# Quarterly Investment Strategy

**Asset Management Fourth Quarter 2015** 



Quarterly Focus
Beyond fear and greed: Enhancing objectivity in the investment process



## Investment capabilities and services

To meet the needs of our clients, UBS Asset Management offers diverse investment capabilities and styles across all major traditional and alternative asset classes. Specialist equity, fixed income, currency, hedge fund, real estate, private equity and infrastructure investment capabilities can also be combined in multi-asset strategies.

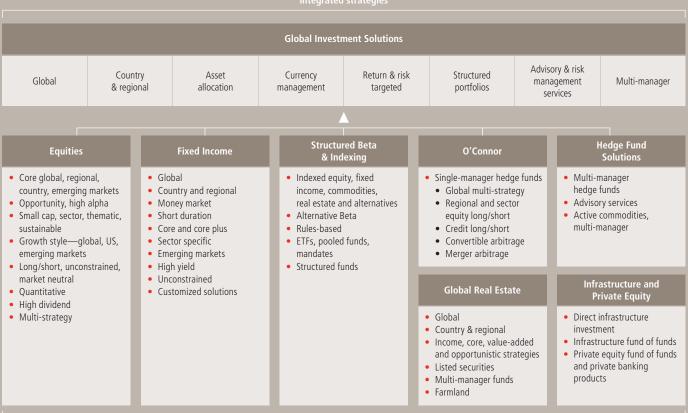
Active investment styles encompass both value and growth and these are complemented by quantitative and indexed approaches.

We also combine traditional and alternative investments and services into integrated packages through our Global Investment Solutions (GIS) initiatives. These include asset/liability matching, asset allocation, currency overlay, risk

management and specifically tailored product development for large clients.

We seek to maximize the benefits to clients who have individually managed mandates by understanding and acting upon their return expectations, risk tolerance and time horizon. We state and explain the risk/return profile of each of our investment vehicles.

#### Integrated strategies



# Quarterly Investment Strategy

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# Beyond fear and greed: Enhancing objectivity in the investment process

UBS Asset Management, US Intrinsic Value Equity Team

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## Global perspectives: 4Q 2015 update

At UBS Asset Management, we use proprietary models developed over the last two decades to value the global investable market, across all asset classes. Investment expectations for all asset classes are derived from passive, index-level information. Our estimates of asset class and market returns and risks are reviewed on a regular basis.

#### Normalized asset class valuation models as of September 30, 2015

Asset classes	Normalized price/value <sup>1</sup>	Equilibrium return % <sup>2</sup>	Three-year expected return % <sup>3</sup>	Secular risk estimate % <sup>4</sup>	Price/value overvalued (+)/ undervalued % (–) <sup>5</sup>
Equities					
Global Equities: MSCI World Equity Index	-1.0	7.4	11.5	15.2	-15.1
US Large Cap Equities: Standard & Poor's 500 Index	-0.4	7.5	6.8	15.7	-5.7
Global (Ex-US) Equities: MSCI World (ex-US) Index	-2.0	7.2	19.0	15.2	-30.3
Australia Equities	-1.5	6.6	16.5	19.2	-29.1
Canada Equities	-1.1	7.1	12.6	18.7	-20.5
EMU Equities	-1.9	8.0	23.8	20.6	-38.6
Japan Equities	-0.5	7.2	7.5	17.8	-8.4
Switzerland Equities	-1.6	6.5	15.4	17.4	-27.4
UK Equities	-2.8	6.7	29.9	17.3	-48.8
Emerging Market Equities: MSCI Index <sup>6</sup>	-1.4	8.7	20.3	23.0	-31.4
Fixed Income					
Global Bonds: Citigroup WGBI Index	1.9	4.2	-1.3	4.5	8.5
US Government Bonds: Citigroup US BIG Treasury Index	0.7	4.2	0.3	5.0	3.3
US Treasury inflation-protected securities (TIPS): Barclays US Government Inflation Linked	-0.4	4.0	1.8	3.1	-1.3
US Credit Bonds: Citigroup US BIG Credit Index	-0.1	4.9	2.2	6.2	-0.8
US High Yield: Merrill Lynch Master Index	-0.5	6.2	4.6	10.4	-5.1
Global (ex-US) Bonds: Citigroup WGBI Index	2.4	4.2	-2.1	4.7	11.2
Australia Bonds	1.4	4.1	-0.9	5.2	7.5
Canada Bonds	1.1	4.3	-0.9	6.7	7.4
EMU Bonds	1.6	4.2	-1.4	5.7	9.0
Japan Bonds	2.6	4.0	-2.9	5.4	13.7
Switzerland Bonds	1.6	5.6	-1.6	5.6	9.1
UK Bonds	2.2	4.3	-3.1	7.0	15.2
Emerging Markets Debt: JP Morgan EMBI Global	0.7	7.3	2.3	12.2	8.1
Private Equity					
Private Markets: Private Equity Indicator (as of March 2015)	0.3	11.5	5.7	27.5	9.5
Direct Real Estate*					
UK (as of August 2015)	0.1	6.9	5.5	10.0	1.4
US (as of August 2015)	0.3	6.9	6.7	10.1	3.1
Australia (as of August 2015)	-1.2	7.7	6.6	10.0	-12.0

Reflects UBS Asset Management's expectations using current market assumptions. There is no assurance that these projections ultimately will be realized.

Valuation estimates based on normalized earnings and growth rates.

Note: Price/value for US Credit and US High Yield is computed based on the spread, not the bond price.

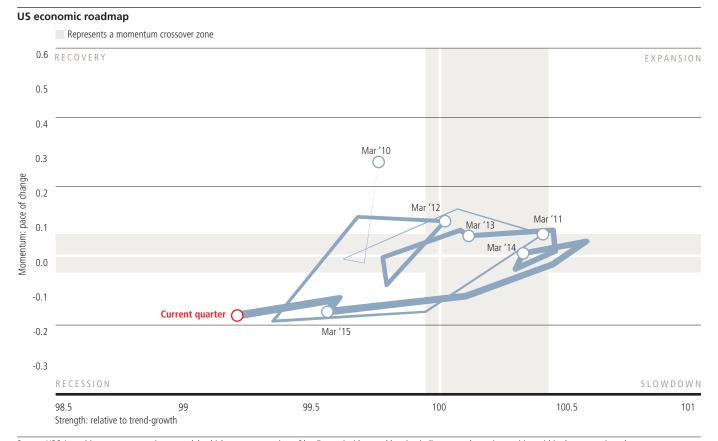
For further information and definitions on footnotes 1–6, please refer to page 5.

For a more detailed description of the indices referenced and further definitions of terms in Quarterly Investment Strategy, please visit: http://www.ubs.com/1/e/am/Americas/amus/amusii/mutual\_fund.html.

<sup>\*</sup>Provided by UBS Asset Management's Global Real Estate team. Note: The three-year expected returns for direct real estate are for new investors.

## Market indicators

US equities score	ecard			
	Indicator	June 30, 2015	September 30, 2015	Definition
Valuation	ValMod		-	Equity discounted cash-flow model based on in-house equilibrium assumptions
	Fed model		-	Alternative long-term valuation approach; reflects relationship of equity earnings yield and government bonds
Market behavior	Monetary policy	•	•	Means by which a central bank controls the money supply via interest rates, reserve requirements and open market operations
	Economic surprise			Gauge of economic data—meeting, exceeding or falling short of expectations
	Earnings revision			Reflects bottom-up earnings outlook
	Stress index			Market stress gauges price dislocations and investor risk appetite
	Economic cycle	•	•	Assessing where we are in the business cycle and our expectations for growth
Source: UBS Asset Mana	gement.	■ Equity P ■ Equity N ■ Equity N	egative Recession	xpansion



Source: UBS Asset Management proprietary model, which assesses a variety of leading, coincident and lagging indicators to determine position within the economic cycle. Data as of August 31, 2015.

# Top-down viewpoints for multi-asset portfolios September 30, 2015

#### Global (ex-US) Equities

- Loose monetary policy continues to lend support to global (excluding the US) equity markets. There are some doubts, however, about the degree to which additional quantitative easing would drive the prices of risk assets higher.
- Our conviction in the Japanese and Eurozone equity markets remains high. Both are supported by similar dynamics: an accommodative central bank; currency weakness boosting exporters; oil price weakness leaving consumers with more disposable income; and a relatively positive outlook for corporate earnings growth.

#### **US Equities**

- The broad US equity market remains unattractive on valuation grounds in our view. However, there are sound investment opportunities in the small- to mid-cap space, where companies are likely to benefit from an environment of increased mergers and acquisitions activity.
- Prospects for US corporate earnings growth remain fairly muted.

#### **Emerging Markets Equities**

- We would need to see strong signs of stabilization in the Chinese economy for the fortunes of other emerging market economies, in our view, to take a turn for the better. While emerging market equities are trading at attractive valuations, we do not yet see the case for adding exposure to this asset class.
- We find attractive investment opportunities in the North Asian equity markets, including Korea and Taiwan, which export technology equipment and products to China, and demand for which should remain healthy. On the other hand, heavily resource-dependent economies, such as Brazil and Russia, could see their equity markets suffer as Chinese commodity demand wanes further.

#### **US Investment Grade Corporate and High Yield Bonds**

- Credit spreads widened meaningfully in September. Recent developments have raised some concerns about liquidity in the global credit markets.
- Due to pension fund de-risking and the presence of structural buyers, such as insurers, the demand for US corporate bonds is expected to exceed supply in the coming years. This helps reduce some of the concerns about liquidity, but we are monitoring market conditions closely.
- Sector allocation remains key as the ongoing impact of weak oil prices may lead to higher default rates among energy companies and increase the risk of retail outflows in a market potentially short of sufficient demand. Given the very low level at which developed government bond yields

languish, spread products can offer relatively attractive returns in our view.

#### Global (ex-US) Bonds

- Investors welcomed the re-election of Alexis Tsipras as Greek prime minister in September, and Greece's new government is expected to focus on implementing the reforms required by the country's third bailout program. Meanwhile, the European Central Bank stands ready to step in to calm bouts of volatility in the bond markets. Conditions should therefore remain favorable for peripheral Eurozone bond markets.
- In September, we added a long Spanish, long Italian 10-year government bonds versus cash position, as spreads on peripheral over core Eurozone government bonds widened to an extent we believe is unjustified.

#### Currencies

- Monetary policy divergence continues to support gains in the US dollar. In our portfolios, we have benefited from a long US dollar versus short New Zealand dollar position. The Reserve Bank of New Zealand has the potential to cut rates further, while sluggish economic growth and low business and consumer confidence are also likely to weigh on the domestic currency.
- The Japanese yen remains significantly undervalued in our view.

#### **US Government Bonds**

- We have added a long US inflation-linked bonds (TIPS) versus nominal government bonds position. Our rationale was that this position would allow us to benefit from the theme of medium-term US inflation risk being underpriced. We remain short US duration.
- Market participants and commentators appear to be assuming that the Federal Reserve (Fed) will remain on track to raise rates by the end of this year, and that the first hike will be followed by a very gradual pace of tightening.
   We believe that there remains scope for Fed policy error.

#### **Emerging Markets Debt**

- Our preference remains for US dollar-denominated over local currency-denominated emerging market debt, in an environment of Fed rate rises on the horizon and weak global growth. In the US dollar debt market, a granular country-bycountry assessment of economic conditions in emerging markets is crucial.
- The prospect of further US dollar strengthening provides a headwind for the local currency-denominated debt markets in the emerging economies.

#### **Definitions of normalized asset class valuations**

#### 1 Normalized price/value

The normalized price/value represents the standard deviation, or dispersion of the asset class from our estimate of fair value. Normalizing the price/value discrepancy provides a standardized relative comparison across asset classes. The normalized price/value is calculated by taking the price/value of an asset class and dividing it by the secular risk estimate of the same asset class. For example, the normalized price/value for the S&P 500 Index is -0.37.

#### 2 Equilibrium return

The equilibrium return represents the return of an asset class in a typical market environment, or one where supply and demand for capital market returns is in 'equilibrium.' This is often considered to be the 'long-term expected asset return' absent any price/value discrepancy. Equilibrium returns are calculated as the geometric addition of the UBS Asset Management estimates of three crucial components:

- A Real risk-free rate: An estimate of the underlying real rate common to all assets in the global economy, representing the underlying real interest rate reflects the fundamental ability and willingness of society to expand wealth through savings and investment. The real risk-free rate is currently estimated to be 1.7%.
- **B** *Inflation premium:* The additional return an asset must provide investors to protect them against losses in purchasing power from inflation The level of long-term inflation is the result of fiscal and monetary policy objectives and actions, as well as the path of overall global inflation. This premium is currently 2.0%.
- C Asset risk premium: Additional return to compensate investors for the additional systematic risk experienced in an asset class. US Equities, carrying more

systematic risk to the global investable capital market, thus have higher risk premiums (3.68% for the S&P 500) than U.S. fixed income investments (0.67%). The equilibrium return for U.S. equities, therefore, is (1.017)\*(1.020)\*(1.0368) - 1 = 7.5%.

3 Expected (three-year) return Reflects UBS Asset Management's expectations using current market assumptions. There is no assurance that these projections ultimately will be realized. This return is the annualized return expected in an asset class for each of the following three years if market price fully realizes our estimate of intrinsic value. Simply, an asset class should yield its required return in an efficient market, but any mispricing that may occur has the potential to increase (if the asset is currently underpriced) or decrease (overpriced) the asset class return. The three-year period is subjective, but does match the horizon of the AARM strategy-setting: asset class overweights and underweights taken in anticipation of higher or lower expected returns are expected to have a positive impact on market allocation results within a 36-month period of being undertaken.

The calculation is more sophisticated than this, but it helps to conceive of the three-year expected return as follows, for the S&P 500 as an example:

The required return for the S&P 500 is 4.8% as of the end of September 2015. Since this represents a 5.7% undervaluation, if the market price appreciates 1.60% per year relative to the required return for each of the next three years as it matches intrinsic value, the S&P can be expected to depreciate overall by (1.048)\*(1+0.0160)-1=6.5% for each of the next thee years. This imperfect back-of-the-envelope estimate approximates the true expected three-year

return of 6.8%. Any difference results from the process of 'averaging' the future 10-year path of required cash returns into a single number for communication purposes. Remember that the required cash return is not a single number per se but a 10-year process of adjustment.

#### 4 Secular risk estimate

The secular risk estimate is defined as the forward-looking standard deviation assigned to each asset class. These are determined in an integrated fashion along with risk premiums, taking into account an asset class's unique risks as well as the relationship of the riskiness of its returns to the global investable market and those of other asset classes.

#### 5 Price/value

An intrinsic value based on the cash flows that an asset class provides – discounted at an appropriate rate of return (the required rate of return) – is identified for each of the asset classes listed. The cash flows would be those that would be expected to pass through to the asset holder; in the case of equities, the relevant cash flows are earnings and non-reinvested earnings (including, though not exclusively, dividends). That intrinsic value is then compared to the market price for the proxy index, and the degree of over- or undervaluation is thereby calculated in percent.

#### 6 EME returns

These expectations are presented as unhedged returns, or those including the effects from translation into US dollars (USD). Emerging markets equity (EME) returns are presented in this way because the manner in which most clients of—and global balanced strategies at—UBS Asset Management invest in EME is through the Emerging Markets Equity Completion Strategy, denominated in USD.

Reflects UBS Asset Management's expectations, estimates and valuations using current market assumptions. There is no assurance that these projections ultimately will be realized. Valuation estimates based on normalized earnings and growth rates.

Source: UBS Asset Management.

# Asset Allocation and Currency

Each quarter, our Global Investment Solutions (GIS) group provides a summary of its viewpoints on global asset classes, including equities, fixed income and currencies. The interaction of world economies and financial markets on occasion generates substantial mispricings of assets, providing opportunities to add value by dynamically adjusting the asset mix. We apply two key principles. First, investment across global markets is based on forward-looking investment fundamentals. Second, equilibrium characteristics and value levels for assets and asset classes are defined within a globally integrated capital market framework. Portfolio structure is the result of relative price/value comparisons, focusing on both risk and return.

#### by Nathan Shetty, CFA, FRM

Financial market participants and commentators have devoted a great deal of time to trying to determine when the US Federal Reserve (Fed) will raise interest rates for the first time in nearly a decade. This comes as little surprise—the exercise can be as simple as tossing a coin ahead of the Federal Open Market Committee's monthly meetings.

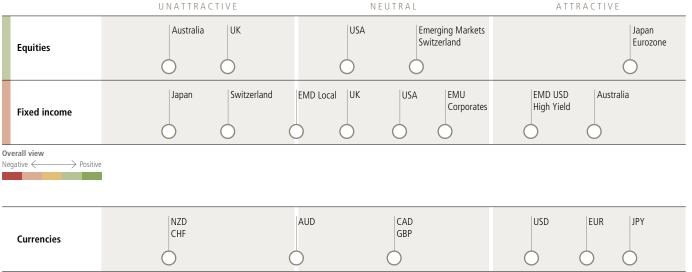
In September, the Fed surprised many by leaving interest rates on hold, despite inflation and labor market trends suggesting that conditions were ripe for an increase. Furthermore, the US economy continued to outpace its developed global counterparts in growth terms, with second-quarter GDP revised upward and the dollar continuing to make gains against other major currencies. The Fed was thrown off course by developments

in the global economy—China and the emerging markets in particular. Market expectations for the first US rate rise have now been pushed back to the end of this year or early 2016.

This leaves the prevailing environment as one of uncertainty. While many expect that the Fed will eventually raise rates, and that the pace of tightening that follows will be very gradual, September's developments showed that the monetary policy trajectory of the world's most important central bank is by no means set in stone. What will help long-term investors seeking returns across multiple regions and asset classes to cope with this uncertainty is having a good understanding of the trends shaping the real economy.

#### Asset class attractiveness

The chart below shows the GIS Asset Allocation and Currency team's views on overall asset class attractiveness, as well as relative attractiveness within equities, fixed income and currencies, as of September 30, 2015.



Source: UBS Asset Management.

Data as of September 30, 2015, based on UBS Asset Management views with a 12-to 18-month time horizon. The chart shows relative attractiveness within each asset class. Views are not necessarily reflective of actual GIS portfolio positioning..

#### No shortage of surprises from China

Doubts about the reliability of official Chinese data and the distinctive state-led capitalism pursued by China's ruling elite indicate that the country's economic developments are likely to provide plenty of surprises for foreign investors and commentators. The quarter showed more clearly than before that Chinese authorities are struggling to shift the economy toward primarily consumption-driven growth.

In early August, the People's Bank of China (PBoC) reduced its daily reference rate for the yuan by 1.9%. Deemed a one-time adjustment by the PBoC, the cut led the yuan to suffer the biggest daily loss against the US dollar in over two decades. The PBoC's actions represented a step toward a more liberal currency regime and were welcomed by the International Monetary Fund. However, they also raised concerns among investors that the central bank had sought to devalue the yuan to boost the competitiveness of Chinese exporters. This in turn exacerbated fears of a cycle of devaluations among emerging market economies to retain their relative competitiveness.

Chinese economic data developments provided investors with little cause for cheer. The closely watched Caixin China purchasing managers' index (PMI) showed that manufacturing activity continued to weaken in September for the second consecutive month. Tight credit conditions, meanwhile, appeared to be constraining business activity, while the multi-year deflationary cycle in producer prices continued, according to data released in September.

Investors were alarmed by the domestic A-share market losing over 43% of its value during a period of about two-and-a-half months between June and August. The measures deployed by the PBoC to normalize conditions were perceived by many as ineffective, at least in the very short term. The Chinese A-share market plunged despite the PBoC's efforts to limit losses, including restrictions on short selling and share disposals by

large stakeholders. This essentially represented the bursting of a price bubble that had inflated in an environment of highly expansionary monetary policy, driven by the PBoC's repeated cuts to interest rates and reserve requirement ratios. The market eventually settled in late August at a level close to that at which it was trading at the start of 2015.

The Chinese authorities also ramped up their fiscal policy interventions, becoming more aggressive on planned infrastructure spending. The debt-for-bond exchange program, designed to channel increased funding to local governments for investment to boost growth, also continued to lend some support to activity. We believe there is scope for the Chinese authorities to undertake further action on both the fiscal and the monetary side.

In our view, the prices of China-linked assets appear to be overestimating the degree to which Chinese growth will deteriorate. However, a weakening Chinese economy will continue to weigh on global trade volumes, adversely affecting the world economy. We would need to see meaningful improvement in Chinese domestic consumption for our outlook to become more positive. China remains at the top of our list of global economic developments to monitor.

## Waning Chinese demand sets the stage for emerging market weakness

The tumultuous developments seen in the Chinese economy and financial markets in the third quarter do not necessarily presage a veering away from China's previously anticipated growth trajectory. Before the quarter's developments raised red flags for investors, most commentators were expecting the Chinese economy to slow gradually onto a path of more sustainable long-term growth—and it was factored into projections that official data from China could overstate growth rates by some margin. A gradual slowing in Chinese economic growth still remains our base case scenario.

What is clear is that waning Chinese demand for imports, as a result of the economy shifting away from investment- and resource-driven growth to consumption-led expansion, has left many emerging economies vulnerable. Among the most adversely affected have been the Latin American economies, such as Brazil, that have traditionally been heavily dependent on exports to China as a driver of growth. Russia, meanwhile, remains in confrontation with Ukraine, and international sanctions serve as an ongoing impediment to the country's economic growth, coupled with the negative impact of oil price weakness.

There is no shortage of factors compounding the problems faced by many emerging market economies and asset classes. With the Fed set to raise rates for the first time in nearly a decade and the US dollar in a strengthening environment against most other currencies, investors have been shifting funds away from the relatively less attractive emerging markets. A stronger US dollar also means that the emerging economies that have borrowed significantly in dollars now face a growing debt service burden, at a time of domestic economic weakness, suppressed commodity prices and, often, high inflation.

Areas of strength remain, however, even in emerging market asset classes facing challenging conditions. India's equity market has fared relatively well compared with the broader MSCI Emerging Markets Index in the third quarter. It has been buoyed by a relatively healthy domestic economy—India has benefited from oil price weakness, and has succeeded in reducing its high current account deficit and in bringing down inflation. The Reserve Bank of India is on track to reach its January 2016 inflation target of 6%.

For us as multi-asset investors, differentiating between emerging market regions, countries and asset classes is crucial to finding the most attractive opportunities in terms of risk and reward. In the third quarter, we became slightly more positive on emerging market equities on valuation grounds, but retained an overall neutral stance. We hold a long North Asia versus MSCI Emerging

Markets Index equity trade. On the long side, the healthy current account balances of Korea, Taiwan and China compared with the broader emerging market universe should make these economies better placed to weather the negative effects of US rate rises. A low oil price will also work in their favor. In fixed income, meanwhile, our preference remains for US dollar-denominated over local currency emerging market debt.

## We retain our conviction in Eurozone and Japanese equities

On the negative front, the performance of Eurozone and Japanese exporters could be harder hit the faster Chinese demand for foreign imports wanes. Consumer price pressures are likely to remain low for some time as global oil and commodity prices remain depressed. However, the flipside of this is that recent dynamics are likely to lead to the continuation of trends that have been broadly favorable for riskier assets in both the Eurozone and Japan.

These dynamics include: the ECB and the BoJ's ongoing government-bond purchase programs and their potential expansion; weakness in the euro and the yen against the US dollar lending support to exports; a favorable backdrop for increased consumer spending; and relative political stability. Earnings growth trends for both Eurozone and Japanese companies have been broadly positive, although more so the case in Japan—and given strong corporate fundamentals, we would expect this to continue.

Our outlook for developed equities, excluding US equities (MSCI EAFE), remains positive on a 12-month time horizon. The developments of the third quarter—namely, in China and the emerging markets—challenged our base case scenario, however. We expect a catalyst to be forthcoming in the shape of Chinese authorities undertaking further monetary and fiscal policy measures to boost the economy and lend support to financial markets. In portfolios, we reduced our directional equity exposure and added exposure through relative trades.

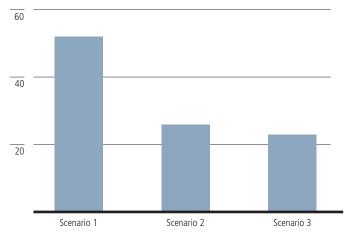
Retaining our conviction in Japanese equities, we added to the TOPIX versus S&P 500 trade. We also added a new long Eurozone banks versus broad Eurozone equity market trade. Our expectation is that Eurozone bank stocks will outperform, due to a combination of: loosening credit conditions and positive loan growth; banking sector earnings upgrades; limited potential for further regulatory uncertainty; and the waning severity of debt crisis-related developments in the peripheral economies.

#### **Cyclical Market Forum**

In September, participants in our Cyclical Market Forum (CMF), representing investment teams across UBS Asset Management, considered the likelihood of three scenarios for the global economy over the next 12–18 months: Scenario 1: Consensus view; Scenario 2: Upside surprise; Scenario 3: Downside surprise. The scenarios differ in their views on growth and inflation for both developed and emerging economies. CMF participants voted Scenario 1 as most likely, followed in order by the other two.

Exhibit 1: Probability of each scenario

Voting results from UBS Asset Management investment staff



Source: UBS Asset Management.

The above results are the views of the participants of the UBS Asset Management Cyclical Market Forum and are not intended to be used as a forecast. Forecasts and probability votes are as of September 26, 2015.

#### Scenario 1: Consensus view

Scenario 1, which is aligned with industry consensus, was voted as being the most probable. The outlook for economic growth in the developed markets is broadly unchanged from the second quarter. The US economy should continue to lead the global recovery, with growth anticipated to be in the range of 2.5%-3% per annum. Meanwhile, stronger-than-expected expansion in the Eurozone looks likely to be offset by a downgrade to the growth outlook for Japan. Emerging market economies are expected to continue to underperform their developed counterparts, as they face greater headwinds from weakening Chinese growth and the prospect of Fed rate rises.

The rate of US economic expansion is solid as demonstrated by the upward revision of second quarter GDP growth, albeit below the average pace of previous recoveries. Consumer spending continues to be the main driver of the recovery, while growth in investment spending remains subdued relative to historical standards. Trends in the labor market and consumer prices suggest that domestic conditions are ripe for a Fed rate rise, at some point between late September and January of next year. As the effects of the fall in energy prices continue to wane, inflation progressively reverts to just above 2% in 2016.

The recovery in the Eurozone economy is expected to gather some momentum as it becomes more broad-based. Domestic demand is supported by lower energy costs and loose monetary policy, while net trade has disappointed slightly as the positive effects of a weaker euro are offset by slowing activity in the emerging economies. Inflation is well below target and is expected to remain so until the second half of 2017.

Weakness in aggregate demand in Japan is expected to continue throughout most of the forecast horizon. At the same time, the slowdown in emerging markets, combined with the currency depreciations in those countries, should partially dampen external demand. Inflationary expectations remain subdued. Overall, the underlying pace of GDP growth amounts to just 1%.

Compared to the previous quarter, the consensus scenario has more question marks regarding emerging markets. With domestic demand constrained by the adjustment process required to redress the imbalances built up in the last few years, GDP growth will be mostly driven by exports to industrialized countries.

Limited commodity exports and persistent government and trade deficits will keep Brazil in stagflation this year. GDP growth is expected to remain low by historical standards.

Chinese economic growth continues to slow, stabilizing at an official rate of just above 6.5% (although likely lower in reality), as investment is dampened by excess capacity in many sectors, construction in particular. Developments in both the financial markets and the real economy are likely to reflect China's continuing shift toward a more consumption-led growth model.

Among emerging markets, India remains a bright spot, with the outlook for its economy remaining positive. The economy is expected to expand at about 7.5% in 2015, with growth accelerating further next year. Both activity and inflation benefit from a stable oil price.

Consensus expectations for the global oil price appear to have declined, with the price of a barrel of crude oil likely to hover in the USD 50-60 range.

#### Scenario 2: Upside surprise

Scenario 2, Upside surprise, has a broadly more optimistic view of growth and inflation prospects, and factors in positive surprises.

Prolonged oil price weakness has an increasingly positive effect on global consumption. The continued low interest rate environment leads to a meaningful increase in global investment.

#### Country-level highlights:

- In the US, higher labor market participation leads to stronger productivity growth, while rising wage levels stimulate increased consumption.
- In the Eurozone, less aggressive fiscal consolidation and faster progress on structural reforms support demand, while an environment of reduced political uncertainty stimulates a revival in investment spending.
- A strong UK labor market and weak consumer price inflation boost consumer spending.
- Stronger-than-expected developed market growth and export demand support the Chinese economy, helping it to rebalance.
- Commodity prices rebound, supporting Brazil's lagging economy.

#### Scenario 3: Downside surprise

Scenario 3, Downside surprise, has a broadly more pessimistic view of growth and inflation prospects, and factors in negative surprises.

The Fed fails to manage expectations about the timing and pace of rate hikes, leading to significantly increased economic and market volatility.

#### Country-level highlights:

- Chinese economic growth slows at a much faster-thanexpected pace, and the adverse effects spill over to the other emerging economies.
- In the US, energy sector weakness spreads, leading to subdued growth in capital spending across other sectors.
- Increased political fragmentation and instability in the Eurozone (Spain, Italy, Portugal and Greece) lead to limited progress on structural reform, further impeding a rebound in investment spending.

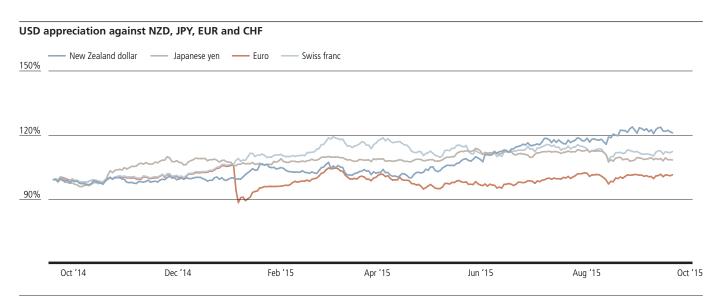
- The Bank of Japan significantly alters its inflation target and reduces monetary support, while corporate earnings growth prospects for Japanese companies suffer.
- In India, the failure of structural reforms to produce higher growth dampens both business and foreign investor confidence.

#### **Our strategies: Currency**

Amid concerns about Chinese economic growth and further yuan liberalization, emerging market weakness and the Fed's decision not to raise interest rates in September, the US dollar depreciated against many major developed currencies in the third quarter, while the euro and the Japanese yen benefited from investor safe-haven flows. Emerging market currencies

suffered the most, with the South African rand, the Malaysian ringgit and the Brazilian real losing significant ground against the US dollar.

We see scope for the Swiss franc to depreciate further against the euro. The franc remains overvalued, while domestic economic indicators are sluggish—the Swiss purchasing managers' index (PMI) in September, at 49.5 versus 52.2 in August, signaled a contraction in business activity—and negative rates are inducing capital to flow out of Switzerland. We maintain our long euro versus short franc position, which currently has positive carry, given the negative interest rate environment in Switzerland.



Source: Bloomberg Finance L.P. Data as of September 30, 2015. Rebased to 100 on September 30, 2015.

#### Currency price/value discrepancies

Reference currency vs. US dollar	Actual rate	Intrinsic value rate	Price/value discrepancy %
Euro (EUR)	1.1	1.3	-13.2%
Japanese yen (JPY)	0.0	0.0	-19.0%
Australian dollar (AUD)	0.7	0.8	-10.1%
Canadian dollar (CAD)	0.8	0.8	-7.6%
New Zealand dollar (NZD)	0.6	0.7	-10.5%
Singapore dollar (SGD)	0.7	0.8	-17.4%
Hong Kong dollar (HKD)	0.1	0.1	1.4%
British pound (GBP)	0.7	0.6	-6.5%
Swiss franc (CHF)	2.0	2.0	-1.8%
Swedish krona (SEK)	0.1	0.1	-9.0%
Norwegian krone (NOK)	0.1	0.1	-17.7%
Danish krone (DKK)	0.2	0.2	-10.0%
Mexican peso (MXN)	0.0	0.1	-18.3%
Korean won (KRW)	0.0	0.0	-15.8%
Taiwan dollar (TWO)	0.0	0.0	-24.3%
Thai baht (THB)	0.0	0.0	-16.5%
Malaysian ringgit (MYR)	0.2	0.3	-18.5%
South African rand (ZAR)	0.0	0.1	-39.4%

Source: UBS Asset Management. Data as of September 30, 2015.

Actual and intrinsic value rates are shown in terms of how much one reference currency buys of the US dollar. Price/value discrepancies depict our view of how the US dollar is over- or undervalued versus the other currency; negative values indicate overvaluation of the US dollar, positive values indicate undervaluation of the US dollar with respect to the other currency. Intrinsic value is derived by adjusting for relative purchasing power parity (PPP) and real interest rate differential.

#### Current strategy: Currency positions in Global Allocation Strategy

Japanese yen (JPY)					6.0
Mexican peso (MXN)					2.0
Swiss franc (CHF)					-2.0
Malaysian ringgit (MYR)					-2.0
New Zealand dollar (NZD)					-2.0
US dollar (USD)					-2.0
	-8	-4	0	4	8
	Over/ur	derweight %	0		

Source: UBS Asset Management. Information is representative of a specific portfolio within the Global Allocation Strategy and may vary slightly within the different investment options. Data as of September 30, 2015.

Elsewhere, we remain overweight the US dollar, predominantly against the New Zealand dollar. Despite our belief that the majority of the dollar's appreciation is now behind us, we see some potential for further upside, given the strength of the domestic economy and our anticipation of Fed rate hikes. Furthermore, the New Zealand dollar still remains overvalued, and there are vulnerabilities in the New Zealand economy that we anticipate will lead to a slowdown in growth. Also supportive of the positioning is the prospect of further interest rate cuts by the Reserve Bank of New Zealand.

We hold several relative value currency positions in the emerging markets. We are overweight the Mexican peso. While investment in energy-related projects in the country is likely to slow due to the weak oil price, an improvement in competitiveness against China is likely to attract other significant investment inflows, particularly from the improving US economy. We are underweight the Malaysian ringgit. As a major trading partner of China, Malaysia's commodity-heavy economy is particularly vulnerable to a Chinese slowdown. Deterioration in the Malaysian trade balance suggests that a weaker currency may be necessary to boost competitiveness.

#### **Our strategies: Alternatives**

The global oil price (Brent crude) fell to a low of USD 43.5 per barrel in late August. This was a continuation of oil adjusting to the new world of supply and demand dynamics driving prices, rather than the Organization of the Petroleum Exporting Countries (OPEC). The market remains oversupplied in the short run, but there are signs of supply contractions, cancelled new capacity investments and stronger price-sensitive demand growth.

Oil demand has been quite resilient to the slowdown in the emerging markets. Over the medium term, we expect the price per barrel to stabilize in the USD 50-70 range, and the key drivers of emerging market growth, energy efficiency and OPEC policy to determine which side of that range is broken first.

Our outlook for base metals is positive, particularly in the case of nickel and zinc. Demand and sentiment remain weak, but both metals are trading at a level below the marginal cost of supply, while there is a lack of investment in new mining capacity. Short-term price movements are likely to be driven by investor sentiment on China, but supply conditions are likely to tighten in the medium term, causing prices to rise. The supply and demand conditions in copper look weaker, and therefore we expect prices to remain muted for longer.

# Investment Spotlight

Each quarter, our Global Investment Solutions (GIS) group provides a summary of its viewpoints on global asset classes, including equities, fixed income and currencies. The Investment Spotlight offers a more in-depth analysis into one of these viewpoints, including both quantitative and qualitative factors.

#### by Jocelyn Saxon

#### Long Dutch versus UK equities

During a quarter of sharp asset price movements, we focused on relative value trades in our multi-asset portfolios. We added a new relative value trade, positioning some of our portfolios long Dutch equities and short UK equities. This trade aligns with our broad preference for Eurozone over UK equities.

In contrast to the rationale for many of our other positions, we did not add the long Dutch versus short UK equities relative trade on valuation grounds, as one index is not clearly cheaper than the other. The European Central Bank's (ECB) stimulus aimed at reviving the Eurozone's economic growth and inflation prospects has been positive for sentiment and has driven investors to riskier assets, including Dutch equities. The Bank of England (BOE), meanwhile, is contemplating its first rate increase in nearly a decade. As UK companies in the FTSE 100 Index derive a significant share of profits from overseas, they are particularly vulnerable in a potential environment of rising rates and a stronger sterling.

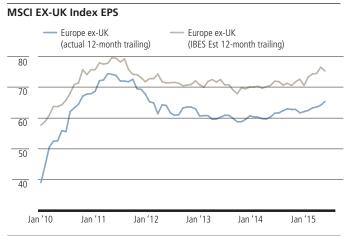
#### Diverging corporate earnings growth trajectories

Despite the erratic economic and financial market developments in the third quarter, we believe that the Eurozone recovery remains intact. According to composite purchasing managers' index (PMI) data, Eurozone output growth in the third guarter equaled the second-quarter's four-year high. For the Dutch economy, specifically, the outlook is bright. The Dutch economy expanded at a rate of 2.2% in the second guarter, outpacing the 1.5% rate of the Eurozone as a whole.

Corporate earnings trends appear to be more favorable for Dutch companies than those in the UK. While corporate earnings growth in the Eurozone appears to be in the early stages of catching up with expectations, forecast earningsper-share growth in the UK has been broadly flat since the year began.

#### Mitigating energy sector exposure

In terms of sector composition, the Dutch and the UK indices share similarities, with several companies included in both. The overlap in energy sector exposure is greater than between the UK and the broad Eurozone equity index, which means that pairing a long Dutch position with a short UK position allows for some neutralization of energy exposure. This will be important in the coming months if the global oil price stages a sustained rebound.



#### Source: Bloomberg Finance L.P. Data as of September 30, 2015. Major investment indicators Milestone/signpost Signal Corporate earnings: Trends are more positive for Dutch companies than for UK companies. Monetary policy: The ECB's loose monetary policy continues to support riskier assets, while the BoE is contemplating its first rate hike in nearly Economic recovery: Dutch and Eurozone economic growth prospects are more positive than for the UK, and expansion is from a lower base. Valuations: Price-to-book and price-to-earnings ratios are both broadly neutral for this trade.

## US Pension Fund Fitness Tracker

The UBS Asset Management US Pension Fund Fitness Tracker is a quarterly estimate of the overall health of the typical US defined benefit pension plan.

#### by Neil Olympio, CFA, FIA, CMT

The UBS Asset Management US Pension Fund Fitness Tracker saw the funding ratio of the typical corporate US pension plan fall by approximately five percentage points to 82% in the third quarter of 2015.

In the third quarter, we saw the funding ratios of pension plans decrease as both investment returns as well as liability returns were unfavorable. Over the course of the full year, many plans have seen a substantial aggregate negative net effect on the overall funding ratios. Because of that, some plans have started to re-risk due to upward adjustments of expected return targets. Other plans have not yet taken action, but we do expect more shifts in allocations given the decreased levels of funding ratios. We continue to advise our clients on appropriate strategy and timing of implementation of new allocation targets.

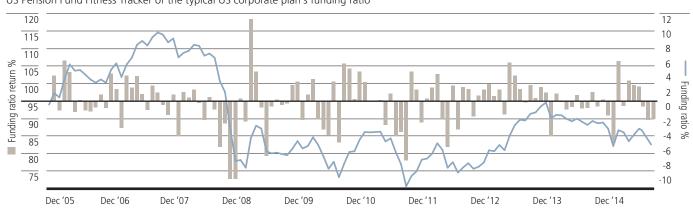
Negative investment returns of -3.1%, along with positive liability returns of 2.5%, led to nearly a 5 percentage point drop in funding ratios over the third quarter. Widening credit spreads failed to offset lower Treasury yields this quarter. These estimates are based on the average corporate plan's reported

asset allocation weightings from the UBS Asset Management Pension 500 Database and publicly available benchmark information.

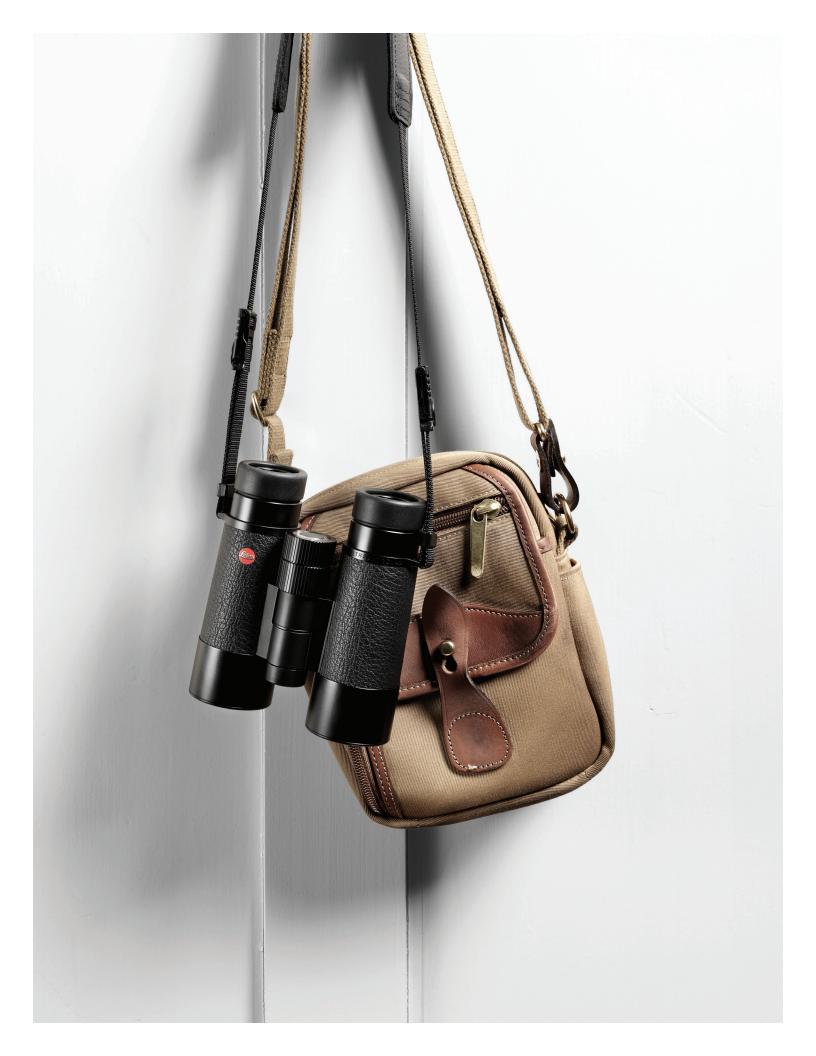
During the third quarter, equity markets globally delivered strong negative performance. The S&P 500 Index ended the quarter down with a total return of -6.44%. The Euro Stoxx Total Return Index was down at -8.05%, in US dollar (USD) terms, over the quarter. The MSCI Emerging Markets Total Return Index ended the quarter -17.78% lower in USD terms.

The yield on 10-year US Treasury Notes ended the quarter down 31 basis points (bps) at 2.04%. The yield on 30-year US Treasury bonds decreased 27 bps, ending at 2.85%. High-quality corporate bond credit spreads, as measured by the Barclays Long Credit A+ option-adjusted spread, ended the quarter 16 bps wider. As a result, pension discount rates (which are based on the yield of high-quality investment grade corporate bonds) decreased over the quarter. The passage of time caused liabilities for a typical pension plan to increase by about one percentage point over the quarter. Together, these effects caused liabilities to increase 2.5% for the quarter.

**Exhibit 1: Funding ratios drop on poor asset returns and higher liabilities in Q3 2015**US Pension Fund Fitness Tracker of the typical US corporate plan's funding ratio



Sources: UBS Asset Management, Barclays, Markit. Data as of September 30, 2015.



# Beyond fear and greed: Enhancing objectivity in the investment process

All investors make mistakes caused by their emotions.

Professional money managers attempt to develop processes that – theoretically, at least – remove emotion from investment decisions. In 2012, UBS's US Intrinsic Value Equity team put that assumption to the test by examining its own investment process for signs of counterproductive behaviors. The results led to the development of new practices designed to diminish the influence of emotion on the investment process and to identify market mispricings caused by behavioral biases.

Examples of the effect of regret aversion, disposition effect and loss aversion on performance over a 17-year period of actual buy, sizing and sell decisions in the US Large Cap Equity portfolio. Findings represent opportunities to capture incremental alpha and return by overcoming behavioral tendencies. The benefits indicated are the results of rigorous analysis and represent statistically significant targets of improvement. They are not guaranteed.

### The impact of regret, disposition effect and loss aversion on performance

#### **Behavior: Regret aversion**

Regret aversion was observed in the portfolio in the tendency to not reach full position weight in a timely manner. Feeding these winners sooner can add around *75 basis points* of alpha annually.

**Solution:** Establish equal active weight as the default initial portfolio weight.

#### **Behavior: Disposition effect**

Disposition effect was observed in the portfolio in the tendency to sell younger winners too quickly. Holding these positions longer and capturing their full alpha can add around *140 basis points* of alpha annually.

**Solution:** Slow down. Allow the analyst to update the model and take potentially improving fundamentals into account.

#### **Behavior: Loss aversion**

Loss aversion was observed in the portfolio in the tendency to sell older losers too slowly. Eliminating this unproductive behavior can add about *110 basis points* of alpha annually.

**Solution:** Stop-look. Re-evaluate the thesis of older losers. Sell if the original thesis is not intact.

Behavioral finance research has identified many ways investors allow emotion to get in the way of rational decisions to their financial disadvantage. In their studies, behavioral experts usually focus on the foibles of the individual investor. Does this mean that trained professionals aren't prone to dysfunctional behaviors, such as selling winners too soon, or holding on to a losing stock too long in the irrational hope that it will reverse its losses, or that they never hesitate to add to a winner out of the misguided regret that they didn't buy more in the first place? Many professional investors believe that a formal investment process renders them immune from judgment-distorting emotions. That mistaken belief almost certainly detracts from performance.

#### Quantifying the effect of behavioral biases

In 2012, the US Intrinsic Value Equity team began a behavioral examination of investment decisions made over approximately the last 17 years in its flagship US Large Cap Equity portfolio. With the help of an outside consultant, it developed a custom behavioral attribution analysis of the portfolio decision-making process in each of three categories: buying, selling and sizing. The goal was to find quantitative evidence of behavioral biases and develop a process to minimize or eliminate them.

Grounded in 30 years of price-to-intrinsic value investing, the team's core philosophy has always been to identify and capitalize on market mispricings caused by the unchecked emotions of other investors. For the first time, the analysis of the process would measure how human behavioral tendencies and emotions like fear and greed affected the portfolio's performance.

From a naïve perspective, an easy conclusion was that everything was working fairly well. Over the long term, the team had outperformed by about 1.5%. They could see what had worked and what had not worked at the sector and stock selection level, but there wasn't a clear message from a standard performance attribution identifying how we could improve. By digging in and analyzing, they found that while they were doing well, they could do much better if they improved in a couple of very specific areas. When they separated performance attribution into three areas, buy, sell and sizing, the picture started to get much more focused. The buy decision was very strong. That is where most of the alpha was derived. The sell decision added value, but there were clear opportunities for improvement. The position sizing detracted. This was clearly an area where there was alpha leakage.

#### Diagnosis: The buy

Buy decisions looked consistently strong. A winning buy is one initiating a position that ultimately outperforms its sector, factoring in subsequent additions, trims and the final sale. A losing buy underperforms under the same analysis. During the period under analysis, buy decisions consistently contributed to annual portfolio performance.

#### Diagnosis: The sell

Sell decisions provided solid proof that emotion influenced the investment process, and offered clear opportunities to improve performance. Sell performance was analyzed over two holding periods — those shorter than the average 22-month holding period and those held for a longer period. Sales of younger positions (trims and complete sells) are considered effective if after the sale the stock underperforms the portfolio. A stock that outperforms after it is sold suggests that the position was trimmed or liquidated before the full alpha was captured. Holding on to an older position is considered effective if it outperforms the portfolio from the day it becomes 'seasoned' at 23 months until it is sold. Underperformance suggests that these positions are being held beyond the information advantage of the buy ideas.

A primary opportunity for improvement was evident in the pattern of selling seasoned losers, especially those that displayed higher-than-average volatility. It was a textbook case of *loss aversion*, the innate tendency to allow one's dislike of a loss to cloud judgment.

Practically all investors can identify with the urge to hang on to losing stocks in the irrational hope that the price will recover if they just wait a while. A 1999 study found that investors were more likely to sell stocks that had gone up in value from the purchase price than they were to sell stocks that had fallen in value. This urge to sell winners is sometimes referred to as the *disposition effect*. There was no rational explanation for the tendency, as the average performance of stocks that investors sold was better than for those they held on to.¹ Behavioral finance research suggests that for almost all of us, the pain of a loss is stronger than the pleasure of a gain.²

Both the tendency to sell younger winners too soon and older, volatile losers too late reduced portfolio performance. To capitalize on this insight, any name displaying particular

#### The Stop-Look Review

The UBS US Intrinsic Value Equity team's stop-look review is unique. Unlike a stop-loss protocol, which generally triggers a sale when a holding meets or exceeds loss thresholds, a stop-look review re-examines the original thesis for acquiring the stock — effectively repitching the stock as though it were being considered for an initial purchase.

characteristics — a holding period greater than 23 months, high volatility and an unrealized loss position — would be flagged for a specially designed stop-look review. A stock marked for stop-look review must be repitched by the responsible analyst as if it were a new idea in order to evaluate the security's attractiveness as if it were not already owned. The goal is to maintain consistent sell rules while giving analysts an opportunity to override the rule, provided they can present a strong case confirming their original thesis. The stop-look review sets a high hurdle to override the rule.

#### **Diagnosis: Sizing**

While the stop-look review attempted to improve a behavior that appeared to be suboptimal, the greatest opportunity for improvement was in sizing. The investment process had consistently generated strong buy decisions. But portfolio weightings indicated a lack of trust in this strength. The analysis measured the effects of sizing by comparing actual portfolio performance to the performance of a portfolio of the same holdings assigned equal active weights. It appeared that the sizing decision was detracting from performance. A large portion of the portfolio's sizing shortfall was caused by failing to reach full positions in a timely manner, likely in an unconscious effort to avoid anticipated regret if the decision falls short. This counter-productive behavior is sometimes called *regret aversion*.

The team tended to initiate positions at a "starter" or smaller weight, to its own detriment. Ironically, initiation is often the time of greatest insight into an investment idea; yet, the team didn't always take full advantage of its conviction. To capitalize on this insight, an equal active weight was instituted as the default portfolio position size, essentially eliminating the sizing impact. This meant initiating new positions at full weight. Taking larger positions earlier helped capture additional alpha.

#### Diagnosis: The cost of unchecked emotion

Over the 17 years analyzed, reaching full position weight in a timely manner could have added about 75 basis points of alpha annually. Establishing a better process for evaluating younger winners and older losers could have added approximately 250 basis points of alpha annually to performance on average. While the team had outperformed, there was clearly room for improvement.

#### Using new tools to identify bias in the market

In addition to measuring and reducing bias at the portfolio level, the team began applying behavioral bias mitigation strategies to improve idea sourcing. The team discovered that two of the most common contributors to market mispricings are *anchoring* and *availability* biases.

Researchers found that when people are asked to form an estimate, they will often start with an arbitrary initial value – an anchor — from which they make adjustments.<sup>3</sup> The starting point, no matter how arbitrary or incompletely calculated, can influence subsequent expectations.

Anchoring often appears in cases where a business has demonstrated unusual fundamental strength, such as revenue growth or margin improvement, for an extended period of time. Investors may unintentionally anchor on those past results and lose objectivity when interpreting new information to estimate future results. Anchoring also affects share price expectations in instances where there has been structural change in an industry or business. Investors who have anchored onto historical relationships and figures may have to relinquish the knowledge they have worked hard to accumulate over time.

Odean, T., "Are investors reluctant to realize their losses?," Journal of Finance, 1998, Vol. 53, pp. 1775-1798.

<sup>&</sup>lt;sup>2</sup> Kahneman, D. and Tversky, A., "Prospect theory: An analysis of decisions under risk," Econometrica, 1979, Vol. 47 (2), pp. 313-327.

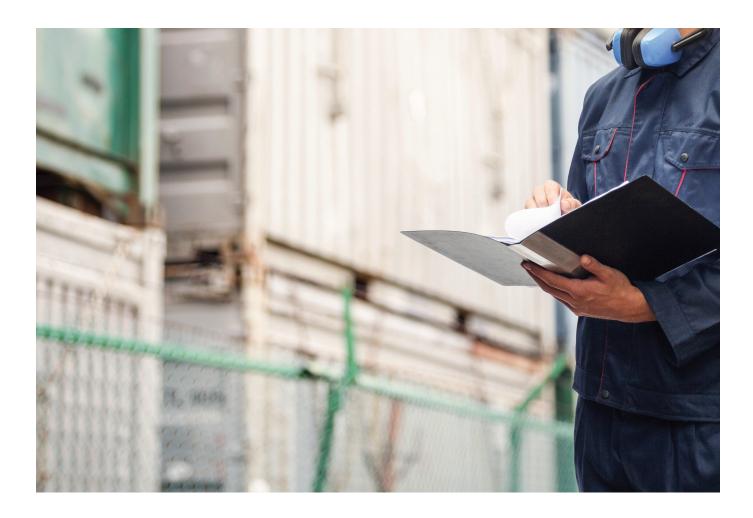
When investors evaluate the headwinds that a particular company or sector may face, they may be overly influenced by more recent or extreme events, which can lead them to miscalculate the likelihood of future occurrences. This human tendency to generalize from a few examples is called availability bias. For example, the share price of one company analyzed last year had been battered by recent industry-related headline events that loomed large in investors' minds and contributed to an apparent underpricing on the stock. The company was an industry leader not dependent on the affected sector and was well able to weather a short-lived downturn. This led to the conclusion that the market was exhibiting availability bias, giving too much weight to intra-quarter events rather than to a longer time horizon. The short-term downturn had apparently reset the anchor for some investors' estimates of the company's long-term value. This is just one line item of an in-depth analysis that has had a positive impact on results.

Some analysts use a checklist to help them recognize their *own* biases. This checklist calls for the analyst to note any red flags in recent company communications or industry developments, and to make note of recent wide price swings that may increase the risk of valuation anchoring. The goal of this process is to broaden thinking and objectively frame key issues and risk factors affecting the business.

Finally, for new investment ideas, a "pre-mortem" analysis considers in detail different reasons why the idea might not work out. Each negative scenario is categorized by severity (relative to the team's intrinsic value estimate), probability, and whether the probability has increased, decreased, or stayed the same over the past year. The objective is not to create a mechanical checklist that highlights everything that could go wrong with an investment — a tactic that could actually narrow an analyst's perspective — but to develop a framework for thinking about an idea that is as rational as possible.



<sup>&</sup>lt;sup>3</sup> Kahneman, D. and Tversky, A., "Judgment under uncertainty: Heuristics and biases," *Science, New Series,* September 27, 1974, Vol. 185, No. 4157, pp. 1124-1131.



#### Eliminating bias is part of the quality-control process

Unhelpful biases and thought habits have a weed-like tendency to creep into even the most process- and fact-driven investment decisions. Part of the answer is to accept that fact and develop a plan to minimize their impact.

These exercises underscore the *UBS US Intrinsic Value Equity* team's focus on continuous learning and improvement. Improved sizing and sell processes have improved portfolio performance. The team continues to monitor and measure its decision-making process as a means of delivering continuous improvement to a strong investment foundation.

An important side effect of gaining clarity around behavioral issues is that it also gives greater insight into the processes that are working well. Buy decisions were exceptionally strong, but that wasn't apparent until the behavioral analysis uncovered relative underperformance in selling volatile older holdings and in sizing decisions. Behavioral issues in some parts of the investment process masked outperformance in others.

The search for emotion in the investment process is part of an overall emphasis on quality control. In the same way that early manufacturers examined every facet of the assembly line to perfect each movement and action, the US Intrinsic Value Equity team continuously looks for factors that create alpha leakage. Currently, it is conducting an in-depth analysis of its behavior following large downside price movements, which can trigger strong emotions for any investor. The ultimate goal in this and all process evaluations is to protect and enhance the ability of the investment process to deliver the maximum possible alpha. The research is clear: Behavioral biases affect professional and nonprofessional investors. Those who want to reduce emotionally driven investment decisions should start by looking for evidence in their results. Ask yourself these questions:

- 1. When I add a holding to my portfolio, do I start out small with the intention of buying more later if it performs well, or do I assign a consistent sector buy weight and stick to it?
- 2. What drives the sell decision, and is it consistently applied?
- 3. Have I developed a process to identify behaviorally driven market mispricings?

The ability to pick stocks is the key to success for any manager doing fundamental research. But too often, the work stops there. Managers should perform detailed data-driven analyses to determine their overall strengths and weaknesses. It is an essential step in the process of continuous improvement that should be our common goal.

# Global Sustainable Equity

We invest in companies that meet two important investment criteria. First, we estimate the intrinsic value for every stock and compare that value estimate with the current stock price. We then select securities that are attractive from a bottom-up perspective, combined with market, sector, currency and risk analysis to form a best-ideas portfolio. Second, companies are screened for a sustainable corporate strategy, environmental impact, social guidelines and governance. The intended result is a portfolio of attractively valued companies with a strong environmental, social and governance (ESG) profile.

#### by Bruno Bertocci, CFA

The third quarter was very volatile as investors tried to digest conflicting news, including continued weakness in the Chinese economy, a migrant crisis in Europe, soft economic data in most of the world, and falling oil and commodity prices. In addition, there was much speculation as to whether the US Federal Reserve would raise interest rates or not, depending on whether the focus was the US economy, which appears to be healthy, or the weaker economies outside of the US.

The MSCI World Index decreased by -8.45% during the quarter, taking year-to-date performance into negative territory, with a return of -6.04%. The global market decline was highly correlated across regions with no meaningful divergence. Moreover, the decline appeared to accelerate during the month of September, with 3%–4% declines across all regions, making up much of the quarterly fall in markets.

Sector performance was also highly correlated, with every sector posting red during the quarter. Healthcare, which had been leading the world, declined very sharply and was the worst-performing sector. Investor concerns over aggressive pricing tactics and some negative comments from Hillary Clinton provided an impetus for selling. Across the sectors outside of healthcare there was little to choose from as all sectors fell 3%-7%. The two defensive sectors, consumer staples and utilities, provided a bit of cushion, declining somewhat less than the sector average. Energy, which had already been in freefall, was the best (albeit negative) performer across sectors. The materials sector deserves a specific mention, because the slowdown in China drove commodity prices down to record levels, triggering a selloff in the stocks of the major commodity producers. For example, the price of copper, which was at a record high in February 2011, has declined about 50% since then, reaching a new low. The commodity producers had been expanding capacity and, in some cases, leveraging balance sheets, a strategy that has proven to be misguided as demand

has slackened. Now, the companies are forced sellers of assets, and must reduce production in an environment of shrinking cash flows. We believe that while a bottom may have been reached, it will take quite some time to bring supply and demand back into equilibrium.

The Global Sustainable Equity strategy continues to focus on companies where management execution is the key to success and to avoid sectors where macroeconomic effects or commodity prices are the primary drivers of earnings. Healthcare and technology remain an overweight, although we have trimmed some winners where valuations are more challenging. We remain meaningfully underweight metals. We have moved energy to an overweight. The energy underweight is no longer warranted at extremely low prices and a chance for some rebound as production slackens.

We continue to see rising interest in sustainable investment strategies as pension funds view the inclusion of material sustainability factors as helpful to the analytical process. We also see heightened awareness of the external social impact of securities portfolios. Up to now, endowments, foundations and individual clients have focused on issues such as mission alignment, but pension funds are now actively discussing their role as activist investors, issues such as carbon divestiture, and their responsibility to generate excess returns in a responsible way.

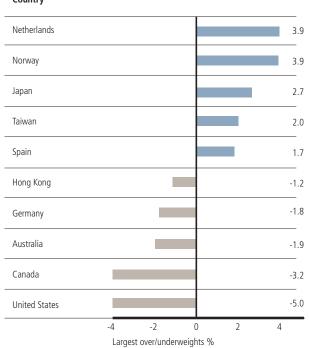
We believe that the Global Sustainable Equity strategy is wellpositioned for future market developments, as well as for the evolution of positive-screening sustainable investment trends.

#### Current strategy: Global Sustainable Equity

#### Sector

Information Technology					2.5
Financials					1.8
Consumer Discretionary					1.6
Materials					1.6
Energy					1.5
Healthcare					0.5
Telecommunication Services			•		0.2
Industrials					-2.6
Utilities					-3.3
Consumer Staples	<				-3.9
	-4	-2	0	2	4
	Larges	t over/unde	rweights %		

#### Country



Benchmark: MSCI World Index (net).

Source: UBS Asset Management. Data as of September 30, 2015.

# **US Large Cap Equity**

As a fundamental, long-term investor, we model an estimate of intrinsic value for each stock in which we invest. We then compare that value estimate with the current stock price and rank each security in our universe based on these price/value discrepancies. Portfolios are constructed by selecting top-quintile stocks, with consideration given to market sensitivity, common factor exposures, industry weightings and rank.

#### by Tom Digenan, CFA, CPA

During the third quarter, a dramatic deleveraging by investors, as reflected in the large redemptions recorded in ETF and hedge fund markets, contributed to indiscriminate selling across US equities. By quarter-end, correlations had spiked to their highest levels in four years, disproportionately impacting stocks with strong fundamentals. The widening of valuation spreads during the quarter was also noteworthy, as gaps between expensive and cheap stocks significantly expanded over a relatively short period. While this market environment may generate short-term headwinds, it can also create opportunity for price-to-intrinsic value investors with fundamental expertise and a long-term view.

In healthcare, concerns stemming from populist campaign rhetoric have shifted the focus away from strong underlying fundamentals. Though these concerns will likely linger with the 2016 elections still over a year away, we believe government restrictions on pharmaceutical pricing will be less onerous and take much longer to play out than is implied by current share prices. In the meantime, ongoing sector-wide consolidation, major advances in science and improving underlying utilization of healthcare services should continue to drive substantial, idiosyncratic value creation within the sector.

Within financials, stocks have traded down in line with the broader market, with more globally oriented and interest-sensitive names declining further. While estimates will be revised lower for the group as a result of lower asset values, slower trading activity and lower interest rates, we still find value in select names. Despite the market turmoil, M&A advisory has been very strong, domestic loan growth has remained solid and credit quality continues to be pristine. We still see value in the larger, more diversified financials, particularly those with exposure to global capital markets, and to US consumer and middle market credit.

Within consumer discretionary, fast fashion and off price continue to take share, while anchor department stores and in-line mall stores have generally suffered due to lackluster product offerings and decreasing mall traffic. Sentiment for the holiday shopping season is generally positive; however, more sales are expected to migrate online. Restaurants are dealing with increased consumer awareness and demand for "pure" ingredient products. Media has become a more controversial sector, with fears of the breakup of the traditional cable bundle and a disruption in the current economic model weighing the sector down. Lodging sentiment is also negative, with fears of increased supply and the long-term impact of hotel alternatives affecting the sector.

For consumer staples, the US remains the strongest market, and companies with less international exposure have held up better. The dollar remains strong relative to several other currencies, a factor that continues to impact companies' profitability. While several international markets remain weak, most companies have called out Brazil as the weakest, and most say they are not yet seeing a slowdown in Chinese demand. As top-line growth has slowed, zero-based budgeting to cut costs and drive earnings growth remains an area of focus. Food staples are seeing increased activist investor activity, with many food staples stocks failing to trade on fundamentals.

Within information technology, semiconductors and semiconductor capital equipment markets will likely continue to grow at an above-GDP level as the electronic content of virtually everything expands (particularly true with regard to radio frequency wireless components) and as electronic devices are consumed at higher penetration rates. Semiconductor companies will likely continue to consolidate in this slower-than-historic growth environment, with segments that have already consolidated (e.g., hard disks and DRAM) exhibiting and

sustaining historically high profits. Traditional IT hardware manufacturers should continue to see top-line and margin pressure as cloud computing and industry standardization expand their addressable market. Within IT software, the focus is on security software, with an emphasis on network security, particularly firewalls and continued adoption of Software as a Service (SaaS) applications.

In the energy sector, oil prices continue to impact drilling programs in the US onshore tight oil space. We believe 2015 cutbacks from US onshore drilling will go a long way toward balancing the market, with the current onshore rig count insufficient to offset underlying production declines. As short-term commodity prices are unpredictable, we continue to pursue company-specific opportunities within the space.

The industrials and materials sectors appear fairly valued on average; however, the dispersion in price-to-intrinsic value has continued to widen as macroeconomic uncertainty has increased. Within the space, there are several big "macro" debates: the magnitude of direct and indirect impacts of lower oil prices on industrial company growth, pricing and margins; the medium-term competitive impact of the stronger dollar on US versus global manufacturers; and finally, how those factors interact to influence the rate of industrial production, and/or GDP growth and cyclicality.

Within yield-oriented sectors, such as utilities and REITs, valuations continue to appear relatively unattractive, in part because these sectors outperformed the broader market in the quarter. We believe this outperformance was related to concerns about global economic growth, which turned investors away from higher beta investments toward yield-oriented sectors perceived as safe havens. Widening credit spreads led to regulated utility outperformance relative to REITs; however, fundamental operating data have generally remained positive for both sectors.

#### **Current industry weightings: US Large Cap Equity** 0.0 Materials -0.1 Capital Goods -4.5 **Commercial Services** -0.9 Transportation 1.5 Auto 1.1 Durables 0.5 **Consumer Services** 0.4 Media 1.5 Retailing -2.2 Food Retail -0.4 Food & Beverage 4.5 Household -1.8 Healthcare -1.8 Pharma & Biotech 4.4 Banks 1.4 Financials -0.3 1.3 Insurance Real Estate -0.4 Software -3.7 Hardware 0.4 Semiconductors 4.6 Telecommunication -2.3 Utilities -3.1 Cash & Others -0.1 2 4 -2 Over/underweight %

Benchmark: Russell 1000 Index.

Source: UBS Asset Management. Data as of September 30, 2015.

# US Small Cap Growth Equity

Our strategy aims to pursue long-term returns by investing in companies with strong business franchises that generate rapidly rising earnings. The investment team conducts fundamental research that analyzes companies' earnings growth potential, as well as provides a thorough assessment of companies' business models. Portfolios seek to manage risk through diversification and attention to reasonable valuations, and are constructed and monitored with close adherence to risk management and client guidelines.

#### by Grant Bughman

The third quarter of 2015 was dominated by worries that a potential hard landing in China will send ripples at best, or tidal waves at worst, throughout the global economy. This concern, coupled with uncertainty about the timing of the first rate hike by the US Federal Reserve (Fed), sent equity markets significantly lower. Emerging markets faced the brunt of the pressure, with broad EM equites declining 18.5% during the quarter. US large cap equities fared relatively better as the Russell 1000 Index declined 6.8% over the quarter. As is typical during periods of market uncertainty, risky assets tend to perform the worst, and this time was no different: US small caps almost doubled the decline of their larger cap cousins as the Russell 2000 Index fell 11.9% during the quarter. In a reversal of what we've seen over most of the past three years, small cap value outperformed small cap growth as the Russell 2000 Value Index declined 12% and the Russell 2000 Growth Index fell 15%. Much of the dispersion came from two sectors as healthcare, which makes up a larger proportion of the growth index, fell 20%, with biotech in particular hit hard on valuation and regulatory concerns. Conversely, the financial sector, which makes up over two-fifths of the value benchmark, declined only 6%. The other outlier during the quarter was cyclical companies, specifically, energyrelated names, which declined over 30% as the price of crude oil retested its lows.

Short of much company-specific headlines, investors chose to sell first and then ask questions later, given the concerns about global growth. Looking more closely at corporate fundamentals tells a better, if not quite overly optimistic story. US small caps actually fared better during the second-quarter reporting season than most had feared, as earnings grew 3.5% after the consensus forecasted a modest decline. The impact from falling energy prices and a stronger US dollar has been the biggest headwind to earnings in the past few quarters, and that is expected to continue in the third quarter as investors are looking for earnings to fall 7% overall, but grow modestly at 2% when excluding energy and materials. Looking more closely at style,

the picture is much improved for growth companies as they have less exposure outside of the US, are less tilted toward cyclicals, and contain a larger percentage of organic growers whose earnings are somewhat more immune to macro influences. For the growth segment, earnings are expected to advance in the third quarter by 3%.

In this light, it seems to us that the recent downturn for small cap equities stems more from the macro concerns discussed above rather than from the reality on the ground when looking at corporate earnings. Risk aversion has pushed earnings multiples lower as investors have lost confidence in the sustainability of earnings growth, against a backdrop of significant global uncertainty. Given that small caps generate less than 20% of their revenue abroad, they should be less impacted by global headwinds and more levered to growth in the US. Turning our focus to here at home, the picture looks quite favorable. While cyclical industries have been negatively impacted by falling commodity prices and instability in emerging markets, the majority of industries have shown resilient growth. The simple fact that the Fed is now close to raising interest rates for the first time in almost a decade speaks to the continued improvement of the domestic economy. Employment growth continues to show steady gains, wages have picked up modestly, lower gasoline prices have added to consumer spending power, home prices have recovered, and consumer and business confidence remains near post-crisis highs.

In this environment, we believe investors will benefit from a greater exposure to organic growth companies whose prospects are less reliant on global GDP, and that are helped primarily by strong secular tailwinds in the US. Growth stocks are expected to generate better earnings in the year ahead, which is even more attractive as they're coupled with the fact that relative valuations compared with value remain below historical averages when looking at both price/earnings and price/sales.

#### Current strategy: US Small Cap Growth Information Technology 7.0 Energy 1.5 Telecommunication Services 1.3 Utilities -0.1 Consumer Discretionary -1.0 Financials -1.3 Healthcare -1.4 -1.9 Materials Consumer Staples -2.8 -6.1 Industrials

In the US Small Cap Growth portfolio, we continue to find the most attractive opportunities within the information technology sector as a shifting landscape in cloud computing and cyber security has led us to increase our overweight. The recent volatility created a compelling opportunity to add back to some of our favorite leaders in the space, as we believe long-term earnings growth is underappreciated as investors have shifted their focus to the short term. The strategy was modestly underweight healthcare and, specifically, biotech prior to the summer volatility. But recently we added exposure in the space as we eliminated a position that was being acquired and increased our immunotherapy exposure. We continue to believe, while multiples may come under pressure given investors' risk appetite, that the biotech industry remains one of the most attractive from a future earnings growth standpoint, and we continue to be disciplined in managing our risk in the space. Finally, the strategy's largest underweight remains industrials where we continue to see headwinds given the weakness in global growth.

Benchmark: Russell 2000 Growth Index.

-6

Source: FactSet, UBS Asset Management. Data as of September 30, 2015.

-3

Over/underweight %

0

3

6

# Emerging Markets Small Cap Equity

The UBS Emerging Markets Growth team believes that companies undergoing positive, sustainable fundamental change that leads to a period of above-average earnings growth will outperform the market over time. Our investment success is determined by our ability to identify and invest in these mispriced earnings growth stories. Attention to sector, region and capitalization biases is merited and monitored in order to size our strategy's positions to be consistent with our convictions.

#### by Joseph Devine

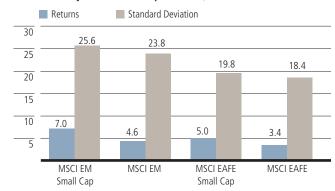
The MSCI Emerging Markets Small Cap benchmark fell 16.7% (in USD) in the third quarter, driven by US rate hike uncertainty, fears of slower growth in China, and further commodity price weakness. This was the worst quarter since the third quarter of 2011 for both emerging markets small caps and the MSCI AC World Index, which fell 10%. Despite the significant selloff, emerging market small caps continue to significantly outperform larger-cap emerging markets as measured by the MSCI EM standard benchmark. Year-to-date, the MSCI emerging markets small cap index is down 9.8% compared to the 15.5% decline in the MSCI EM standard benchmark. As seen in the table below, outperformance by small caps solidifies a trend in place for most of the last decade.

The third-quarter volatility erased the 7% gain emerging market small caps had through the end of the second quarter. Risk assets sold off over the third quarter driven by fears of a China-led emerging markets recession and uncertainty around the timing of the Federal Reserve's (Fed) rate decision. The surprise devaluation of the yuan and increasing concerns of a Fed hike amid slowing global growth led to a steep selloff in emerging markets in August before they stabilized somewhat in September. During the quarter, in USD, the CRB Commodity Index fell 15%, China's Shanghai Index dropped 30%, and the Indonesian rupiah, the Australian dollar, and the Canadian dollar all fell between 6% and 9%.

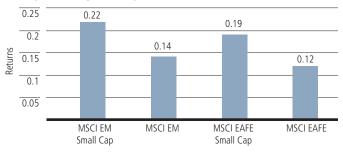
At the country level, the best-performing emerging markets small caps were Poland, up 0.07%, India and Mexico, down 2.2% and 6.0%, respectively. The Polish and Mexican economies are seen as benefitting from their close economic ties to Germany and the US, respectively – two relative economic bright spots in the world. India's 7% economic growth, falling inflation, and a surprise 50 bps rate cut to 6.75% bolstered its market relative to the deeper EM slowdown. The worst-performing markets were Brazil, Indonesia, and China. These markets declined 34%, 28% and 27% respectively. Brazil declined as its economy fell back into recession – the worst in

#### Attractive returns and manageable volatility: Emerging Markets Growth Equity

#### 10-Year Volatility and Return to September 30, 2015



#### Sharp Ratio - 10 years to September 30, 2015



Source: Data sourced from MSCI used with permission, eVestment. Returns greater than one year are annualized. Index is gross of fees and in USD.

**Standard Deviation** – A measure of the average deviations of a returns series from its mean; often used as a risk measure. A large standard deviation implies that there have been large swings or volatility in the manager's return series.

**Sharpe Ratio** – This statistic is computed by subtracting the return of the risk-free index (typically 91-day T-Bill or some other cash benchmark) from the return of the manager to determine the risk-adjusted excess return. This excess return is then divided by the standard deviation of the manager. A manager taking risk, as opposed to investing in the cash, is expected to generate higher returns, and Sharpe measures how well the manager generated returns with that risk. In other words, it is a measurement of efficiency utilizing the relationship between annualized risk-free return and standard deviation. The higher the Sharpe Ratio, the greater efficiency produced by this manager. For example, a Sharpe Ratio of 1 is better than a ratio of 0.5.

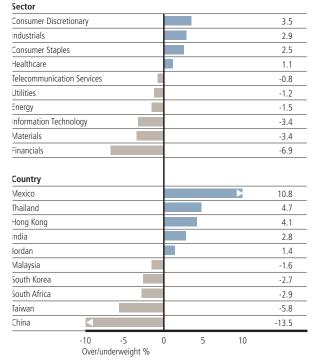
many years. GDP declined by 1.9% in the second quarter of 2015, lagging estimates. Furthermore, Moody's downgraded Brazil from Baa2 to Baa3. Indonesia cut its economic growth forecast for 2016 from 5.5% to 5.3%, and the rupiah reached 1998 lows. Unsettling fiscal balances may pose a further threat to infrastructure spending, which has been slow to materialize, inflation is still high at 6%-7%, and the rupiah remains under pressure. China's yuan devaluation surprised the markets, as macro data continued to weaken, and the authorities cut the main interest rate and lowered bank reserve requirements.

At the sector level, all 10 EM small cap sectors underperformed, with IT and utilities each falling 18% and materials conceding 22%. IT declined due to seasonally weak second-quarter results and uncertain third-quarter guidance driven largely by weakness in smartphones, while materials fell on weaker commodity prices. Telecom, consumer staples and consumer discretionary performed the best relatively, down 5%, 12%, and 15%, respectively, as investors see benefits for consumers in cheaper commodity prices and lower interest rates.

Looking ahead, our emerging market small cap portfolio continues to be driven by stock selection, and we continue to find strong growth ideas that are somewhat protected from the overall macroeconomic cycle. Over the quarter, we initiated new positions in diverse companies with strong outlooks. New buys include a leading Thai hospital operator that benefits from the rapid demand for private hospital healthcare in the region, a South African micro lender with a well-established financial distribution network that is allowing it to rapidly transition from a niche player to a full-service retail bank, and the leading dental implant company in Korea, which has begun to penetrate the large Chinese dental implant market. Our overall view of the market remains cautiously optimistic, while we acknowledge that the looming uncertainty and fear over US interest rates and a possible China slowdown will likely continue to be the biggest near-term impediments. In China, the economic data have generally been tepid to disappointing; however, signs of

stabilization exist. Chinese August retail sales increased 11% year-over-year, airline passenger growth was 10%, and movie box office growth came in at 45%. Improving property markets, slower capital outflows, and policy measures to bolster the property and auto markets all indicate support for this view. Additionally, the manufacturing sector may be stabilizing at a low level. If evidence of stabilization continues, then the China risks and their spillover effects to other emerging markets may not be as high as many believe. We continue to closely monitor Chinese data, as well as to look for strong structural growth stories in emerging markets small caps that we believe will benefit from long-term structural growth opportunities.

## Current strategy: Emerging Markets Small Cap Equity



Benchmark: MSCI Emerging Markets Small Cap Index.

Source: FactSet, UBS Asset Management. Data as of September 30, 2015.

## Global Fixed Income

Our dynamic investment process combines top-down and bottom-up factors to exploit diversified sources of alpha, which we believe is key to delivering consistent performance over time. Our global fixed income capability is defined by a rigorous investment process supported by a global research organization, local presence and strong risk management capabilities. Emphasis is placed on sector analysis and security selection and, to a lesser extent, duration and yield curve strategy.

#### by Simon Foster

The third quarter of 2015 saw developed market global government bonds post positive returns, outperforming both investment grade and high yield credit sectors. This was against a background of equity market weakness and a spike in financial market volatility, concentrated in particular in emerging markets and commodities. Fears of higher US interest rates, a Chinese hard landing and tumbling commodity prices significantly impacted the emerging markets. Concerns spilled over into developed markets, bringing into question the sustainability of the global growth recovery and the ability of central banks to hit their inflation targets. Inflation-linked bonds underperformed nominal bonds as longer-term inflation expectations fell further. Nominal bond yields fell as a lower-for-longer profile for developed market central bank policy rates was reflected in market pricing.

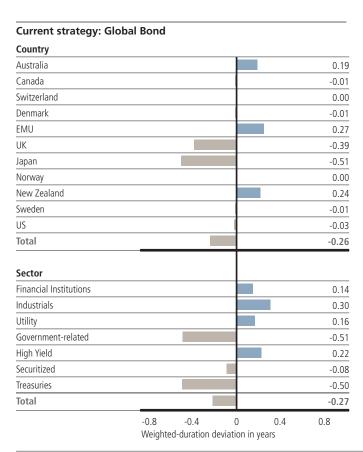
In the US, the Federal Reserve (Fed) failed to produce the much anticipated Fed liftoff, citing in part the effect of global uncertainties. This year's appreciation in the US dollar and the more recent decline in energy prices are exerting additional downward pressure on inflation at a time when global growth also appears to be slowing. With risks to near-term growth, inflation increasing on the downside and a lack of wage growth inflation despite the improvements in unemployment, market participants have started to question whether the first rate rise may even be deferred into 2016.

In the euro area, headline inflation fell back into negative territory, and the European Central Bank announced downward revisions to growth and inflation for both 2015 and 2016. The ECB made some technical changes to its bond-buying program. The limit on the share of each bond that the ECB can buy under its QE program was increased from 25% to 33%, and the statement detailing that the current monthly asset purchase program would run until the end of September 2016 was extended to "or beyond, if necessary." Political risks also remained in the spotlight. Developments in Greece saw a

new deal with creditors accepted in July, followed by a surprisingly strong election result for Prime Minister Tsipras's Syriza Party in September, giving the government a stronger political mandate to fulfill creditor demands. Together, the commitment to expand QE if necessary and positive outcomes to immediate Greek challenges were particularly supportive of peripheral Eurozone government bond markets, which were some of the strongest performers on the quarter. However, with general elections due soon in Spain, Portugal and Ireland, along with EU-UK negotiations ahead of a referendum on the UK's EU membership, European politics will stay very much in focus.

The slowdown in China saw policymakers respond with a range of measures, including credit easing, lower interest rates, equity market support and a change in the FX regime that allowed the currency to be driven a little more by market forces. The China slowdown has spilled into developed markets, directly in the case of Australia and New Zealand, where policymakers' engagement with monetary easing has provided strong support to the performance of their local government bond markets. Meanwhile, the oil price fall has pressured Canada and Norway into equal action, leaving the UK and the US monetary policy stance increasingly at odds with the rest of the world.

Credit markets underperformed on the quarter, led, unsurprisingly, by commodity-related issuers. US high yield markets were particularly impacted due to their greater direct exposure to the energy sector, to the extent that investor concerns about potential fund outflows drove the rest of the market lower. Within investment grade, industrials underperformed financials, even after stripping out the commodity-related sectors. In Europe, the scandal engulfing Volkswagen, the world's second-largest car manufacturer, was a further reminder of idiosyncratic issuer risk, in this case hitting one of the largest issuers in the investment grade index and weighing further on broader credit market sentiment.



We expect to see continued near-term monetary policy accommodation in developed markets to support growth and prevent the risk of deflation, the latter exacerbated by the sharp fall in energy prices. The moderate growth and low inflation environment remains supportive of fixed income, and we continue to favor markets in which central banks are in the process of easing monetary policy – for instance, Europe, New Zealand and Australia – while remaining cautious on US, UK and Japanese bond markets.

In Europe, inflation remains too low relative to target, and a combination of fiscal austerity and private sector deleveraging continues to place downward pressure on inflation. The ECB's quantitative easing program indicates that peripheral European countries, such as Spain and Italy, should ultimately be more resilient. Disinflationary pressures may yet call for additional ECB action to sustain the recovery.

With monetary policy highly likely to remain accommodative in the developed world this year, we see the risk/reward for selective carry-oriented investment remaining favorable. In addition to holdings in agencies, supranationals and investment grade corporates, we see opportunities in high yield and select emerging market sovereign and corporate bonds.

Note: Exhibits show the active weighted-duration deviation of (1) Global Sovereign Composite relative to JP Morgan Government Bond Index, and (2) the Global Aggregate Composite relative to Barclays Global Aggregate Bond Index.

Source: JP Morgan, Barclays, UBS Asset Management. Data as of September 30, 2015.

## US Multi-Sector Fixed Income

Our dynamic investment process combines top-down and bottom-up factors to exploit diversified sources of alpha, which we believe is key to delivering consistent performance over time. Top-down factors, including duration, yield curve and sector positioning, allow us to define our strategy and establish a quantitative framework. In order to construct the optimal strategy, portfolio managers work in close collaboration with research analysts to develop investment themes and select securities.

#### by Danielle Cassidy

#### Market overview

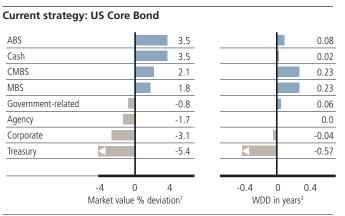
Heightened volatility was the key theme of the third quarter of 2015, due in large part to the continued hard landing in China and its adverse impact on markets globally. Credit spreads widened and safe-haven US Treasury yields fell, as the Fed delayed its much anticipated 'liftoff.' Two-year, 10-year, and 30-year US Treasury yields fell -1 bp, -27 bps, and -23 bps to close the quarter at 0.63%, 2.06%, and 2.88%, respectively. Most spread sectors underperformed during the quarter, with only asset-backed securities outperforming Treasuries. Investment grade and high yield spreads widened 24 bps and 154 bps to close the quarter at year-to-date highs of 169 bps and 630 bps, respectively. For the first time in nearly four years, the yield-to-worst on high yield rose above 8% to close September at 8.04%.

#### **Portfolio positioning**

Given increased volatility and our low conviction in the direction of interest rates in the very near term, we maintained a near-neutral duration position throughout the quarter. We remain underweight Treasuries and have removed our tactical overweight to TIPS, as they have fallen out of favor given recently benign inflation readings. We ended the quarter overweight secured credit (e.g., MBS, CMBS). Toward the end of the quarter, we decreased our underweight to investment grade corporates and, within that sector, we are overweight industries that we believe may benefit from an improving economy (e.g., transportation, consumer cyclicals) and rising rates (e.g., financials). Finally, we have maintained our general bias to be long the US dollar, given continued capital flows to the US, along with our expectation for Fed hikes this year.

#### Market outlook

The economic recovery in the US remains firmly in place, albeit at a marginal pace. Domestic-related data, such as employment, housing, services, auto sales, construction and income growth, have exceeded expectations, while foreign-related data, such as manufacturing and exports, have disappointed.



<sup>1</sup> Relative to the Barclays US Aggregate Index.

<sup>2</sup> Weighted Duration Deviation (WDD) = Strategy CTD – Benchmark CTD. Source: Barclays, UBS Asset Management. Data as of September 30, 2015.

Outside of the US, however, most other economies are struggling. In developed markets, Europe and Japan are still quantitatively easing quite aggressively. While in emerging markets, the hard landing in China, falling commodity prices, and a strong US dollar are all contributing to broad-based weakness and exchange-rate volatility.

The volatility in capital markets that we have experienced this summer is not showing signs of abating. China's economy continues to weaken considerably, leading to less demand for goods from Europe and Japan, and less demand for commodities from emerging markets. Furthermore, geopolitical risks have increased of late given the escalated conflict in Syria. All of these global concerns put the Fed in a quandary: whether to hike rates now in order to get in front of future domestic inflation, or to leave rates at zero in order to minimize the adverse impact that the prospect of rising rates in the US is having on the global economy – China and the emerging markets in particular.

# US Municipal Fixed Income

The strategy seeks to capitalize on the municipal bond market's inefficiencies by analyzing relative valuations, credit quality and bond structures through a disciplined, top-down investment process. Relative valuations are combined with fundamental in-depth quantitative, credit market and economic research. Specifically, duration/yield curve positioning, sector allocation and security selection are distinct steps in the investment process, with the goal to reduce risk through diversification.

#### by Dawn Zerillo

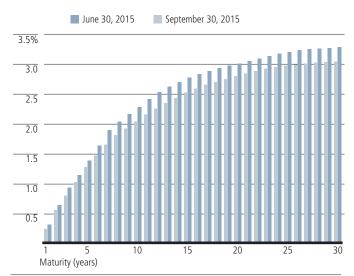
The US municipal bond market, as measured by the Barclays Municipal Bond Index, ended the third quarter of 2015 up 165 basis points (bps). On a quarter-to-quarter basis, the market has been up, down, and now up again, leading to a total year-to-date return of 1.77% through the end of the third quarter. Yields were lower across the municipal curve, ranging from eight to 28 bps. Outside of seven years, all maturities moved practically in parallel, over 20 bps each. This has led to a flattening of the yield curve (the spread was 297 at the end of last quarter and is now 281).

Municipal bond supply remains slightly above the normal run rate, based on the last 12 months; however, please bear in mind the effect produced by the large amount of refundings earlier in the year. Flows into municipal fixed income mutual funds have been mainly neutral to negative over the last several months. This reduced demand has made municipals fairly cheap. Technical factors have been one major component of municipal market performance; the other big factor, of course, is rates. Rather than trying to predict interest rates, we believe it's more important to focus on what interest rate levels the current market is pricing in, and we know that a rise in rates doesn't automatically lead to negative returns. Yield curve selection is a key factor, and the inability of the typical investor to select properly along the curve based on relative value creates opportunities.

The credit landscape varies widely from state to state. At this point in the credit cycle, we see a mixed bag in terms of risk and opportunity. Municipal credit has improved dramatically since the crisis in 2008. However, that improvement does not apply to every credit. While some states have adjusted their balance of expenditures to better match revenue collections, others have failed to reform their expenditure outlays in the face of declining revenues. Three states with varying credit outcomes offer a good illustration. The State of California is the poster child for better fiscal management. Its credit ratings were A1 at the start of the Great Recession. They dropped as low as Baa1 from

Moody's and BBB from Fitch. They have now recovered to Aa3. At the opposite end of the spectrum is the State of Illinois. We believe the state squandered the opportunity to align revenues and expenditures through a temporary tax increase. Illinois now finds itself in no better financial shape than when the recession began. New Jersey is an extremely interesting credit. During the Great Recession, the state never increased its taxes, nor did it experience a robust recovery. Those factors combined in turn prevented revenue growth in the state coffers. The market is fragmented and very specific, which creates opportunity for active management.

## Changes in municipal yield curve by maturity over one quarter ended September 30, 2015



Benchmark: Barclays US Municipal Bond Index.
Source: Thomson Reuters. Data as of September 30, 2015.

# **US High Yield**

We are focused on capturing the high yield market's return potential, while minimizing losses due to credit deterioration or default. Asset coverage, preservation of principal and diversification are at the forefront of our philosophy. Our disciplined process seeks to avoid taking large risks solely for the sake of a high indicated yield. In constructing the portfolio, we combine industry views with the relative value of companies, diversifying securities by issuer and industry in a risk-managed framework.

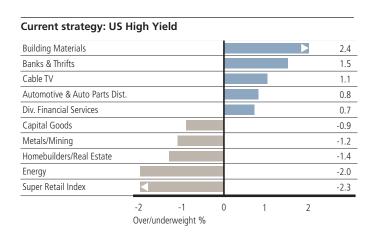
#### by Bernard Hunter, ACA

US economic data for the third quarter were generally weaker, especially toward the end of September. The weakness was widespread across sectors, although consumer-related data were relatively stronger. Bolstered by strong personal consumption spending, second quarter US GDP was revised up in the final release to 3.9% (quarterly, annualized). The lack of action by the Fed in September increased market concerns over global growth, leading to increased volatility in risk assets.

Spreads widened steadily through July and August by approximately 110 basis points (bps), and subsequently tightened by approximately 50 bps from late-August until mid-September. Spreads then widened sharply from mid-September to the end of the quarter, by approximately 100 bps in total, as a confluence of negative corporate events, weak commodity prices and concerns over the outlook for global economic growth impacted investor risk appetite. Much of this spread widening occurred in the last week of September. During the third guarter, the US high yield market, as measured by the Bank of America Merrill Lynch US Cash Pay High Yield Constrained Index, posted a return of -4.85%. The yield on the index moved higher over this period, largely due to increased corporate yield spreads, ending at 7.9%, with the optionadjusted spread on the index at 646 bps, 163 bps higher for the quarter.

Higher-rated bonds generally outperformed, with double B-rated bonds outperforming single B- and CCC-rated bonds, with all rating categories providing negative returns. Most industry categories posted negative returns, with banks, real estate and consumer goods among the top performers, while energy, basic industries and telecom were among the relative underperformers. This was a sharp reversal from the second quarter, when energy was the top-performing industry sector. Through the third quarter, we sought to maintain a broadly neutral stance in our portfolios from a beta, or market risk, perspective versus the benchmark. We anticipate investment opportunities to continue to arise through our bottom-up issuer

selection and our focus on avoiding issuers at risk of credit deterioration. Despite recent weakness in economic data, our view remains that economic growth is sufficient to support the high yield market. From an industry perspective, our strategies' overweights include banks, building materials and cable TV, while portfolio sector underweights include energy, metals and mining, and homebuilders.



Top and bottom industry exposures.

Benchmark: BofA Merrill Lynch High Yield Cash Pay Constrained Index. Source: UBS Asset Management. Data as of September 30, 2015.

# **Emerging Markets Debt**

Discrepancies sometimes occur between securities' market prices and their fundamental values. In the case of emerging markets debt, price volatility exceeds that of the underlying macroeconomic fundamentals. We seek to take advantage of these discrepancies by using a disciplined approach to estimate fundamental value from the perspective of a long-term investor. Our strategy reflects our view of the relative attractiveness of the overall asset class, individual countries and specific debt securities.

#### by Uta Fehm, DVFA, CEFA

During the third quarter of 2015, US dollar-denominated emerging markets debt posted a return of -2.04%, as measured by the JP Morgan EMBI Global Index. Sovereign debt spreads widened significantly by more than 83 bps, reaching 474 bps at quarter-end. The selloff occurred throughout the whole period, while intensifying during the second half of September. In particular, energy- and commodity-related countries like Ecuador, Gabon, Iraq, Kazakhstan, and Nigeria sustained deeper losses than the overall EM market due to declining oil and commodity prices. Brazil was hit severely by rating shifts, indicating that it has been losing its investment grade status. Over the same period, 10-year US Treasury yields declined as economic data came in weaker than expected and as the Fed delayed its rate decision for the time being. Despite the supportive move from US Treasury markets, the overall return in EM debt remained negative due to the spread widening. The best-performing country was Ukraine, as the restructuring of its defaulted debt went through much more smoothly and investorfriendly than originally expected.

Local market investments (measured in USD) provided a negative return for the quarter as well. Local yields broke away from their correlation to US Treasuries and were mainly driven by increasing risk aversion. Bonds sold off and yield increased by around 30 bps, reaching 7.1% as September ended. The resulting negative return cancelled out all positive carry return. However, declining currencies –driven by weak EM economic data, no signs as yet of an economic recovery and lower commodity revenues—were the biggest detractors, as they added to the overall decline, and returns turned strongly negative (-10.5% measured in USD terms). Brazil detracted most, following by Colombia, Turkey, Malaysia and Russia.

In our emerging markets sovereign debt strategy, we have a nearly neutral position in interest rate duration and have kept the spread exposure stable at slightly above-benchmark levels during most of the period. Local debt exposure is positioned neutral versus the benchmark, while local currency exposure is

Current strategy: Emerging markets debt						
	Strategy	Index	Relative			
US interest rate duration	5.7	5.8	1.0			
Spread duration	5.4	5.8	0.9			
Yield to maturity	7.3%	6.8%	1.1			
USD exposure	50.9%	50.0%	1.0			

Index: 50% JP Morgan EMBI Global; 50% JP Morgan GBI-EM Global Diversified (in USD). Source: UBS Asset Management. Data as of September 30, 2015.

slightly below the benchmark weight. At quarter-end, the strategy's overall risk exposure was around 104%, and nearly 48% of the strategy was invested in local currencies.

While global growth is recovering slowly, and emerging economies are still lagging, we feel that growth could be bolstered by increasing exports. A stable oil price and higher demand for commodities could be a first indication for improving growth in emerging economies. In addition, the recent depreciation in EMFX should make products from developing countries more attractive on a relative basis. However, we recognize that economic growth in some emerging markets countries is still behind that of a potential global recovery. If there is another delay by the Fed in hiking US rates, it might be seen as a negative, indicating a weaker economic environment. Consequently, the volatility in EM markets will stay high.

That being said, a lot of the negative news should be priced in, and many issuers are trading at attractive spread levels far below of what is currently justified by economic data. Any positive news in EM countries might be a trigger for spread tightening and currency appreciation.

For further information, please contact us at one of our worldwide offices.

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## **UBS Asset Management Pension Fund Fitness Tracker**

#### **Funding ratio**

Funding ratios measure a pension fund's ability to meet future payout obligations to plan participants. The main factors impacting the funding ratio of a typical US defined benefit plan are equity market returns, which grow (or shrink) the asset pool from which plan participants' benefits are paid, and liability returns, which move inversely to interest rates.

#### Liability indices: Methodology

Pension Protection Act (PPA) liability returns are approximated by the Barclays US Long Credit A—AAA Index. This index broadly reflects the duration and credit characteristics of the PPA discount curve that is used to discount expected pension benefit payments for US defined benefit pension plans.

#### **Asset index: Methodology**

UBS Asset Management approximates the return for the "typical" US defined benefit plan using the reported asset allocation of the UBS Asset Management Pension 500 Database. The series is constructed using the aggregate asset allocation weightings and publicly available benchmark information, with geometrically linked monthly total returns.

#### Pension Fund Fitness Tracker: Methodology

The US Pension Funds Fitness Tracker is the ratio of the asset index over the liability index. Assuming all other factors remain constant, it combines asset and liability returns and measures the impact of a "typical" investment strategy on the funding ratio of a model defined benefit plan in the US due to interest rollup, change in interest rates and typical asset performance, but excludes unique plan factors, such as contributions and benefit payments.

#### The UBS Asset Management Pension 500 Database

The UBS Asset Management Pension 500 Database ("the Database") is a proprietary database that is based on the analysis of 500 public companies sponsoring large defined benefit plans. The information was extracted from the companies' 10-K statements, and therefore represents generally accepted accounting principles (GAAP) information. The study may include figures for companies' nonqualified and foreign plans, both of which are not subject to ERISA. The aggregate asset allocation is based on an equally weighted average of the 500 companies included in the database. The aggregate asset allocation includes equities, fixed income, hedge funds, private equity, real estate and cash.

#### **Additional disclosures**

The views expressed are as of September 30, 2015, and are a general guide to the views of UBS Asset Management. This document does not replace portfolio and fund-specific materials. Commentary is at a macro or strategy level and is not with reference to any registered or other mutual fund.

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Real estate securities risk: Real estate values may be affected by a variety of factors, including: local, national or global economic conditions; changes in zoning or other property-related laws; environmental regulations; interest rates; tax and insurance considerations; overbuilding; property taxes and operating expenses; or declining values in a neighborhood.

Commodities risk: Returns on commodities can be very volatile, and are subject to sudden price collapses. In addition, experience has shown that commodities may post negative performance for several years at a time. Investing directly in a commodity future is very risky and requires solid financial market expertise.

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#### Hedge funds risks

Hedge fund investing entails substantial risks which may place your capital at risk. An investment in a hedge fund includes the risks inherent in an investment in securities, as well as specific risks associated with limited liquidity, the use of leverage, short sales, options, futures, derivative instruments, investments in non-US securities and illiquid investments. Hedge funds may invest largely in other unregulated hedge funds. Such a portfolio of hedge funds may increase an investor's volatility for potential losses or gains. In general, hedge funds may have minimum required investments in excess of USD 250,000, may not offer investors the ability to liquidate shares on a daily basis, and may have management fees ranging from 1%-2% of total assets, plus a positive performance fee of 20%, and are not subject to SEC registration and reporting requirements.

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#### Your global investment challenges answered

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#### Leading institutional asset manager

UBS Asset Management, a business division of UBS, is a large-scale asset manager with well-diversified businesses across regions, capabilities, and client segments. Whatever your investment profile or time horizon, we offer a comprehensive range of active and passive investment styles and strategies designed to meet your needs across traditional and alternative asset classes. Our invested assets total USD 652 billion<sup>1</sup> and we have over 2,400 employees in 24 countries.

<sup>1</sup>As of September 30, 2015. UBS Asset Management (Americas) Inc. is a member of UBS Asset Management, and has USD 148 billion in assets under management as of September 30, 2015.

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