

A decorative geometric pattern of overlapping triangles in various shades of blue and teal covers the left side of the slide. A white triangle is positioned to the left of the main title text.

# **PERSPECTIVES** THAT DRIVE ENTERPRISE SUCCESS

1<sup>ST</sup> QUARTER 2016  
Investment Landscape



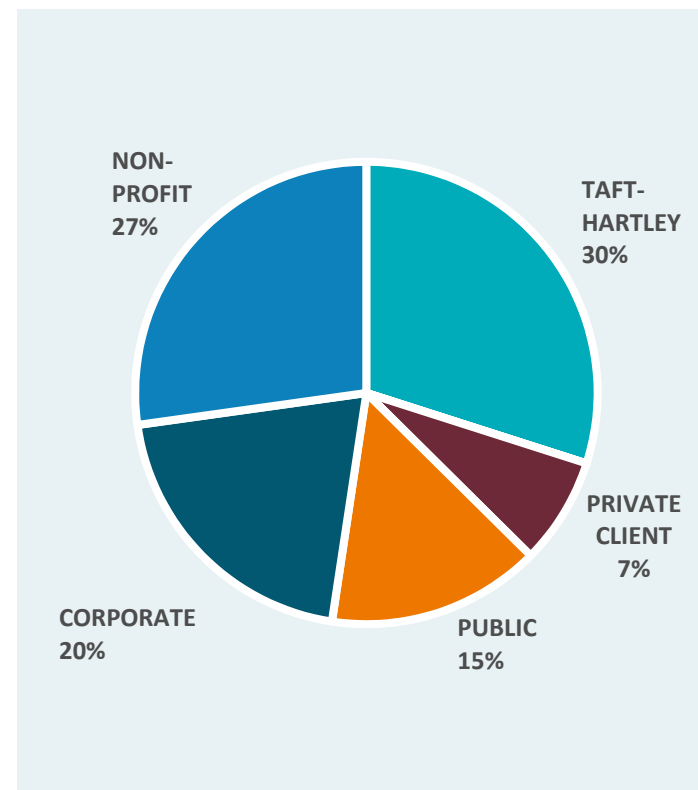
# An update on Verus

2016 marks our 30<sup>th</sup> anniversary

Since 1986, Verus has provided high quality services to institutional investors, growing our depth of investment team and expertise as the capital markets have become exponentially more complex. Some highlights of our recent achievements:

- In 2011, we brought in an investment team headed by Jeffrey Scott, CFA, former Chief Investment Officer of the Alaska Permanent Fund Corporation, to lead our expansion into full discretionary investment services (“OCIO”). Today, this team manages over \$19 billion in institutional assets.
- In April 2015, in recognition of our evolution and continued investment into capital markets research, risk analytics and portfolio management capabilities, we rebranded from Wurts & Associates to Verus.
- In December 2015, we closed our merger with Strategic Investment Solutions, growing our total staff to more than 100 professionals. We now have offices in Seattle, Los Angeles and San Francisco, and serve clients across the US, in Canada and in South America.
- In January 2016 we expanded our ownership base from 11 to 22 employee-owners.
- Throughout all of these years, we are pleased to have continued to be rated highly for overall quality of service. We have ranked in the top quartile of the Greenwich Associates annual institutional investor survey 10 of the past 11 years.
- Today our suite of offerings includes non-discretionary consulting, risk advisory, private markets consulting, discretionary management, and outsourced CIO services.

**\$337 BILLION IN ASSETS / 148 RELATIONSHIPS\***



*\*Estimated discretionary and non-discretionary regulatory assets under management as of 1/1/2016; chart reflects client breakdown by number of relationships*

# Table of contents



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---

Economic environment 5

---

Fixed income rates & credit 17

---

Equity 25

---

Other assets 37

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Appendix 44

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# 1<sup>st</sup> quarter summary

## THE ECONOMIC CLIMATE

- Global growth has benefited from improvements in Europe and Japan, but headwinds persist in emerging market economies. U.S. real GDP growth fell slightly quarter-over-quarter to 2.0%. **p.7, 15**
- There is continuing global disinflationary pressure from falling commodity prices and excess manufacturing capacity. Despite this, inflation in the U.S. and other developed markets rose slightly in Q4. **p.12, 15**
- Some emerging market economies are experiencing economic depression. China continues to moderate with real GDP growth falling to 6.9%. **p.13, 14**

## MARKET PORTFOLIO IMPACTS

- The U.S. dollar rose in Q4 to a level not seen since 2003. Appreciation hit investors with unhedged equity exposure, commodity markets, and earnings of international businesses. **p.26, 41**
- Risk assets have broadly suffered, with particular recent weakness in equity markets and credit fixed income, especially high yield energy. **p.22, 26, 43**

## THE INVESTMENT CLIMATE

- Sentiment across risk markets seems to be shifting in a more bearish direction. **p.28, 43**
- Developed countries may have limited ability to stimulate growth and inflation with lower interest rates. **p.16**
- The Federal Reserve implemented a 25 bps rate hike in December. Underlying weakness in the domestic economy may lead to policy shifts. **p.6**

## ASSET ALLOCATION ISSUES

- High yield spreads widened in Q4, with energy leading the way. There is a potential for market concerns to begin to affect higher quality credit. **p.22, 43**
- Market sentiment towards risk assets in general suggests careful consideration of risk exposures in all asset classes is warranted. **p.28**
- U.S. dollar strength may be at a secular high, which could have implications for currency hedging decisions. **p.41**

We are increasingly concerned over the behavior of risk assets and are watching economic and market developments carefully for signs of more sustained weakness

# Economic environment

# U.S. economics summary

- U.S. real GDP growth moved slightly downward to 2.0% quarter-over-quarter. The Atlanta Fed GDPNow model forecasts continued weaker growth of 1.2% real for Q4, as of December 31<sup>st</sup>. This figure is much lower than economist forecasts.
- Realized headline inflation ticked up during the quarter to 0.5%, while inflation expectations were relatively unchanged.
- The Federal Reserve implemented a 25 bps rate hike in December. This move was generally expected and priced in. Initial Fed expectations of further rises may be tempered by market conditions.
- The job market continued to tighten, as unemployment rates declined. Broader measures of unemployment (U-6) have improved alongside stricter measures of unemployment (U-3).
- Household borrowing has been muted since the crisis, but credit growth is beginning to pick up. Households seem to be healing and disposable income is rising with the help of lower gas prices.

	Most Recent	12 Months Prior
GDP ( <i>annual YoY</i> )	2.1% <i>9/30/15</i>	2.9% <i>9/30/14</i>
Inflation ( <i>CPI</i> )	0.5% <i>11/30/15</i>	1.3% <i>11/30/14</i>
Expected Inflation ( <i>5yr-5yr forward</i> )	1.8% <i>12/31/15</i>	2.1% <i>12/31/14</i>
Fed Funds Rate	0.2% <i>12/31/15</i>	0.06% <i>12/31/14</i>
10 Year Rate	2.3% <i>12/31/15</i>	2.2% <i>12/31/14</i>
U-3 Unemployment	5.0% <i>12/31/15</i>	5.6% <i>12/31/14</i>
U-6 Unemployment	9.9% <i>12/31/15</i>	11.2% <i>12/31/14</i>

Weakening GDP but stronger than many developed markets

Slight inflation uptick in Q4 as initial oil effects dissipate but still lower year on year

# U.S. economics – GDP growth

Real GDP came in at 2% in the third quarter, and 2.1% on a year-over-year basis. Growth was hindered by a contraction in inventory builds and continued weakness in exports. GDP forward expectations have come down materially over the past year. Furthermore, the Atlanta Fed GDPNow model forecasts continued weaker growth of 1.2% real for Q4, as of December 31<sup>st</sup>, though this figure is much lower than economist forecasts.

The U.S. economy has faced headwinds, particularly in

the manufacturing sector, following a stronger dollar and slow global growth. The service sector has shown greater signs of health.

The domestic economy is relatively self-sufficient and highly concentrated in services rather than manufacturing, which suggests the U.S. consumer will likely dictate the direction of growth. Domestic growth remains more robust than in most developed countries.

U.S. remains a relative economic bright spot

Recent weakness in forward expectations

LONG-TERM U.S. GDP GROWTH



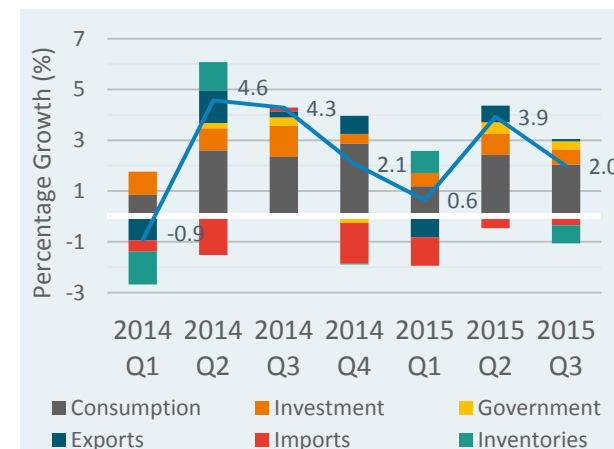
Source: FRED, as of 9/30/15

MEDIUM-TERM U.S. GDP GROWTH



Source: FRED, as of 9/30/15

GDP COMPONENTS



Source: FRED

# U.S. economics – unemployment

The U.S. labor market continued to strengthen. U-6 unemployment (broader definition) and U-3 unemployment (stricter definition) moved downward to 9.9% and 5.0% in December, respectively. The participation rate improved in Q4.

Finishing off a strong year for employment, December's nonfarm payrolls beat expectations coming in at 292,000 vs 200,000 expected. Wages for the month were flat, resulting in an annualized growth figure of

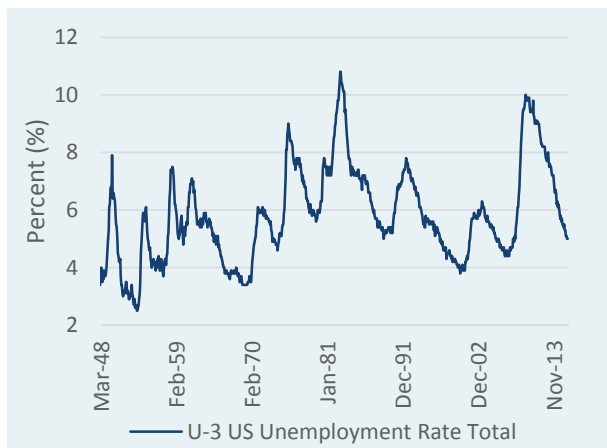
2.5% - a disappointment relative to expectations.

In previous quarters we discussed a secular decline in the aggregate U.S. labor participation rate. This movement appears a negative indicator - possibly a sign of underlying economic weakness and structural slack in the labor force. However, if we focus in on the specific demographic of full time workers ages 25 to 54, we see a less extreme picture.

Continued job market improvement

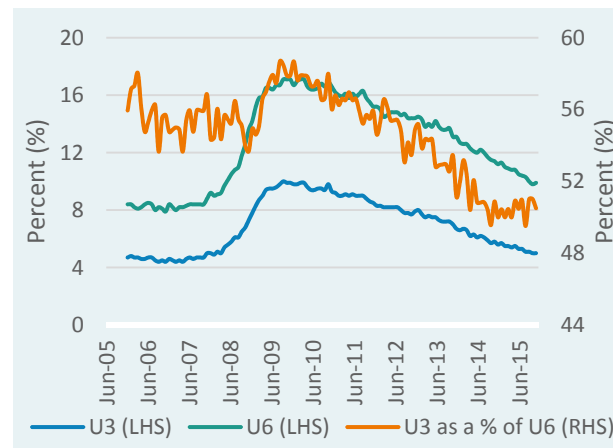
Demographic changes may be primary driver of declining participation

UNEMPLOYMENT SINCE 1948



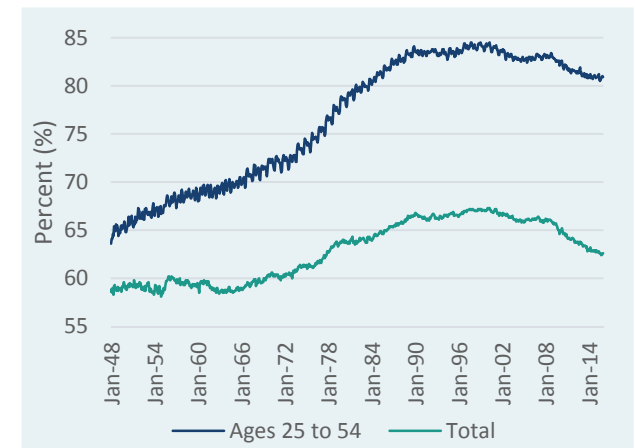
Source: Bloomberg, as of 11/30/15

MORE RECENT UNEMPLOYMENT & U6



Source: FRED, as of 11/1/15

LABOR FORCE PARTICIPATION RATE



Source: FRED, as of 12/1/15



# U.S. economics – the consumer

Although household borrowing has been relatively muted in the recent recovery, credit growth is beginning to pick up. Households are healing from the deleveraging process of recent years and disposable income is rising as employment strengthens.

Consumer spending has been bolstered by the oil price decline. Drivers saved around \$540 on average in 2015 due to the drop in gas prices. J.P. Morgan estimates consumers have spent approximately 80% of that

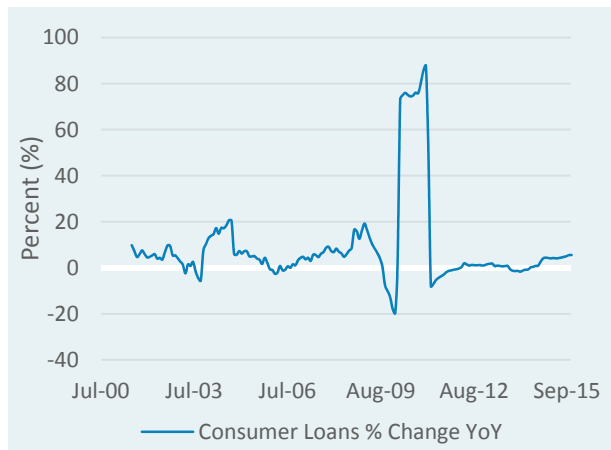
savings. The personal savings rate ticked up slightly in Q4 to 5.5%, but remains in a normal range.

Real disposable income growth remains at a normal level as of November, at 2.7%.

Consumer behavior appears conservative, but stronger spending and credit growth could soon be realized as the labor market tightens. Higher student loan debt remains a drag on spending for younger consumers.

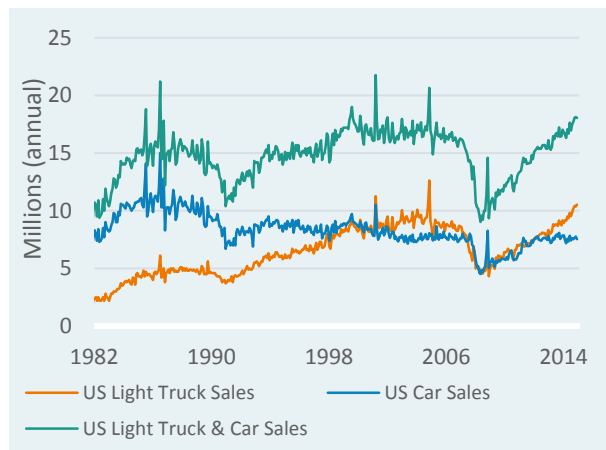
Credit growth has begun to pick up, and has room for expansion

**CREDIT GROWTH**



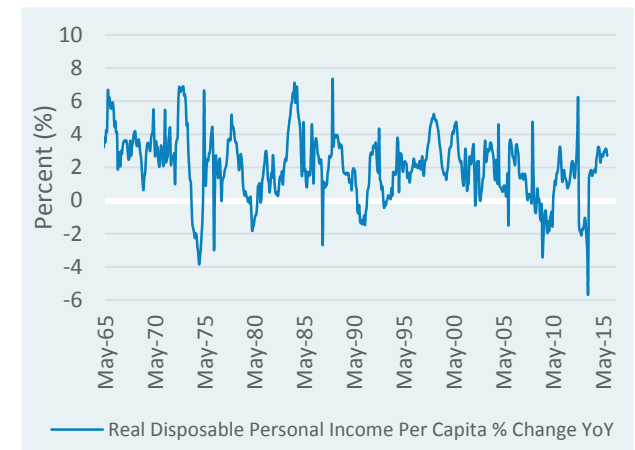
Source: FRED, as of 11/1/15

**AUTO SALES**



Source: FRED, as of 11/30/15

**GROWTH OF DISPOSABLE INCOME**



Source: FRED, as of 11/1/15

# U.S. economics – sentiment

Consumer and market sentiment surveys were mixed in Q4, but remain in a normal range.

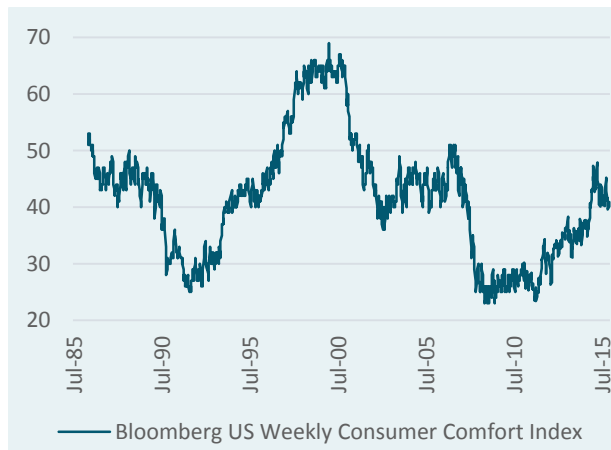
The Bloomberg consumer comfort index had been significantly below average since December 2007. This index now sits at the bottom end of a normal range. The University of Michigan Consumer Sentiment Survey rose in December to the highest level since July. The average in 2015 was the highest annual average in 11 years.

The Citi Economic Surprise index recently dropped to levels not seen since 2012, but continues to recover to normal levels.

The U.S. consumer appears to have been on a steady recovery since the great recession. While business borrowing has since picked up significantly, the consumer remains hesitant to accumulate debt. We continue to believe sentiment may be vulnerable to a stream of bad news.

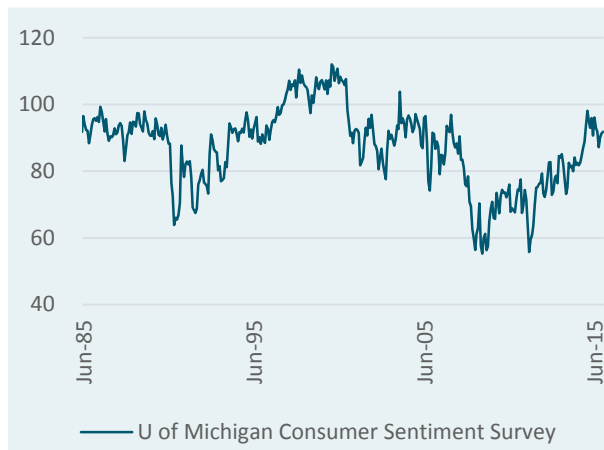
Sentiment and comfort indices mixed in Q4

CONSUMER COMFORT INDEX



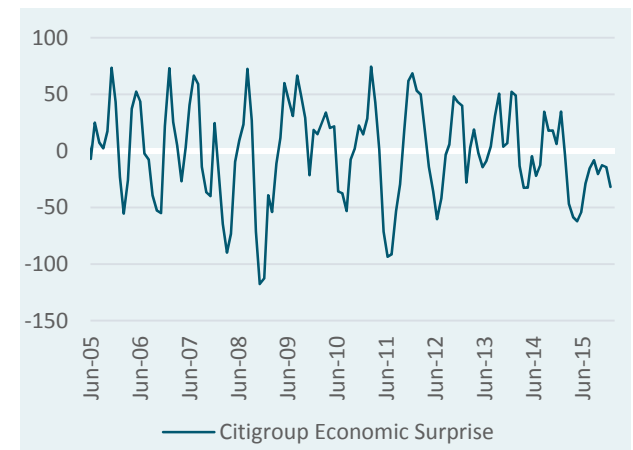
Source: Bloomberg, as of 12/1/15 (see Appendix)

CONSUMER SENTIMENT



Source: University of Michigan, as of 12/31/15 (see Appendix)

ECONOMIC SURPRISE



Source: Bloomberg, as of 12/31/15 (see Appendix)

# U.S. economics – housing

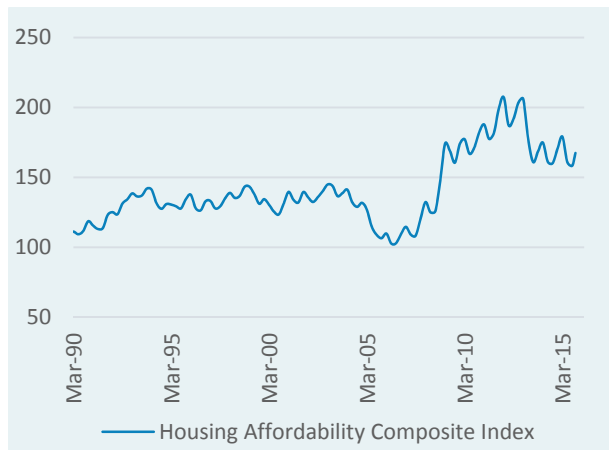
The U.S. housing market has normalized in terms of pricing, rate of new home construction, and rate of home sales. New home construction climbed 10.5% in November from a month earlier. Construction of single family homes, which reflect two thirds of the market, reached an eight-year high in November.

Despite continued pent up demand for housing, the construction of multi-family homes continues to outpace single-family homes, further providing

evidence that Americans remain constrained in their ability to borrow. The recent policy change from the Fed may push lending rates higher and reduce demand for mortgages. A slower than expected rate-rise process may provide ongoing support.

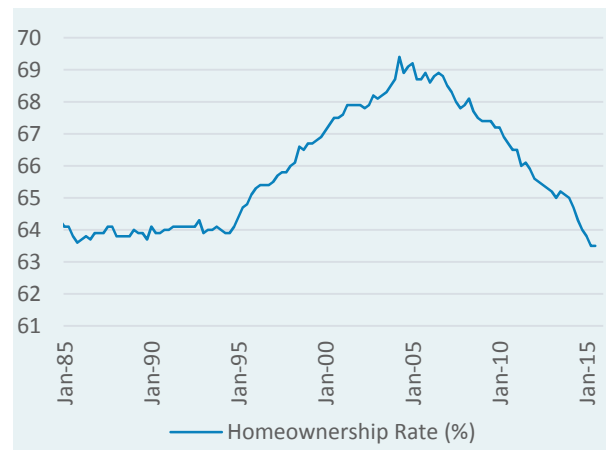
Home prices have risen faster than wages, which is a hurdle to homeownership. High student loan levels may be continuing to act as a drag on first-time purchasers.

## HOME AFFORDABILITY



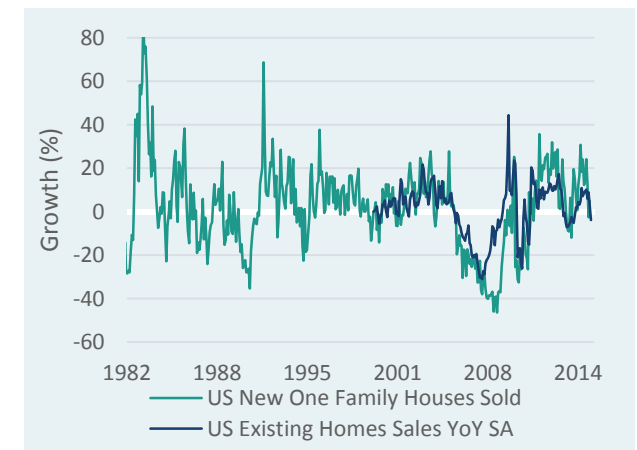
Source: National Association of Realtors, as of 11/30/15

## HOMEOWNERSHIP RATE



Source: FRED, as of 7/1/15

## NEW & EXISTING HOME SALES



Source: Bloomberg, as of 11/30/15

# U.S. economics – inflation

Inflation expectations remained stable in the 4<sup>th</sup> quarter, as measured by the U.S. TIPS 10yr Breakeven Rate and the U. of Michigan Inflation Expectations Survey. Headline inflation ticked up to 0.5% in November, while Core CPI remains around 2%. Inflation drag from the initial oil price decline is coming off the year-over-year inflation calculation, which could result in upward pressure to CPI.

The continuing oil price decline, ongoing global industrial overcapacity, especially in China, and dollar

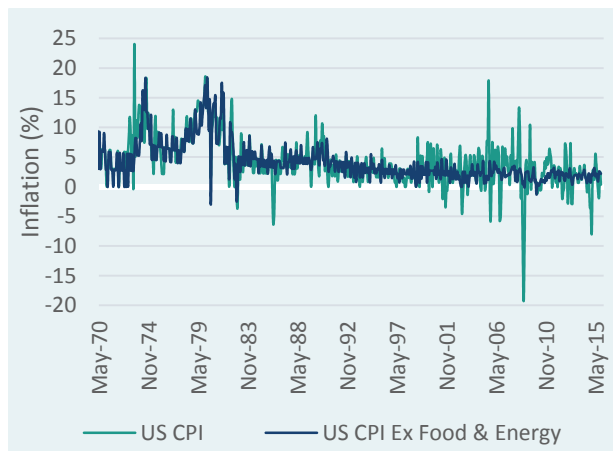
strength pose further challenges for inflation. There is some positive pressure on inflation from an increasingly tight labor market, and a lower commodity price base. Further appreciation of the dollar is currently an inflation headwind but may fuel inflation if this trend reverses.

Domestic inflation is an input to Federal Reserve policy, and further spillover of global disinflation trends to the US could be expected to influence rate hike decisions.

Effects of  
initial oil  
price decline  
falling off  
CPI print

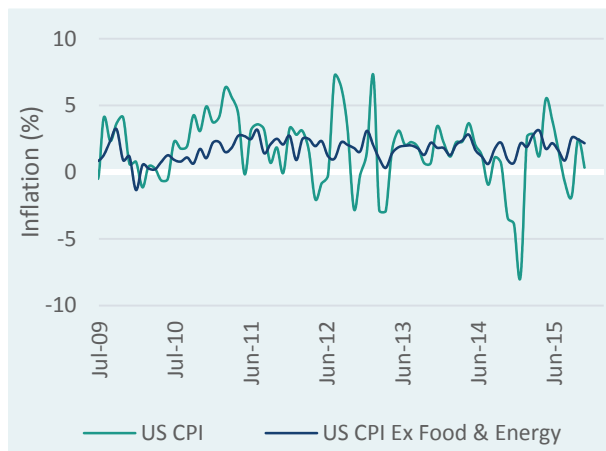
Global  
downward  
pressures

**LONG-TERM U.S. CPI**



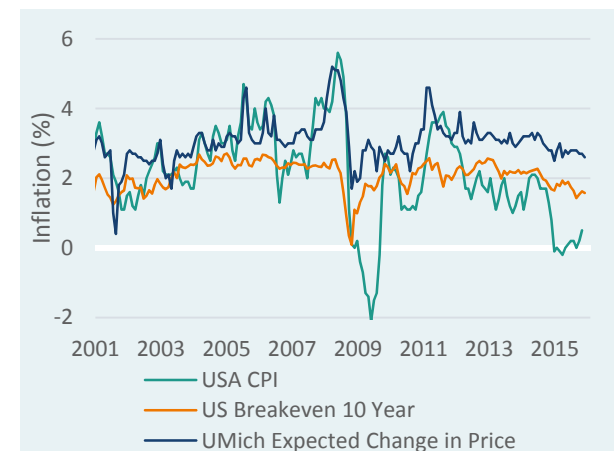
Source: FRED, as of 11/1/15

**MEDIUM-TERM U.S. CPI**



Source: FRED, as of 11/1/15

**MARKET EXPECTATIONS OF INFLATION**



Source: Bloomberg, University of Michigan, as of 12/31/15



# International economics – current

- Global GDP growth remains mild, while Japan and the Eurozone saw marginal improvement. Slowing external demand may prove a challenge.
- China economic growth continues to cause concern. Real GDP growth is reported at 6.9%, though the accuracy of this figure is debated. Government stimulus may have helped mitigate the slowdown, but quickly rising debt-to-GDP might lead to problems.
- Japan did not enter a technical recession in Q3 as previously thought. Q3 Real GDP was revised up from -0.8% to +1% QoQ.
- Japan achieved positive year-over-year base wage growth of 0.3% in 2015, which is the first positive growth seen in 10 years.
- Total wages remain flat. The country continues its struggle to generate inflation.
- Global unemployment continues to decrease, while the BRIC nations remain an exception.
- Commodity markets remain challenging, which has affected emerging market equity and currency markets.
- Eurozone growth slowed in Q3 as exports weakened. Germany, a major contributor to export growth in the area, led the way.
- Puerto Rico defaulted on approximately \$174 million of debt payments on January 4<sup>th</sup>, as widely expected.

Area	GDP (Real, YoY)	Inflation (CPI)	Unemployment
United States	2.1% 9/30/15	0.5% 11/30/15	5.0% 11/30/15
Western Europe	1.8% 9/30/15	0.2% 12/31/15	8.9% 9/30/15
Japan	1.6% 9/30/15	0.3% 11/30/15	3.4% 9/30/15
BRIC Nations	4.7% 9/30/15	4.2% 9/30/15	5.1% 9/30/15
Brazil	(4.5%) 9/30/15	10.5% 11/30/15	7.6% 9/30/15
Russia	(4.1%) 9/30/15	15.0% 11/30/15	5.3% 9/30/15
India	7.4% 9/30/15	4.6% 9/30/15	8.6% 12/31/14
China	6.9% 9/30/15	1.5% 11/30/15	4.0% 9/30/15

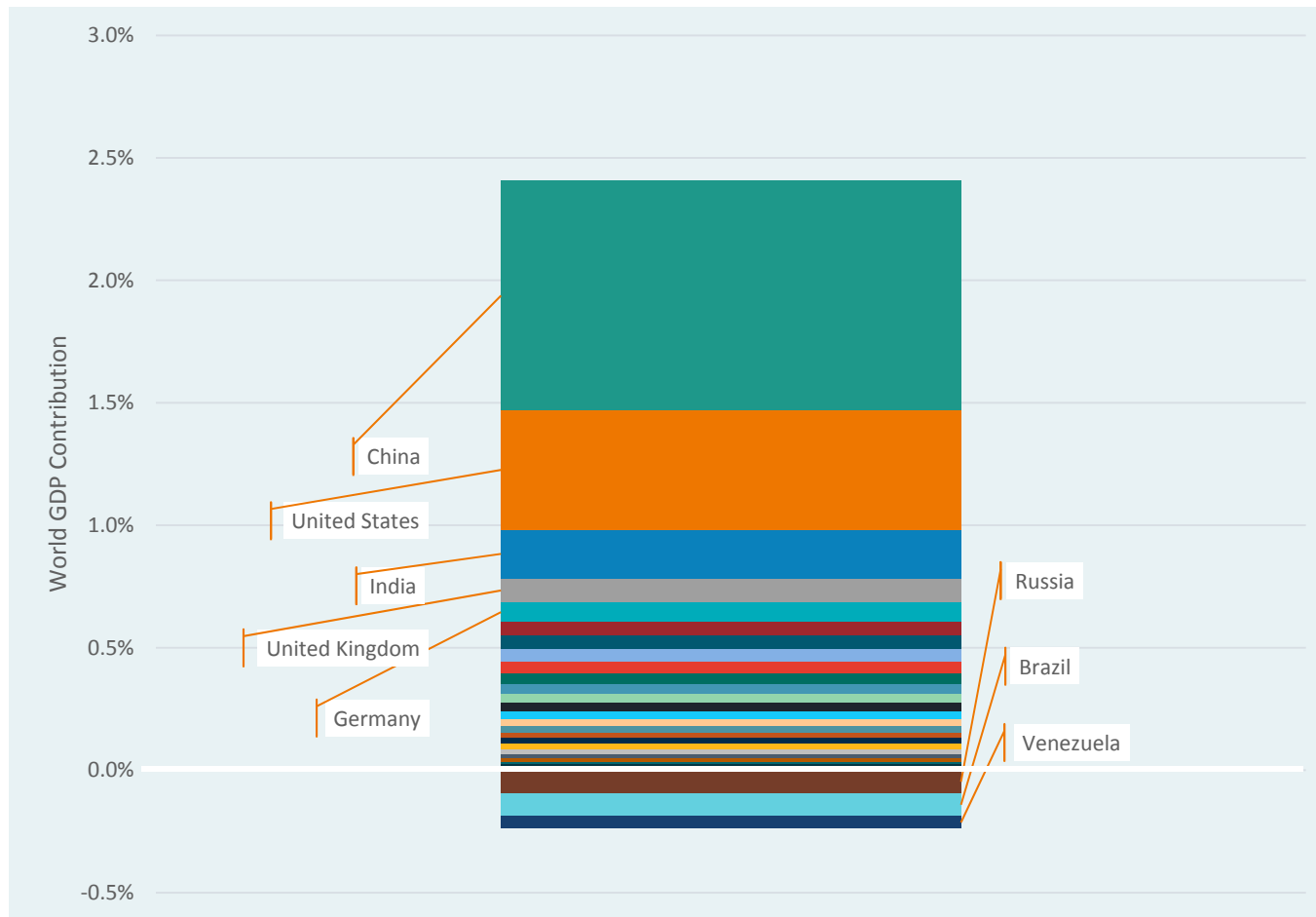
In developed markets mild positive progress continues

Concern over further China weakness

Emerging market challenges continue

# Global growth environment

REAL GDP GROWTH BY CONTRIBUTION



China is the second largest contributor to world GDP, but is the largest contributor to GDP growth

Developed economies not necessarily contributing the most to growth

Source: World Bank, as of 12/31/15

# International economics

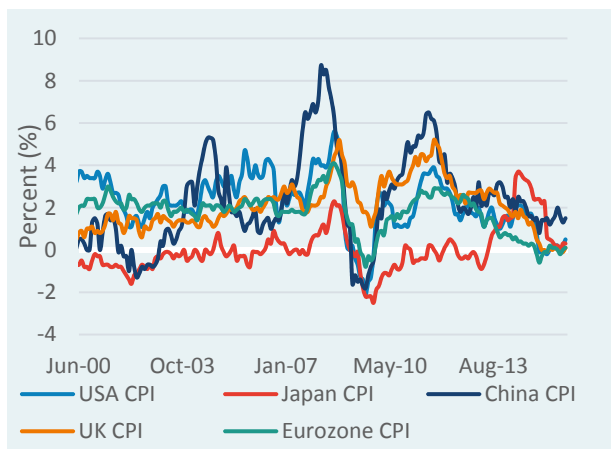
Global growth has benefited from improvements in Europe and Japan. Developed economies produced slowing to flat growth, improving employment, and subdued inflation. Many economies experienced a slight inflation uptick in Q4. Further improvement may be realized as the initial oil price decline falls out of annual CPI calculations. Consumer confidence in the Eurozone continues to improve from the lows of the financial crisis.

Emerging market economies exhibited disparate

growth. These economies have struggled, with the exception of India. Commodity production has been a key driver of growth for many countries, along with high government spending. Global excess manufacturing capacity is negatively affecting inventory builds and has had a dampening effect on demand.

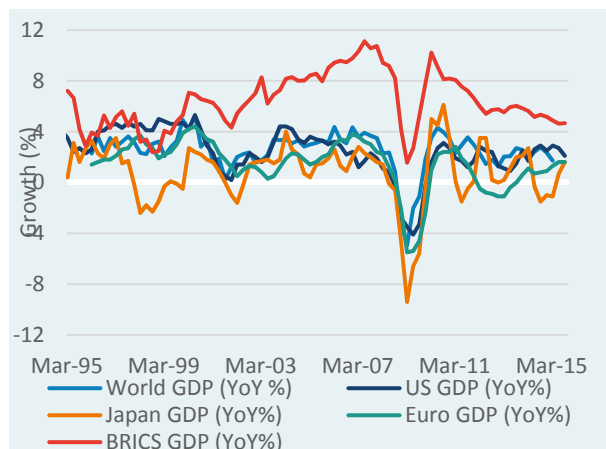
Emerging market economic health is increasingly important to the global economy, as emerging markets drive approximately 60% of global growth and compose approximately 60% of global commodity consumption.

**INTERNATIONAL INFLATION (CPI)**



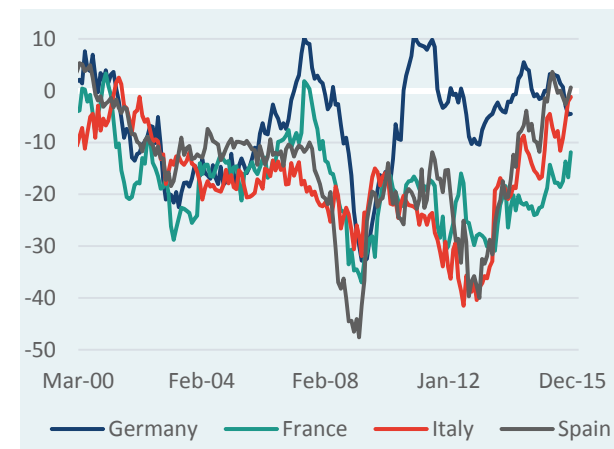
Source: Bloomberg, as of 11/30/15

**REAL GDP GROWTH**



Source: Bloomberg, as of 9/30/15

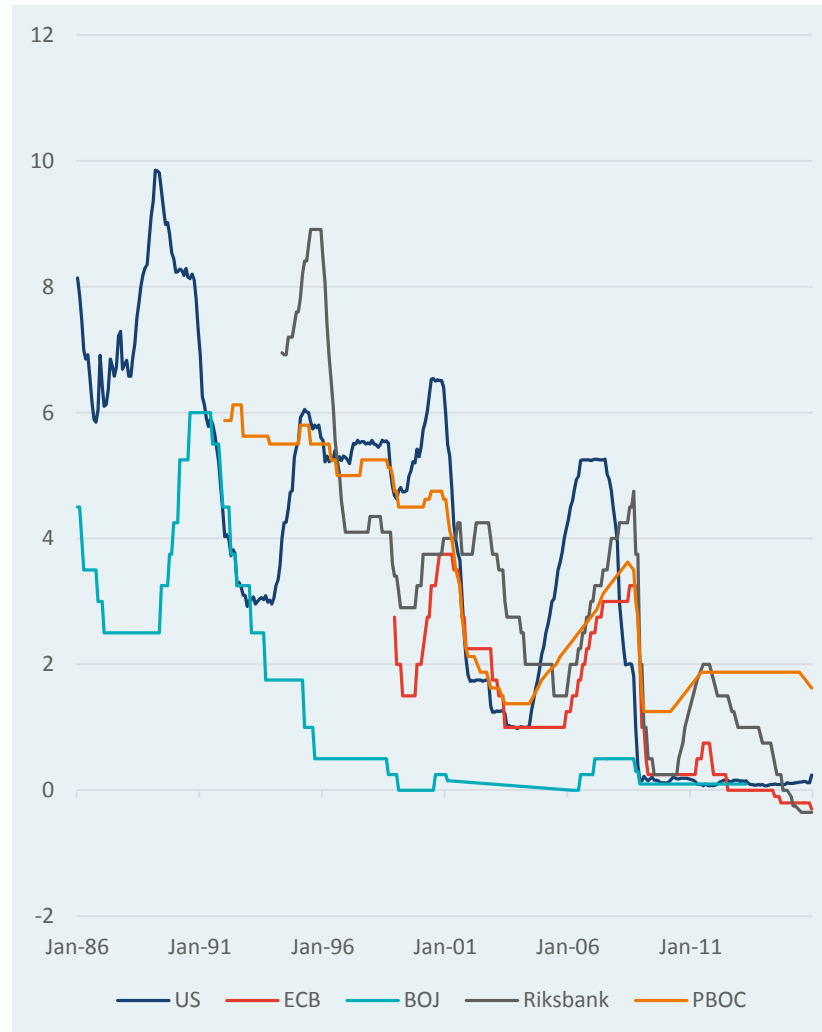
**CONSUMER CONFIDENCE**



Source: Bloomberg, as of 11/30/15

# Limitations of monetary policy

- Central banks have the ability to stimulate investment by lowering interest rates through open market operations. In the U.S., policymakers target the federal funds rate to either encourage or discourage borrowing.
- Given the recent regime shift of global policy rates to all time lows, many near zero or even negative, policymakers may find it difficult to make further rate cuts.
- In the case of another global financial crisis, central banks may have limited power to respond with stimulative monetary policy as rates can only go so low. In extreme cases, central banks are paying to lend money to investors.
- If central banks are unable to lower rates and reduce financial stability, global markets may suffer.



Central bank policy rates reaching all time lows, creating challenges for central banks

Source: Bloomberg, as of 12/31/15



# Fixed income rates & credit

# Interest rate environment

- The Federal Reserve implemented a long anticipated rate hike in December. Policy in Europe and Japan remains accommodative.
- Interest rates decreased broadly across developed markets in Q4, with the exception of the U.S and Germany.
- U.S. interest rates remain high relative to other developed markets
- The ECB lowered the deposit facility rate to a level of -0.30% in December, despite earlier comments by Mario Draghi that rates would not go any lower. Markets were disappointed by this policy decision and yields climbed on the news. The ECB continues to suggest looser policy may be available if needed.
- While initial expectations were for further U.S. rate rises, more recent news suggests these may be delayed. A move towards slower rate rises, or even the reintroduction of looser monetary policy, could lead to a market reassessment of relative currency values, and a weaker dollar.
- Many central banks have few policy tools available to them in the event of further economic weakness

Area	Short Term (3M)	10 Year
United States	0.17%	2.27%
Germany	(0.55%)	0.63%
France	(0.46%)	0.99%
Spain	(0.18%)	1.77%
Italy	(0.12%)	1.59%
Greece	2.10%	8.07%
UK	0.51%	1.96%
Japan	(0.04%)	0.27%
Australia	2.11%	2.88%
China	2.14%	2.83%
Brazil	15.03%	16.51%
Russia*	11.79%	10.39%

\*Shortest term rate for Russia is 1Y

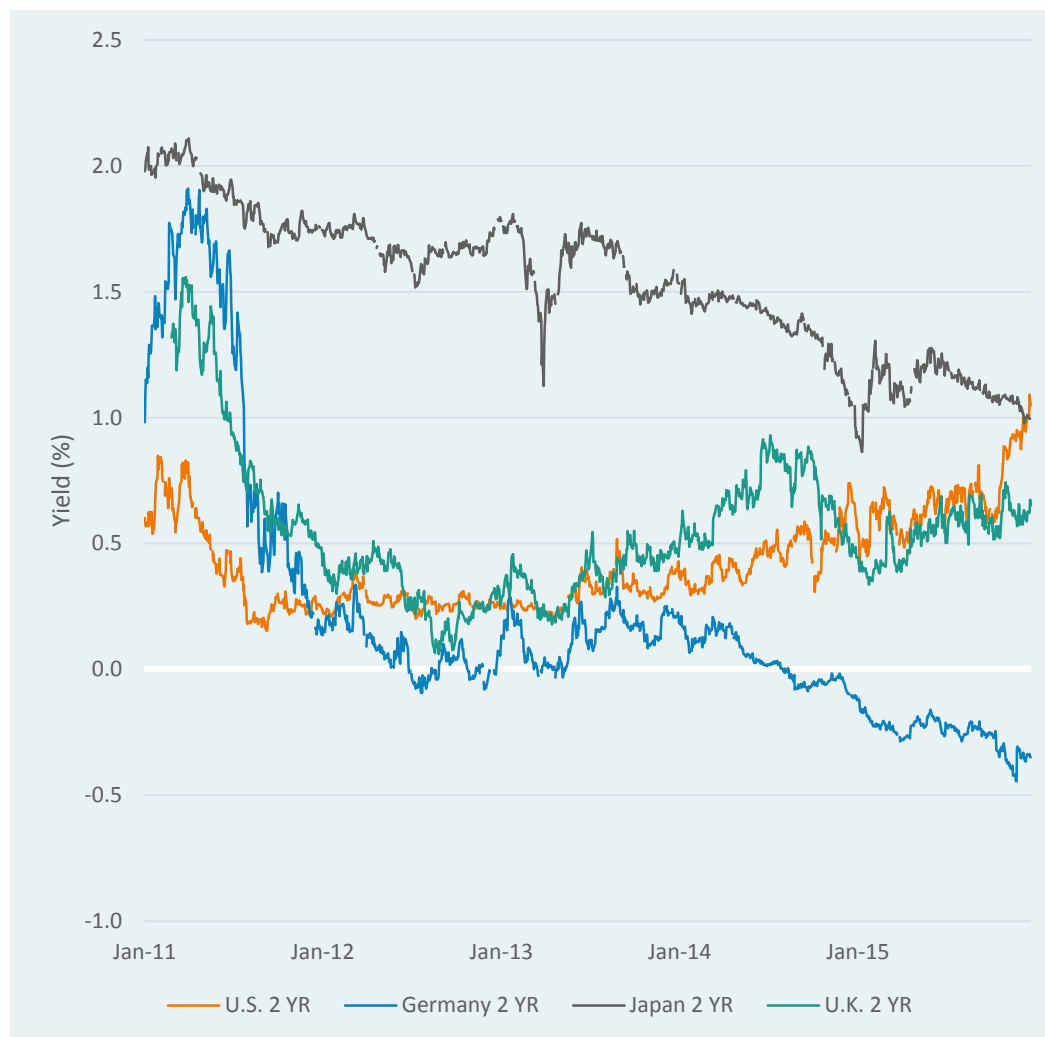
Interest rates fell in Q4

Diverging monetary policies could be detrimental to countries with high debt burdens

Source: Bloomberg, as of 12/31/15

# Monetary divergence

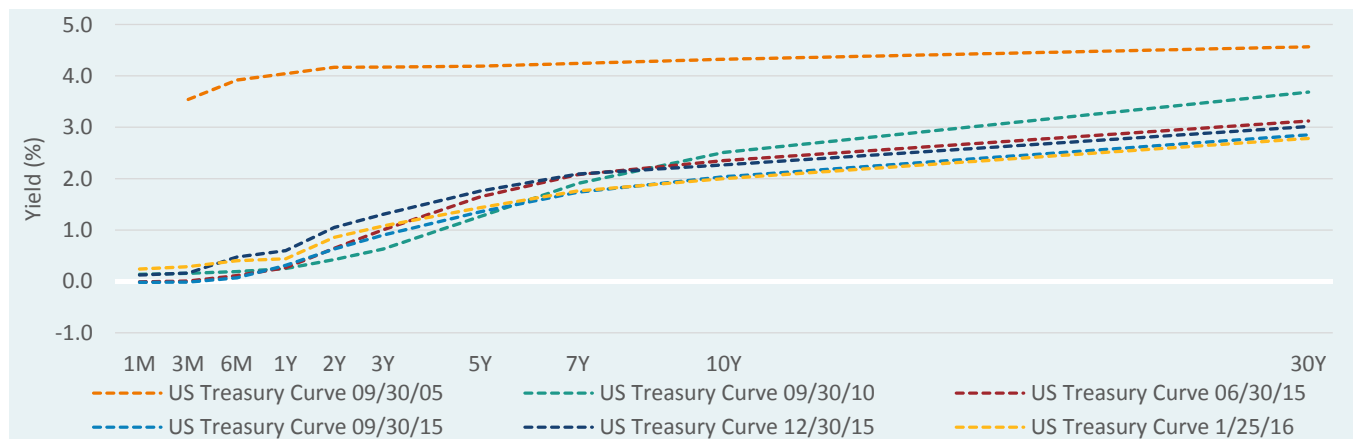
- During Q4, the Fed raised interest rates for the first time since 2006. The decision was in contrast to the policy decisions of other central banks including Europe, Japan and China in 2015.
- Two weeks prior to the Fed's decision, the ECB made announcements of plans to further expand European stimulus in the form of a rate cut, and extension of the QE program to March 2017. In the final weeks of the year the Bank of Japan decided to leave the monetary base unchanged, but added several other accommodative measures.
- If markets allow a continuation of this divergence, it could support dollar strength. However, continued weakness in markets or economic data could reverse this trend.
- The U.K. remains somewhere in the middle, echoing the desire to tighten alongside the Fed but not seeing convincing signs from domestic and global data.
- The key concern is whether deflationary pressure, continuing commodity down-cycle effects, and overcapacity will cause continued loosening in monetary policy globally. This change in direction could require substantive changes in market behaviors.



Source: Bloomberg, as of 12/31/15

# Global yield curve

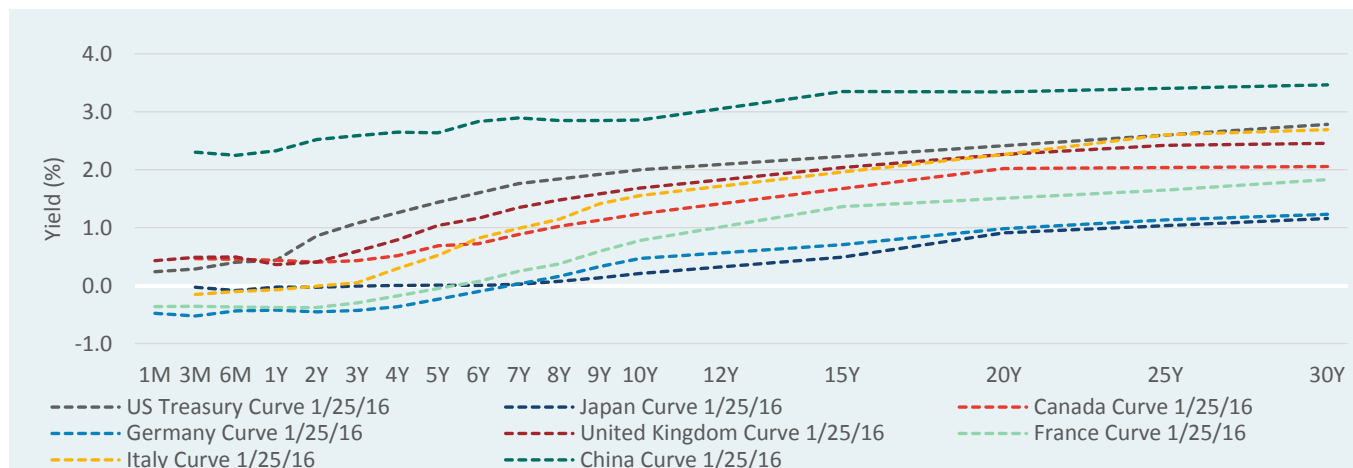
## U.S. YIELD CURVE



U.S. Treasury curve shifted up in anticipation of the Fed's decision

Foreign developed interest rates broadly decreased in Q4

## GLOBAL GOVERNMENT YIELD CURVES

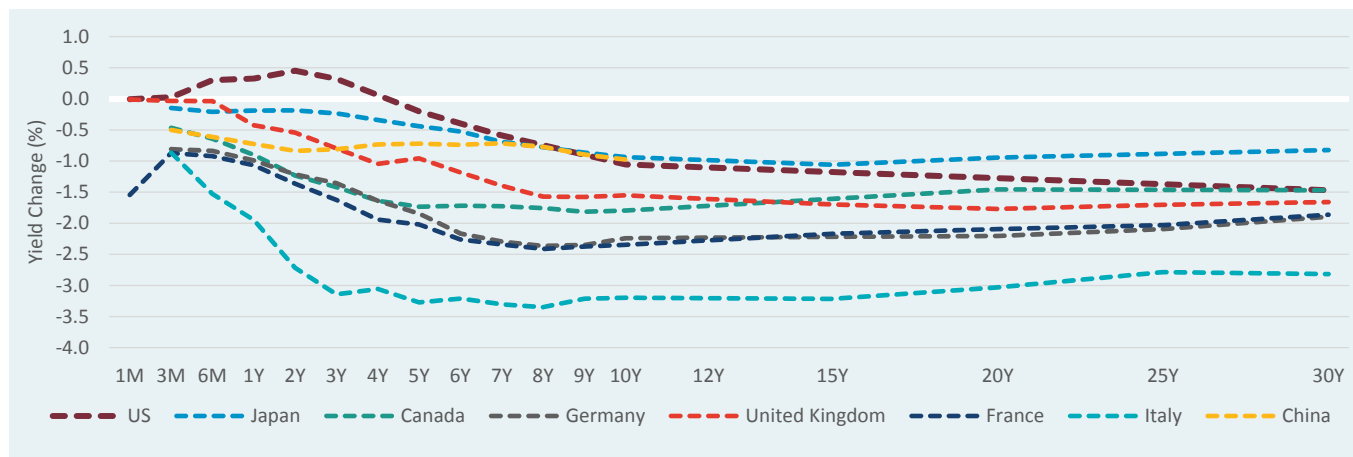


Source: Bloomberg, as of 12/31/15



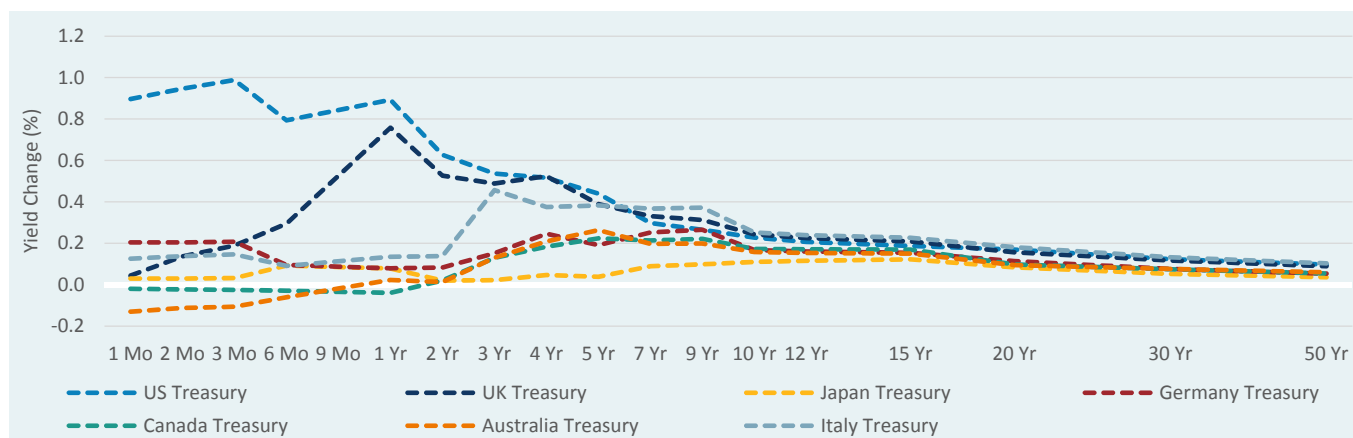
# Global yield curve changes

INTERNATIONAL YIELD CURVE CHANGES OVER LAST FIVE YEARS



Forward curves imply flat or modestly higher rates in most countries, with the exception of the U.S.

EXPECTED INTEREST RATE CHANGES ONE YEAR FORWARD IMPLIED BY MARKET PRICING



Source: Bloomberg, as of 12/31/15

# Credit environment

While consumer credit appeared to pick up in Q4, business borrowing slowed. Recent widening of spreads, high M&A activity, increasing leverage, and relatively less restrictive covenants, increase concern over credit markets.

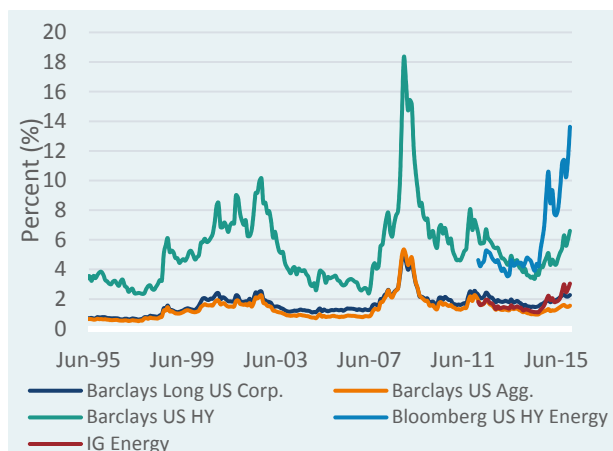
Domestic credit spreads widened further during the quarter, led by the energy sector. However most spreads remain in a broadly normal range. Higher credit spreads make further corporate leveraging difficult leading to higher financing costs for equity buybacks

and M&A activity, which may be a headwind to equity prices. Emerging market economies have experienced great pain, reflected in wider CDS spreads following the drop in the price of oil.

In the past, a broad sell-off in the high yield market might have created risks of broader contagion as banks were primary holders of credit; however, banks have largely divested from this asset class. Nonetheless the possibility of broader impact on the credit market from high yield weakness remains worrying.

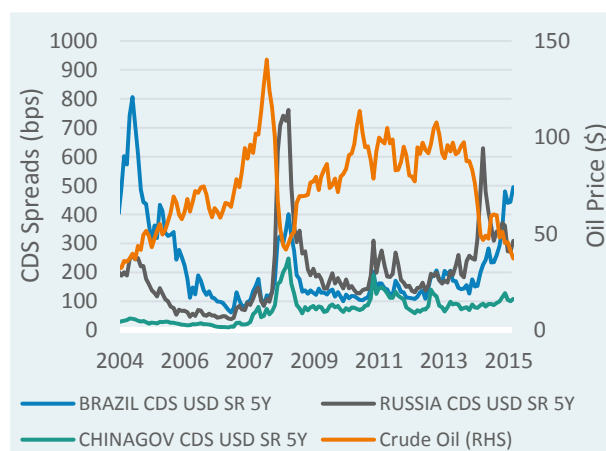
Broad concerns across credit spectrum, particularly in energy high yield

## CREDIT SPREADS



Source: Barclays Capital Indices, Bloomberg, as of 12/31/15

## EMERGING MARKET SPREADS



Source: Bloomberg, as of 12/31/15

## SPREADS

Market	Credit Spread (12/31/2015)	Credit Spread (1 Year Ago)
Long US Corporate	2.1%	1.7%
US Aggregate	1.1%	1.0%
US High Yield	7.1%	5.3%
US High Yield Energy	13.6%	9.3%
US Bank Loans	3.9%	3.9%

Source: Barclays, Credit Suisse, Bloomberg, as of 12/31/15

# Issuance and default

Investment grade issuance increased in 2015, while issuance of bank loans and high yield continued to contract.

Defaults are rising in the high yield market, driven by the energy sector. Hedges put in place by energy-related companies are largely rolling off, revealing the true financial effects of lower commodity prices. Bankruptcies may have knock-on effects on lenders.

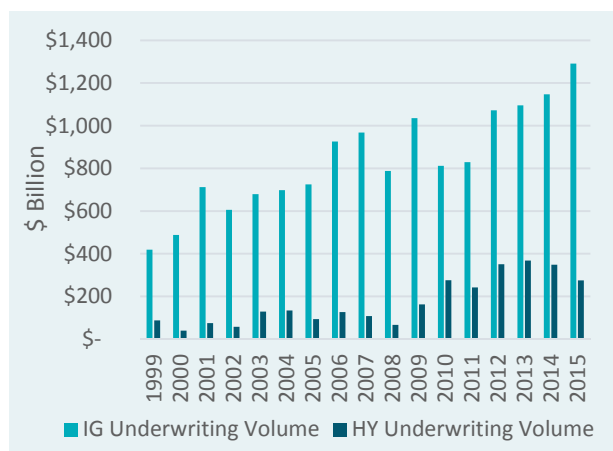
the high yield market. Though small, this portion of the market could be negatively affected if energy market turbulence persists. Aggregate defaults remain in a normal range year-over-year.

With continued issues in the credit market, investors should take care to understand and control the degree of credit exposure in portfolios, particularly in the high yield space.

Defaults rising but for now remain near average

Energy-related high yield issuers make up about 15% of

IG & HIGH YIELD ISSUANCE



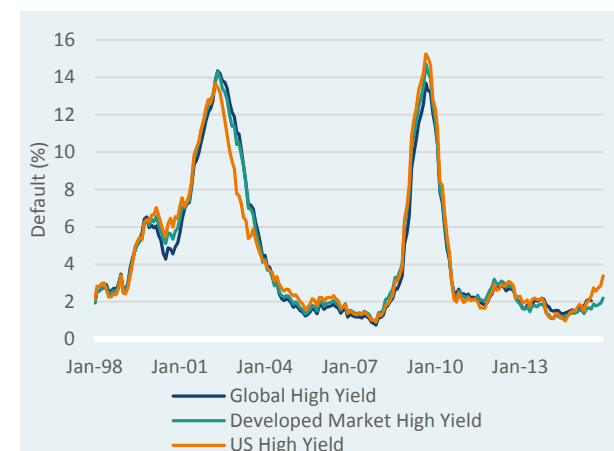
Source: Bloomberg, as of 12/31/15

BANK LOAN & GLOBAL HY ISSUANCE



Source: BofA Merrill Lynch Global Research, as of 12/31/15

HY DEFAULT TRENDS (ROLLING 1 YEAR)



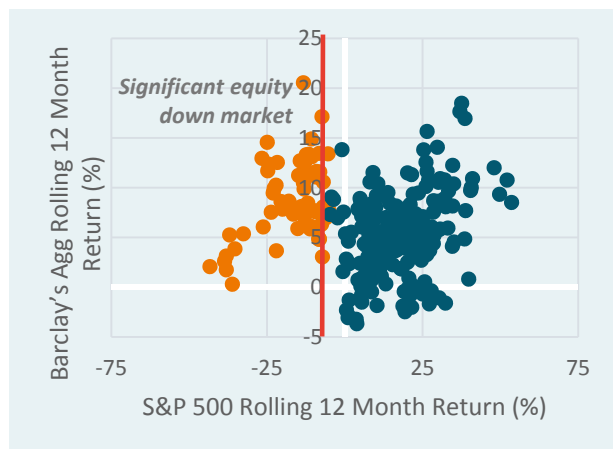
Source: Credit Suisse, BofA, as of 12/31/15

# Continued role of fixed income

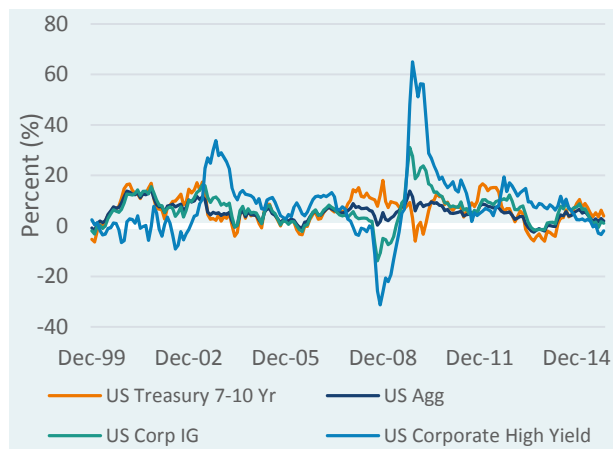
- Investors have lately questioned the role of fixed income. An environment of lower yields, the prospect of rising yields, and higher duration, arguably lessen the attractiveness of this asset class.
- Investors typically hold fixed income instruments for five primary reasons: equity risk protection, capital preservation, income, credit premium, and tenor premium. Although at current levels of risk premia and pricing some of these benefits may be less effective than in the past, broadly they remain intact.
- Although rising rates imposes a downward pressure on bond prices, investors have the opportunity to reinvest capital on instruments offering higher interest.
- Tenor risk and credit risk, although potentially paired with increased defaults, will continue to offer higher returns.

Fixed income instruments have provided a safe haven during equity down markets

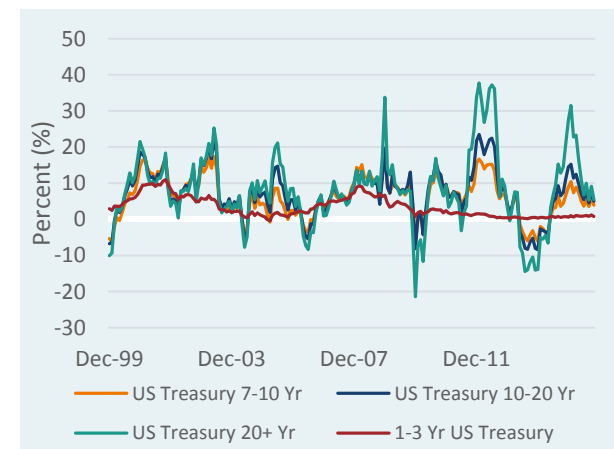
## EQUITY RISK PROTECTION



## CREDIT PREMIA



## TENOR PREMIA



Source: Bloomberg, as of 10/31/15



# Equity

# Equity environment

- The current low inflation, low interest rate environment remains accommodative for risk assets, but economic and market concerns persist.
- S&P 500 earnings fell 4.3% in Q3 while sales fell 3.8%. Earnings beat estimates by 4.9% while sales missed by -0.1%.
- The technology sector has been a major contributor to U.S. business margin expansion since 2009. Apple generated an estimated 22% of S&P 500 margin growth.
- While energy and mining sectors weighed on the broader indices, measuring returns on an ex-energy basis may be inappropriate as this excludes firms negatively impacted and includes the firms feeling positive effects.
- Size and value factors underperformed in Q4.
- Emerging market equity continued to experience volatility and losses. The effects of a lower price of oil has translated to broad currency depreciation.
- Japan on both a hedged and unhedged basis performed exceptionally well. While there remain doubts around the pace of reform, our ongoing view that structural change will drive benefits to investors remains intact.

	QTD Total Return (unhedged)	QTD Total Return (hedged)	YTD Total Return (unhedged)	YTD Total Return (hedged)	1 Year Total Return (unhedged)	1 Year Total Return (hedged)
US Large Cap (Russell 1000)	6.5%		0.9%		0.9%	
US Small Cap (Russell 2000)	3.6%		(4.4%)		(4.4%)	
US Large Value (Russell 1000 Value)	5.6%		(3.8%)		(3.8%)	
US Large Growth (Russell 1000 Growth)	7.3%		5.7%		5.7%	
International Large (MSCI EAFE)	4.7%	6.4%	0.8%	5.0%	(0.8%)	5.0%
Eurozone (Euro Stoxx 50)	3.6%	5.5%	(0.1%)	6.2%	(0.1%)	6.2%
UK (FTSE 100)	1.1%	0.8%	(6.4%)	(9.6%)	(6.4%)	(9.6%)
Japan (NIKKEI 225)	8.7%	9.6%	9.9%	10.7%	9.9%	10.7%
Emerging Markets (MSCI Emerging Markets)	0.7%	0.9%	(14.9%)	(8.2%)	(14.9%)	(8.2%)

Negative sentiment and economic challenges may cause ongoing concerns

Source: Russell Investments, MSCI, STOXX, FTSE, Nikkei, as of 12/31/15

# Domestic equity historical return

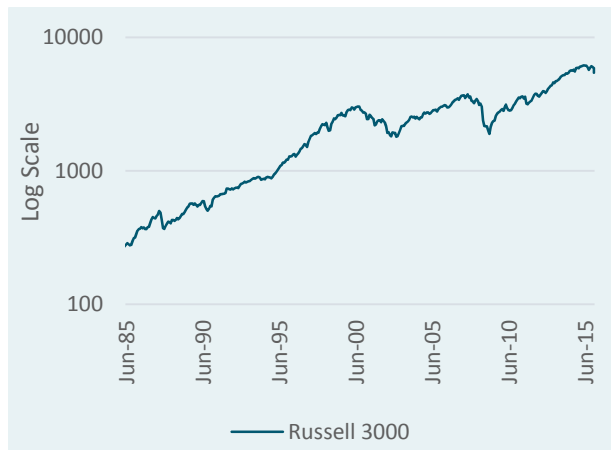
The U.S. equity market has performed exceptionally well since the global financial crisis, but equities were range-bound in 2015.

Equities provide exposure to economic growth, and should be held over the long-term. Short-term attempts to time the market, done poorly, can detract from long-term returns. A systematic rebalancing policy can be very helpful to long-term performance by avoiding emotional buying or selling which can damage performance. Domestic equity fundamentals have

shown some weakening as of late. Other developed equity markets may provide better opportunities for investing new money, although concerns are warranted for risk assets as a whole.

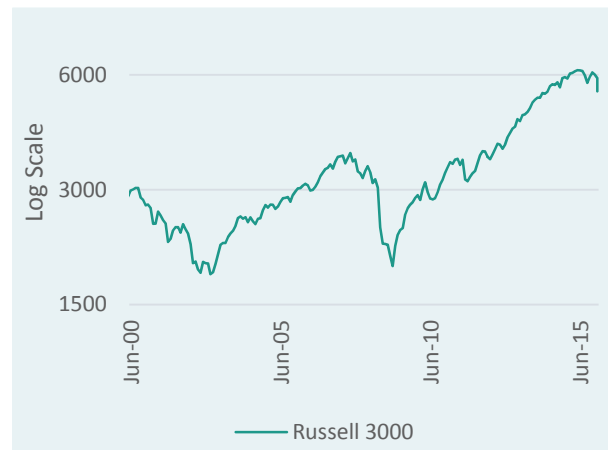
Equity exposure remains an integral part of the portfolio and is the primary means for investors to access long term productive capacity of the economy.

## LONG-TERM PERFORMANCE



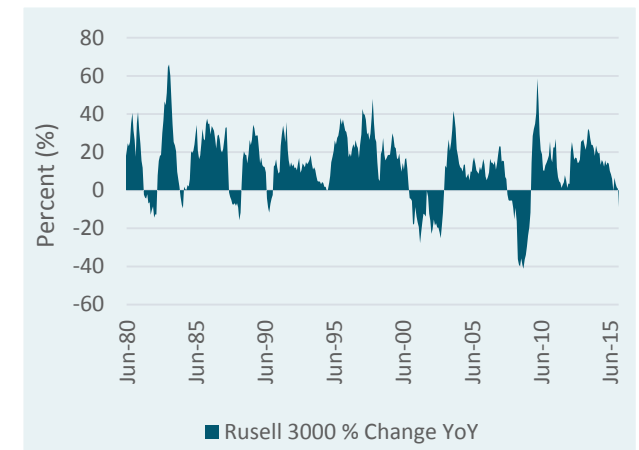
Source: FRED, as of 1/21/16

## INTERMEDIATE RETURN



Source: FRED, as of 1/21/16

## DOWNSIDE EVENTS



Source: FRED, as of 1/21/16

# Domestic equity recent

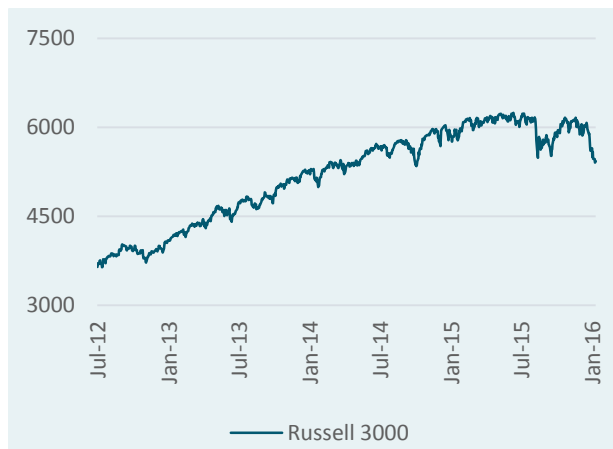
Domestic equities rallied in Q4, but retraced gains early in the new year. Worries over slowing growth in the U.S. and a hard landing in China continued to weigh on risk assets. The timing of rate hikes in 2016 may add additional uncertainty. Nearly seven years in length, the current bull market has extended longer than most. It is important to remember that bull markets do not die of old age, but rather due to a shifting environment. There are concerns we may be in the process of such a shift today.

S&P 500 earnings fell 4.3% in Q3 while sales fell 3.8%. Earnings beat estimates by 4.9% while sales missed by -0.1%.

Domestic growth and weakening corporate earnings may cause uncertainty in the short term. Market technical factors also provide some grounds for concern, with all major domestic equity indices showing poor technical market signals.

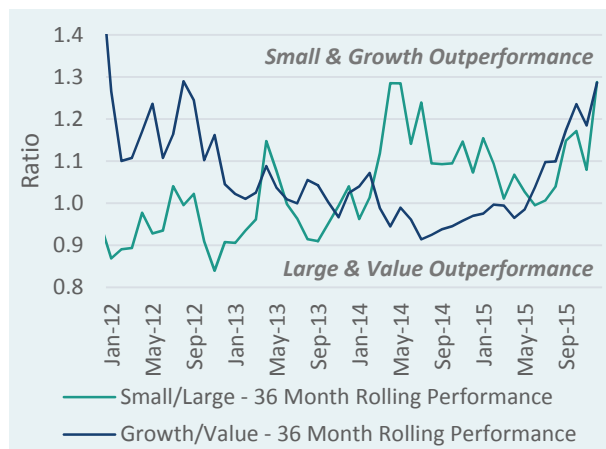
Signs of weakness are evident in domestic equity markets

## SHORT TERM PERFORMANCE (3YR)



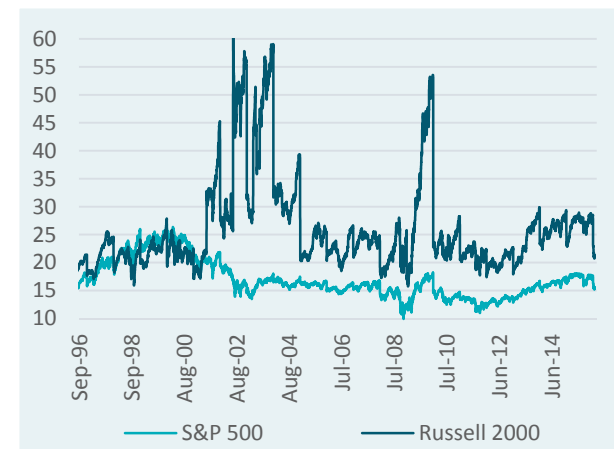
Source: Russell Investments, as of 1/21/16

## SMALL/LARGE & GROWTH/VALUE



Source: Russell Investments, as of 12/31/15

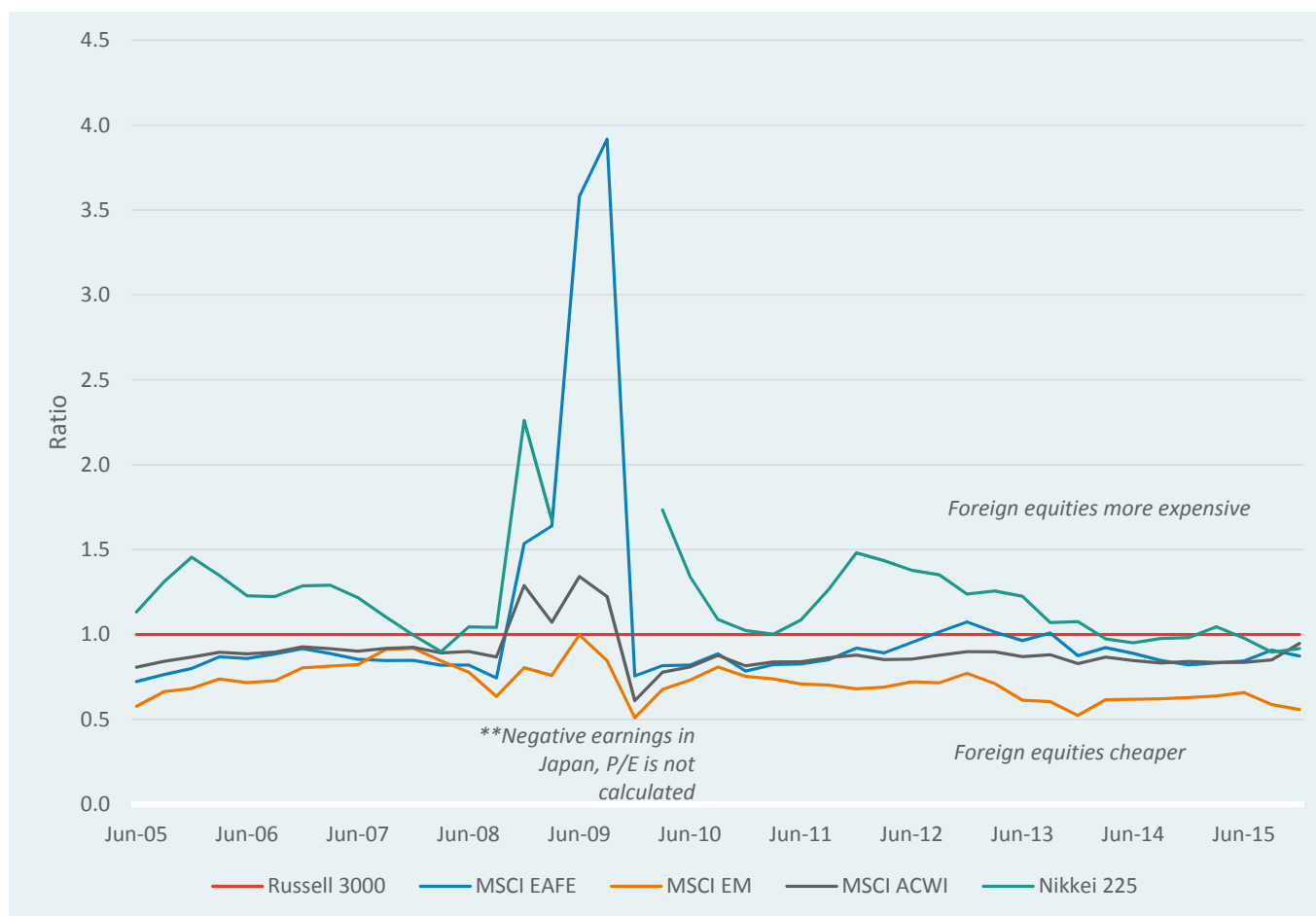
## FORWARD P/E



Source: Standard & Poor's, Russell Investments, as of 1/21/16

# Relative valuations

FOREIGN INDEX P/E DIVIDED BY RUSSELL 3000 P/E



On a P/E basis foreign equity markets appear relatively cheap compared to the U.S.

This has, however, often been the case and may not be indicative of future performance

Source: Russell Investments, MSCI, Nikkei, as of 12/31/15. Note negative earnings for Japan for certain periods cause a gap in the Japan series

# Equity volatility

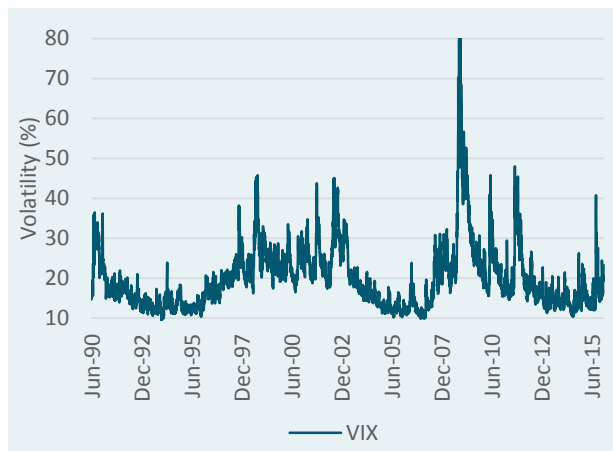
After significantly spiking in August, the VIX remained relatively range-bound through the remainder of the quarter. Closing 2015 near the high end of the range, an increase in volatility levels in early January may be sustained in the coming months. Disparate views on the impact and magnitude of a China slowdown, uncertainty surrounding the path of Fed rate hikes, and broad pain caused by a low commodity base have fueled greater price uncertainty.

Volatility in domestic indices is marginally lower than international indices with emerging markets remaining the most volatile. Geopolitical tensions and volatile commodities prices are likely to impact emerging market volatility in the coming months.

Volatility levels typically exhibit muted behavior during bull markets and spike during market downturns, which makes it important to monitor volatility.

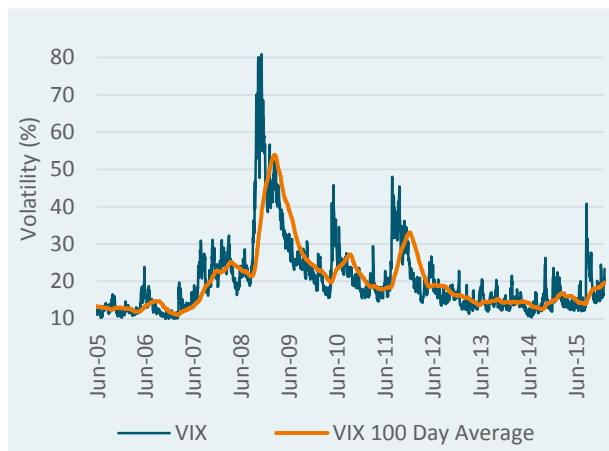
Equity volatility in both developed and EM has increased

## LONG-TERM VOLATILITY



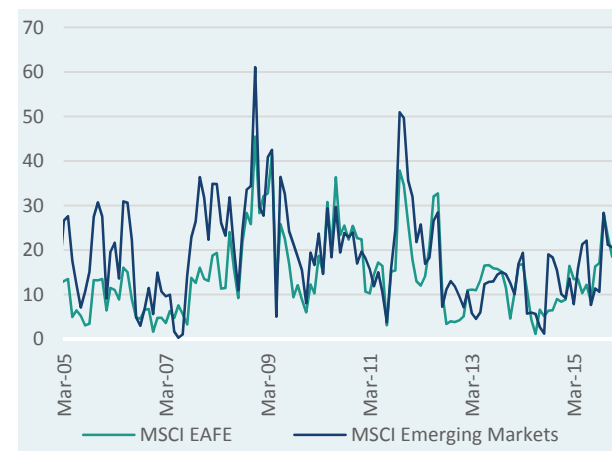
Source: CBOE, as of 12/31/15

## INTERMEDIATE-TERM VOLATILITY



Source: CBOE, as of 12/31/15

## INTERNATIONAL EQUITY VOLATILITY



Source: MSCI, as of 12/31/15



# Domestic equity size and style

Small cap equities trailed large cap in Q4, and growth continues to outperform value. Over the past three years investors have been reward for taking on exposure to size, but punished for taking on exposure to value.

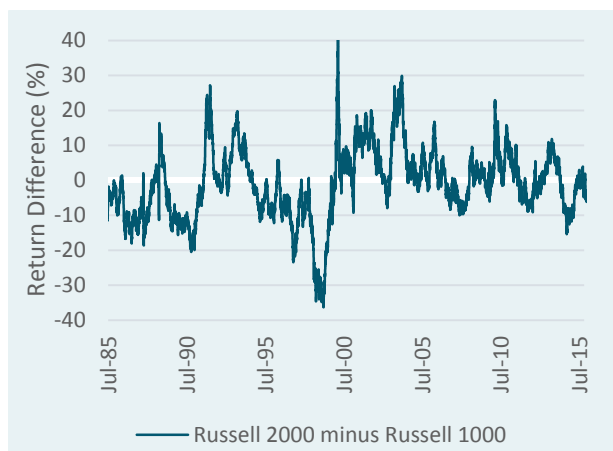
Appreciation of the U.S. dollar contributed to small cap outperformance as larger firms with foreign currency receipts received currencies worth less relative to the U.S. dollar. Growth beat value by a significant margin in 2015, outperforming by 9.6% in 2015.

Style performance is often displayed in cumulative terms; however, it is necessary to understand the degree of periodicity in these returns.

In the context of investment style factors, it should be noted that most of the embedded risk is primarily equity risk; however, factor awareness and management can be important in portfolio construction.

Size and value risk factors suffered losses in Q4

**SMALL CAP VS LARGE CAP (YOY)**



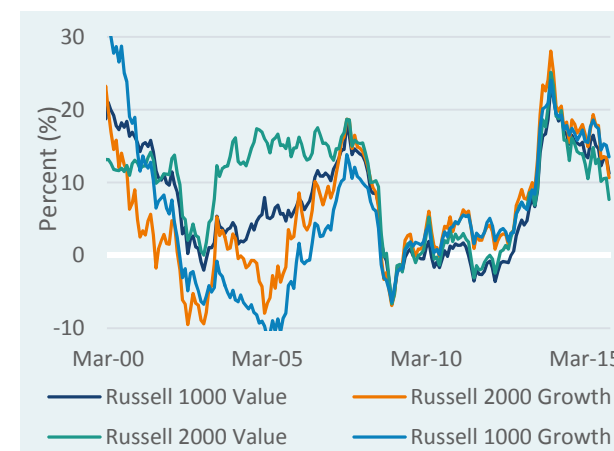
Source: Russell Investments, as of 12/31/15

**VALUE VS GROWTH (YOY)**



Source: Russell Investments, as of 12/31/15

**ROLLING 5 YEAR RETURN**



Source: Russell Investments, as of 12/31/15

# Domestic equity valuations

Domestic equity valuations rose slightly in Q4 on both a trailing and forward P/E basis, but have fallen back to a normal range since the beginning of the year.

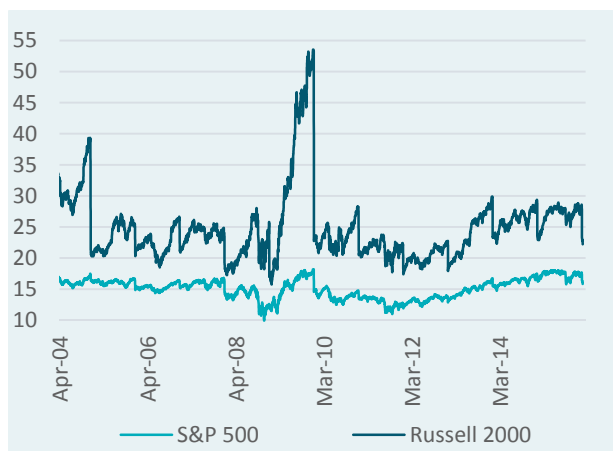
Stronger profit margin and earnings growth, and a general economic recovery since 2008 have justified an expansion of equity valuations. Nominal equity returns are driven by dividends, earnings growth, valuation expansion, and inflation (prices keeping up with higher input costs). Dividend yields are currently low relative

to history, profit margins are strong relative to history, valuations are somewhat above average, and inflation is near record lows. This environment is not particularly accommodative for the fundamental drivers of long-term nominal equity returns.

The spread between S&P 500 dividend yield and the U.S. 10yr Treasury yield remains wide. Continued interest rate hikes could help bring this spread back to an average level.

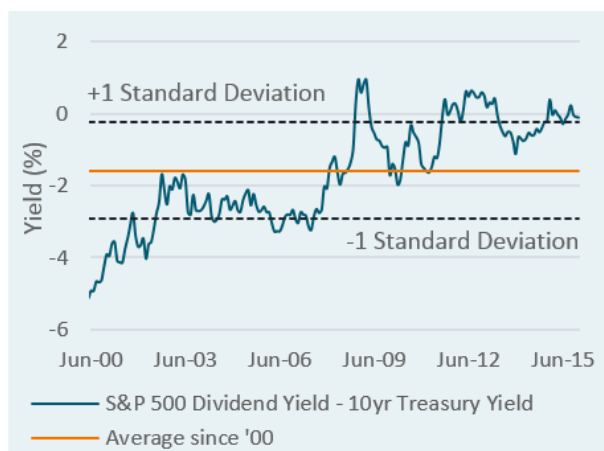
Valuations rose slightly in Q4, and remain somewhat high

12 MONTH FORWARD P/E



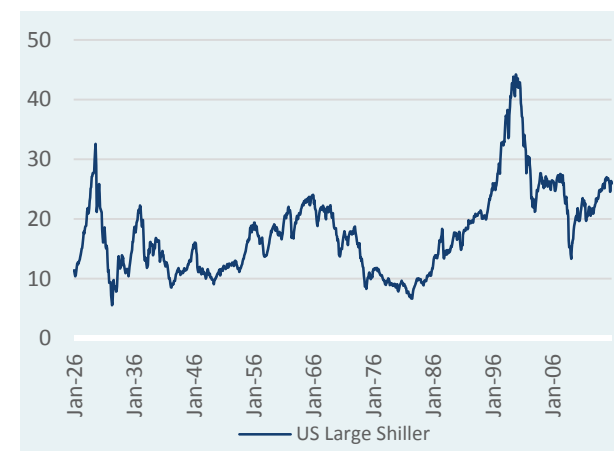
Source: Standard & Poor's, Russell Investments, as of 1/7/15

EQUITY YIELD LESS BOND YIELD



Source: Standard & Poor's, Bloomberg, as of 12/31/15

SHILLER P/E LONG-TERM



Source: Shiller, as of 12/31/15

# International equity historical return

International developed market equities, in general, have lagged their U.S. counterparts since the lows of 2009. International developed small cap equities outperformed significantly during this time. Currency hedging decisions continue to have a material impact on performance as of late.

Emerging markets were relatively range-bound between 2010 and early 2015, but since early 2015 have moved into bear market territory. Growth concerns in China and a lower oil price have

contributed to poor returns. Currency volatility makes it necessary for investors to understand the nature of unhedged exposures to international equities. At times the return from currency exposure can be as large or larger than the equity return. Investors should think of these two exposure sets as separate investment decisions.

Despite volatility, it is important to remember that emerging market exposure has typically bolstered portfolio performance significantly over the long run.

Significant concerns in emerging markets continue

**EAFE LONG TERM (USD)**



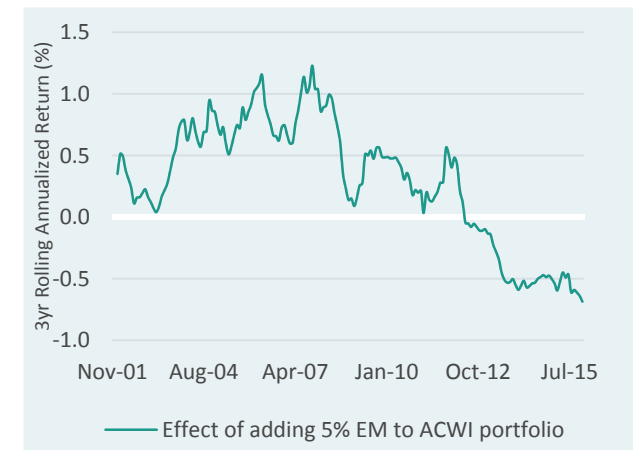
Source: MSCI, as of 12/31/15

**EMERGING MARKETS LONG TERM (USD)**



Source: MSCI, as of 12/31/15

**EM EFFECT ON GLOBAL EQUITY PORTFOLIO**



Source: MSCI, as of 12/31/15

# International equity recent

Developed international equity performance was mixed in 2015. Currency fluctuations have overwhelmed positive equity returns in many markets, but added to returns in others.

European equities have typically underperformed U.S. equities in terms of earnings growth. This trend has reversed as European companies have outperformed. European equities appear less vulnerable than domestic equities, following aggressive financial engineering in the United States.

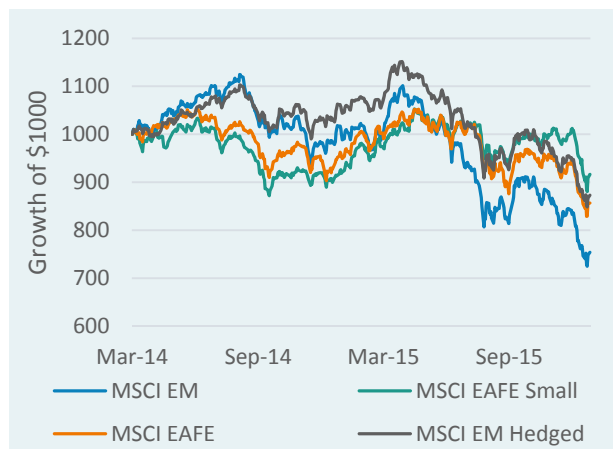
Severe foreign currency drawdowns experienced earlier in 2015 appear to have moderated in many countries during Q4. The price of oil and other commodities will likely be important in determining the future trend of foreign exchange rates.

Emerging markets were volatile in Q4 on the back of further downward oil price pressure, China growth concerns, and currency movement.

Positive Q4 performance

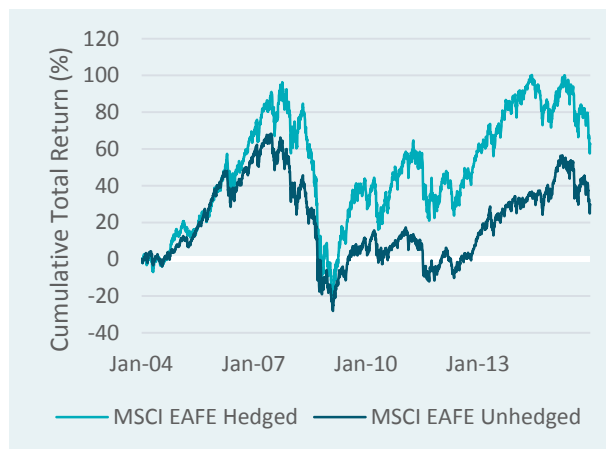
Currency exposure had significant impact

## SHORT-TERM PERFORMANCE



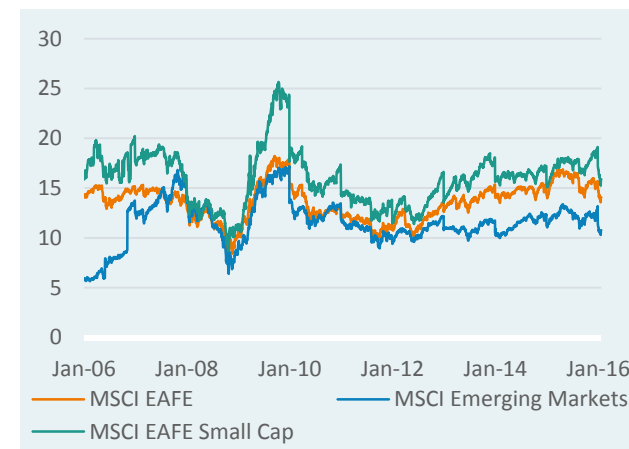
Source: MSCI, as of 1/25/16

## CUMULATIVE RETURN



Source: MSCI, as of 1/25/16

## 12 MONTH FORWARD P/E



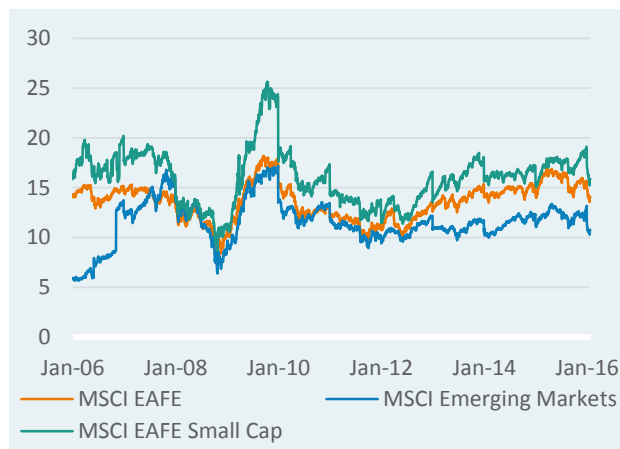
Source: MSCI, as of 1/25/16

# International equity valuations

International equity valuations remain more attractive than domestic equities. Europe appears slightly cheap relative to history. Japan valuations are at the low end of the historical range, further contributing to our belief that Japan deserves a neutral or perhaps overweight position in portfolios. Emerging market valuations appear relatively attractive, though most likely priced appropriately due to greater accompanying risks. Investors should be aware of value traps in this space.

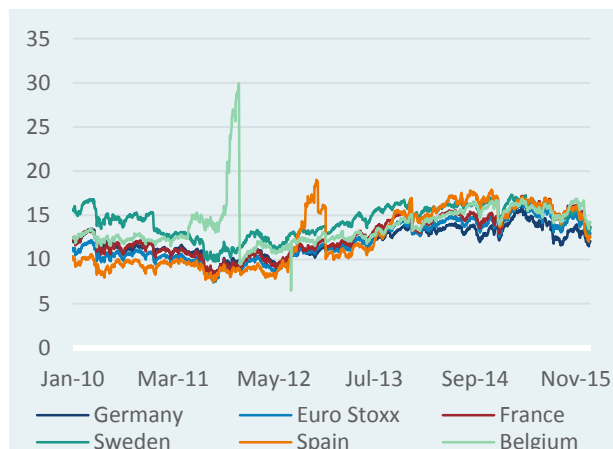
Corporate earnings in European markets have improved while U.S. companies struggle, but European equities continue to lag their U.S. counterparts. In contrast to a tighter business environment in the U.S., conditions in Europe may offer more room to run in terms of labor market slack, easy monetary conditions, and devalued currencies. Large valuation differences exist between individual countries in Europe, which may suggest active management is preferable.

12 MONTH FORWARD P/E



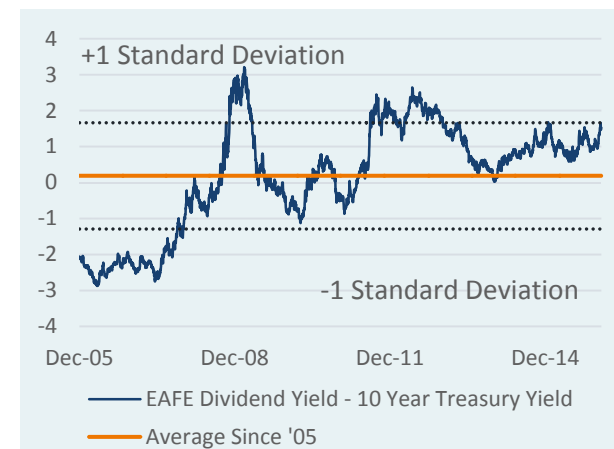
Source: MSCI, as of 1/25/16

COUNTRY VALUATIONS



Source: Bloomberg, as of 1/25/16

EQUITY YIELD LESS BOND YIELD



Source: MSCI, as of 1/25/16

# Emerging market equity

Emerging market equities continue a steep selloff in the face of decelerating Chinese growth and oil volatility. 2015 was a year of FX reserve net outflows for many countries which has been rare, given the steady accumulation of currency reserves in recent decades.

If allowed by current market environments U.S. interest rate hikes might result in further emerging market outflows; however, continued quantitative easing in other developed nations may counteract these effects, and in the current environment U.S. rate hikes are not certain.

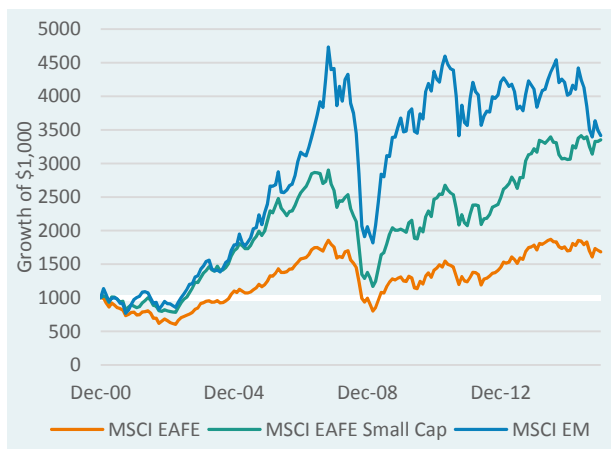
Brazil was downgraded to junk rating by Fitch. The country continues to fight higher inflation with high interest rates, and is feeling economic pain from a budget deficit and less competitive currency.

Chinese officials recently initiated a widespread crackdown on corruption, involving a large number of private sector and government officials. Luxury goods markets have felt much pain following this initiative, as an estimated 50% of global luxury spending comes from Chinese consumers.

Energy price movement continues to have impact

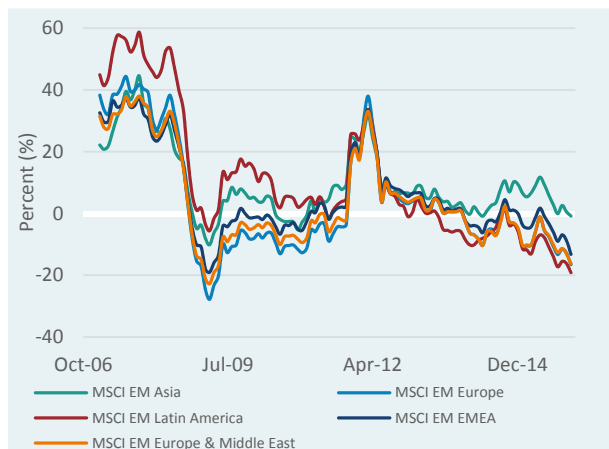
China remains in the spotlight

## LONG TERM PERFORMANCE



Source: MSCI, as of 12/31/15

## ROLLING 3 YEAR RETURN



Source: MSCI, as of 12/31/15

## FORWARD P/E



Source: MSCI, as of 1/21/16

# Other assets



# Other asset volatility

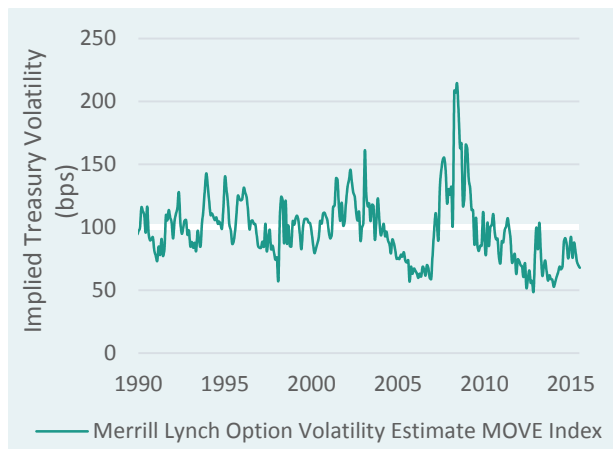
Despite the highly anticipated rate hike at the end of the fourth quarter, fixed income volatility has remained relatively low. The end of 2015 was characterized by relatively range-bound trading as domestic investors experienced a flight to quality which was offset by the sell-off in global sovereign funds.

Foreign exchange volatility has remained relatively high based on activity from central banks and weaker commodity prices. The uncertainty around monetary

policy decisions and global financial stability has introduced increased volatility in this space.

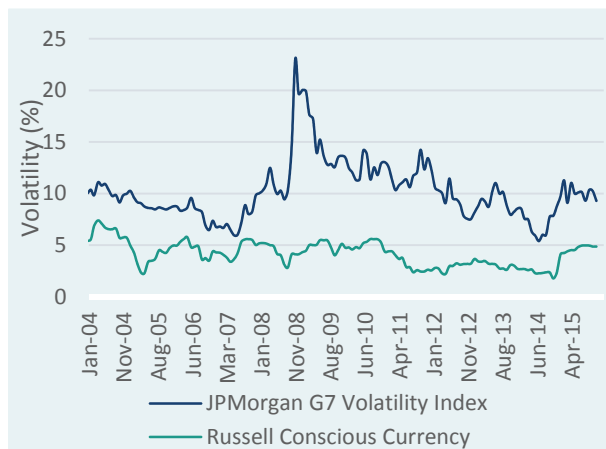
The volatility of commodities has spiked based on the recent price movements in oil. The price moving to levels last seen in 2009 has created a significant amount of volatility. Contrary to expectations, the price of gold has remained relatively stagnant over the last 12-18 months.

## FIXED INCOME VOLATILITY



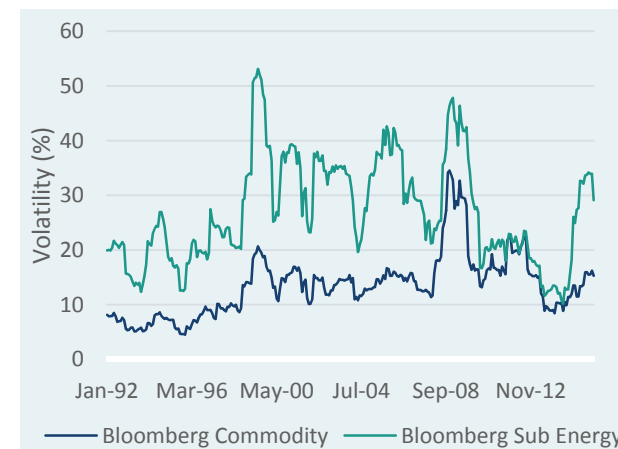
Source: Merrill Lynch, as of 12/31/15 (see Appendix)

## FX VOLATILITY



Source: JP Morgan, Russell Investments, as of 12/31/15

## COMMODITY VOLATILITY



Source: Bloomberg, as of 12/31/15

# Real estate & REITs

Real estate assets provide high exposure to the general business cycle. The recovery from the economic crisis has benefited the real estate market, which has shown significant recovery.

Real estate fundamentals remain strong with lower and declining vacancy rates across all property types. NOI is strongest in apartments, while industrial has shown increased strength recently. Low interest rates have

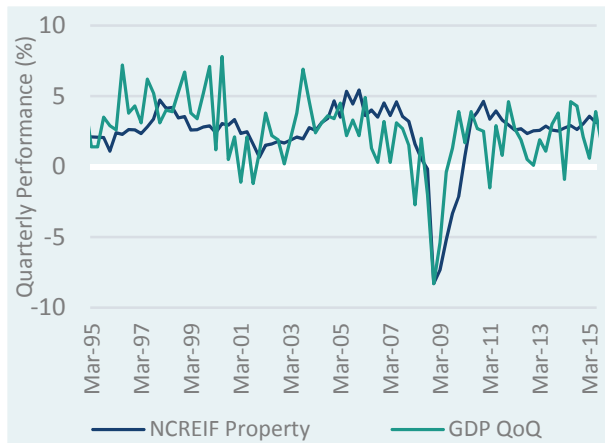
been accretive to returns for the asset class.

REITs have been volatile, trading with the uncertainty of future FED rate activity, which resulted in a discount to fund NAV though November.

Cap rates continue to trend downward, while spreads to Treasuries remain above historical averages.

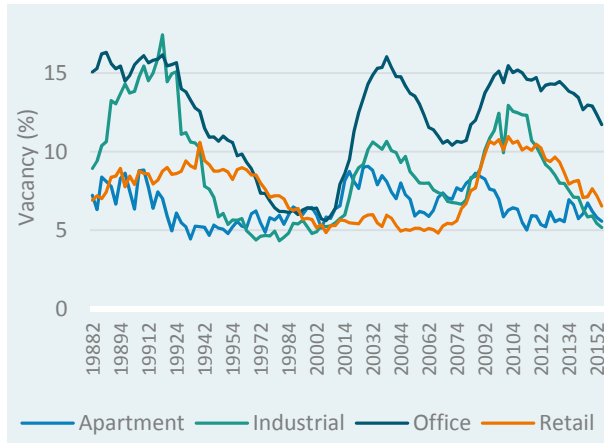
Some opportunities but careful selection needed

REAL ESTATE & THE BUSINESS CYCLE



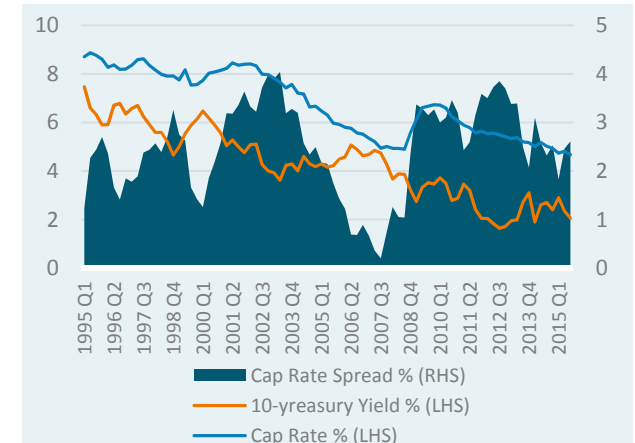
Source: NCREIF, as of 9/30/15

REAL ESTATE VACANCY BY TYPE



Source: NCREIF, as of 9/30/15

CAP RATE SPREADS



Source: NCREIF, as of 9/1/15

# Commodities

The Bloomberg Commodity Index returned -10.5% in Q4, driven by energy and industrial metals. OPEC dropped its oil production quotas in December, and oil inventory levels continue to climb as producers struggle to generate cash flow. Large inventory builds, along with the lifting of sanctions against Iran (a source of supply), may also act as headwinds.

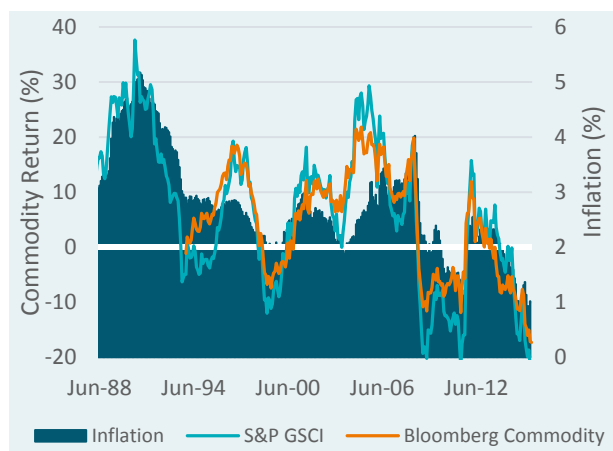
Oil prices continue to fluctuate, which has impacted credit spreads, energy-related equities, and the health of many energy-exporting countries.

Significant bankruptcies of energy firms would traditionally help balance supply and help prices; however, large sums of money being dedicated to the distressed credit space may mean that assets, while written down, stay in production thereby prolonging the price pain.

Commodities are typically held in portfolios to provide inflation sensitivity. Despite commodities moving in an undesirable direction over the past year, they continue to fulfill this role.

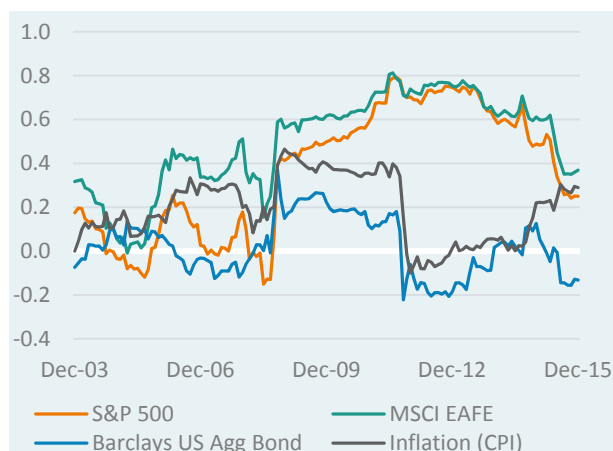
Commodity  
cycle  
weakness  
persists

## 3 YR ROLLING RETURNS



Source: Standard & Poor's, Bloomberg, as of 12/31/15

## COMMODITY CORRELATION (3YR ROLLING)



Source: MPI, as of 12/31/15 - correlation to Bloomberg Commodity

## COMMODITY CUMULATIVE RETURNS



Source: S&P Dow Jones, as of 12/31/15

# Currency

The trade-weighted U.S. dollar extended its rise in Q4, strengthening to a level not seen since 2003. Dollar movement has a widespread impact, including: gains/losses for unhedged foreign equity exposure, commodity price volatility (many commodities are denominated in USD), and revenue volatility for businesses who pay or receive payment in non-U.S. dollars.

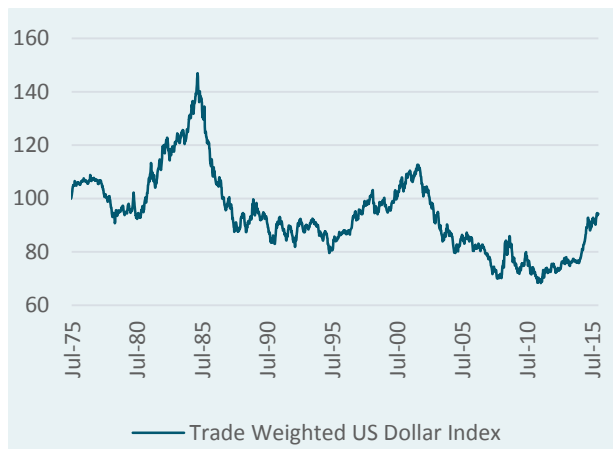
When measured and managed using unhedged benchmarks, international equity portfolios hold

significant exposure to a currency portfolio derived from the size and structure of the equity markets concerned. Despite recent dollar moderation, the trend towards U.S. dollar strength has made this a negative contribution for investors recently.

Treating currency as an independent market allows investors additional insight. Although returns from this exposure have typically been positive, recent price movements have tipped rolling one year return from currency beta into slightly negative territory.

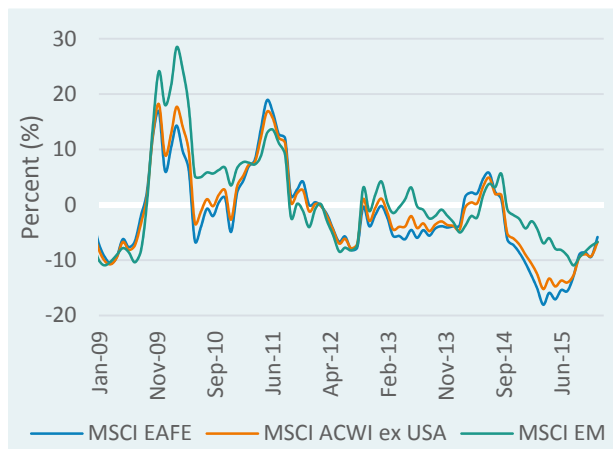
Short term questions over continuing dollar strength

**LONG-TERM TRADE WEIGHTED USD**



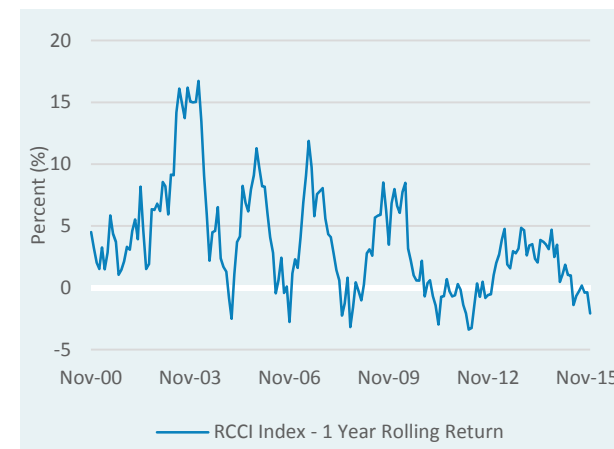
Source: FRED, as of 1/1/16

**EFFECT OF CURRENCY (1YR ROLLING)**



Source: MSCI, as of 12/31/15

**CURRENCY MARKET BEHAVIOR**



Source: Russell Investments, as of 12/31/15

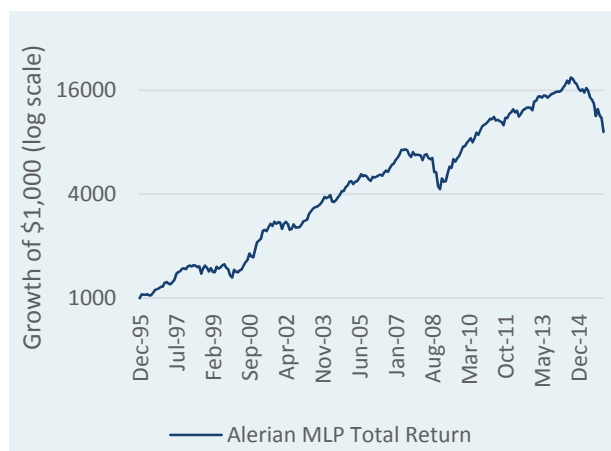
# MLPs – a complex set of exposures

A Master Limited Partnership (MLP) is a tax advantaged fund which derives most cash flows from investments in commodities and natural resources. These funds are often involved in midstream activities such as the transportation and storage of commodities (ex: oil pipelines and storage). MLPs generally hold exposure to toll-road type investments which are expected to earn fees somewhat independent of commodity prices due to take-or-pay contracts with commodity producing firms.

As commodity prices have fallen, MLP valuations have followed. Many investors point to the fact that MLP contracts are more exposed to commodity *volume* than they are to commodity *price*, and claim that MLP valuations have fallen too far (are currently undervalued). However take-or-pay contracts do not fully protect MLP returns were the counterparty to become insolvent. There may be value in the MLP space, but the risk exposures are complex and it is difficult to forecast how MLPs will react to the commodity sell-off.

It is difficult to forecast how MLPs will react to the effects of lower oil on the energy ecosystem

ALERIAN MLP INDEX



Source: Alerian, as of 1/15/15

MLPS & COMMODITY PERFORMANCE (1YR)



Source: Bloomberg, Alerian, as of 12/31/15 (note difference in end date)

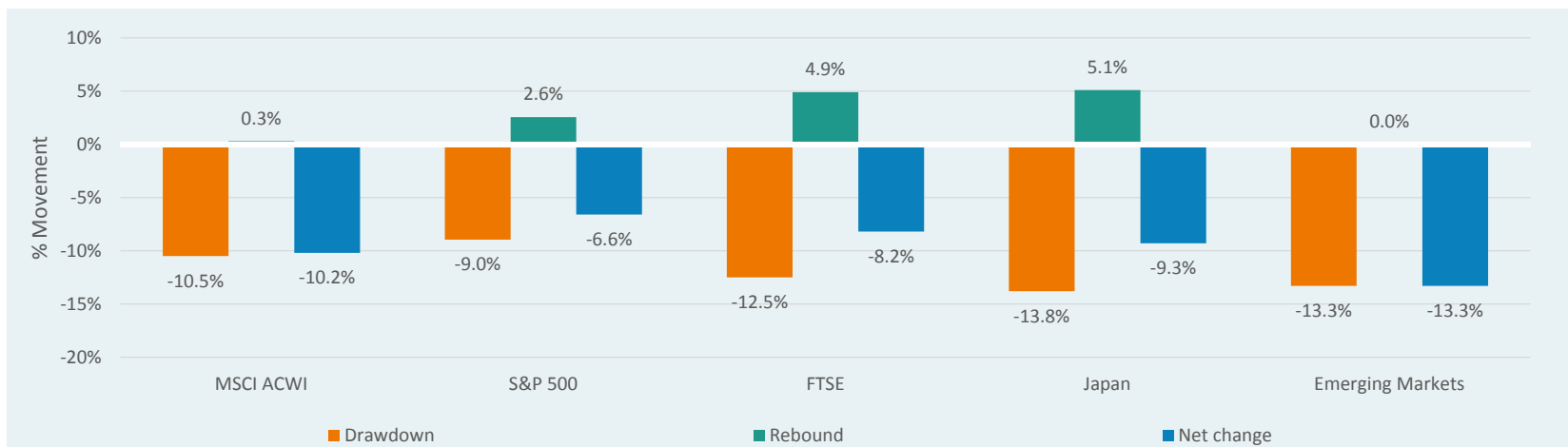
ENERGY HY CREDIT DEFAULT SWAP



Source: Bloomberg, as of 1/22/15

# Welcome to 2016

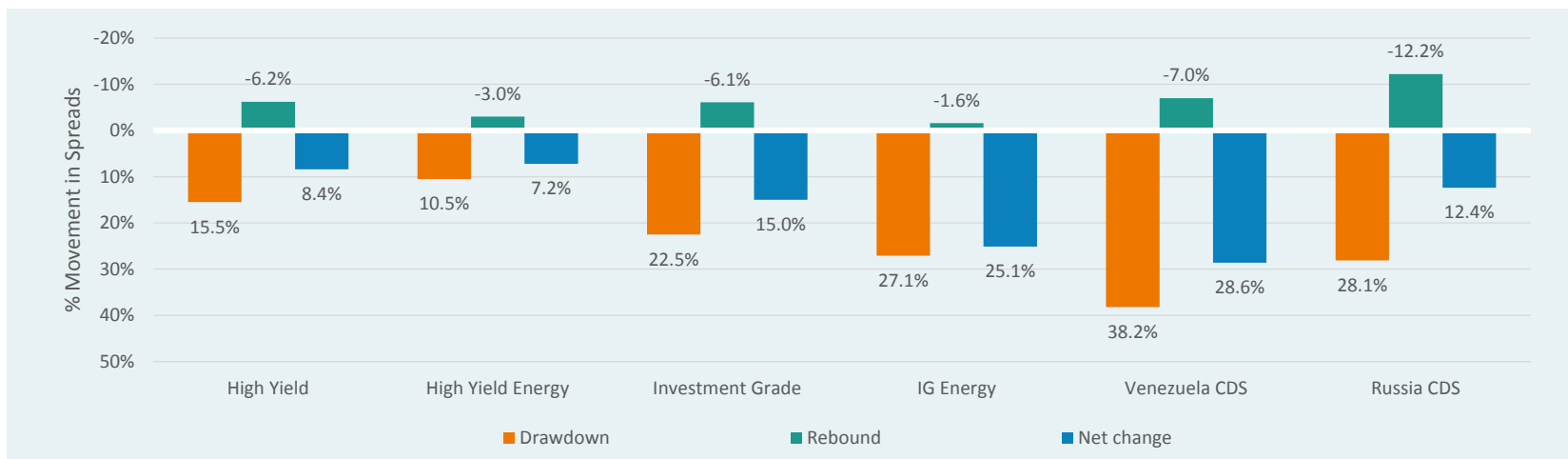
## EQUITY DRAWDOWN AND RECOVERY



Significant equity market drawdowns in January

Credit spreads moved wider with the drop in oil but have since compressed slightly

## SPREAD EXPANSION AND COMPRESSION



Source: Bloomberg, as of 1/22/2016 Returns are for the period observed during from 1/1/2016 to 1/22/2016. Indices are stated in USD and returns are gross.

# Appendix



# Periodic table of returns – December 2015

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	5-Year	10-Year
Real Estate	74.8	16.6	38.4	23.2	35.2	38.7	66.4	31.8	14.0	25.9	56.3	26.0	34.5	32.6	39.8	5.2	79.0	29.1	14.3	18.6	43.3	13.5	10.1	13.5	8.5
Large Cap Growth	32.9	8.1	37.8	23.1	32.9	27.0	43.1	22.8	8.4	10.3	48.5	22.2	21.4	26.9	16.2	1.4	37.2	26.9	7.8	18.1	38.8	13.2	5.7	12.5	8.0
Large Cap Equity	26.3	6.4	37.2	22.4	31.8	20.3	33.2	12.2	7.3	6.7	47.3	20.7	20.1	23.5	15.8	-6.5	34.5	24.5	2.6	17.9	34.5	13.0	0.9	12.4	8.0
US Bonds	23.8	4.4	31.0	21.6	30.5	19.3	27.3	11.6	3.3	1.6	46.0	18.3	14.0	22.2	11.8	-21.4	32.5	19.2	1.5	17.5	33.5	11.8	0.6	11.3	7.4
Cash	19.3	3.2	28.5	21.4	22.4	16.2	26.5	7.0	2.8	1.0	39.2	16.5	7.5	18.4	11.6	-25.9	28.4	16.8	0.4	16.4	33.1	6.0	0.0	10.7	6.8
Hedge Funds of Funds	18.9	2.6	25.7	16.5	16.2	15.6	24.3	6.0	2.5	-5.9	30.0	14.5	7.1	16.6	10.9	-28.9	27.2	16.7	0.1	16.3	32.5	5.6	-0.4	9.2	6.2
International Equity	18.1	0.4	19.6	14.4	13.9	8.7	21.3	4.1	-2.4	-6.0	29.9	14.3	6.3	15.5	10.3	-33.8	23.3	16.1	-2.1	15.3	23.3	4.9	-0.8	7.7	5.6
Small Cap Growth	13.4	-1.5	18.5	11.3	12.9	4.9	20.9	-3.0	-5.6	-11.4	29.7	12.9	5.3	15.1	7.0	-35.6	20.6	15.5	-2.9	14.6	12.1	4.2	-1.4	4.2	4.7
60/40 Global Portfolio	10.2	-1.8	15.2	10.3	10.6	1.2	13.2	-7.3	-9.1	-15.5	25.2	11.4	4.7	13.3	7.0	-36.8	19.7	13.1	-4.2	11.5	11.0	3.4	-2.5	3.6	4.5
Large Cap Value	9.7	-2.0	11.6	9.9	9.7	-2.5	11.4	-7.8	-9.2	-15.7	23.9	9.1	4.6	10.4	5.8	-37.6	18.9	10.2	-5.5	10.5	9.0	2.8	-3.8	3.2	3.6
Small Cap Equity	3.1	-2.4	11.1	6.4	5.2	-5.1	7.3	-14.0	-12.4	-20.5	11.6	6.9	4.6	9.1	4.4	-38.4	11.5	8.2	-5.7	4.8	0.1	0.0	-4.4	2.1	3.0
Small Cap Value	2.9	-2.9	7.5	6.0	2.1	-6.5	4.8	-22.4	-19.5	-21.7	9.0	6.3	4.2	4.8	-0.2	-38.5	5.9	6.5	-11.7	4.2	-2.0	-1.8	-7.5	0.0	2.3
Emerging Markets Equity	1.4	-3.5	5.7	5.1	-3.4	-25.3	-0.8	-22.4	-20.4	-27.9	4.1	4.3	3.2	4.3	-1.6	-43.1	0.2	5.7	-13.3	0.1	-2.3	-4.5	-14.9	-4.8	1.1
Commodities	-1.1	-7.3	-5.2	3.6	-11.6	-27.0	-1.5	-30.6	-21.2	-30.3	1.0	1.4	2.4	2.1	-9.8	-53.2	-16.9	0.1	-18.2	-1.1	-9.5	-17.0	-24.7	-13.5	-6.4

BEST

WORST

Large Cap Equity

Large Cap Value

Large Cap Growth

Small Cap Equity

Small Cap Value

Small Cap Growth

International Equity

Emerging Markets Equity

US Bonds

Cash

Commodities

Real Estate

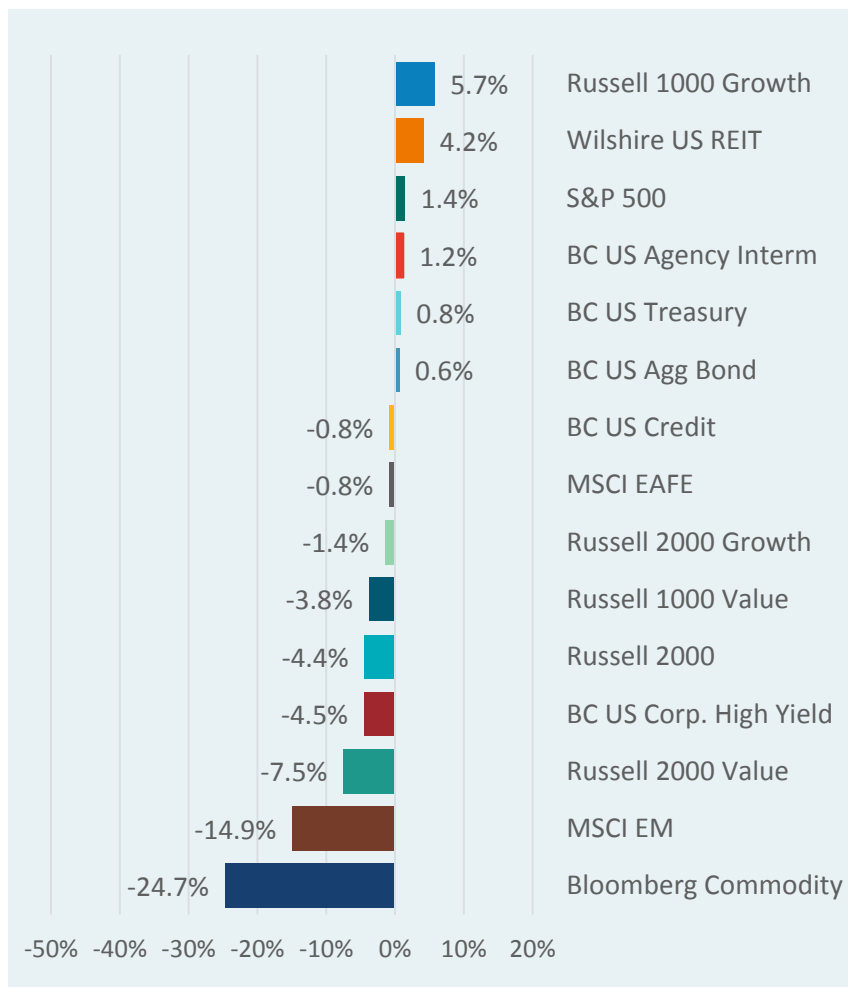
Hedge Funds of Funds

60% MSCI ACWI/40% BC Global Bond

Source Data: Morningstar, Inc., Hedge Fund Research, Inc. (HFR), National Council of Real Estate Investment Fiduciaries (NCREIF). Indices used: Russell 1000, Russell 1000 Value, Russell 1000 Growth, Russell 2000, Russell 2000 Value, Russell 2000 Growth, MSCI EAFE, MSCI EM, BC Agg, T-Bill 90 Day, Bloomberg Comm Index, NCREIF Property, HFRI FOF, MSCI ACWI, BC Global Bond.

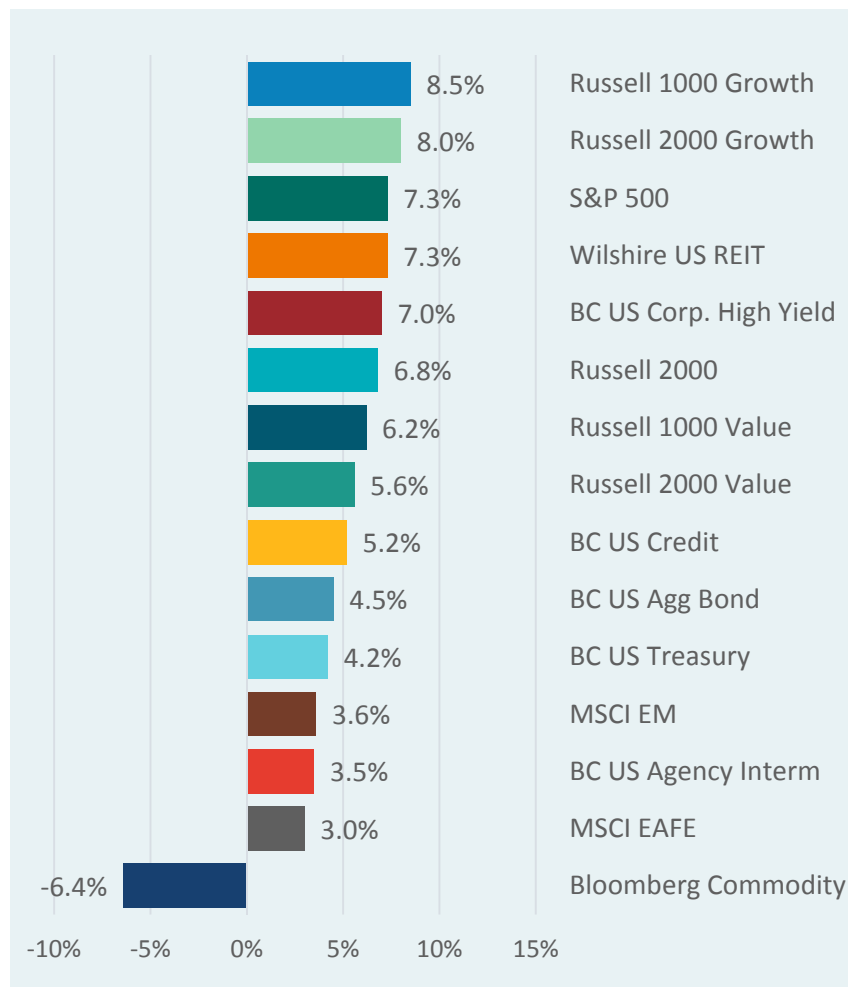
# Major asset class returns

ONE YEAR ENDING DECEMBER



Source: Morningstar, Verus, as of 12/31/15

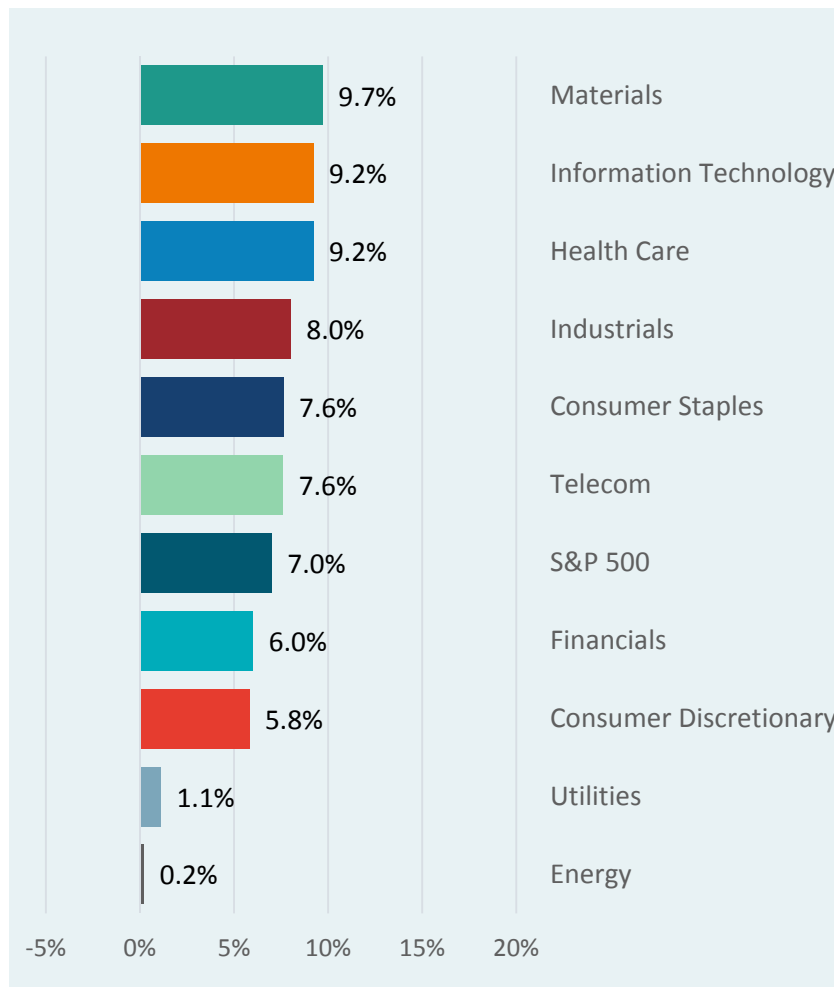
TEN YEARS ENDING DECEMBER



Source: Morningstar, Verus, as of 12/31/15

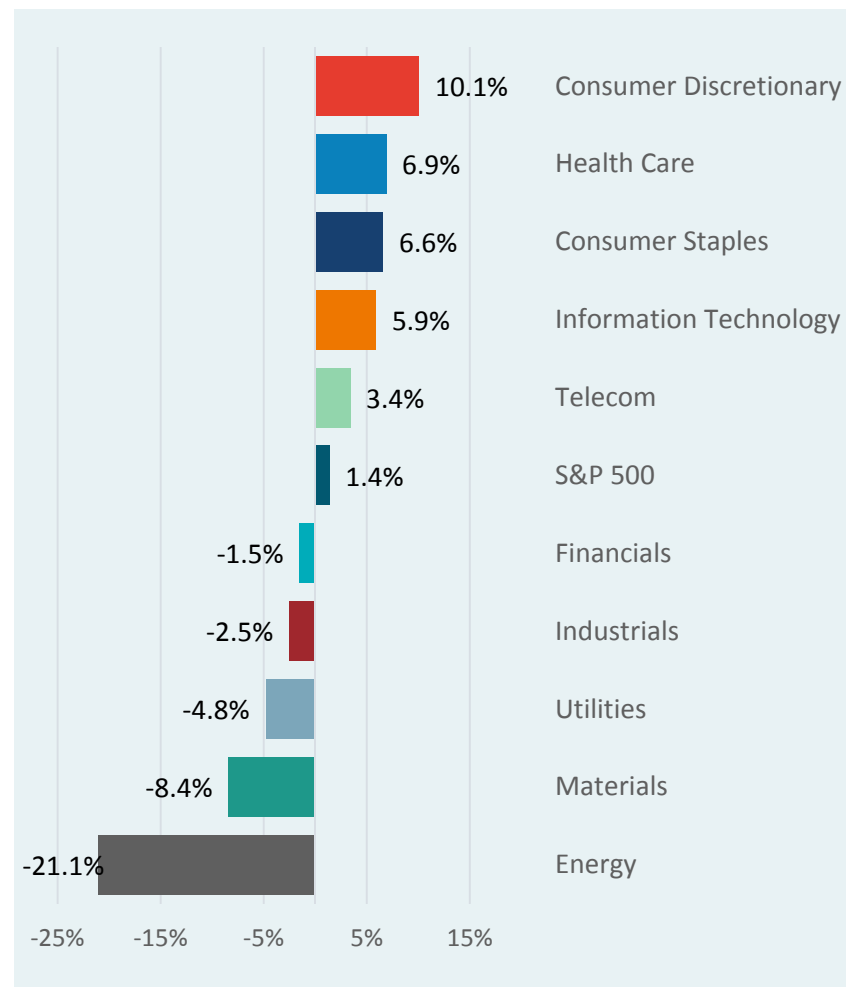
# S&P 500 and S&P 500 sector returns

4<sup>TH</sup> QUARTER



Source: Morningstar as of 12/31/15

2015 CALENDAR YEAR



Source: Morningstar as of 12/31/15

# Detailed index returns

## DOMESTIC EQUITY

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
<b>Core Index</b>							
S&P 500	(1.6)	7.0	1.4	1.4	15.1	12.6	7.3
S&P 500 Equal Weighted	(2.3)	5.0	(2.2)	(2.2)	15.1	12.4	8.5
DJ Industrial Average	(1.5)	7.7	0.2	0.2	12.7	11.3	7.7
Russell Top 200	(1.4)	7.7	2.4	2.4	15.4	12.9	7.2
Russell 1000	(1.8)	6.5	0.9	0.9	15.0	12.4	7.4
Russell 2000	(5.0)	3.6	(4.4)	(4.4)	11.7	9.2	6.8
Russell 3000	(2.1)	6.3	0.5	0.5	14.7	12.2	7.4
Russell Mid Cap	(2.7)	3.6	(2.4)	(2.4)	14.2	11.4	8.0
<b>Style Index</b>							
Russell 1000 Growth	(1.5)	7.3	5.7	5.7	16.8	13.5	8.5
Russell 1000 Value	(2.2)	5.6	(3.8)	(3.8)	13.1	11.3	6.2
Russell 2000 Growth	(4.8)	4.3	(1.4)	(1.4)	14.3	10.7	8.0
Russell 2000 Value	(5.3)	2.9	(7.5)	(7.5)	9.1	7.7	5.6

## INTERNATIONAL EQUITY

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
<b>Broad Index</b>							
MSCI EAFE	(1.4)	4.7	(0.8)	(0.8)	5.0	3.6	3.0
MSCI AC World ex US	(1.9)	3.2	(5.7)	(5.7)	1.5	1.1	2.9
MSCI EM	(2.2)	0.7	(14.9)	(14.9)	(6.8)	(4.8)	3.6
MSCI EAFE Small Cap	0.7	6.8	9.6	9.6	10.4	6.3	4.6
<b>Style Index</b>							
MSCI EAFE Growth	(0.8)	6.7	4.1	4.1	6.8	4.6	4.0
MSCI EAFE Value	(1.9)	2.7	(5.7)	(5.7)	3.1	2.6	2.0
<b>Regional Index</b>							
MSCI UK	(3.9)	0.7	(7.6)	(7.6)	1.8	3.5	3.1
MSCI Japan	0.3	9.3	9.6	9.6	10.2	4.4	0.9
MSCI Euro	(3.5)	3.4	(2.8)	(2.8)	4.6	3.0	2.2
MSCI EM Asia	(0.7)	3.5	(9.8)	(9.8)	(1.2)	(0.8)	5.8
MSCI EM Latin American	(4.3)	(2.7)	(31.0)	(31.0)	(19.4)	(14.4)	1.2

## FIXED INCOME

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
<b>Broad Index</b>							
BC US Treasury US TIPS	(0.8)	(0.6)	(1.4)	(1.4)	(2.3)	2.6	3.9
BC US Treasury Bills	0.0	(0.0)	0.1	0.1	0.1	0.1	1.3
BC US Agg Bond	(0.3)	(0.6)	0.6	0.6	1.4	3.2	4.5
<b>Duration</b>							
BC US Treasury 1-3 Yr	(0.1)	(0.4)	0.6	0.6	0.5	0.7	2.4
BC US Treasury Long	(0.0)	(1.4)	(1.2)	(1.2)	2.6	7.7	6.7
BC US Treasury	(0.2)	(0.9)	0.8	0.8	1.0	2.9	4.2
<b>Issuer</b>							
BC US MBS	(0.0)	(0.1)	1.5	1.5	2.0	3.0	4.6
BC US Corp. High Yield	(2.5)	(2.1)	(4.5)	(4.5)	1.7	5.0	7.0
BC US Agency Interm	(0.2)	(0.5)	1.2	1.2	0.9	1.6	3.5
BC US Credit	(0.8)	(0.5)	(0.8)	(0.8)	1.5	4.4	5.2

## OTHER

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
<b>Index</b>							
Bloomberg Commodity	(3.1)	(10.5)	(24.7)	(24.7)	(17.3)	(13.5)	(6.4)
Wilshire US REIT	1.9	7.5	4.2	4.2	11.8	12.4	7.3
<b>Regional Index</b>							
JPM EMBI Global Div	(1.4)	1.3	1.2	1.2	1.0	5.4	6.9
JPM GBI-EM Global Div	(2.2)	0.0	(14.9)	(14.9)	(10.0)	(3.5)	4.3

Source: Morningstar, as of 12/31/15

# Definitions

**Bloomberg US Weekly Consumer Comfort Index** - tracks the public's economic attitudes each week, providing a high-frequency read on consumer sentiment. The index, based on cell and landline telephone interviews with a random, representative national sample of U.S. adults, tracks Americans' ratings of the national economy, their personal finances and the buying climate on a weekly basis, with views of the economy's direction measured separately each month. ([www.langerresearch.com](http://www.langerresearch.com))

**University of Michigan Consumer Sentiment Index** - A survey of consumer attitudes concerning both the present situation as well as expectations regarding economic conditions conducted by the University of Michigan. For the preliminary release approximately three hundred consumers are surveyed while five hundred are interviewed for the final figure. The level of consumer sentiment is related to the strength of consumer spending. ([www.Bloomberg.com](http://www.Bloomberg.com))

**Citi Economic Surprise Index** - objective and quantitative measures of economic news. Defined as weighted historical standard deviations of data surprises (actual releases vs Bloomberg survey median). A positive reading of the Economic Surprise Index suggests that economic releases have on balance been beating consensus. The indices are calculated daily in a rolling three-month window. The weights of economic indicators are derived from relative high-frequency spot FX impacts of 1 standard deviation data surprises. The indices also employ a time decay function to replicate the limited memory of markets. ([www.Bloomberg.com](http://www.Bloomberg.com))

**Merrill Lynch Option Volatility Estimate (MOVE) Index** – a yield curve weighted index comprised of a weighted set of 1-month Treasury options, including 2.5.10 and 30 year tenor contracts. This index is an indicator of the expected (implied) future volatility in the rate markets.

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