



# Q4

Quarterly Market Review  
Fourth Quarter 2015

# The Rise of Short-Term Rates

Fourth Quarter 2015

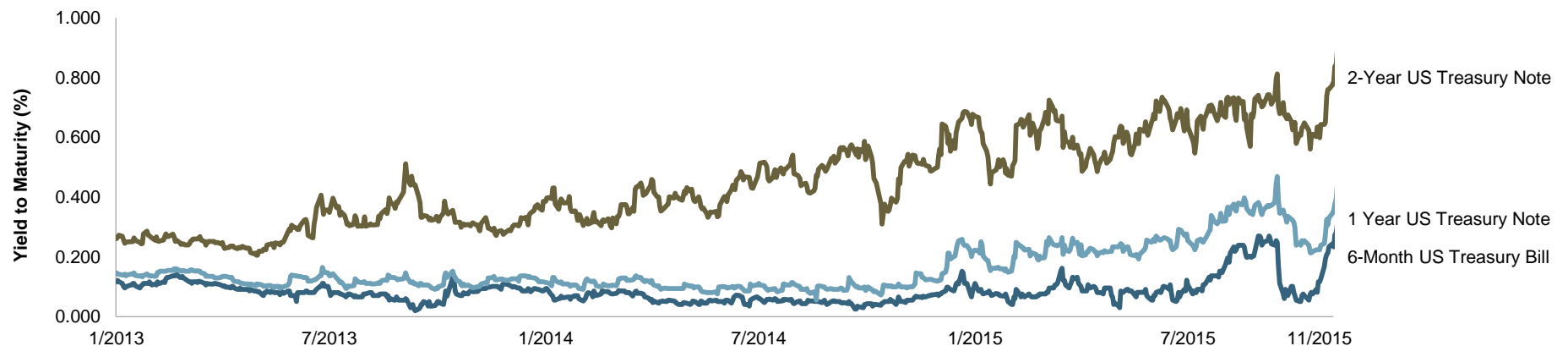
While many market participants were waiting for the “inevitable” rise in short-term interest rates expected when the Federal Reserve tightened its monetary policy, some investors may have missed the increase in short-term rates already underway as a result of market forces.

Looking at the zero- to two-year segment of the yield curve—the segment that many believe will be most affected whenever the Fed “normalizes interest rates”—it may be surprising to see how much rates have increased since 2013.

In fact, the yield on the 2-Year US Treasury note has nearly doubled since the beginning of 2015, rising from 0.45% in January to almost 0.90% in late November.<sup>1</sup> The yield on the 1-Year US Treasury note more than tripled, from 0.15% to more than 0.50% over the same period. The 6-Month US Treasury bill’s yield rose from a low of 0.03% in May to over 0.30% in late November. Yet, despite the higher rates, we have not experienced the conjectured financial storm in the fixed income market.

The question of how far the Fed will go in raising its overnight target rate is still open. Similarly, we can ask ourselves a more complex question: Will the market lead the Fed or is the Fed leading the market through setting expectations?

US Treasury Yields, January 2013 to November 2015



Past performance is no guarantee of future results. Source: Barclays Bank PLC.

1. As of November 18, 2015. Source: Barclays Bank PLC.

Adapted from “The Rise of Short-Term Rates,” Issue Brief, November 2015. Dimensional Fund Advisors LP is an investment advisor registered with the Securities and Exchange Commission.

Fixed income securities are subject to increased loss of principal during periods of rising interest rates and may be subject to various other risks, including changes in credit quality, liquidity, prepayments, and other factors. Sector-specific investments can increase these risks.

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# Quarterly Market Review

Fourth Quarter 2015

This report features world capital market performance and a timeline of events for the past quarter. It begins with a global overview, then features the returns of stock and bond asset classes in the US and international markets.

The report also illustrates the performance of globally diversified portfolios and features a quarterly topic.



## Overview:

Market Summary

World Stock Market Performance

World Asset Classes

US Stocks

International Developed Stocks

Emerging Markets Stocks

Select Country Performance

Real Estate Investment Trusts (REITs)

Commodities







Fixed Income

Global Diversification

Quarterly Topic: The Rise of Short-Term Rates

# Market Summary

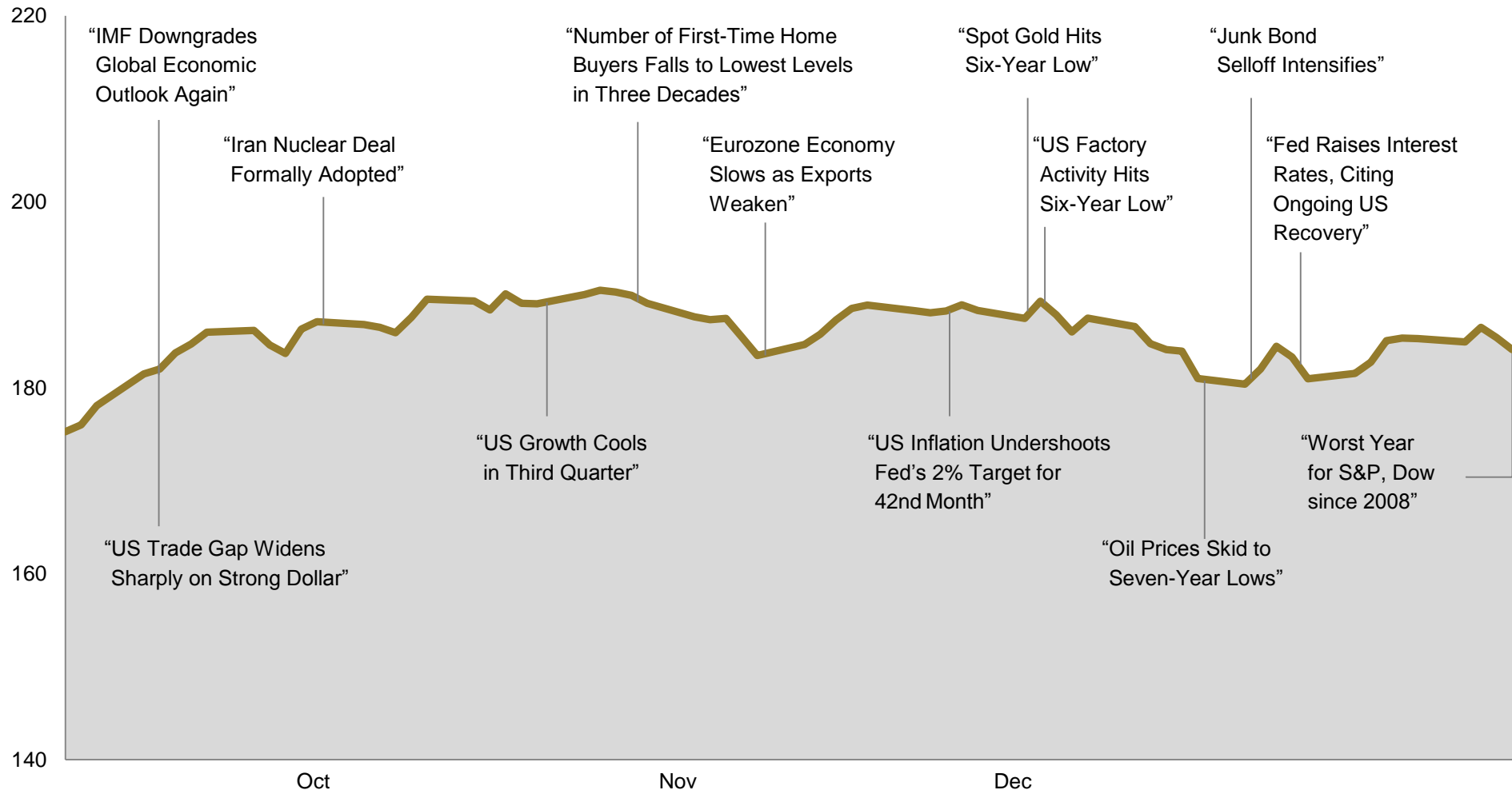
## Index Returns

	US Stock Market	International Developed Stocks	Emerging Markets Stocks	Global Real Estate	US Bond Market	Global Bond Market ex US
<b>4Q 2015</b>	<b>STOCKS</b>				<b>BONDS</b>	
	<b>6.27%</b> 	<b>3.91%</b> 	<b>0.66%</b> 	<b>4.89%</b> 	<b>-0.57%</b> 	<b>0.58%</b> 
<b>Since Jan. 2001</b>						
Avg. Quarterly Return	1.7%	1.4%	2.9%	2.8%	1.2%	1.1%
Best Quarter	16.8% <b>Q2 2009</b>	25.9% <b>Q2 2009</b>	34.7% <b>Q2 2009</b>	32.3% <b>Q3 2009</b>	4.6% <b>Q3 2001</b>	5.5% <b>Q4 2008</b>
Worst Quarter	-22.8% <b>Q4 2008</b>	-21.2% <b>Q4 2008</b>	-27.6% <b>Q4 2008</b>	-36.1% <b>Q4 2008</b>	-2.4% <b>Q2 2004</b>	-3.2% <b>Q2 2015</b>

**Past performance is not a guarantee of future results. Indices are not available for direct investment. Index performance does not reflect the expenses associated with the management of an actual portfolio.** Market segment (index representation) as follows: US Stock Market (Russell 3000 Index), International Developed Stocks (MSCI World ex USA Index [net div.]), Emerging Markets (MSCI Emerging Markets Index [net div.]), Global Real Estate (S&P Global REIT Index), US Bond Market (Barclays US Aggregate Bond Index), and Global Bond ex US Market (Citigroup WGBI ex USA 1–30 Years [Hedged to USD]). The S&P data are provided by Standard & Poor's Index Services Group. Russell data © Russell Investment Group 1995–2016, all rights reserved. MSCI data © MSCI 2016, all rights reserved. Barclays data provided by Barclays Bank PLC. Citigroup bond indices © 2016 by Citigroup.

# World Stock Market Performance

MSCI All Country World Index with selected headlines from Q4 2015



These headlines are not offered to explain market returns. Instead, they serve as a reminder that investors should view daily events from a long-term perspective and avoid making investment decisions based solely on the news.

Graph Source: MSCI ACWI Index. MSCI data © MSCI 2016, all rights reserved.

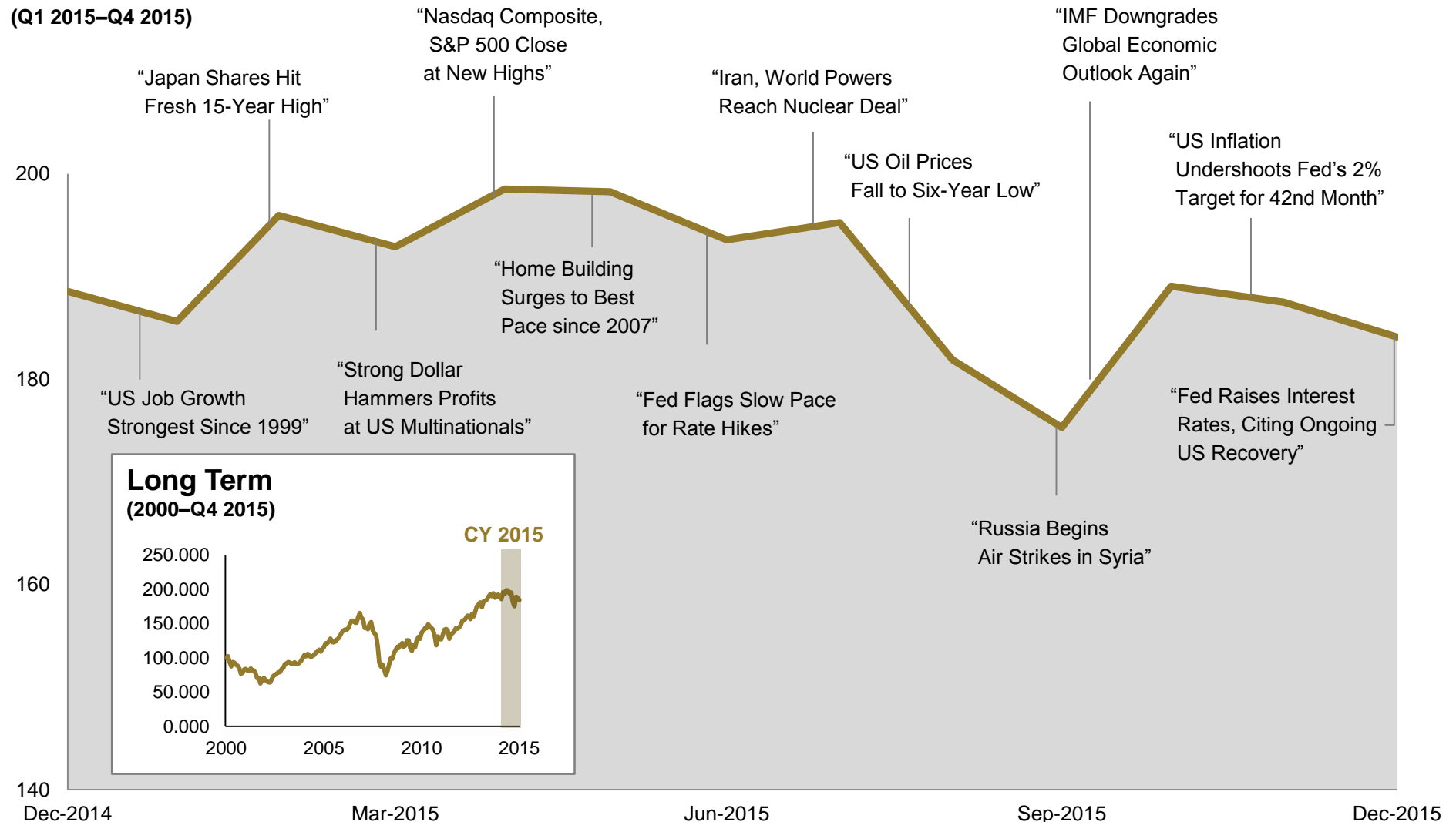
It is not possible to invest directly in an index. Performance does not reflect the expenses associated with management of an actual portfolio. Past performance is not a guarantee of future results.

# World Stock Market Performance

MSCI All Country World Index with selected headlines from past 12 months

## Short Term

(Q1 2015–Q4 2015)



These headlines are not offered to explain market returns. Instead, they serve as a reminder that investors should view daily events from a long-term perspective and avoid making investment decisions based solely on the news.

Graph Source: MSCI ACWI Index. MSCI data © MSCI 2015, all rights reserved.

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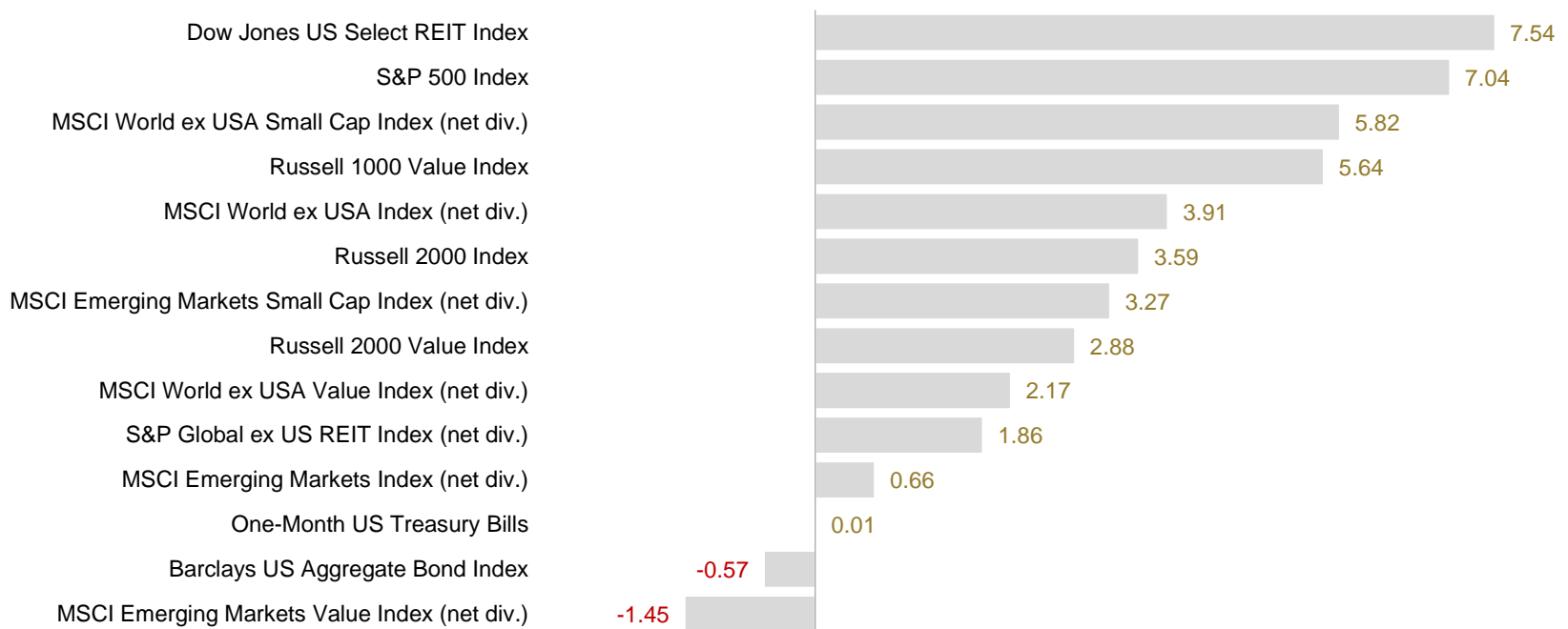


# World Asset Classes

## Fourth Quarter 2015 Index Returns

Looking at broad market indices, the US equity market again outperformed both developed ex US and emerging markets during the quarter. In a repeat from the third quarter, US REITs recorded the highest returns, outperforming equity markets.

The value effect was negative in the US, developed ex US, and emerging markets. Small caps outperformed large caps in both developed ex US and emerging markets but underperformed in the US.



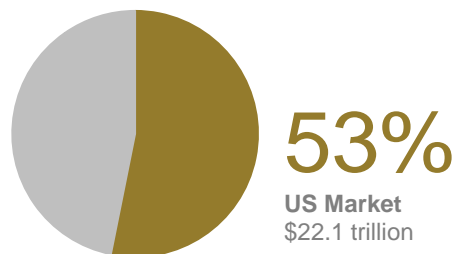
# US Stocks

## Fourth Quarter 2015 Index Returns

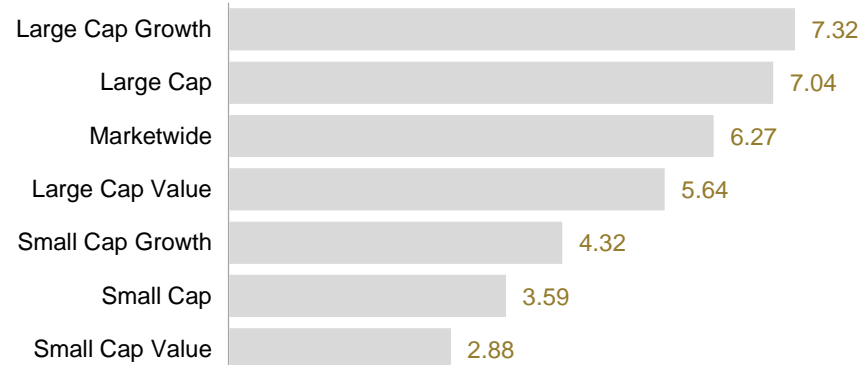
In a turnaround from the previous quarter, the US equity market recorded positive performance.

Small caps underperformed large caps, and value indices underperformed growth indices across all size ranges.

### World Market Capitalization—US



### Ranked Returns for the Quarter (%)



### Period Returns (%)

\* Annualized

Asset Class	1 Year	3 Years*	5 Years*	10 Years*
Marketwide	0.48	14.74	12.18	7.35
Large Cap	1.38	15.13	12.57	7.31
Large Cap Value	-3.83	13.08	11.27	6.16
Large Cap Growth	5.67	16.83	13.53	8.53
Small Cap	-4.41	11.65	9.19	6.80
Small Cap Value	-7.47	9.06	7.67	5.57
Small Cap Growth	-1.38	14.28	10.67	7.95

Past performance is not a guarantee of future results. Indices are not available for direct investment. Index performance does not reflect the expenses associated with the management of an actual portfolio. Market segment (index representation) as follows: Marketwide (Russell 3000 Index), Large Cap (S&P 500 Index), Large Cap Value (Russell 1000 Value Index), Large Cap Growth (Russell 1000 Growth Index), Small Cap (Russell 2000 Index), Small Cap Value (Russell 2000 Value Index), and Small Cap Growth (Russell 2000 Growth Index). World Market Cap represented by Russell 3000 Index, MSCI World ex USA IMI Index, and MSCI Emerging Markets IMI Index. Russell 3000 Index is used as the proxy for the US market. Russell data © Russell Investment Group 1995–2016, all rights reserved. The S&P data are provided by Standard & Poor's Index Services Group.



# International Developed Stocks

## Fourth Quarter 2015 Index Returns

In US dollar terms, developed markets outside the US underperformed the US equity market but outperformed emerging markets indices.

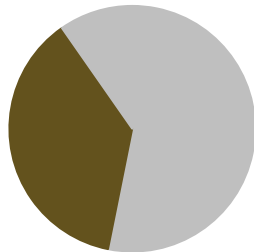
Small caps outperformed large caps in non-US developed markets.

Value indices underperformed growth indices across all size ranges in non-US developed markets.

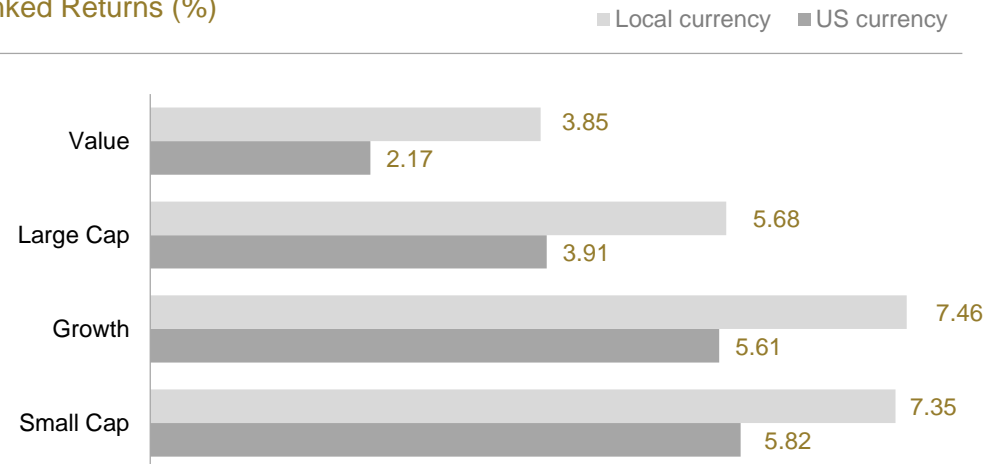
### World Market Capitalization—International Developed

**37%**

International  
Developed  
Market  
\$15.4 trillion



### Ranked Returns (%)



### Period Returns (%)

Asset Class	* Annualized			
	1 Year	3 Years*	5 Years*	10 Years*
Large Cap	-3.04	3.93	2.79	2.92
Small Cap	5.46	7.82	4.39	4.09
Value	-7.68	1.99	1.90	1.95
Growth	1.65	5.83	3.62	3.81

# Emerging Markets Stocks

## Fourth Quarter 2015 Index Returns

In US dollar terms, emerging markets indices underperformed developed markets, including the US, during the quarter.

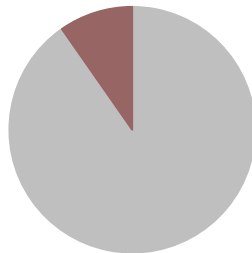
Small cap indices outperformed large cap indices in emerging markets.

Value indices underperformed growth indices in emerging markets across all size ranges.

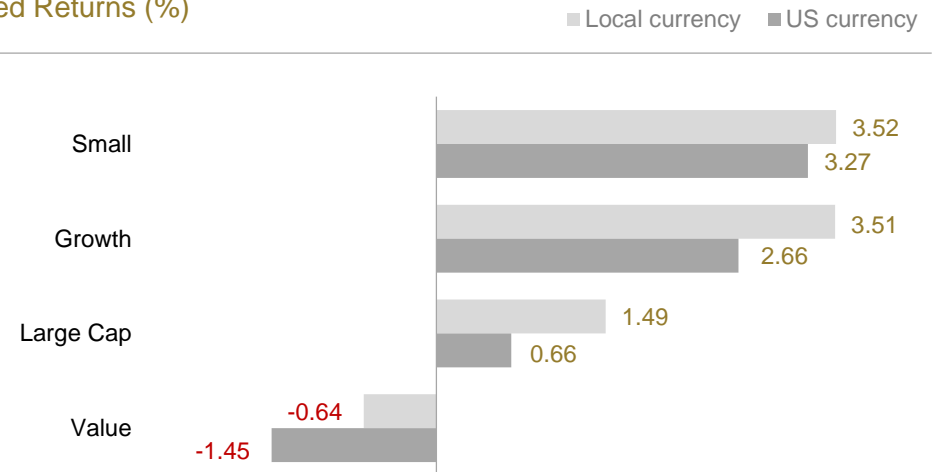
### World Market Capitalization—Emerging Markets

**10%**

Emerging  
Markets  
\$4.0 trillion



### Ranked Returns (%)



### Period Returns (%)

Asset Class	* Annualized			
	1 Year	3 Years*	5 Years*	10 Years*
Large Cap	-14.92	-6.76	-4.81	3.61
Small Cap	-6.85	-1.67	-3.29	6.11
Value	-18.57	-9.50	-6.74	3.39
Growth	-11.34	-4.10	-2.94	3.76

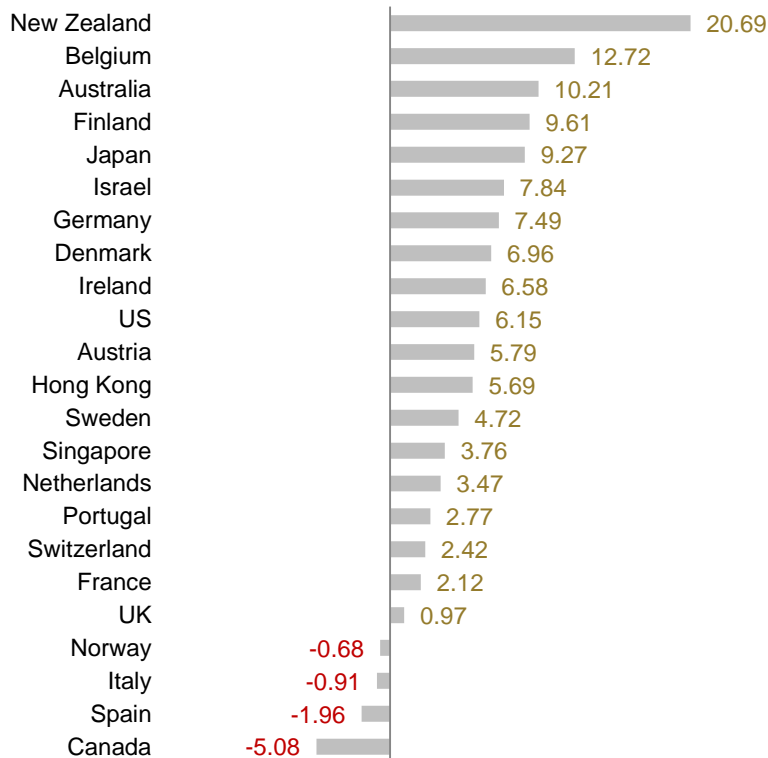
Past performance is not a guarantee of future results. Indices are not available for direct investment. Index performance does not reflect the expenses associated with the management of an actual portfolio. Market segment (index representation) as follows: Large Cap (MSCI Emerging Markets Index), Small Cap (MSCI Emerging Markets Small Cap Index), Value (MSCI Emerging Markets Value Index), and Growth (MSCI Emerging Markets Growth Index). All index returns are net of withholding tax on dividends. World Market Cap represented by Russell 3000 Index, MSCI World ex USA IMI Index, and MSCI Emerging Markets IMI Index. MSCI Emerging Markets IMI Index used as the proxy for the emerging market portion of the market. MSCI data © MSCI 2016, all rights reserved.

# Select Country Performance

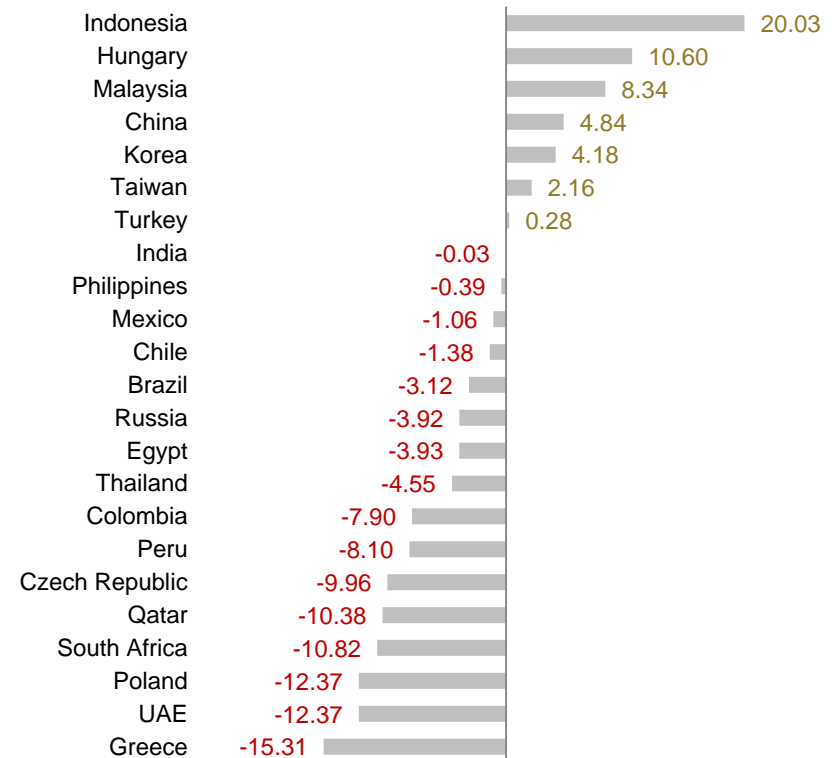
## Fourth Quarter 2015 Index Returns

In US dollar terms, there was wide dispersion in country returns across both developed and emerging markets countries. New Zealand recorded the highest country performance in developed markets, while Spain and Canada returned the lowest performance for the quarter. In emerging markets, Indonesia and Hungary posted the highest country returns, while Poland and Greece posted the lowest. China, which had previously dominated news headlines, recorded one of the highest returns in emerging markets.

### Ranked Developed Markets Returns (%)



### Ranked Emerging Markets Returns (%)

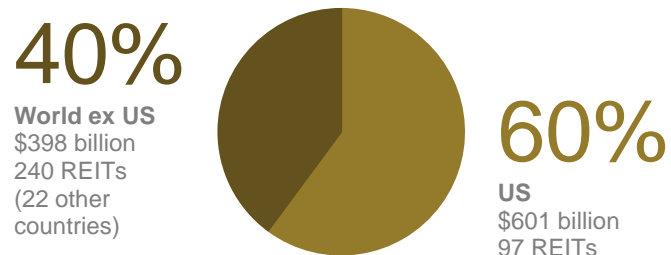


# Real Estate Investment Trusts (REITs)

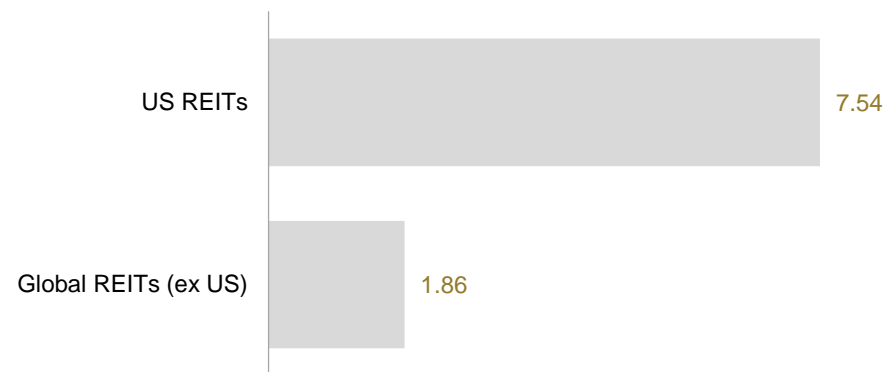
## Fourth Quarter 2015 Index Returns

US REITs were one of the best-performing asset classes during the quarter, outperforming equities. But REITs outside the US underperformed non-US broad equity market indices.

### Total Value of REIT Stocks



### Ranked Returns (%)



### Period Returns (%)

Asset Class	* Annualized			
	1 Year	3 Years*	5 Years*	10 Years*
US REITs	4.48	11.76	12.32	7.20
Global REITs (ex US)	-3.54	3.08	5.72	3.32

Past performance is not a guarantee of future results. Indices are not available for direct investment. Index performance does not reflect the expenses associated with the management of an actual portfolio. Number of REIT stocks and total value based on the two indices. All index returns are net of withholding tax on dividends. Total value of REIT stocks represented by Dow Jones US Select REIT Index and the S&P Global ex US REIT Index. Dow Jones US Select REIT Index used as proxy for the US market, and S&P Global ex US REIT Index used as proxy for the World ex US market. Dow Jones US Select REIT Index data provided by Dow Jones ©. S&P Global ex US REIT Index data provided by Standard and Poor's Index Services Group © 2016.

# Commodities

## Fourth Quarter 2015 Index Returns

Commodities had mostly negative performance in the fourth quarter. The Bloomberg Commodity Index Total Return fell 10.5%. The energy complex again led the decline with heating oil falling 31.1%. WTI crude oil declined 23.4%, while natural gas fell 22.0%.

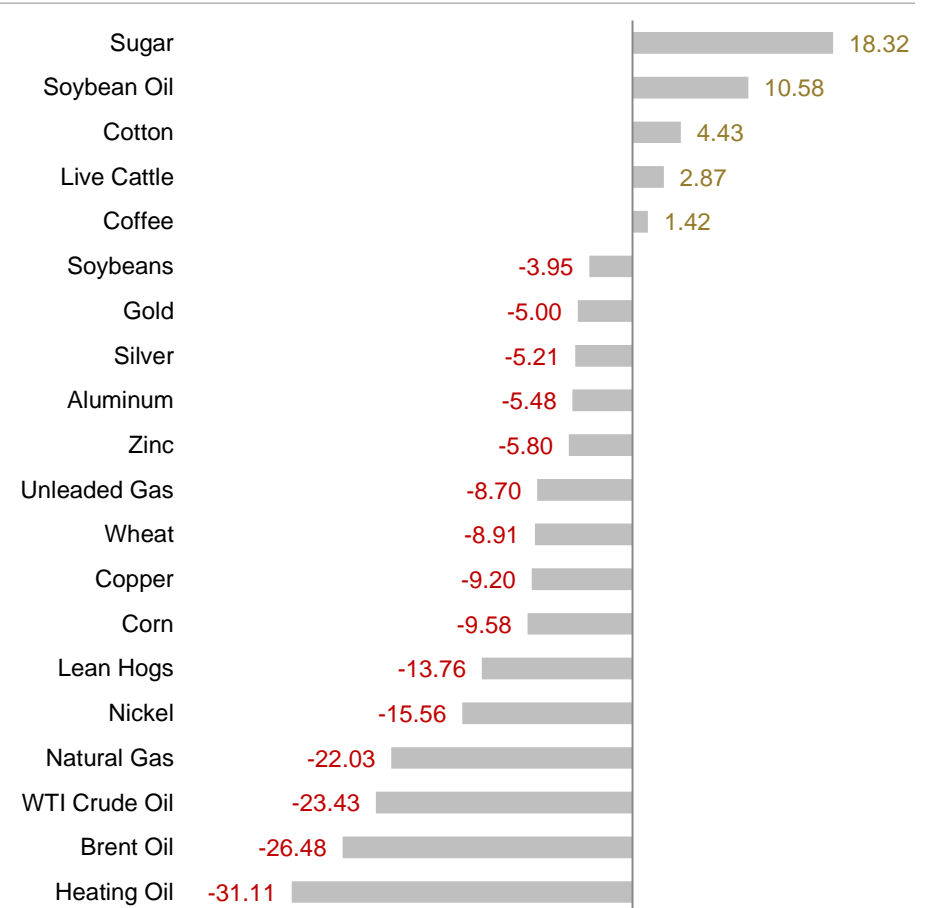
Sugar was the strongest performer with an 18.3% increase. Soybean oil was also among the stronger performers, increasing by 10.6%.

The index declined 24.7% during 2015. Cotton was the only commodity to post positive returns for the year.

### Period Returns (%) \* Annualized

Asset Class	Q4	1 Year	3 Years*	5 Years*	10 Years*
Commodities	-10.52	-24.66	-17.29	-13.47	-6.43

### Ranked Returns for Individual Commodities (%)



# Fixed Income

## Fourth Quarter 2015 Index Returns

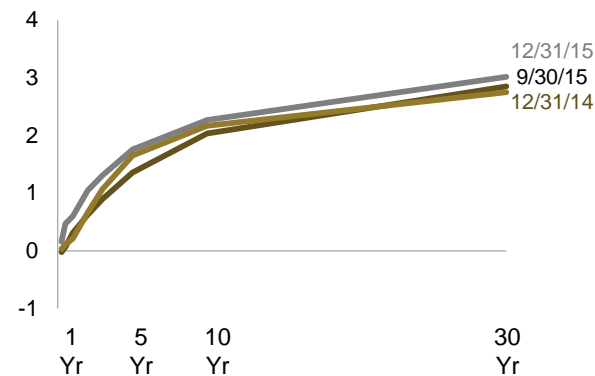
Interest rates across the US fixed income markets increased in the fourth quarter. The yield on the 5-year Treasury note gained 39 basis points to end the quarter at 1.77%. The yield on the 10-year Treasury note increased 22 bps to 2.27%. The 30-year Treasury bond added 14 bps points to finish with a yield of 3.01%.

The short end of the yield curve experienced the largest increase in yields during 2015.

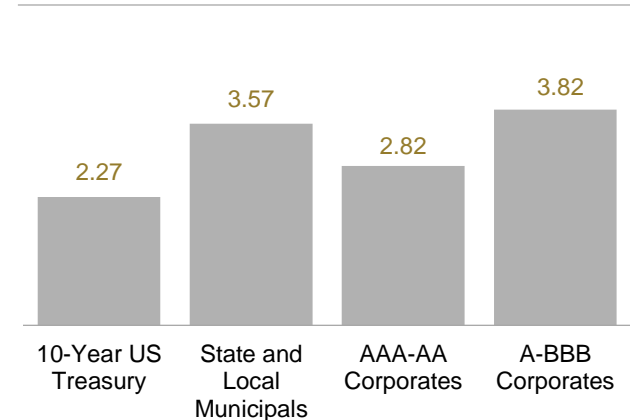
Short-term corporate bonds declined 0.14% during the quarter but gained 1.01% for the year. Intermediate-term corporates fell by 0.42% during the quarter but climbed 1.08% in 2015.<sup>1</sup>

Short-term municipal bonds returned 0.08% for the quarter and 1.21% for the year. Intermediate-term municipal bonds returned 1.26% for the quarter and 3.28% for the year.<sup>2</sup>

### US Treasury Yield Curve



### Bond Yields across Issuers



### Period Returns (%)

Asset Class	* Annualized			
	1 Year	3 Years*	5 Years*	10 Years*
BofA Merrill Lynch Three-Month US Treasury Bill Index	0.05	0.05	0.07	1.24
BofA Merrill Lynch 1-Year US Treasury Note Index	0.15	0.20	0.28	1.78
Citigroup WGBI 1–5 Years (hedged to USD)	1.00	1.17	1.58	2.90
Barclays Long US Government Bond Index	-1.16	2.55	7.65	6.67
Barclays US Aggregate Bond Index	0.55	1.44	3.25	4.51
Barclays US Corporate High Yield Index	-4.47	1.69	5.04	6.96
Barclays Municipal Bond Index	3.30	3.16	5.35	4.72
Barclays US TIPS Index	-1.44	-2.27	2.55	3.94

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1. Barclays Short and Intermediate US Corporate Bond Indices. 2. Barclays Short and Intermediate Municipal Bond Indices. Yield curve data from Federal Reserve. State and local bonds are from the Bond Buyer Index, general obligation, 20 years to maturity, mixed quality. AAA-AA Corporates represent the Bank of America Merrill Lynch US Corporates, AA-AAA rated. A-BBB Corporates represent the Bank of America Merrill Lynch US Corporates, BBB-A rated. Barclays data provided by Barclays Bank PLC. US long-term bonds, bills, inflation, and fixed income factor data © Stocks, Bonds, Bills, and Inflation (SBI) Yearbook™, Ibbotson Associates, Chicago (annually updated work by Roger G. Ibbotson and Rex A. Sinquefeld). Citigroup bond indices © 2016 by Citigroup. The BofA Merrill Lynch Indices are used with permission; © 2014 Merrill Lynch, Pierce, Fenner & Smith Incorporated; all rights reserved. Merrill Lynch, Pierce, Fenner & Smith Incorporated is a wholly owned subsidiary of Bank of America Corporation.



# Global Diversification

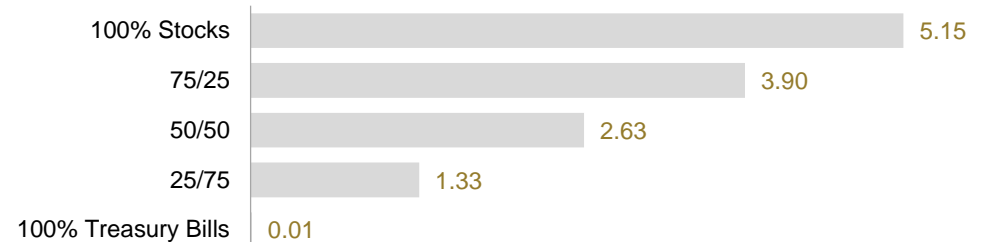
## Fourth Quarter 2015 Index Returns

These portfolios illustrate the performance of different global stock/bond mixes and highlight the benefits of diversification. Mixes with larger allocations to stocks are considered riskier but have higher expected returns over time.

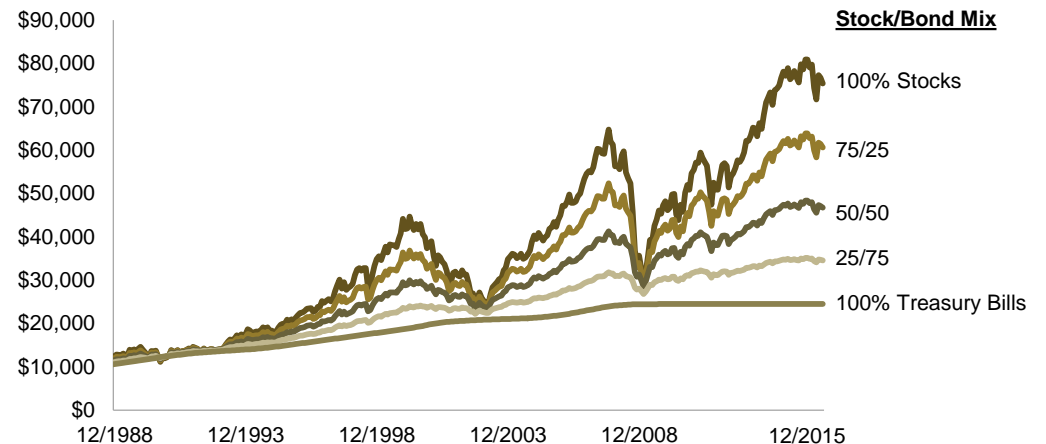
Asset Class	Period Returns (%)			
	1 Year	3 Years*	5 Years*	10 Years*
100% Stocks	-1.84	8.26	6.66	5.31
75/25	-1.22	6.25	5.13	4.54
50/50	-0.70	4.21	3.51	3.58
25/75	-0.29	2.13	1.81	2.44
100% Treasury Bills	0.02	0.02	0.03	1.13

\* Annualized

### Ranked Returns (%)



### Growth of Wealth: The Relationship between Risk and Return



Diversification does not eliminate the risk of market loss. **Past performance is not a guarantee of future results. Indices are not available for direct investment. Index performance does not reflect expenses associated with the management of an actual portfolio.** Asset allocations and the hypothetical index portfolio returns are for illustrative purposes only and do not represent actual performance. Global Stocks represented by MSCI All Country World Index (gross div.) and Treasury Bills represented by US One-Month Treasury Bills. Globally diversified allocations rebalanced monthly, no withdrawals. Data © MSCI 2016, all rights reserved. Treasury bills © Stocks, Bonds, Bills, and Inflation Yearbook™, Ibbotson Associates, Chicago (annually updated work by Roger G. Ibbotson and Rex A. Sinquefeld).