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# Q2

Quarterly Market Review  
Second Quarter 2017

# Quarterly Market Review

Second Quarter 2017

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 impact 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

Select Currency Performance vs. US Dollar

Real Estate Investment Trusts (REITs)

Commodities







Fixed Income

Impact of Diversification

Quarterly Topic: When Rates Go Up, Do Stocks Go Down?

# Market Summary

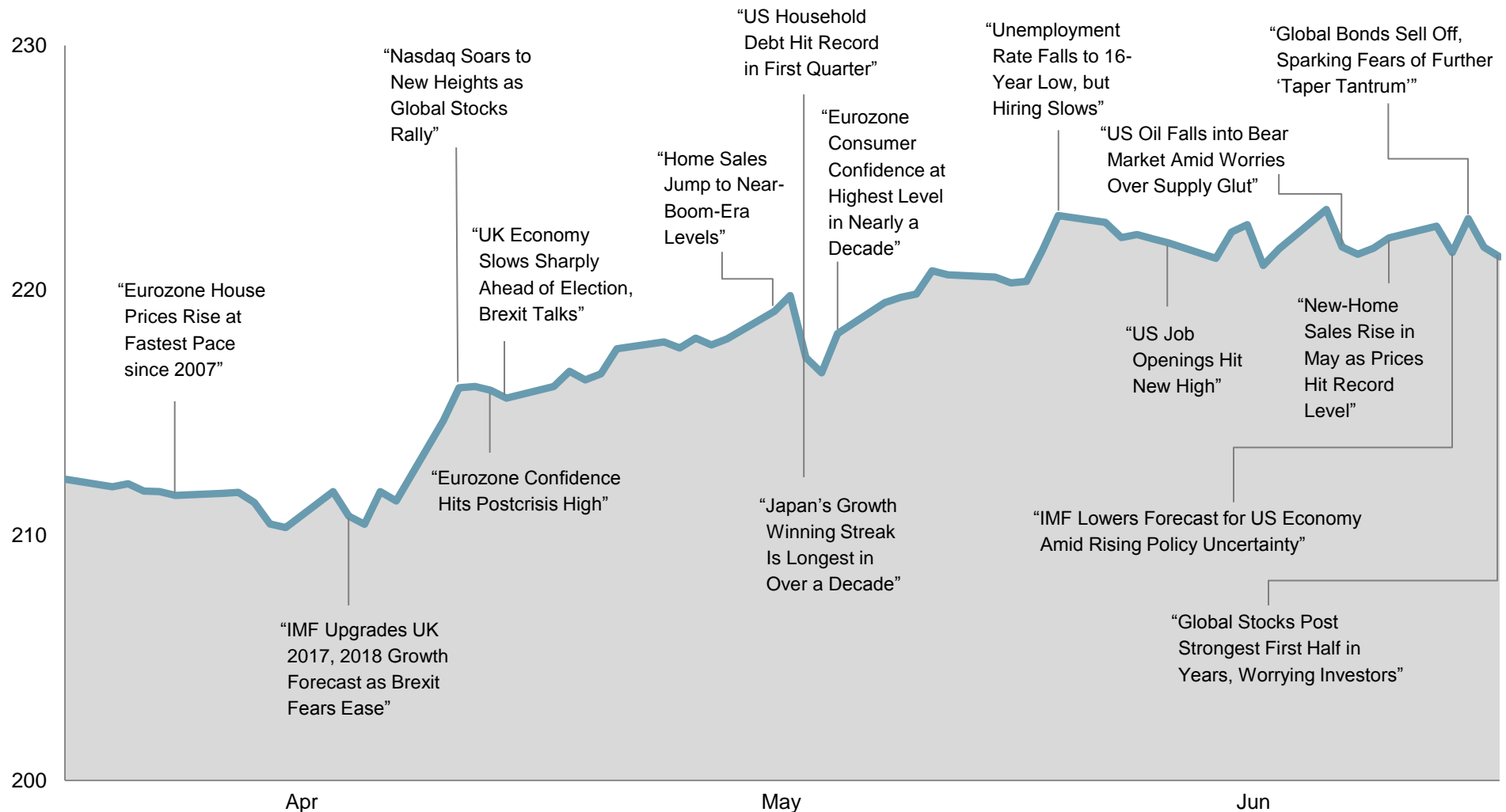
## Index Returns

|                        | US Stock Market   | International Developed Stocks  | Emerging Markets Stocks   | Global Real Estate  | US Bond Market  | Global Bond Market ex US  |
|------------------------|---|---|---|---|---|---|
| <b>Q2 2017</b>         | <b>STOCKS</b>   |   |   |   | <b>BONDS</b>  |   |
|                        | <b>3.02%</b><br> | <b>5.63%</b><br> | <b>6.27%</b><br> | <b>1.67%</b><br> | <b>1.45%</b><br> | <b>0.60%</b><br> |
| <b>Since Jan. 2001</b> |   |   |   |   |   |   |
| Avg. Quarterly Return  | 1.9%  | 1.5%  | 3.1%  | 2.7%  | 1.2%  | 1.1%  |
| Best Quarter           | 16.8%<br><b>Q2 2009</b>   | 25.9%<br><b>Q2 2009</b>   | 34.7%<br><b>Q2 2009</b>   | 32.3%<br><b>Q3 2009</b>   | 4.6%<br><b>Q3 2001</b>  | 5.5%<br><b>Q4 2008</b>  |
| Worst Quarter          | -22.8%<br><b>Q4 2008</b>  | -21.2%<br><b>Q4 2008</b>  | -27.6%<br><b>Q4 2008</b>  | -36.1%<br><b>Q4 2008</b>  | -3.0%<br><b>Q4 2016</b>   | -3.2%<br><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 [net div.]), US Bond Market (Bloomberg Barclays US Aggregate Bond Index), and Global Bond ex US Market (Citi WGBI ex USA 1-30 Years [Hedged to USD]). The S&P data are provided by Standard & Poor's Index Services Group. Frank Russell Company is the source and owner of the trademarks, service marks, and copyrights related to the Russell Indexes. MSCI data © MSCI 2017, all rights reserved. Bloomberg Barclays data provided by Bloomberg. Citi fixed income indices copyright 2017 by Citigroup.

# World Stock Market Performance

MSCI All Country World Index with selected headlines from Q2 2017



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.

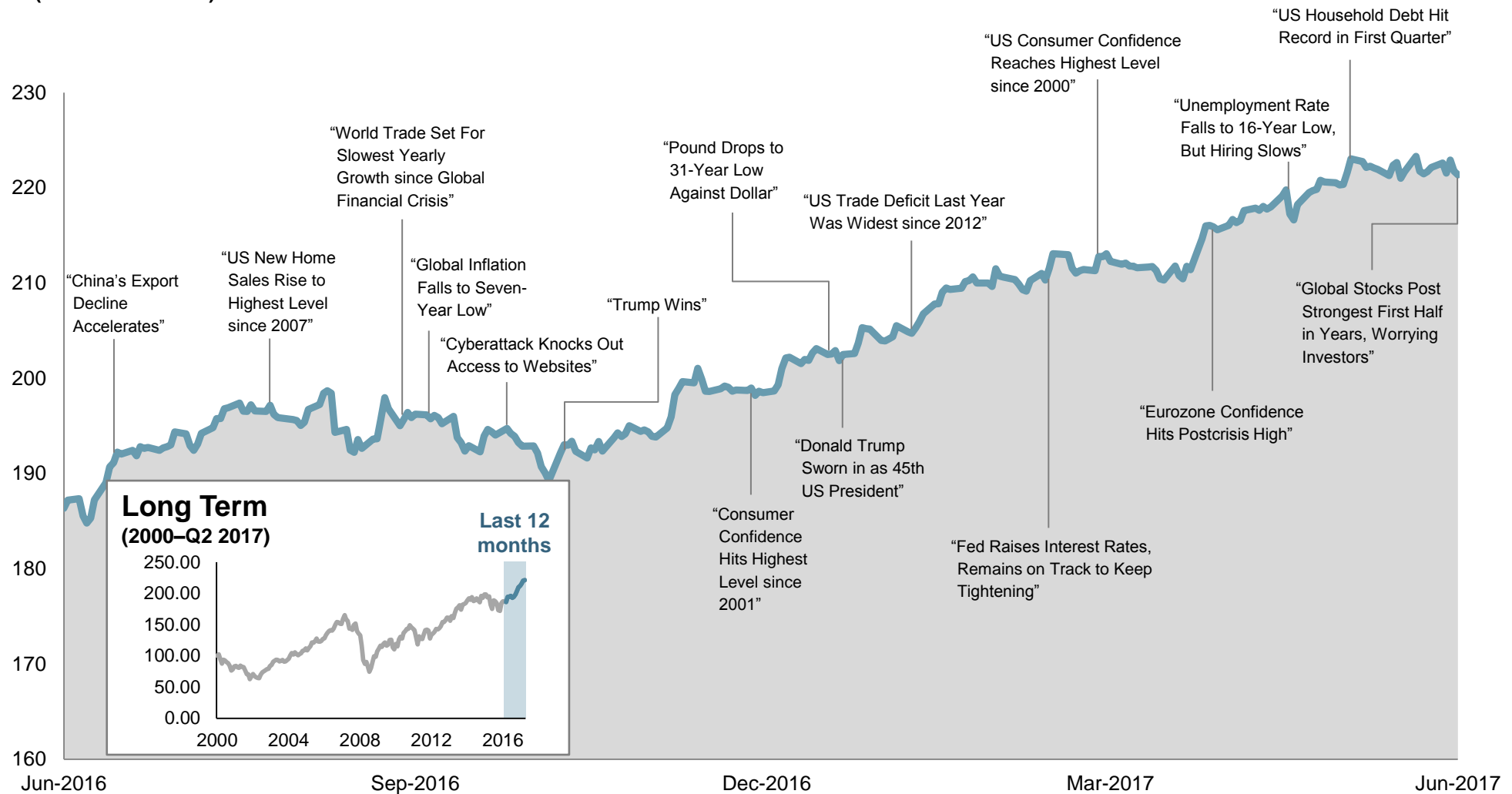
Graph Source: MSCI ACWI Index [net div.]. MSCI data © MSCI 2017, all rights reserved.

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 (Q3 2016–Q2 2017)



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 [net div.]. MSCI data © MSCI 2017, all rights reserved.

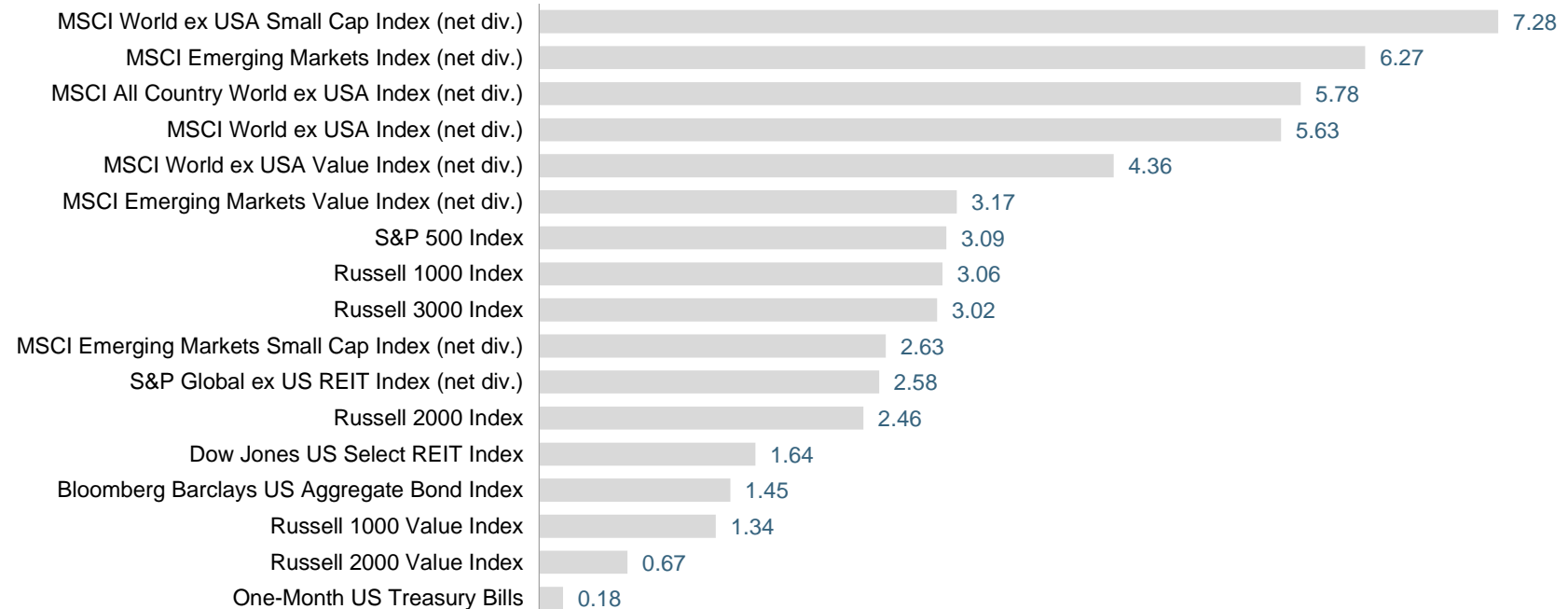
It is not possible to invest directly in an index. Performance does not reflect the expenses associated with management of an actual portfolio. **Past performance is not a guarantee of future results.**

# World Asset Classes

## Second Quarter 2017 Index Returns (%)

Looking at broad market indices, non-US developed markets and emerging markets recorded similar returns, outperforming the US during the quarter.

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



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# US Stocks

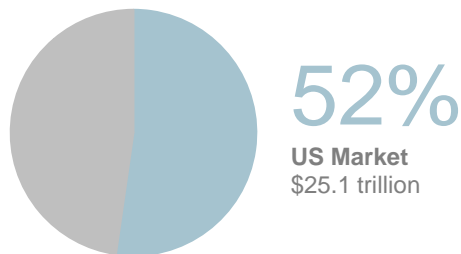
## Second Quarter 2017 Index Returns

The broad US equity market posted positive returns for the quarter but underperformed both non-US developed and emerging markets.

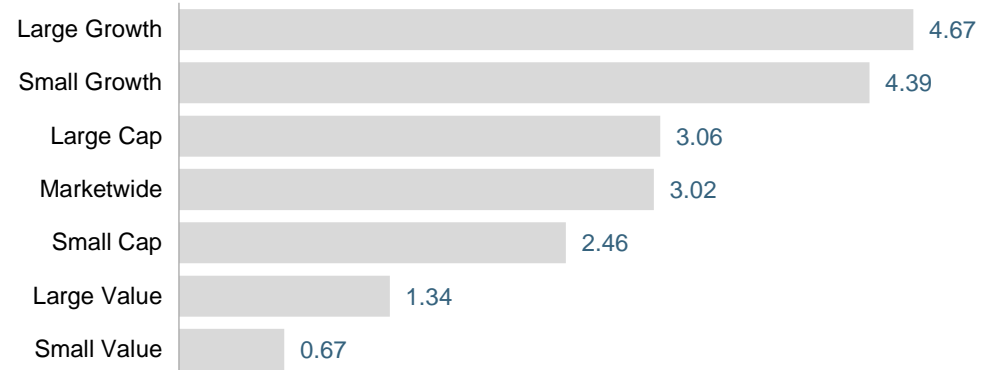
Value underperformed growth indices in the US across all size ranges.

Small caps in the US underperformed large caps.

### World Market Capitalization—US



### Ranked Returns for the Quarter (%)



### Period Returns (%)

| Asset Class  | YTD   | 1 Year | * Annualized |          |           |
|--------------|-------|--------|--------------|----------|-----------|
|              |       |        | 3 Years*     | 5 Years* | 10 Years* |
| Marketwide   | 8.93  | 18.51  | 9.10         | 14.58    | 7.26      |
| Large Cap    | 9.27  | 18.03  | 9.26         | 14.67    | 7.29      |
| Large Value  | 4.66  | 15.53  | 7.36         | 13.94    | 5.57      |
| Large Growth | 13.99 | 20.42  | 11.11        | 15.30    | 8.91      |
| Small Cap    | 4.99  | 24.60  | 7.36         | 13.70    | 6.92      |
| Small Value  | 0.54  | 24.86  | 7.02         | 13.39    | 5.92      |
| Small Growth | 9.97  | 24.40  | 7.64         | 13.98    | 7.82      |

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 (Russell 1000 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. Frank Russell Company is the source and owner of the trademarks, service marks, and copyrights related to the Russell Indexes. MSCI data © MSCI 2017, all rights reserved.

# International Developed Stocks

## Second Quarter 2017 Index Returns

In US dollar terms, developed markets outperformed the US equity market and had similar performance to emerging markets indices during the quarter.

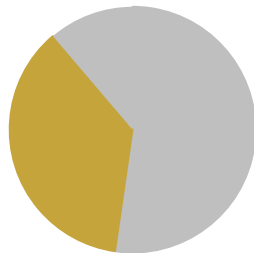
Looking at broad market indices, the value effect was negative across all size ranges in non-US developed markets.

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

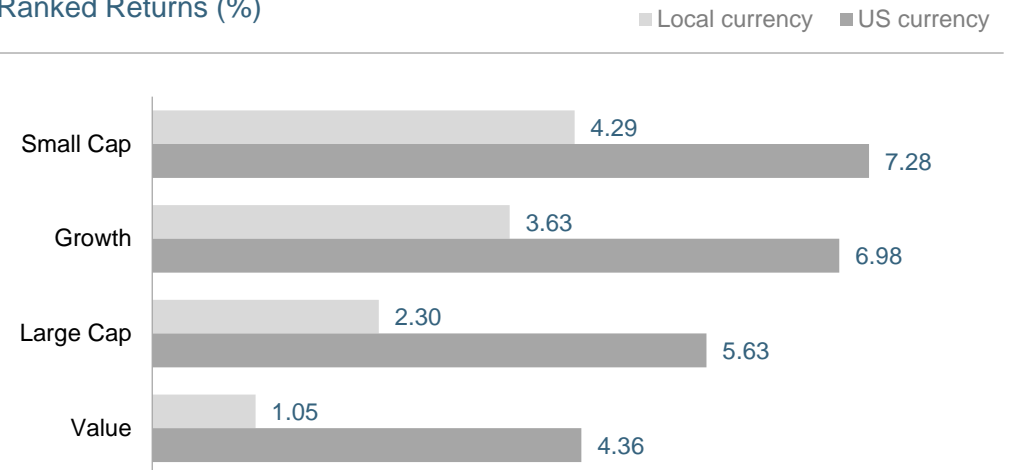
### World Market Capitalization—International Developed

**36%**

International  
Developed  
Market  
\$17.5 trillion



### Ranked Returns (%)



### Period Returns (%)

| Asset Class | YTD   | 1 Year | 3 Years* | 5 Years* | 10 Years* |
|-------------|-------|--------|----------|----------|-----------|
| Large Cap   | 12.82 | 19.49  | 0.67     | 8.15     | 1.00      |
| Small Cap   | 15.45 | 21.26  | 4.02     | 11.43    | 2.92      |
| Value       | 10.27 | 24.24  | -0.94    | 7.69     | 0.09      |
| Growth      | 15.57 | 14.90  | 2.22     | 8.54     | 1.84      |

\* Annualized

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Market segment (index representation) as follows: Large Cap (MSCI World ex USA Index), Small Cap (MSCI World ex USA Small Cap Index), Value (MSCI World ex USA Value Index), and Growth (MSCI World ex USA Growth). 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 World ex USA IMI Index is used as the proxy for the International Developed market. MSCI data © MSCI 2017, all rights reserved. Frank Russell Company is the source and owner of the trademarks, service marks, and copyrights related to the Russell Indexes.



# Emerging Markets Stocks

## Second Quarter 2017 Index Returns

In US dollar terms, emerging markets indices outperformed the US and recorded similar performance to developed markets outside the US.

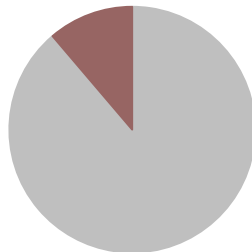
Looking at broad market indices, the value effect was negative across all size ranges in emerging markets.

Small caps underperformed large caps in emerging markets.

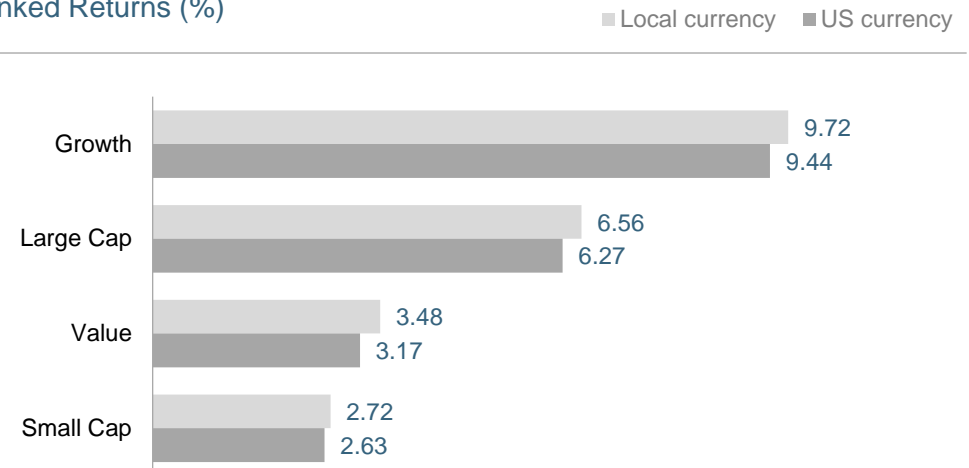
### World Market Capitalization—Emerging Markets

**11%**

Emerging Markets  
\$5.4 trillion



### Ranked Returns (%)



### Period Returns (%)

\* Annualized

| Asset Class | YTD   | 1 Year | 3 Years* | 5 Years* | 10 Years* |
|-------------|-------|--------|----------|----------|-----------|
| Large Cap   | 18.43 | 23.75  | 1.07     | 3.96     | 1.91      |
| Small Cap   | 15.99 | 17.03  | 0.81     | 5.15     | 2.17      |
| Value       | 13.65 | 21.57  | -1.33    | 1.67     | 1.53      |
| Growth      | 23.45 | 25.99  | 3.42     | 6.18     | 2.22      |

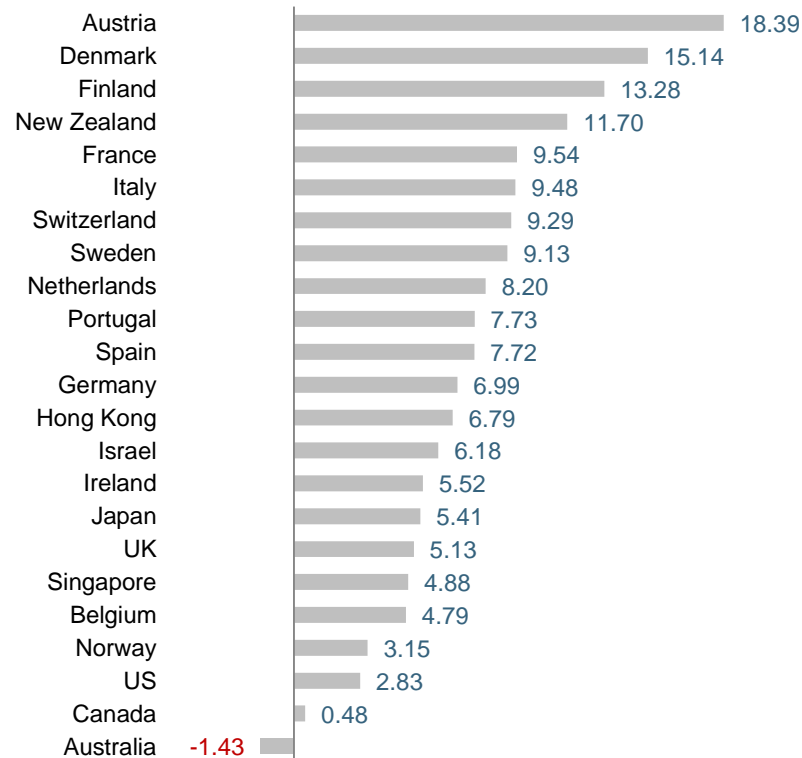
Past performance is not a guarantee of future results. Indices are not available for direct investment. Index performance does not reflect the expenses associated with the management of an actual portfolio. Market segment (index representation) as follows: Large Cap (MSCI Emerging Markets Index), Small 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 2017, all rights reserved. Frank Russell Company is the source and owner of the trademarks, service marks, and copyrights related to the Russell Indexes.

# Select Country Performance

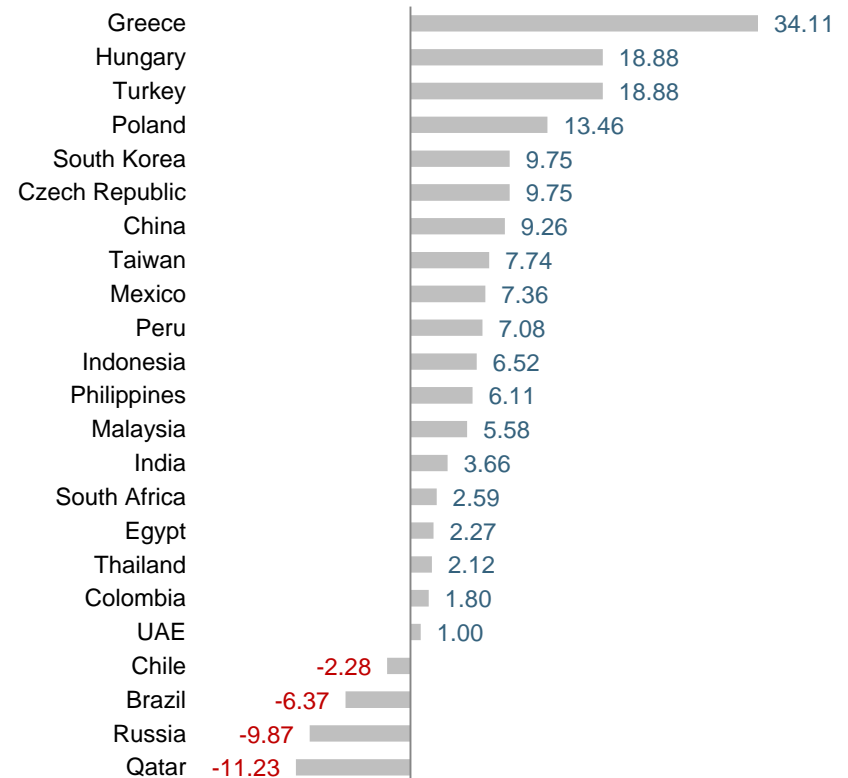
## Second Quarter 2017 Index Returns

In US dollar terms, Austria and Denmark recorded the highest country performance in developed markets, while Australia and Canada posted the lowest returns for the quarter. In emerging markets, Greece, Hungary, and Turkey posted the highest country returns, while Qatar and Russia had the lowest performance.

Ranked Developed Markets Returns (%)



Ranked Emerging Markets Returns (%)



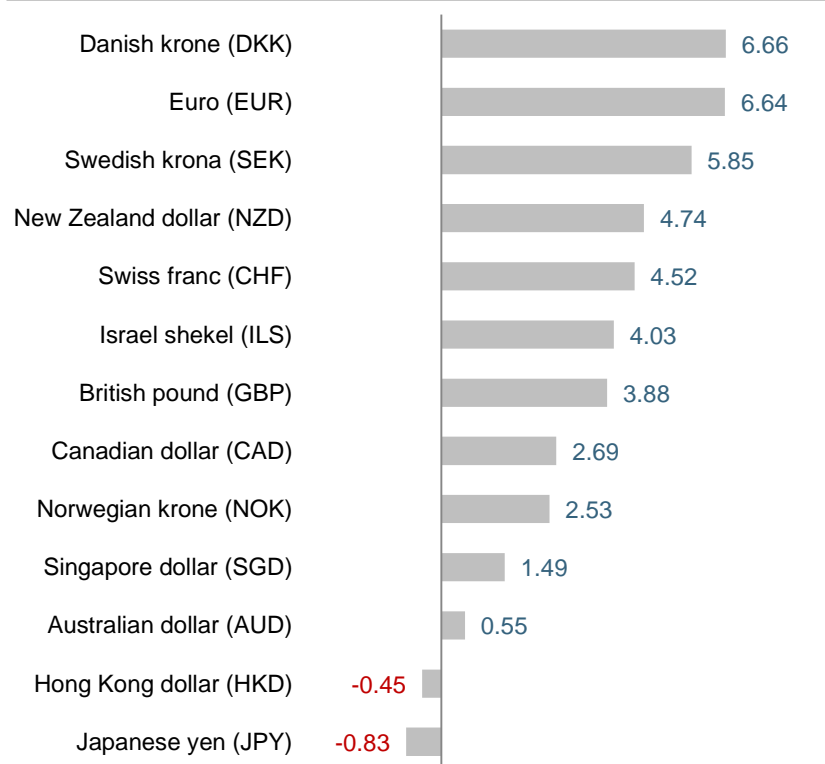
Past performance is not a guarantee of future results. Indices are not available for direct investment. Index performance does not reflect the expenses associated with the management of an actual portfolio. Country performance based on respective indices in the MSCI World ex US IMI Index (for developed markets), MSCI USA IMI Index (for US), and MSCI Emerging Markets IMI Index. All returns in USD and net of withholding tax on dividends. MSCI data © MSCI 2017, all rights reserved. UAE and Qatar have been reclassified as emerging markets by MSCI, effective May 2014.

# Select Currency Performance vs. US Dollar

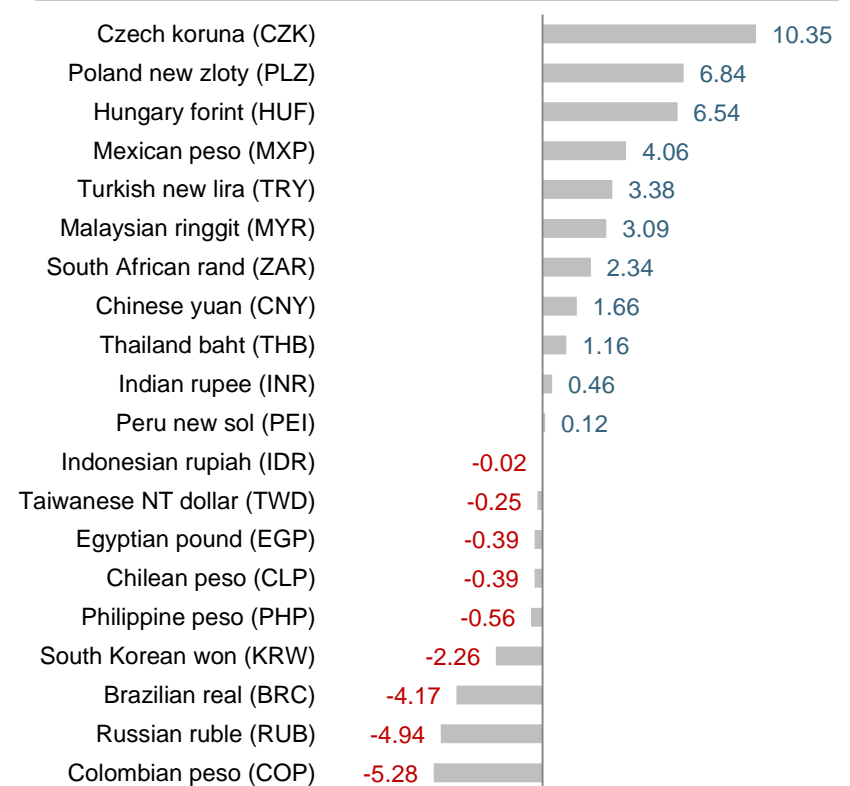
Second Quarter 2017

Most non-US developed currencies appreciated against the US dollar during the quarter, with the Danish krone and the euro experiencing the biggest gains. Emerging markets currencies were mixed vs. the US dollar. The Czech koruna appreciated by more than 10%, while the Russian ruble, Brazilian real, and Columbian peso depreciated by more than 4%.

## Ranked Developed Markets (%)



## Ranked Emerging Markets (%)

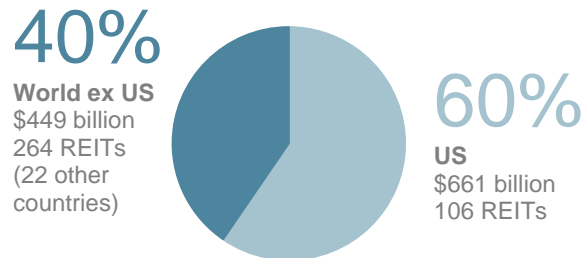


# Real Estate Investment Trusts (REITs)

## Second Quarter 2017 Index Returns

Non-US real estate investment trusts outperformed US REITs.

### Total Value of REIT Stocks



### Ranked Returns (%)



### Period Returns (%)

| Asset Class          | YTD  | 1 Year | * Annualized |          |           |
|----------------------|------|--------|--------------|----------|-----------|
|                      |      |        | 3 Years*     | 5 Years* | 10 Years* |
| US REITs             | 1.36 | -2.43  | 8.04         | 9.00     | 5.42      |
| Global REITs (ex US) | 6.30 | -0.37  | 1.13         | 6.86     | 0.20      |

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 © 2017.

# Commodities

## Second Quarter 2017 Index Returns

The Bloomberg Commodity Index Total Return declined 3.00% during the second quarter.

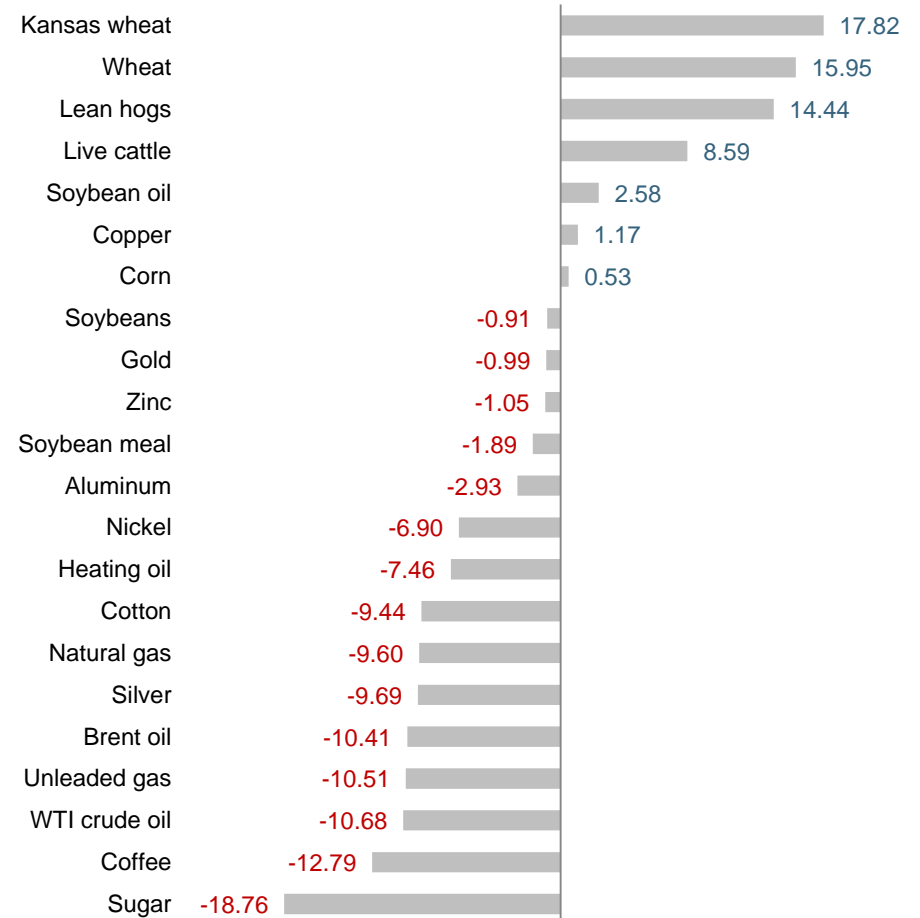
The livestock and grains complexes led quarterly performance, with lean hogs returning 14.44%, live cattle 8.59%, wheat (Chicago) 15.95%, and wheat (Kansas) 17.82%.

Softs was the worst-performing complex, with sugar and coffee declining 18.76% and 12.79%, respectively. Cotton also experienced a decline, decreasing 9.44%.

| Asset Class | Period Returns (%) |        |          |          |           |
|-------------|--------------------|--------|----------|----------|-----------|
|             | YTD                | 1 Year | 3 Years* | 5 Years* | 10 Years* |
| Commodities | -5.26              | -6.50  | -14.81   | -9.25    | -6.49     |

\* Annualized

### Ranked Returns for Individual Commodities (%)



# Fixed Income

## Second Quarter 2017 Index Returns

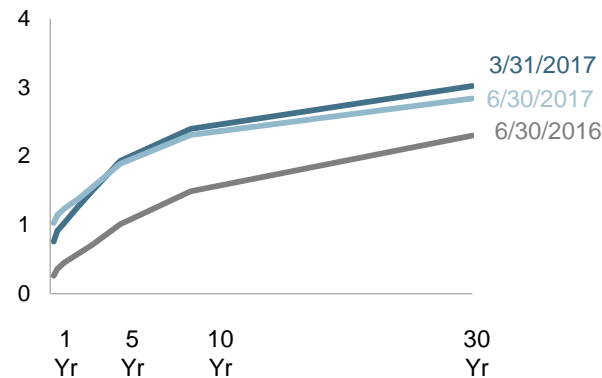
Interest rates were mixed across the US fixed income market during the second quarter. The yield on the 5-year Treasury note decreased 4 basis points (bps) to 1.89%. The yield on the 10-year Treasury note decreased 9 bps to 2.31%. The 30-year Treasury bond yield decreased 18 bps to finish at 2.84%.

The yield on the 1-year Treasury bill rose 21 bps to 1.24%, and the 2-year Treasury note yield rose 11 bps to 1.38%. The yield on the 3-month Treasury bill climbed 27 bps to 1.03%, while the 6-month Treasury bill yield increased 23 bps to 1.14%.

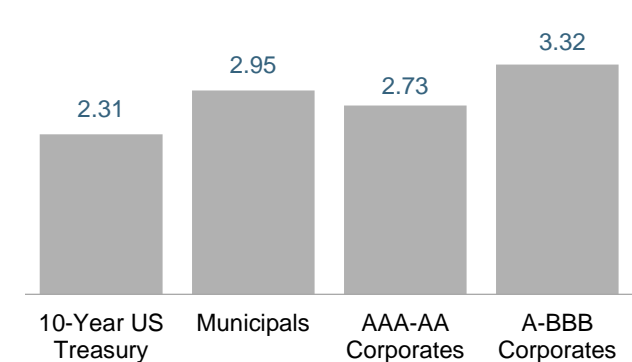
In terms of total returns, short-term corporate bonds gained 0.59% and intermediate corporates gained 1.49%.

Short-term municipal bonds gained 0.56%, while intermediate-term municipal bonds returned 1.97%. Revenue bonds gained 2.19%, outperforming general obligation bonds by 39 bps.

US Treasury Yield Curve (%)



Bond Yields across Issuers (%)



Period Returns (%)

\* Annualized

| Asset Class  | YTD  | 1 Year | 3 Years* | 5 Years* | 10 Years* |
|--|------|--------|----------|----------|-----------|
| Bloomberg Barclays Long US Government Bond Index           | 5.44 | -6.96  | 5.54     | 2.82     | 7.27      |
| Bloomberg Barclays Municipal Bond Index                    | 3.57 | -0.49  | 3.33     | 3.26     | 4.60      |
| Bloomberg Barclays US Aggregate Bond Index                 | 2.27 | -0.31  | 2.48     | 2.21     | 4.48      |
| Bloomberg Barclays US Corporate High Yield Index           | 4.93 | 12.70  | 4.48     | 6.89     | 7.67      |
| Bloomberg Barclays US TIPS Index                           | 0.85 | -0.63  | 0.63     | 0.27     | 4.27      |
| BofA Merrill Lynch 1-Year US Treasury Note Index           | 0.30 | 0.40   | 0.41     | 0.37     | 1.21      |
| BofA Merrill Lynch Three-Month US Treasury Bill Index      | 0.31 | 0.49   | 0.23     | 0.17     | 0.58      |
| Citi World Government Bond Index 1-5 Years (hedged to USD) | 0.65 | 0.28   | 1.30     | 1.37     | 2.52      |

One basis point equals 0.01%. 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. Yield curve data from Federal Reserve. State and local bonds are from the S&P National AMT-Free Municipal Bond Index. 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. Bloomberg Barclays data provided by Bloomberg. US long-term bonds, bills, inflation, and fixed income factor data © Stocks, Bonds, Bills, and Inflation (S&BBI) Yearbook™, Ibbotson Associates, Chicago (annually updated work by Roger G. Ibbotson and Rex A. Sinquefeld). Citi fixed income indices copyright 2017 by Citigroup. The BofA Merrill Lynch Indices are used with permission; © 2017 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. The S&P data are provided by Standard & Poor's Index Services Group.

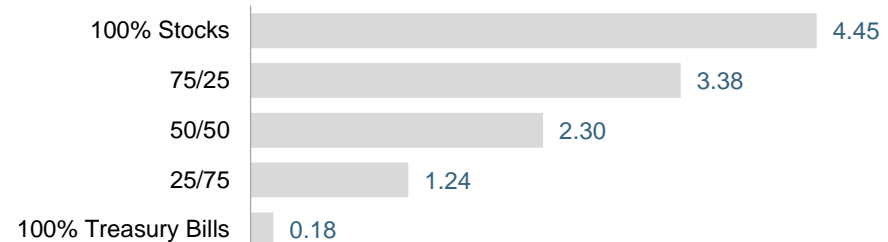
# Impact of Diversification

## Second Quarter 2017 Index Returns

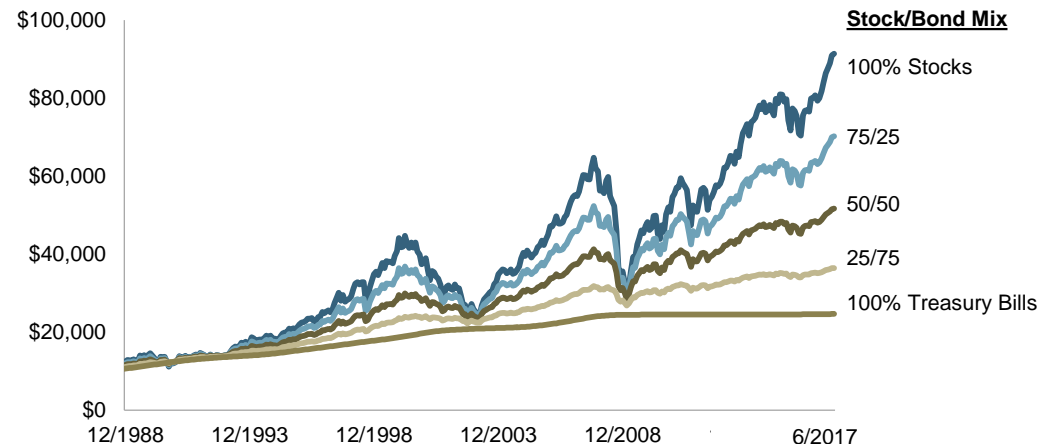
These portfolios illustrate the performance of different global stock/bond mixes. Mixes with larger allocations to stocks are considered riskier but have higher expected returns over time.

| Asset Class         | Period Returns (%) |        |          |          |           | * Annualized               |
|---------------------|--------------------|--------|----------|----------|-----------|----------------------------|
|                     | YTD                | 1 Year | 3 Years* | 5 Years* | 10 Years* | 10-Year STDEV <sup>1</sup> |
| 100% Stocks         | 11.82              | 19.42  | 5.39     | 11.14    | 4.27      | 16.96                      |
| 75/25               | 8.84               | 14.41  | 4.17     | 8.38     | 3.60      | 12.71                      |
| 50/50               | 5.93               | 9.57   | 2.89     | 5.62     | 2.73      | 8.46                       |
| 25/75               | 3.08               | 4.90   | 1.56     | 2.87     | 1.68      | 4.22                       |
| 100% Treasury Bills | 0.29               | 0.40   | 0.17     | 0.12     | 0.45      | 0.29                       |

### Ranked Returns (%)



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



1. STDEV (standard deviation) is a measure of the variation or dispersion of a set of data points. Standard deviations are often used to quantify the historical return volatility of a security or portfolio. 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 2017, 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).

# When Rates Go Up, Do Stocks Go Down?

Second Quarter 2017

## Should stock investors worry about changes in interest rates?

Research shows that, like stock prices, changes in interest rates and bond prices are largely unpredictable.<sup>1</sup> It follows that an investment strategy based upon attempting to exploit these sorts of changes isn't likely to be a fruitful endeavor. Despite the unpredictable nature of interest rate changes, investors may still be curious about what might happen to stocks if interest rates go up.

Unlike bond prices, which tend to go down when yields go up, stock prices might rise or fall with changes in interest rates. For stocks, it can go either way because a stock's price depends on both future cash flows to investors and the discount rate they apply to those expected cash flows. When interest rates rise, the discount rate may increase, which in turn could cause the price of the stock to fall. However, it is also possible that when interest rates change, expectations about future cash flows expected from holding a stock also change. So, if theory doesn't tell us what the overall effect should be, the next question is what does the data say?

### Recent Research

Recent research performed by Dimensional Fund Advisors helps provide insight into this question.<sup>2</sup> The research examines the correlation between monthly US stock returns and changes in interest rates.<sup>3</sup>

**Exhibit 1** shows that while there is a lot of noise in stock returns and no clear pattern, not much of that variation appears to be related to changes in the effective federal funds rate.<sup>4</sup>

Exhibit 1. Monthly US Stock Returns against Monthly Changes in Effective Federal Funds Rate, August 1954–December 2016



Monthly US stock returns are defined as the monthly return of the Fama/French Total US Market Index and are compared to contemporaneous monthly changes in the effective federal funds rate. Bond yield changes are obtained from the Federal Reserve Bank of St. Louis.

1. See, for example, Fama 1976, Fama 1984, Fama and Bliss 1987, Campbell and Shiller 1991, and Duffee 2002.

2. Wei Dai, "Interest Rates and Equity Returns" (Dimensional Fund Advisors, April 2017).

3. US stock market defined as Fama/French Total US Market Index.

4. The federal funds rate is the interest rate at which depository institutions lend funds maintained at the Federal Reserve to another depository institution overnight.



# When Rates Go Up, Do Stocks Go Down?

(continued from page 16)

For example, in months when the federal funds rate rose, stock returns were as low as -15.56% and as high as 14.27%. In months when rates fell, returns ranged from -22.41% to 16.52%. Given that there are many other interest rates besides just the federal funds rate, Dai also examined longer-term interest rates and found similar results.

So to address our initial question: when rates go up, do stock prices go down? The answer is yes, but only about 40% of the time. In the remaining 60% of months, stock returns were positive. This split between positive and negative returns was about the same when examining all months, not just those in which rates went up. In other words, there is not a clear link between stock returns and interest rate changes.

## CONCLUSION

There's no evidence that investors can reliably predict changes in interest rates. Even with perfect knowledge of what will happen with future interest rate changes, this information provides little guidance about subsequent stock returns. Instead, staying invested and avoiding the temptation to make changes based on short-term predictions may increase the likelihood of consistently capturing what the stock market has to offer.

## GLOSSARY

**Discount Rate:** Also known as the "required rate of return," this is the expected return investors demand for holding a stock.

**Correlation:** A statistical measure that indicates the extent to which two variables are related or move together. Correlation is positive when two variables tend to move in the same direction and negative when they tend to move in opposite directions.

## INDEX DESCRIPTIONS

**Fama/French Total US Market Index:** Provided by Fama/French from CRSP securities data. Includes all US operating companies trading on the NYSE, AMEX, or Nasdaq NMS. Excludes ADRs, investment companies, tracking stocks, non-US incorporated companies, closed-end funds, certificates, shares of beneficial interests, and Berkshire Hathaway Inc. (Permco 540).

Source: Dimensional Fund Advisors LP.

Results shown during periods prior to each Index's index inception date do not represent actual returns of the respective index. Other periods selected may have different results, including losses. Backtested index performance is hypothetical and is provided for informational purposes only to indicate historical performance had the index been calculated over the relevant time periods. Backtested performance results assume the reinvestment of dividends and capital gains.

Eugene Fama and Ken French are members of the Board of Directors for and provide consulting services to Dimensional Fund Advisors LP.

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# Disclosures



There is no guarantee that a diversified portfolio will enhance overall returns or outperform a non-diversified portfolio. Diversification does not protect against market risk.

Bonds are subject to market and interest rate risk if sold prior to maturity. Bond values will decline as interest rates rise and bonds are subject to availability and change in price. Bond yields are subject to change. Certain call or special redemption features may exist which could impact yield.

The price of equity securities may rise, or fall because of changes in the broad market or changes in a company's financial condition, sometimes rapidly or unpredictably. These price movements may result from factors affecting individual companies, sectors or industries, or the securities market as a whole, such as changes in economic or political conditions. Equity securities are subject to "stock market risk" meaning that stock prices in general may decline over short or extended periods of time.

Investments in emerging markets can be more volatile. As mentioned above, the normal risks of investing in foreign countries are heightened when investing in emerging markets. In addition, the small size of securities markets and the low trading volume may lead to a lack of liquidity, which leads to increased volatility. Also, emerging markets may not provide adequate legal protection for private or foreign investment or private property.

Investments in commodities may have greater volatility than investments in traditional securities, particularly if the instruments involve leverage. The value of commodity-linked derivative instruments may be affected by changes in overall market movements, commodity index volatility, changes in interest rates, or factors affecting a particular industry or commodity, such as drought, floods, weather, livestock disease, embargoes, tariffs and international economic, political and regulatory developments. Use of leveraged commodity-linked derivatives creates an opportunity for increased return but, at the same time, creates the possibility for greater loss.

**Real estate** investments may be subject to a higher degree of market risk because of concentration in a specific industry, sector or geographical sector. Real estate investments may be subject to risks including, but not limited to, declines in the value of real estate, risks related to general and economic conditions, changes in the value of the underlying property owned by the trust and defaults by borrower. Investing in Real Estate Investment Trusts (REITs) involves special risks such as potential illiquidity and may not be suitable for all investors. There is no assurance that the investment objectives of this program will be attained.

**International** investing involves a greater degree of risk and increased volatility. Changes in currency exchange rates and differences in accounting and taxation policies outside the U.S. can raise or lower returns. Also, some overseas markets may not be as politically and economically stable as the United States and other nations.

## Disclosures (cont'd.)



**Treasury inflation-protected securities (TIPS)** help eliminate inflation risk to your portfolio as the principal is adjusted semiannually for inflation based on the Consumer Price Index – while providing a real rate of return guaranteed by the U.S. Government. Treasury Inflation-Protected Securities, or TIPS, are subject to market risk and significant interest rate risk as their longer duration makes them more sensitive to price declines associated with higher interest rates.

**All indexes are unmanaged and an individual cannot invest directly in an index. Unmanaged index returns do not reflect fees, expenses, or sales charges. Index performance is not indicative of the performance of any investment. Past performance is no guarantee of future results.**

The **Russell 3000 Index**® measures the performance of the 3,000 largest U.S. companies based on total market capitalization.

The **Russell 1000 Index** consists of the 1,000 largest securities in the Russell 3000 Index, which represents approximately 90% of the total market capitalization of the Russell 3000 Index. It is a large-cap, market-oriented index and is highly correlated with the S&P 500 Index.

The **Russell 2000 Index** ® measures the performance of the 2,000 smallest companies in the Russell 3000 Index.

The **Russell 2000 Value Index** ® measures the performance of those Russell 2000 companies with lower price-to-book ratios and lower forecasted growth values.

The **MSCI World ex USA Index** captures large and mid cap representation across 22 of 23 Developed Markets (DM) countries\*--excluding the United States. With 1,005 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.

The **MSCI World ex USA Small Cap Index** captures small cap representation across 22 of 23 Developed Markets (DM) countries\* (excluding the United States). With 2,437 constituents, the index covers approximately 14% of the free float-adjusted market capitalization in each country.

The **MSCI Emerging Markets Small Cap Index** includes small cap representation across 23 Emerging Markets countries\*. With 1,792 constituents, the index covers approximately 14% of the free float-adjusted market capitalization in each country. The small cap segment tends to capture more local economic and sector characteristics relative to larger Emerging Markets capitalization segments.

## Disclosures (cont'd.)



The **MSCI World ex USA Value Index** captures large and mid cap securities exhibiting overall value style characteristics across 22 of 23 Developed Markets countries\*. The value investment style characteristics for index construction are defined using three variables: book value to price, 12-month forward earnings to price and dividend yield. With 540 constituents, the index targets 50% coverage of the free float-adjusted market capitalization of the MSCI World ex USA Index.

The **MSCI Emerging Markets Value Index** captures large and mid cap securities exhibiting overall value style characteristics across 23 Emerging Markets (EM) countries\*. The value investment style characteristics for index construction are defined using three variables: book value to price, 12-month forward earnings to price and dividend yield. With 484 constituents, the index targets 50% coverage of the free float-adjusted market capitalization of the MSCI EM Index.

The **MSCI Emerging Markets Index<sup>SM</sup>** is a free float-adjusted market capitalization index that is designed to measure equity market performance in the global emerging markets. As of June 2007, the MSCI Emerging Markets Index consisted of the following 25 emerging market country indices: Argentina, Brazil, Chile, China, Colombia, Czech Republic, Egypt, Hungary, India, Indonesia, Israel, Jordan, Korea, Malaysia, Mexico, Morocco, Pakistan, Peru, Philippines, Poland, Russia, South Africa, Taiwan, Thailand, and Turkey.

The **MSCI ACWI (All Country World Index) Index** is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed and emerging markets. As of June 2009 the MSCI ACWI consisted of 45 country indices comprising 23 developed and 22 emerging market country indices.

The **S&P 500 Index** is widely regarded as the best single gauge of the U.S. equities market. This world renowned index includes a representative sample of 500 leading companies in leading industries of the U.S. economy. Although the S&P 500 Index focuses on the large-cap segment of the market, with approximately 75% coverage of U.S. equities, it is also an ideal proxy for the total market. An investor cannot invest directly in an index.

A member of the S&P Global Property Index Series, the **S&P Global REIT Index** serves as a comprehensive benchmark of publicly traded equity REITs listed in both developed and emerging markets.

The **S&P Global ex-U.S. Property Index** defines and measures the investable universe of publicly traded property companies domiciled in developed and emerging markets excluding the U.S. The companies included are engaged in real estate related activities such as property ownership, management, development, rental and investment.

# Disclosures (cont'd.)



The **Barclays US Aggregate Bond Index** is a broad-based flagship benchmark that measures the investment grade, US dollar-denominated, fixed-rate taxable bond market. The index includes Treasuries, government-related and corporate securities, MBS (agency fixed-rate and hybrid ARM pass-throughs), ABS and CMBS (agency and non-agency). Provided the necessary inclusion rules are met, US Aggregate eligible securities also contribute to the multi-currency Global Aggregate Index and the US Universal Index, which includes high yield and emerging markets debt. The US Aggregate Index was created in 1986 with history backfilled to January 1, 1976.

The **S&P/Citigroup International Treasury Bond Ex-U.S. 1-3 Years Index** is designed to reflect the performance of bonds issues by non-U.S. developed market countries maturing in 1-3 years.

The **Dow Jones U.S. Select REIT Index** intends to measure the performance of publicly traded REITs and REIT-like securities. The index is a subset of the Dow Jones U.S. Select Real Estate Securities Index (RESI), which represents equity real estate investment trusts (REITs) and real estate operating companies (REOCs) traded in the U.S. The indices are designed to serve as proxies for direct real estate investment, in part by excluding companies whose performance may be driven by factors other than the value of real estate.

The **Bloomberg Commodity Index** is composed of futures contracts on physical commodities and represents twenty two separate commodities traded on U.S. exchanges, with the exception of aluminum, nickel, and zinc

This **U.S. Treasury Index** is a component of the U.S. Government index.

The **BofA Merrill Lynch Three-Month US Treasury Bill Index** is an unmanaged market index of U.S. Treasury securities maturing in 90 days that assumes reinvestment of all income.

The **BofA Merrill Lynch 1-3 US Year Treasury Index** is an unmanaged index that tracks the performance of the direct sovereign debt of the U.S. Government having a maturity of at least one year and less than three years. It is not possible to invest directly in an unmanaged index

The **Citigroup WGBI 1-5 Years Index** measures the performance of the short-term global government bond market.

The **Barclays U.S. Government Index** is comprised of the U.S. Treasury and U.S. Agency Indices. The U.S. Government Index includes Treasuries (public obligations of the U.S. Treasury that have remaining maturities of more than one year) and U.S. agency debentures (publicly issued debt of U.S. Government agencies, quasi-federal corporations, and corporate or foreign debt guaranteed by the U.S. Government). The U.S. Government Index is a component of the U.S. Government/Credit Index and the U.S. Aggregate Index.

# Disclosures (cont'd.)



The **Barclays US Corporate High Yield Bond Index** measures the USD-denominated, high yield, fixed-rate corporate bond market. Securities are classified as high yield if the middle rating of Moody's, Fitch and S&P is Ba1/BB+/BB+ or below. Bonds from issuers with an emerging markets country of risk, based on Barclays EM country definition, are excluded. The US Corporate High Yield Index is a component of the US Universal and Global High Yield Indices. The index was created in 1986, with history backfilled to July 1, 1983.

The **Barclays U.S. Municipal Index** covers the USD-denominated long-term tax exempt bond market. The index has four main sectors: state and local general obligation bonds, revenue bonds, insured bonds, and prerefunded bonds. Many of the subindices of the Municipal Index have historical data to January 1980. In addition, several subindices based on maturity and revenue source have been created, some with inception dates after January 1980 but no later than July 1, 1993. In January 1996, Barclays Capital also began publishing a noninvestment grade municipal bond index and "enhanced" state-specific indices for Arizona, Connecticut, Maryland, Massachusetts, Minnesota, and Ohio. These indices are published separately from the Barclays Capital Municipal Bond Index. In 2005, Barclays Capital began publishing Managed Money Municipal Indices and Insurance Mandate Municipal Indices.

The **Barclays US Treasury Index** measures US dollar-denominated, fixed-rate, nominal debt issued by the US Treasury. Treasury bills are excluded by the maturity constraint, but are part of a separate Short Treasury Index. STRIPS are excluded from the index because their inclusion would result in double-counting. The US Treasury Index is a component of the US Aggregate, US Universal, Global Aggregate and Global Treasury Indices. The US Treasury Index was launched on January 1, 1973.

The **Consumer Price Index** is a measure that examines the weighted average of prices of a basket of consumer goods and services, such as transportation, food and medical care. The CPI is calculated by taking price changes for each item in the predetermined basket of goods and averaging them; the goods are weighted according to their importance. Changes in CPI are used to assess price changes associated with the cost of living.

The **S&P 500 Total Return Index** is a type of equity index that tracks both the capital gains of a group of stocks over time, and assumes that any cash distributions, such as dividends, are reinvested back into the index. It is designed to measure performance of the broad domestic economy through changes in the aggregate market value of 500 stocks representing all major industries.