR VALUE STRATEGIES



MSCI, Bloomberg, BlackRock, as at the end of Mar. 2015. Based on US$ denominated net total return indices. Index values have been re-based to 100 as at Jan. 1, 2001

that we have known about them for decades. Yet, they persist because they represent a reward for bearing risk. These investment styles also continue to generate enhanced returns compared to the market because they result from an economic structural impediment or they go against behavioral biases of the average investor.

For example, we can apply this lens to three very different sounding exchange-traded funds (ETFs): a dividend fund, a value factor fund and an equal-weighted portfolio of Canadian banks. Figure 2 plots the Z-scores of each ETF to four style factors: value, momentum, volatility, and size (a score of zero would indicate style exposures similar to the broad global equity market). These three seemingly different ETFs turn out to have similar factor exposures – they are all biased towards large-cap stocks, less volatile names and less momentum-oriented names. These style exposures will drive a large portion of excess returns. Understanding these exposures becomes even more important in multi-manager portfolios where it is critical to determine how the pieces add up – are your selected strategies diversifying against one another, or simply compounding unintended risks?

2. Portfolio construction rules

Secondly, portfolio construction rules matter – because it is those choices in portfolio construction that give rise to the factor exposures that are ultimately delivered. Many strategies may sound alike, but subtle differences in portfolio construction choices may lead to large differences in performance. Of the many portfolio construction choices to consider, the rules governing security selection (screening) and weighting scheme have the largest impact on portfolio characteristics and performance.

To illustrate, figure 3 plots the cumulative historical return for three value-oriented strategies: a traditional (cap-weighted) value index, a fundamentally weighted index and a value factor index. Each provides a tilt towards value-oriented securities – but with very different total performance experiences:

- A traditional value index like the MSCI World Value Index includes only a subset of the universe with the lowest valuation ratios, but remains cap-weighted.
- A fundamental index like the MSCI World Value Weighted Index includes all securities in the universe, reweighted in proportion to a value score to emphasize the most value-oriented names.
- Finally, the MSCI World Enhanced Value Index, a value factor index, is both screened and reweighted, including only the names with the highest value scores, then reweighted in proportion to those scores.

While all three strategies deliver an exposure to "value" in varying degrees, the rules governing stock selection and weighting criteria have a profound impact on the strength of the nature of the exposure that's delivered and therefore on the performance of the strategy.

3. Implementation

Finally, implementation matters. The best laid designs can quickly be eroded without skilled implementation. Smart-beta strategies tend to have a higher level of turnover and a less advantageous liquidity profile compared to standard (i.e. cap-weighted) strategies: most smart-beta indices have annual turnover rates in the range of 20-60%, for example, compared to 3-5% for a standard cap-weighted index of large and mid-cap securities. Without skilled implementation, transaction costs and illiquidity can quickly erode the benefits that smart-beta strategies aim to provide.

The best managers utilize thoughtful evaluation of potential returns alongside risk and costs – a skill that requires an understanding of benchmark methodology and global capital markets. Of course, implementation matters for even the most straightforward and liquid index strategies. For example, comparing the annual returns for flagship S&P 500 Index funds across the four largest index managers reveals differences of 12 bps in a single year.[1] The S&P 500 is arguably one of the most liquid and replicable indices on the planet, and the potential differences are only magnified for strategies that are more complex and challenging to trade. Choosing a skilled manager for smart-beta implementation becomes a critical final component for success in the strategy.

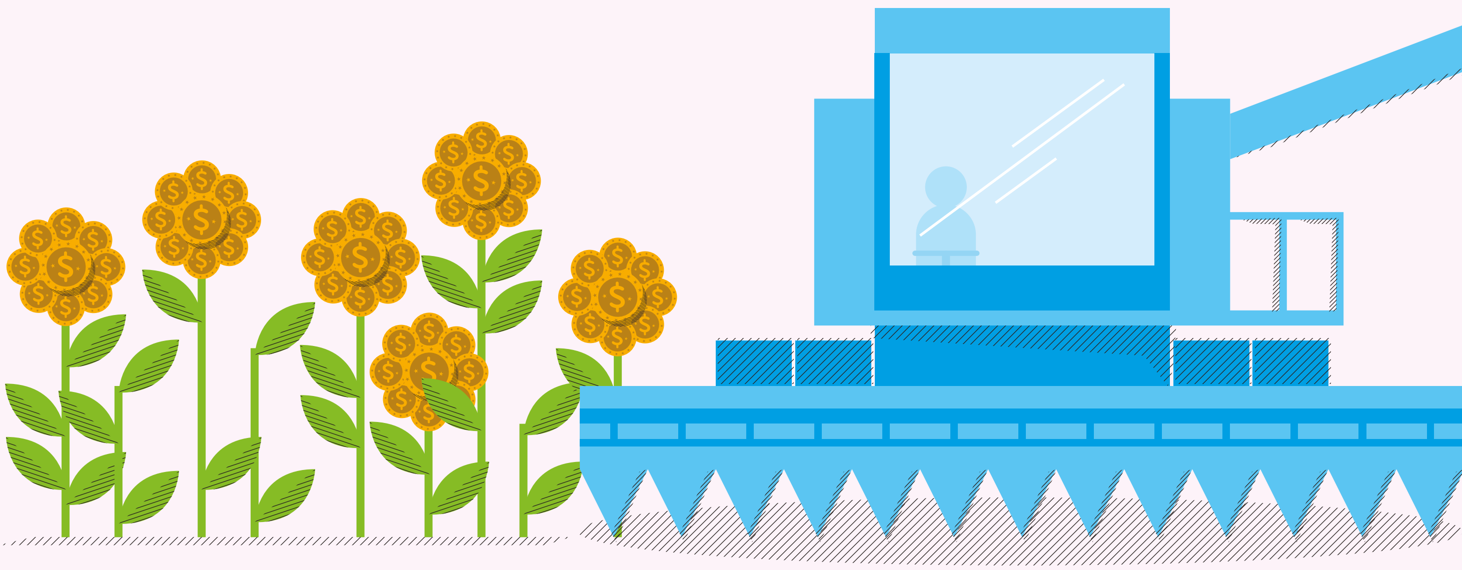
At their best, smart-beta strategies empower investors, providing efficient and affordable access to time-tested investment strategies. The rise of technology makes data mining easier than ever, and has powered the surge in smart-beta strategies. Before you pack your skis and head to the Alps for the winter, be sure you've vetted the underlying factor exposures, portfolio construction rules and implementation skill of any smart-beta strategy you consider. «

1. Source: eVestment Alliance, June 2015

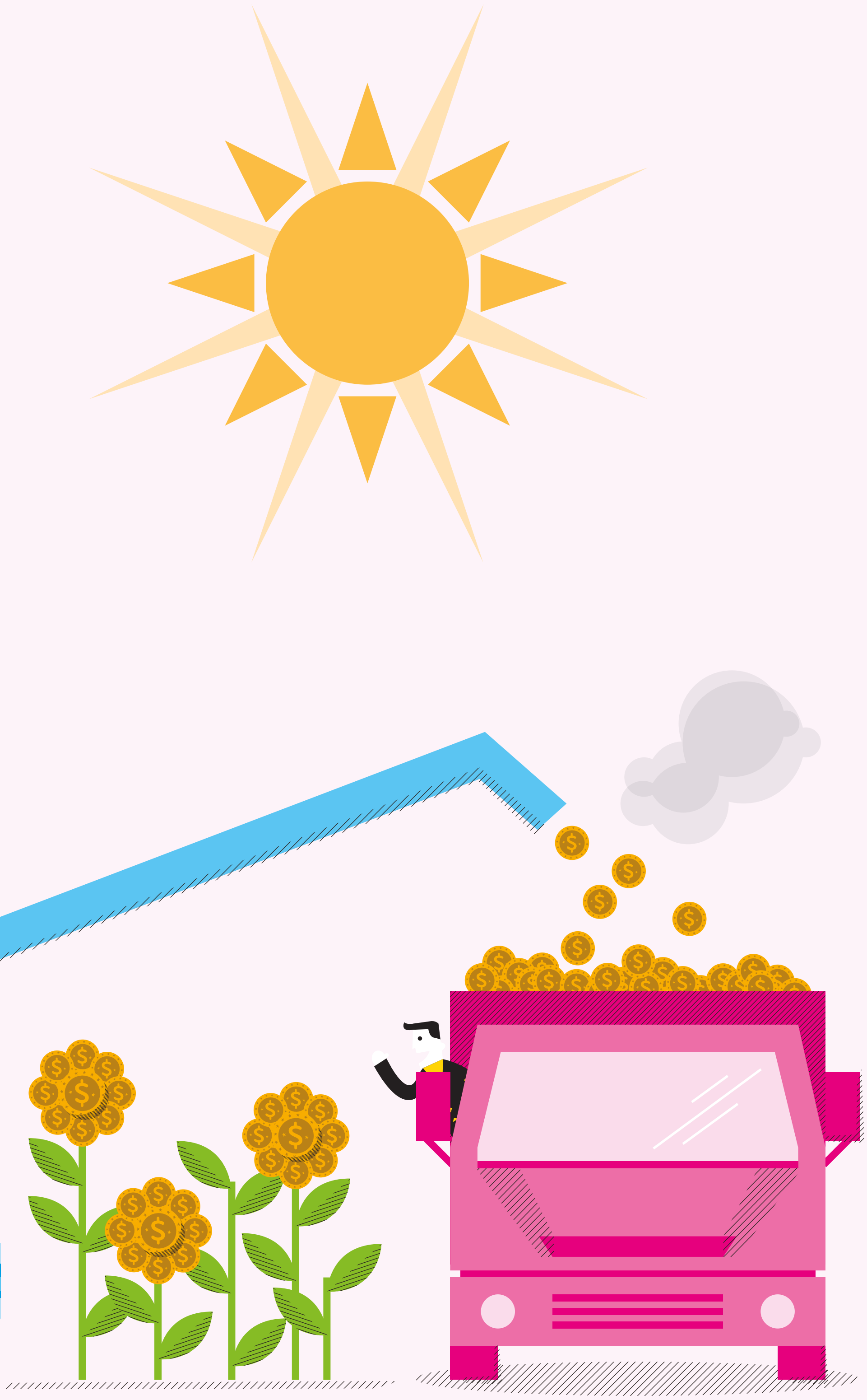
Yoshiyuki Masuda
Joint General Manager
Asset Management Division
Mitsubishi UFJ Trust &
Banking

»SMART-BETA INDEX TO CAPTURE "ABENOMICS" RETURNS

A new index from STOXX and Mitsubishi UFJ Trust & Banking that focuses on Japanese stocks with high return on equity appears timely given the economic reforms in the country.



"STOXX AND MUTB PARTNERED TO OFFER HIGH QUALITY SMART-BETA INVESTING IN JAPAN."



STOXX and Mitsubishi UFJ Trust & Banking (MUTB) have jointly developed the iSTOXX® MUTB Japan Quality 150 Index, a benchmark that selects companies based on their "high quality" factor, with a focus on returns to shareholders and profitability. This compares to traditional price- or cap-weighted indices such as the Nikkei 225 Index, where constituents are picked based on size or stock value. The iSTOXX MUTB Japan Quality 150 Index follows on from the Japanese government's own gauge, the JPX-Nikkei 400 Index, which focuses on companies with high returns and good corporate governance. Yet it raises the bar a couple of notches by adding criteria such as cash-flow generation and by leaving out qualitative assessments.

The new index from STOXX and MUTB is part of a number of indices known as smart beta that are revolutionizing the asset management industry. Armed with selection criteria based on quantitative factors such as earnings, value, or dividend growth, smart beta is attracting a larger pool of index-tracking money that's seeking to both outperform markets and avoid the high fees of active fund managers.

"Smart beta received little recognition just three years ago, but we have seen a rapid change over the past few years," said Yoshiyuki Masuda, Joint General Manager, Asset Management Division at MUTB who helped design the criteria.

"Some relatively large pensions have switched over half of their assets to smart-beta indices, but others are still wholly invested in traditional indices."

Since returning to power in 2012, Prime Minister Shinzō Abe has pushed for change in the form of a three-arrow economic plan consisting of large fiscal stimulus, aggressive monetary easing and structural reforms. Part of the reform package is a plan to cut the corporate tax rate and to require companies to adhere to a corporate governance code and target higher return on equity (ROE).

"With the increasing number of companies consistently able to realize a higher ROE than investors expect, the setting is becoming increasingly favorable to earn returns from ROE as a stable factor," says Masuda-san. "However, despite the launch of the JPX-Nikkei 400 Index last year, not many choices exist with regard to quality investing looking at ROE."

The iSTOXX MUTB Japan Quality 150 index selects companies from the broader STOXX Japan 600 Index. The component screening is based on four fundamental factors: ROE, financial health, cash-flow generation ability and business stability. Stocks need to fulfill minimum liquidity criteria before being selected. Once the 150 stocks are selected, the index is weighted by free-float market cap, with each component's weight capped at 2%. It is rebalanced twice a year.

SMART BETA
A QUICK OVERVIEW

Smart beta is the name given to the universe of benchmarks whose membership is constructed on criteria other than market capitalization. They have led a quiet revolution in recent years, undermining the dominance of traditional indices by highlighting shortcomings.

They were born out of the idea that allocating the biggest weight to the largest companies may not be the best choice when investment objectives, other than reflecting the actual market composition, are aimed at. In essence, this is the indexing world's – i.e. a rules-based world – translation of what traditional active portfolio management has done for a long time: trying to identify and implement superior, or at least different in scope, investment themes. These, in turn, offer the possibility to provide better risk-adjusted returns or meet specific investment objectives, such as high quality in companies' fundamentals or low portfolio variance.

Academic literature has provided compelling evidence that long-term equity-portfolio performance can be explained by certain factors. In particular, studies show that quality factors have delivered positive excess returns in the long run, with defensive characteristics and lower risk across historical business cycles.

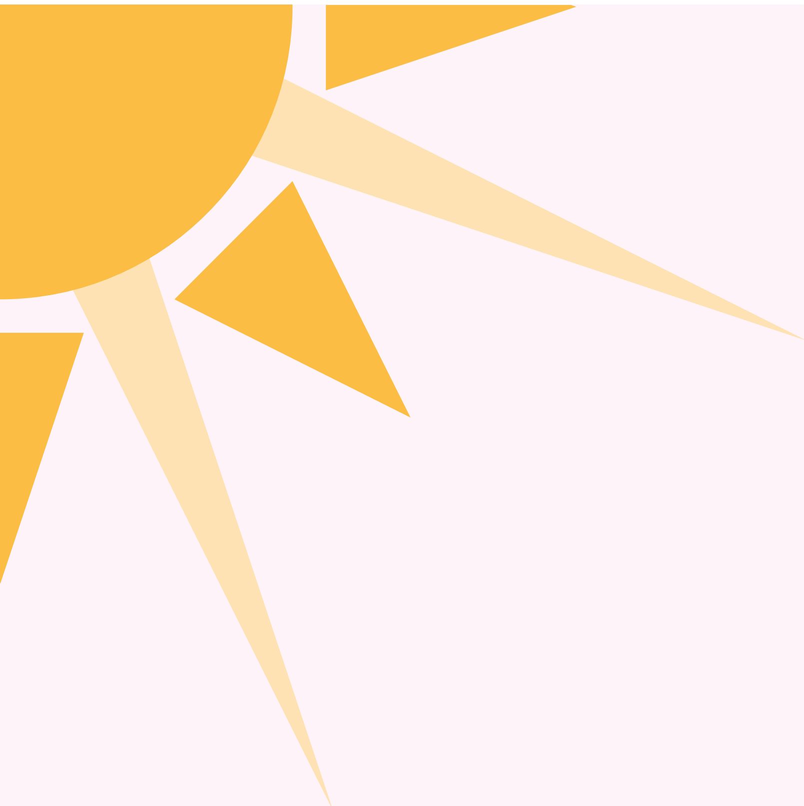
In adopting these indices, money managers take a passive approach where stock-picking is based on strict index methodology. Yet they keep the active view on criteria selections and drivers of returns. Because products tied to smart-beta indices don't employ an active manager, fees are significantly reduced.

The search for outperformance at low cost in ever-correlated markets, coupled with increased volatility during the financial crisis of 2008, has lured pension funds including Japan's Government Pension Investment Fund to these products. According to BlackRock Inc., there was $255 billion invested in smart-beta exchange-traded funds through July 2015, up from $111 billion in 2012.

While high-dividend used to be the factor that attracted the most flows, investors are putting more money into multi-factor, equal-weight and minimum-volatility funds this year, according to BlackRock. STOXX has an extended range of smart-beta indices, covering a large set of strategies and spanning most regions.

"SMART BETA RECEIVED LITTLE RECOGNITION IN JAPAN JUST THREE YEARS AGO, BUT WE HAVE SEEN A RAPID CHANGE OVER THE PAST FEW YEARS."

"ON SEP. 9, JAPANESE STOCKS RECORDED THEIR BIGGEST JUMP IN ALMOST SEVEN YEARS."



Among the four factors, ROE is prioritized. This ratio reflects the relative amount of earnings that shareholders get back from their investment, even if those profits have been reinvested in growing the business. Historical data, which is available back to 2009, shows that Japanese stock valuations tend to rise in tandem with ROE and that shares have been valued at a price-to-book ratio of 1.2 or more only when ROE exceeded 8%.

Stocks gain

The government's actions haven't gone unnoticed among international investors, who had gotten used to poor performance from the Japanese market since the 1990s. Japan's TOPIX returned 18% in 2015 through Aug. 4, in local currency, compared with 1.7% for the Standard & Poor's 500 Index in the US and 17% for the EURO STOXX 50® Index in the Eurozone.

Despite this outperformance, the Japanese market remains relatively cheap. The TOPIX traded at 19.8 times the current year's earnings forecast on Aug. 4, compared with about 20.4 times for the S&P 500 and 20.6 times for the EURO STOXX 50. The spread in favor of Japanese stocks could even increase, as profits in the country are expected to rise at a faster pace than in other regions in the coming year.

That said, volatility has come back with a vengeance in recent weeks after years of subdued price swings on the back of extraordinary stimulus from central banks around the world. The TOPIX slumped 7.4% in August, the most since May 2012. On Sep. 9, Japanese stocks recorded their biggest jump in almost seven years.

Aureliano Gentilini, head of research at STOXX, points to extensive academic literature that shows that quality factors can produce higher risk-adjusted returns. That is, investors are likely to be better compensated through a cycle of market upturns and downturns for holding the defensive and low-volatile profiles of these companies.

Backtested data shows the iSTOXX MUTB Japan Quality 150 Index had an annualized total return of 19.2% in the past five years, compared with 16.1% for the STOXX Japan 600. The outperformance also came with lower volatility, Gentilini says.

Pension funds, which manage large pools of money with long-term targets, have been lured to smart beta's higher risk-adjusted returns. Japan's Government Pension Investment Fund is among those that have chosen the products, which provides the factor exposure that active management offers, but with fees that match those of passive strategies.

"For large pension funds, traditional indices can be better from the point of view of securing liquidity," says Masuda-san. "However, we must discuss structural issues if we really want to outperform over the long run."

STOXX CEO Hartmut Graf said the iSTOXX MUTB Japan Quality 150 Index is an exciting first initiative with partner MUTB that will offer local and international investors an innovative, rules-based tool to participate in the performance of quality companies in Japan. «

Bart van Ark
Executive Vice President,
Chief Economist & Chief
Strategy Officer
The Conference Board

HOW MUCH LONGER CAN EUROPE'S RECOVERY BE EXTENDED?

The next five years are likely to show a moderate recovery path for Europe at around 2% which is roughly half a percentage point below the region's growth performance in the 1990s and 2000s.

Europe's large and mature consumer market, its high-quality innovation infrastructure and deep integration in global value chains provide a positive backdrop for medium-term investment and growth opportunities. However, the completion of the single market for goods, services, capital and labor is the key factor that can make or break Europe's recovery.

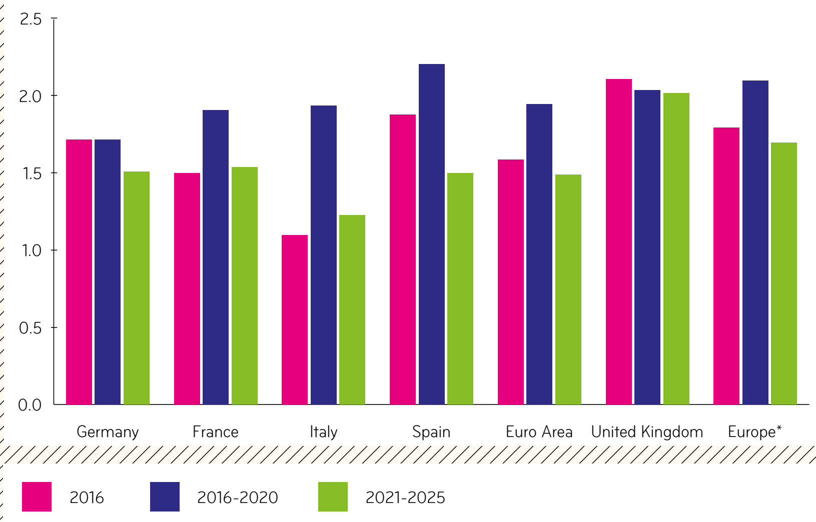
Current situation: Recovery in Europe boosted by quantitative easing, but Greece and the migrant crisis still threaten stability

The recovery from back-to-back recessions (2008/09 and 2011/12) in the euro area finally gained traction in 2015. Labor markets, consumer spending, and business and consumer

"EUROPE HAS BECOME INCREASINGLY RELIANT ON EMERGING MARKETS AS A DESTINATION FOR ITS EXPORTS."

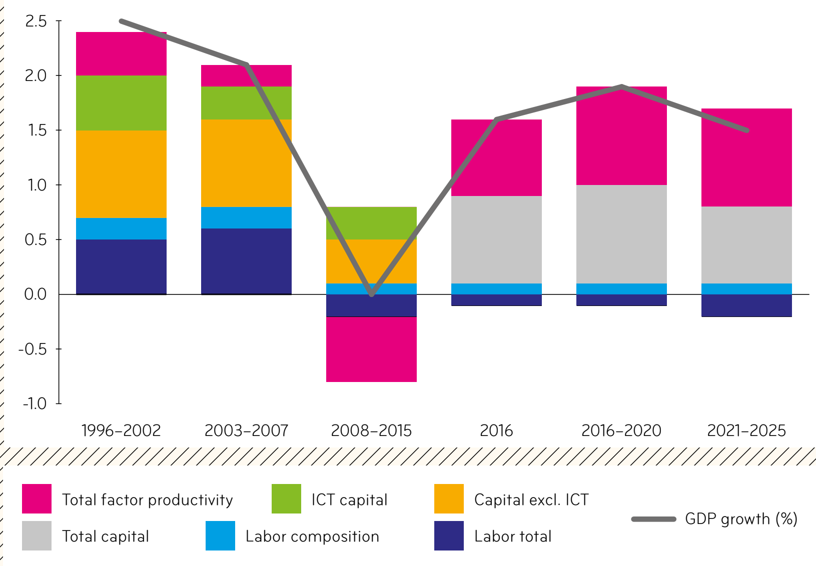
Aging and QE overhang

FIGURE 1: GROWTH RATES FOR MAJOR EUROPEAN ECONOMIES, THE EURO AREA AND EUROPE, 2016, 2016-20 AND 2021-25



* Europe includes all 28 members of the European Union, as well as Switzerland and Norway.
Source: The Conference Board Global Economic Outlook, 2016

FIGURE 2: CONTRIBUTION OF LABOR, LABOR COMPOSITION, CAPITAL AND TOTAL FACTOR PRODUCTIVITY TO GDP GROWTH, EURO AREA



Source: The Conference Board Total Economy Database™, September 2015 and The Conference Board Global Economic Outlook, 2016

confidence have all improved since 2014, boosted by cyclical factors. This upward trend was further stimulated by the quantitative easing (QE) program initiated by the European Central Bank (ECB) at the beginning of 2015. The crisis around Greece did not significantly impact recovery in the rest of Europe, but it shook confidence in the stability of Europe's integration project in the medium term. This is further exacerbated by the disorderly handling of the admission of the stream of refugees from the Middle East.

Short-term outlook: Emerging market slowdown, especially in China, poses a risk for the current recovery

For 2016, The Conference Board expects an annual growth rate of gross domestic product (GDP) of 1.6% for the euro area and at 1.8% for Europe as a whole. However, Europe's growth performance is susceptible to external shocks which, if they prove long-lasting, could lead to additional downside risks for the 2016 outlook. For example, the sharp decline in the value of China's currency, the renminbi, over the summer of 2015 led to a loss of confidence in the growth prospects of many emerging markets. Over the past decade Europe has become increasingly reliant on emerging markets as a destination for its exports, so that the growth slowdown in these markets is likely to dampen the current export-dependent recovery. On the other hand, exports to the United States, the EU's largest trading partner, are expected to increase, thanks to a strengthening US economy and weakness in the euro versus the dollar.

The emerging market turmoil may also further have disinflationary effects on the euro. While the value of the euro has been depreciating against major trading partners such as the US dollar, the British pound and the Swiss franc, it has appreciated against the BRICS currencies (including South Africa's rand). The latter has helped keep a lid on import prices, reduced costs for European firms and increased the purchasing power of European consumers. In combination with the current low oil prices, this will dampen the inflation outlook and threaten the ECB's target to reach an inflation rate of close to 2% from the current deflationary period of essentially zero or even negative inflation. This may prolong the lags required for the QE program to show its effects on providing more support to the investment climate in Europe and avoid a secular stagnation path. This may even cause a modification or extension of the QE program in 2016.

Medium-term outlook: Gradual growth strengthens investment opportunities

Beyond 2016, European GDP is expected to build momentum, growing at an average annual rate of 2% between 2016 and 2020 for the euro area and 2.1% for Europe as whole. As of 2020, it will follow a slower growth path at about 1.5-1.7% on average growth from 2021 to 2025. During this period the retirement of the baby boomer generation and aging populations will become so large that labor supply will detract on average 0.2% per year off GDP growth.

However, the negative contribution from slowing labor supply in Europe can be offset by a projected pickup in investment growth and a recovery in productivity. For example, Europe is well placed to benefit from:

- The growth of information and communications technology (ICT) and related innovations that will be unlocked by the completion of the Single Market[1], specifically within services and the Digital Single Market[2].
- Europe's highly skilled and increasingly mobile labor force will help translate investments into economic output.
- The above-average quality of Europe's innovation infrastructure, which allows business, government, and research institutions to work actively together to strengthen innovation at European-wide, national and regional levels.
- Increasing contributions from European firms in manufacturing and service sectors to the global supply chains of manufactured goods, which increase growth potential in the region.

Finally, while growth is moderate at best, Europe has a large and mature market with relatively high levels of per capita income and productivity.

So how long can Europe's recovery continue? It appears that the worst is over and the gradual liftoff from past recessions could persist for several more years. Growth won't be strong, which means any major unforeseen calamities could threaten to derail it. Deflation fears could also slow the EU economy, as they have in Japan.

European leaders will need to carefully manage the demographic shift to an older population – again drawing lessons from Japan's experience. And eventually the EU, along with Japan and the US, will have to begin unwinding the massive QE programs and rein in government debts that could restrain fiscal policy options down the road. «

1. The Single Market refers to the EU as one territory without any internal borders or other regulatory obstacles to the free movement of goods and services. A functioning Single Market is expected to stimulate competition and trade, improve efficiency, raise quality, and helps cut prices. Source: http://ec.europa.eu/growth/single-market/index_en.htm

2. The Digital Agenda will update EU Single Market rules for the digital era. The aims are to boost the music download business, establish a single area for online payments, and further protect EU consumers in cyberspace. Source: https://ec.europa.eu/digital-agenda/en/our-goals/pillar-i-digital-single-market

"WHILE GROWTH IS MODERATE AT BEST, EUROPE HAS A LARGE AND MATURE MARKET."

Interview with

Julien Bieren
Director Equities
Credit Suisse

Guillaume Flamarion
Executive Director
Equity Derivatives Group
JPMorgan Chase & Co

BRIGHT FUTURE FOR STRUCTURED PRODUCTS

Structured products are often described as one of the most complicated products available to investors. That is why product issuers assume a key role in providing the needed education and transparency to investors and their financial advisors to help them fully understand the unique 'make-up' of these products.

What is a structured product?

The basic concept behind structured products is nothing new. Protecting an asset from its associated risks by using derivatives has been a popular strategy for hundreds of years – as far back as the thirteenth century shipping merchants would protect the value of their cargo by using options. Today, structured products allow investors to access financial markets by using the most diverse range of derivatives instruments. They can be customized in terms of specific risk-return objectives depending on the investor's appetite. From this perspective alone, they can be considered as complementary investment vehicles in modern portfolio management. But their benefits, as well as risks, need to be well-explained and understood by the investor to be used to their full potential.

"ARE THESE DEVELOPMENTS ENOUGH TO PUT THEM BACK ON THE RADAR OF INVESTORS?"

Despite their long history, structured products are not lending themselves to a 'one-size-fits-all' description. Indeed, the fact there is no uniform definition adds another layer of complexity and further fuels the criticism that they lack transparency. Investors find it difficult to identify what is important to them, from the underlying assets to the credit worthiness of the issuers, from their downside risk to upside potential (i.e. the derivatives payoff). However, like many areas of the industry, increased scrutiny following the financial crisis has prompted change. As Julien Bieren, Director Equities at Credit Suisse observes, "since the financial crisis, there has been an evolving trend towards more simplicity and clarity."

Improved risk management

As the financial crisis highlighted, investors were perhaps unaware of further risks – such as counterparty risk – involved. Crucially, structured-product providers have taken steps both to reduce risks, to 'stress test' products, and to communicate these risks more clearly. As Mr. Bieren notes, "significant effort has taken place to mitigate counterparty/bank risks by using special purpose vehicles (SPVs) and collateralized notes." Guillaume Flamarion, Executive Director, Equity Derivatives Group at JPMorgan Chase & Co echoes this view; he sees a renewed focus on "fully disclosing the risks embedded into the product to the end-investor." He cites scenario analysis as an example – where the product's performance is scrutinized under a wide range of market scenarios.

Structured products – meeting a diverse range of needs

Structured products with specific characteristics can be a potential solution helping investors meet their growth and income targets. A structured product may consist of several components, each of which provides either exposure to an asset class – such as equity or debt securities – and/or some form of protection. And there are varying degrees of protection built into structured products. One obvious example would be a structured product that offers investors access to a particular equity index, while offering a level of capital protection should the index fall.

But the role of structured products doesn't end there. Julien Bieren points out: "There is an inherent diversity in the world of structured products.
For pension funds, we can identify products that either offer exposure to return-seeking assets (for instance, the new breed of indices), or products for balance-sheet management (including the evolution of hybrid products) helping to manage funding ratios."

"CONTINUOUS INNOVATION IS PAVING THE WAY FOR A WHOLE NEW FUTURE FOR STRUCTURED PRODUCTS."

New indices are offering an expanding opportunity set

Innovation regarding structured products has evolved as can be seen in the creation of new indices that move beyond traditional indices to capture global themes and trends and, as such, provide an interesting underlying to structured products. The iSTOXX® Europe Demography 50 Index, for example, is an equity index providing investors access to companies that will be impacted by demographic trends: such as aging population and changes to familial structures. As Julien Bieren remarks, the iSTOXX Europe Demography 50 Index "offers an interesting investment opportunity for pension funds, who are themselves impacted by these very trends."

Mr. Bieren cites another way in which structured products enrich the investment spectrum. In the past, it has been very difficult to isolate dividends as an investable asset. Now, however, they are available as indices, via the use of a liquid and transparent futures market. In addition, traditional benchmarks that are typically weighted by market capitalization are now giving way to an equally-weighted index, or products with more efficient exposures.

Of course, EURO STOXX 50® is still the most popular index used in structured products, in terms of both investment volumes and customer orders. But continuous innovation is paving the way for a whole new future for structured products.

As the choice of themes of an index is increasing, structured products are being designed around very specific solutions. These include products where hedging is used to protect assets, or even structured products that offer a diversified source of income.

Guillaume Flamarion suggests that we should see structured products as a full set of solutions that respond to specific and varied investor needs. He adds that "recent innovation around the underlyings of structured products has led to the creation of factor style and risk premia indices, which offer access to new alternative exposures." He quotes examples to include growth, value, momentum and carry strategies.

The future looks bright for structured products

Since the financial crisis, the focus shifted towards the underlying holdings of structured products, and innovation aimed at meeting investors' needs. Not only are we seeing the risks of structured products being addressed, but there has been a rise in innovation with regards to the underlying indices used.

This, along with improving liquidity, means structured products could become even more popular with investors as providers are able to offer focused products that provide investment solutions to a range of pension fund needs. These needs include transparency, protection, diversified income, or even helping to manage funding ratios. «

FEATURED INDICES

STOXX Global 1800	YTD PERFORMANCE	52-WEEK PERFORMANCE	3-YEAR PERFORMANCE
STOXX Global 1800	-1.8%	0.5%	33.1%
STOXX Global 1800 Minimum Variance	2.0%	7.4%	38.5%
STOXX Global 1800 Minimum Variance Unconstrained	0.8%	5.8%	30.9%
STOXX Global Select Dividend 100*	-7.6%	-6.2%	13.6%
STOXX Global Maximum Dividend 40*	-2.4%	0.1%	31.2%
STOXX Global Strong Quality 50	-5.1%	-0.8%	41.5%
STOXX Global Strong Balance Sheet	0.4%	5.1%	41.7%
STOXX Global Strong Balance Sheet Equal Weight	1.4%	5.6%	38.1%
STOXX Global Sharpe Ratio 100	-3.3%	-1.4%	30.4%
STOXX Europe 600			
STOXX Europe 600	0.7%	-0.8%	25.1%
STOXX Europe 600 Minimum Variance	5.9%	7.1%	31.7%
STOXX Europe 600 Minimum Variance Unconstrained	7.6%	7.9%	32.8%
STOXX Europe Select Dividend 30*	-2.1%	-1.2%	15.3%
STOXX Global Maximum Dividend 40*	-7.3%	-9.7%	19.4%
STOXX Europe 600 Equal Weight	3.4%	3.9%	32.6%
STOXX Europe Low Risk Weighted 100	5.9%	8.5%	36.5%
STOXX Europe Strong Quality 30	0.1%	-2.7%	16.9%
STOXX Europe Strong Balance Sheet	3.3%	4.8%	34.6%
STOXX Europe Strong Balance Sheet Equal Weight	5.4%	9.0%	35.1%
STOXX Europe Sharpe Ratio 50	6.9%	8.5%	55.2%
EURO STOXX			
EURO STOXX 50	-1.9%	-4.9%	22.2%
EURO STOXX Minimum Variance	4.5%	5.8%	28.2%
EURO STOXX Minimum Variance Unconstrained	10.0%	11.7%	35.3%
EURO STOXX Select Dividend 30	-0.9%	-1.4%	25.7%
EURO STOXX 50 Equal Weight	-2.7%	-4.4%	25.7%
EURO STOXX 50 Low Risk Weighted	6.5%	8.7%	32.7%
EURO STOXX Small	3.5%	2.6%	26.8%

STOXX Asia/Pacific 600	YTD PERFORMANCE	52-WEEK PERFORMANCE	3-YEAR PERFORMANCE
STOXX Asia/Pacific 600	-0.5%	-1.3%	21.8%
STOXX Asia/Pacific 600 Minimum Variance	5.8%	5.6%	23.0%
STOXX Asia/Pacific 600 Minimum Variance Unconstrained	1.4%	2.5%	17.3%
STOXX Asia/Pacific Select Dividend 30*	-14.0%	-14.4%	1.5%
STOXX Asia/Pacific Maximum Dividend 40*	-7.5%	-9.9%	21.5%
STOXX ASEAN-Five Select Dividend 50	-18.1%	-20.7%	-13.3%
STOXX Asia/Pacific Strong Quality 30	4.2%	2.4%	24.1%
STOXX Asia/Pacific Sharpe Ratio 50	-6.7%	-4.6%	11.8%
STOXX China A 50			
STOXX China A 50	-16.1%	28.8%	47.5%
STOXX China A 50 Equal Weight	-11.0%	27.4%	40.0%
STOXX North America 600			
STOXX North America 600	-3.2%	1.6%	40.3%
STOXX North America 600 Minimum Variance	0.4%	7.4%	44.2%
STOXX North America 600 Minimum Variance Unconstrained	-0.8%	5.6%	40.7%
STOXX North America Maximum Dividend 40*	-6.4%	-0.9%	22.7%
STOXX North America Select Dividend 40*	-6.6%	-2.5%	20.7%
STOXX North America Sharpe Ratio 50	-2.1%	4.0%	32.3%
STOXX USA 900			
STOXX USA 900	-2.5%	2.8%	44.7%
STOXX USA 900 Minimum Variance	0.2%	6.9%	45.4%
STOXX USA 900 Minimum Variance Unconstrained	2.1%	12.1%	48.9%
STOXX USA Strong Quality 50	-3.7%	1.0%	48.6%
STOXX USA Strong Balance Sheet	-0.7%	5.7%	48.4%

All indices are in USD Gross Return versions, except the ones marked with *, which are in USD Net Return versions.
Source: STOXX data as of Oct. 31, 2015

VOL 4/ISSUE 4 – **FALL 2015/WINTER 2015**
Printed in December 2015

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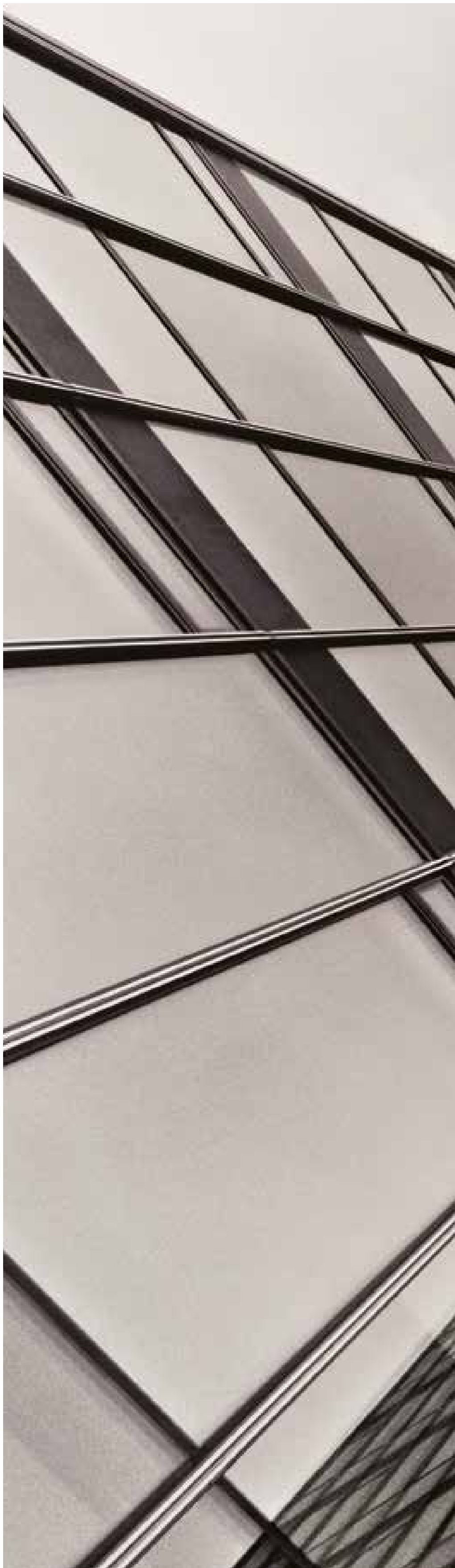

STOXX is part of Deutsche Boerse AG