

# QUARTERLY MARKETS REVIEW

Q4

2018

# Quarterly Market Review

Fourth Quarter 2018

After a volatile quarter – and another year where domestic markets relatively outperformed overseas markets – it's helpful to revisit the reasons and long-term benefits of a globally diversified portfolio, which we do in this quarter's lead article.

We then feature world capital market performance and a timeline of events for the past quarter.

We start with a global overview, followed by returns of stock and bond asset classes in the US and international markets.

Finally, to tie things together, we end with an illustration of the impact of globally diversified portfolios.

## Overview:

Quarterly Topic: Why Should You Diversify?

Market Summary

World Stock Market Performance

World Asset Classes

US Stocks

International Developed Stocks

Emerging Markets Stocks

Real Estate Investment Trusts (REITs)

Fixed Income

Global Fixed Income

Impact of Diversification

# Why Should You Diversify?

Fourth Quarter 2018

As 2019 approaches, and with US stocks outperforming non-US stocks in recent years, some investors have again turned their attention towards the role that global diversification plays in their portfolios.

For the five-year period ending October 31, 2018, the S&P 500 Index had an annualized return of 11.34% while the MSCI World ex USA Index returned 1.86%, and the MSCI Emerging Markets Index returned 0.78%. As US stocks have outperformed international and emerging markets stocks over the last several years, some investors might be reconsidering the benefits of investing outside the US.

While there are many reasons why a US-based investor may prefer a degree of home bias in their equity allocation, using return differences over a relatively short period as the sole input into this decision may result in missing opportunities that the global markets offer. While international and emerging markets stocks have delivered disappointing returns relative to the US over the last few years, it is important to remember that:

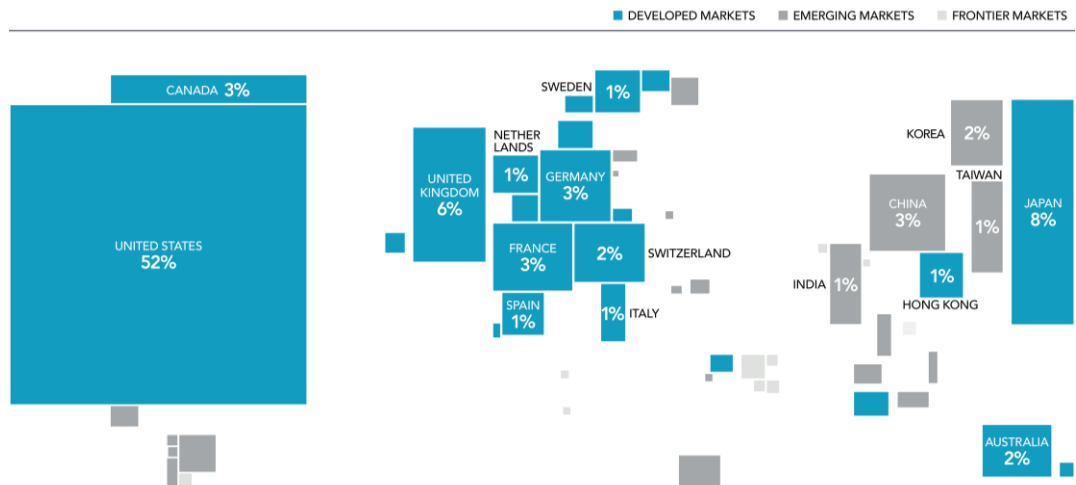
- Non-US stocks help provide valuable diversification benefits.
- Recent performance is not a reliable indicator of future returns.

## THERE'S A WORLD OF OPPORTUNITY IN EQUITIES

The global equity market is large and represents a world of investment opportunities. As shown in **Exhibit 1**, nearly half of the investment opportunities in global equity markets lie outside

the US. Non-US stocks, including developed and emerging markets, account for 48% of world market capitalization<sup>1</sup> and represent thousands of companies in countries all over the world. A portfolio investing solely within the US would not be exposed to the performance of those markets.

Exhibit 1. World Equity Market Capitalization



As of December 31, 2017. Data provided by Bloomberg. Market cap data is free-float adjusted and meets minimum liquidity and listing requirements. China market capitalization excludes A-shares, which are generally only available to mainland China investors. For educational purposes; should not be used as investment advice.

1. The total market value of a company's outstanding shares, computed as price times shares outstanding.

# Why Should You Diversify?

(continued from page 3)

## THE LOST DECADE

We can examine the potential opportunity cost associated with failing to diversify globally by reflecting on the period in global markets from 2000–2009. During this period, often called the “lost decade” by US investors, the S&P 500 Index recorded its worst ever 10-year performance with a total cumulative return of –9.1%. However, looking beyond US large cap equities, conditions were more favorable for global equity investors as most equity asset classes outside the US generated positive returns over the course of the decade. **(See Exhibit 2.)** Expanding beyond this period and looking at performance for each of the 11 decades starting in 1900 and ending in 2010, the US market outperformed the world market in five decades and underperformed in the other six.<sup>2</sup> This further reinforces why an investor pursuing the equity premium should consider a global allocation. By holding a globally diversified portfolio, investors are positioned to capture returns wherever they occur.

Exhibit 2. Global Index Returns, January 2000–December 2009

	Total Cumulative Return (%)
S&P 500 Index	–9.10
MSCI World ex USA Index (net div.)	17.47
MSCI World ex USA Value Index (net div.)	48.71
MSCI World ex USA Small Cap Index (net div.)	94.33
MSCI Emerging Markets Index (net div.)	154.28
MSCI Emerging Markets Value Index (net div.)	212.72

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## A DIVERSIFIED APPROACH

Over long periods of time, investors may benefit from consistent exposure in their portfolios to both US and non-US equities. While both asset classes offer the potential to earn positive expected returns in the long run, they may perform quite differently over short periods. While the performance of different countries and asset classes will vary over time, there is no reliable evidence that this performance can be predicted in advance. An approach to equity investing that uses the global opportunity set available to investors can provide diversification benefits as well as potentially higher expected returns.

## PICK AN ASSET CLASS?

The importance of diversification extends beyond the US/International stock breakdown and into asset classes in general. In a perfect world, we’d know ahead of time which asset classes would be the best and worst performing ones, and we’d put all our money in the former and avoid the latter like the plague. In practice, that turns out to be virtually impossible.

Ben Carlson updates asset class returns on an annual basis on his blog *A Wealth of Common Sense*, and we’ve included his most recent update as Exhibit 3 (next page). Each colored block of the quilt represents a separate asset class, and each asset class is listed in descending order from best performer to worst performer in each year.

The randomness of the chart illustrates the challenge of picking asset class winners and losers, as well as how single year performance can give misleading impressions of longer term annualized results. But more importantly, the EW box (equal-weighted portfolio) shows how a diversified portfolio allows an investor to tread water right in the middle: returns may never be the highest, but they certainly won’t ever be the lowest.

2. Source: Annual country index return data from the Dimson-Marsh-Staunton (DMS) Global Returns Data, provided by Morningstar, Inc.

# Why Should You Diversify?

(continued from page 4)

Exhibit 3. Asset Class Returns 2009-2018

2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	10 Years
EM 68.9%	REITs 28.4%	TIPS 13.3%	EM 19.1%	Small Cap 41.0%	REITs 30.4%	REITs 2.4%	Small Cap 26.6%	EM 37.3%	Cash 1.7%	Small Cap 15.0%
Small Cap 41.6%	Small Cap 27.2%	REITs 8.6%	Int'l Stocks 18.8%	Mid Cap 35.2%	Large Cap 13.5%	Large Cap 1.3%	Mid Cap 20.5%	Int'l Stocks 25.1%	Bonds 0.1%	Mid Cap 13.4%
Mid Cap 37.6%	Mid Cap 26.3%	Bonds 7.7%	REITs 17.6%	Large Cap 32.3%	Mid Cap 9.4%	Bonds 0.5%	Comdty 12.9%	Large Cap 21.7%	TIPS -1.4%	Large Cap 13.0%
REITs 30.1%	EM 16.5%	Large Cap 1.9%	Large Cap 16.0%	Int'l Stocks 21.4%	Bonds 6.0%	Cash -0.1%	Large Cap 12.0%	Mid Cap 15.9%	Large Cap -4.6%	REITs 12.1%
Int'l Stocks 27.0%	Comdty 16.2%	Small Cap 1.1%	Small Cap 15.7%	EW 10.7%	Small Cap 5.5%	Int'l Stocks -1.0%	EM 10.9%	Small Cap 13.1%	REITs -6.0%	EW 7.2%
EW 26.4%	Large Cap 15.1%	Cash 0.0%	Mid Cap 15.2%	REITs 2.3%	EW 4.0%	TIPS -1.8%	EW 10.0%	EW 12.6%	EW -7.2%	EM 6.6%
Large Cap 26.4%	EW 15.0%	EW -1.4%	EW 11.0%	Cash -0.1%	TIPS 3.6%	Small Cap -1.8%	REITs 8.6%	REITs 4.9%	Small Cap -8.6%	Int'l Stocks 5.8%
Comdty 20.1%	Int'l Stocks 8.2%	Mid Cap -1.5%	TIPS 6.4%	Bonds -2.0%	Cash -0.1%	Mid Cap -2.5%	TIPS 4.7%	Bonds 3.6%	Mid Cap -11.3%	TIPS 3.3%
TIPS 8.9%	Bonds 6.4%	Int'l Stocks -12.3%	Bonds 3.8%	EM -3.7%	EM -3.9%	EW -4.7%	Bonds 2.4%	TIPS 2.9%	Comdty -13.1%	Bonds 3.1%
Bonds 3.3%	TIPS 6.1%	Comdty -14.0%	Cash 0.0%	TIPS -8.5%	Int'l Stocks -6.2%	EM -16.2%	Int'l Stocks 1.4%	Comdty 0.7%	Int'l Stocks -13.8%	Cash 0.2%
Cash 0.3%	Cash 0.0%	EM -18.8%	Comdty -2.1%	Comdty -11.1%	Comdty -18.6%	Comdty -28.2%	Cash 0.1%	Cash 0.7%	EM -15.3%	Comdty -4.9%







Funds: EEM, VNQ, MDY, SLY, SPY, EFA, TIP, AGG, DJP, BIL

Source: **Updating My Favorite Performance Chart for 2018**, *A Wealth of Common Sense*, <https://awealthofcommonsense.com/2019/01/updated-my-favorite-performance-chart-for-2018/>

EW = Equal-weighted portfolio made up of 10% of each represented asset class. Performance does not reflect the expenses associated with the management of an actual portfolio. Past performance is not a guarantee of future results. Diversification does not eliminate the risk of market loss. There is no guarantee investment strategies will be successful. Investing involves risks, including possible loss of principal. Investors should talk to their financial advisor prior to making any investment decision. All expressions of opinion are subject to change. This article is distributed for informational purposes, and it is not to be construed as an offer, solicitation, recommendation, or endorsement of any particular security, products, or services. Investors should talk to their financial advisor prior to making any investment decision

# Quarterly 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>Q4 2018</b>	<b>STOCKS</b>					<b>BONDS</b>	
	<b>-14.30%</b>	<b>-12.78%</b>	<b>-7.47%</b>	<b>-5.79%</b>		<b>1.64%</b>	<b>1.89%</b>
							
<b>Since Jan. 2001</b>							
Avg. Quarterly Return	1.8%	1.3%	2.8%	2.4%		1.1%	1.1%
Best Quarter	16.8%	25.9%	34.7%	32.3%		4.6%	4.6%
	<b>2009 Q2</b>	<b>2009 Q2</b>	<b>2009 Q2</b>	<b>2009 Q3</b>		<b>2001 Q3</b>	<b>2008 Q4</b>
Worst Quarter	-22.8%	-21.2%	-27.6%	-36.1%		-3.0%	-2.7%
	<b>2008 Q4</b>	<b>2008 Q4</b>	<b>2008 Q4</b>	<b>2008 Q4</b>		<b>2016 Q4</b>	<b>2015 Q2</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 Market ex US (Bloomberg Barclays Global Aggregate ex-USD Bond Index [hedged to USD]). S&P data © 2019 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved. Frank Russell Company is the source and owner of the trademarks, service marks, and copyrights related to the Russell Indexes. MSCI data © MSCI 2019, all rights reserved. Bloomberg Barclays data provided by Bloomberg.

# 2018 Year-End 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>2018</b>	<b>STOCKS</b>				<b>BONDS</b>	
	<b>-5.24%</b>	<b>-14.09%</b>	<b>-14.58%</b>	<b>-5.90%</b>	<b>0.01%</b>	<b>3.17%</b>
						
<b>Since Jan. 2001</b>						
Avg. Annual Return	7.6%	5.8%	13.1%	10.1%	4.5%	4.4%
Best Year	33.6% 2013	39.4% 2003	78.5% 2009	37.4% 2006	10.3% 2002	8.8% 2014
Worst Year	-37.3% 2008	-43.6% 2008	-53.3% 2008	-45.7% 2008	-2.0% 2013	1.2% 2013

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# Long-Term Market Summary

## Index Returns

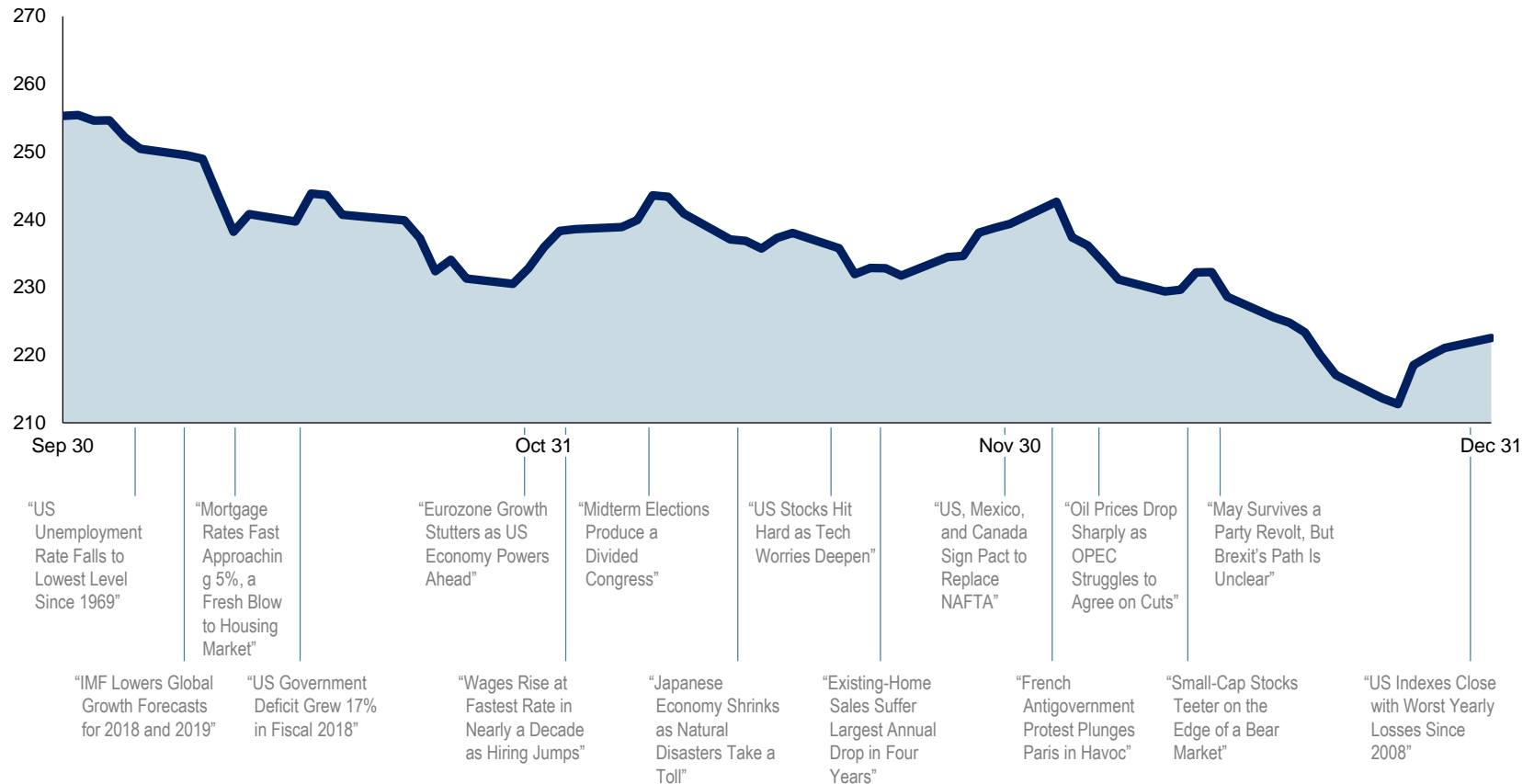
	US Stock Market	International Developed Stocks	Emerging Markets Stocks	Global Real Estate	US Bond Market	Global Bond Market ex US
<b>1 Year</b>	<b>STOCKS</b>				<b>BONDS</b>	
	-5.24%	-14.09%	-14.58%	-5.90%	0.01%	3.17%
						
<b>5 Years</b>						
	7.91%	0.34%	1.65%	5.28%	2.52%	4.11%
						
<b>10 Years</b>						
	13.18%	6.24%	8.02%	10.05%	3.48%	3.98%
						

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# World Stock Market Performance

MSCI All Country World Index with selected headlines from Q4 2018



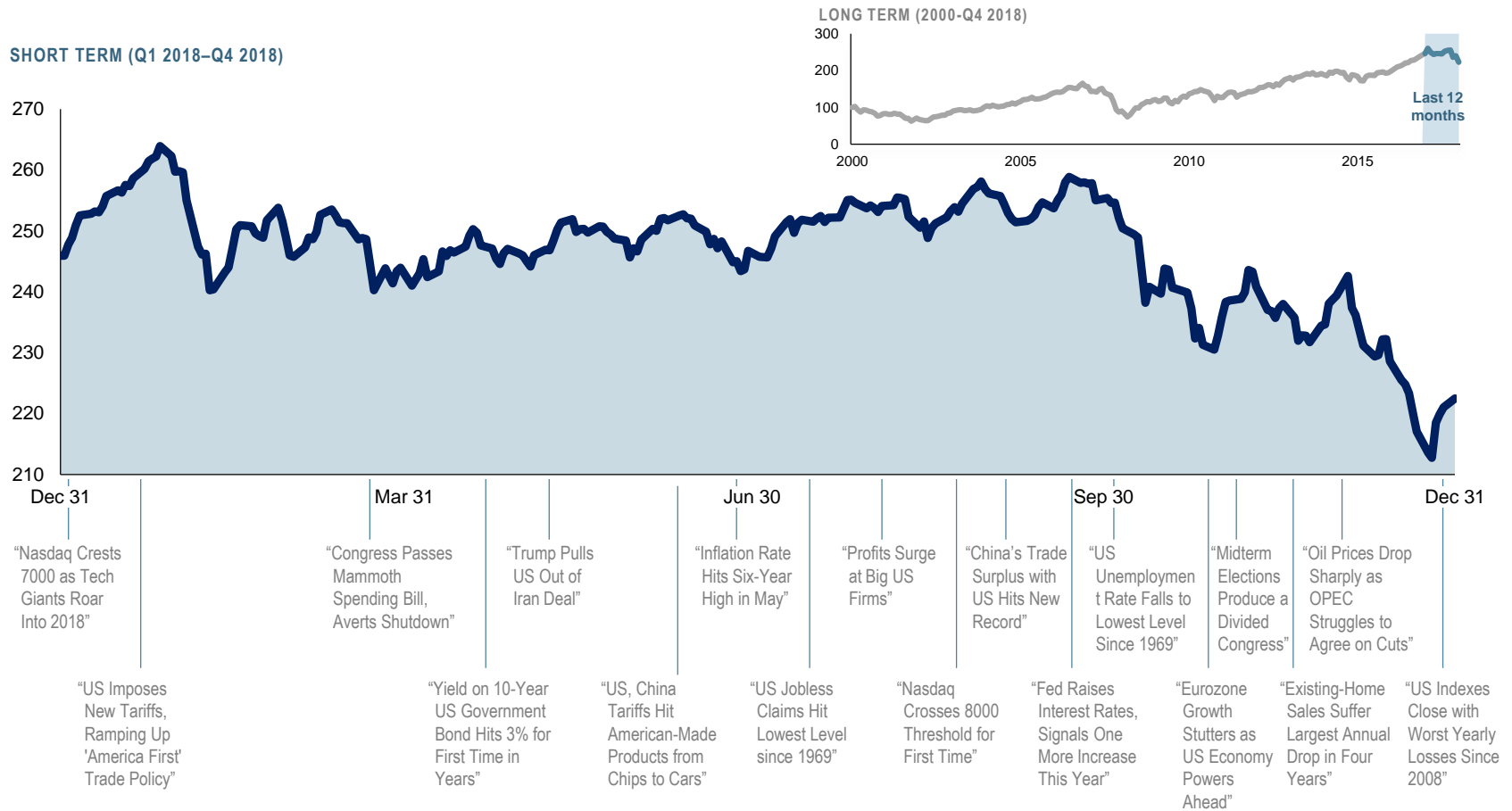
*These headlines are not offered to explain market returns. Instead, they serve as a reminder that investors should view daily events from a long-term perspective and avoid making investment decisions based solely on the news.*

Graph Source: MSCI ACWI Index [net div.]. MSCI data © MSCI 2019, 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



*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 2019, 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.

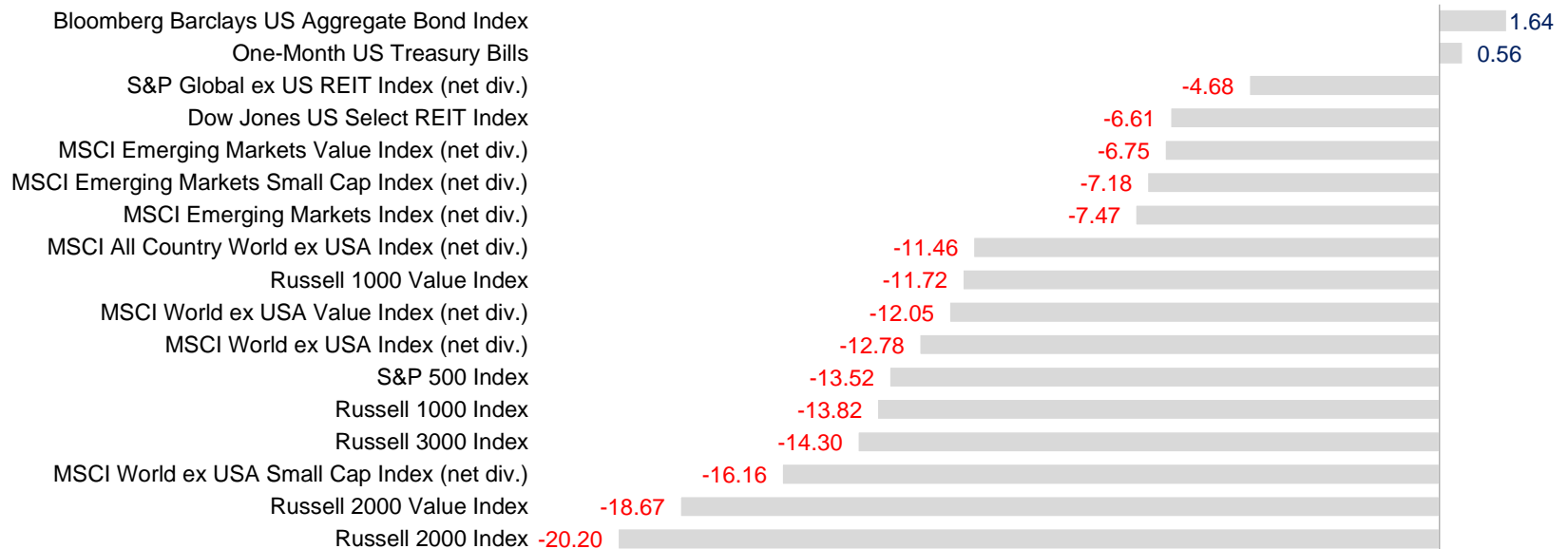
# World Asset Classes

## Fourth Quarter 2018 Index Returns (%)

Equity markets around the world posted negative returns for the quarter. Looking at broad market indices, emerging markets outperformed developed markets, including the US.

Value stocks were positive vs. growth stocks in all markets, including the US. Small caps underperformed large caps in the US and non-US developed markets but outperformed in emerging markets.

REIT indices outperformed equity market indices in both the US and non-US developed markets.



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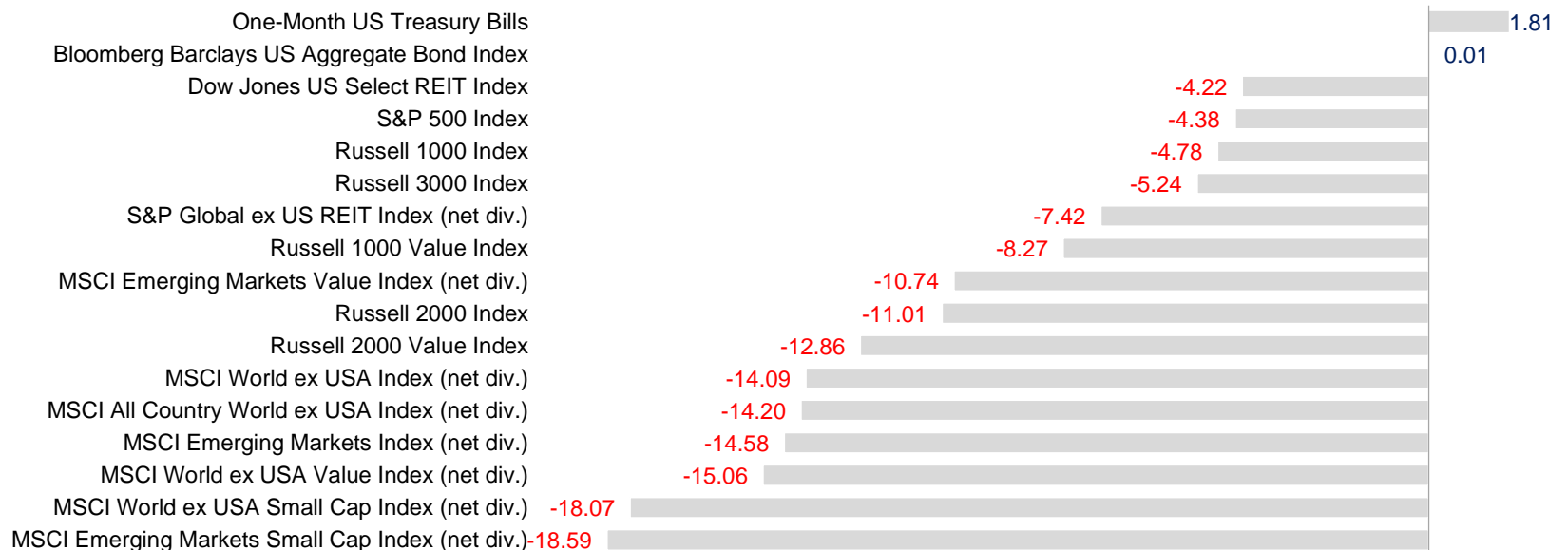
# World Asset Classes

## 2018 Index Returns (%)

Equity markets around the world posted negative returns for 2018. Looking at broad market indices, the US outperformed non-US developed and emerging markets.

Value stocks were positive vs. growth stocks in emerging markets but negative in the US and non-US developed markets. Small caps underperformed large caps in the US, non-US developed, and emerging markets.

REIT indices outperformed equity market indices in both the US and non-US developed markets.



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# US Stocks

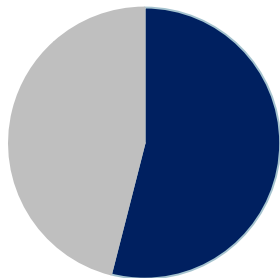
## Fourth Quarter 2018 Index Returns

US equities underperformed both non-US developed and emerging markets.

Value outperformed growth in the US across large and small cap stocks.

Small caps underperformed large caps in the US.

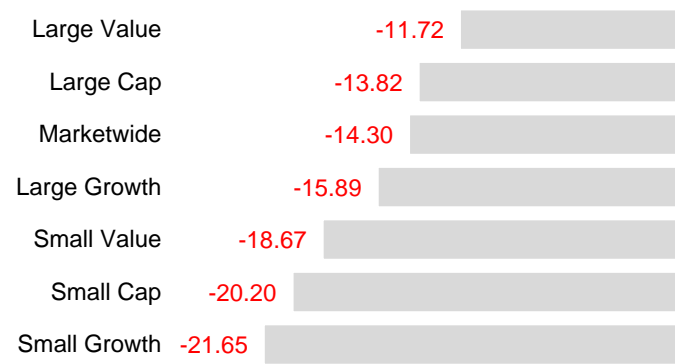
### World Market Capitalization—US



**54%**

US Market  
\$25.1 trillion

### Ranked Returns for the Quarter (%)



### Period Returns (%)

\* Annualized

Asset Class	1 Year	3 Years*	5 Years*	10 Years*
Large Growth	-1.51	11.15	10.40	15.29
Large Cap	-4.78	9.09	8.21	13.28
Marketwide	-5.24	8.97	7.91	13.18
Large Value	-8.27	6.95	5.95	11.18
Small Growth	-9.31	7.24	5.13	13.52
Small Cap	-11.01	7.36	4.41	11.97
Small Value	-12.86	7.37	3.61	10.40

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# International Developed Stocks

## Fourth Quarter 2018 Index Returns

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

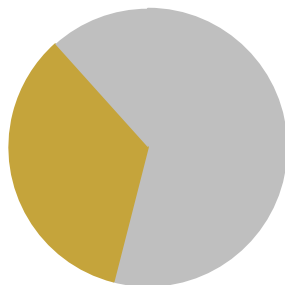
Value outperformed growth across large and small cap stocks.

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

### World Market Capitalization—International Developed

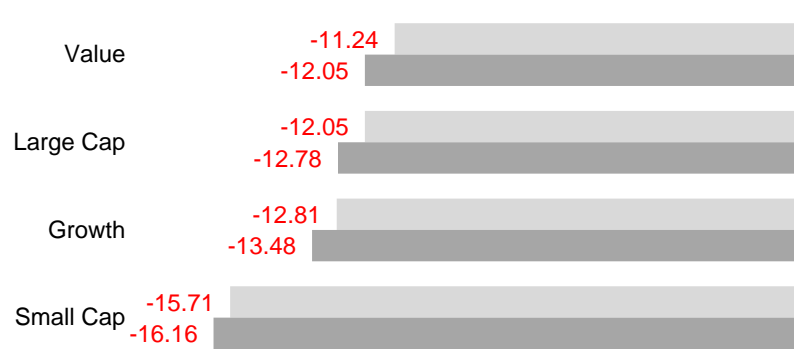
**34%**

International Developed Market  
\$16.0 trillion



### Ranked Returns for the Quarter (%)

■ Local currency



### Period Returns (%)

\* Annualized

Asset Class	1 Year	3 Years*	5 Years*	10 Years*
Growth	-13.14	2.84	1.36	6.74
Large Cap	-14.09	3.11	0.34	6.24
Value	-15.06	3.36	-0.73	5.69
Small Cap	-18.07	3.85	2.25	10.06

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# Emerging Markets Stocks

## Fourth Quarter 2018 Index Returns

In US dollar terms, emerging markets outperformed developed markets, including the US.

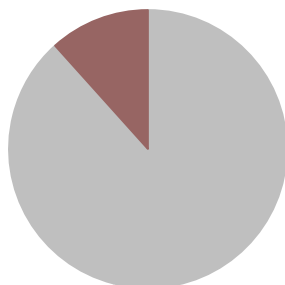
Value outperformed growth across large and small cap stocks.

Small caps outperformed large caps.

### World Market Capitalization—Emerging Markets

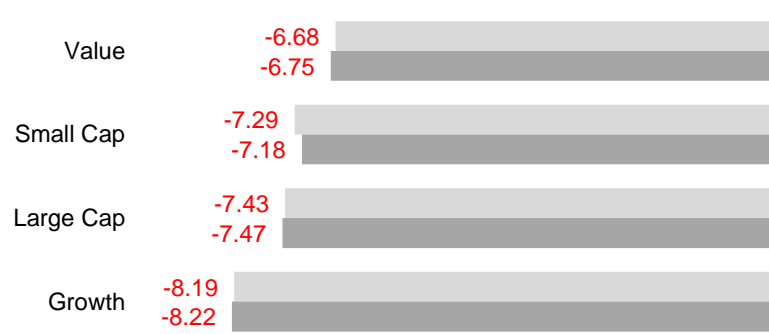
12%

Emerging Markets  
\$5.4 trillion



### Ranked Returns for the Quarter (%)

Local currency US currency



### Period Returns (%)

\* Annualized

Asset Class	1 Year	3 Years*	5 Years*	10 Years*
Value	-10.74	9.52	0.51	6.99
Large Cap	-14.58	9.25	1.65	8.02
Growth	-18.26	8.89	2.67	8.97
Small Cap	-18.59	3.68	0.95	9.87

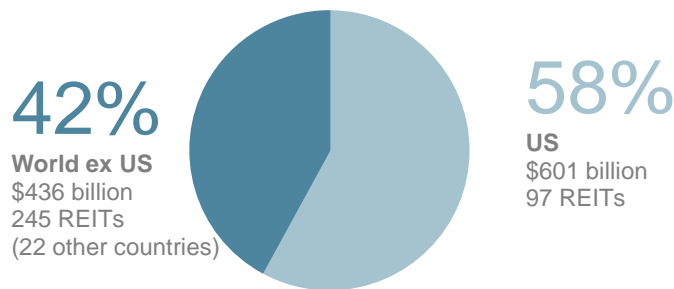
Past performance is not a guarantee of future results. Indices are not available for direct investment. Index performance does not reflect the expenses associated with the management of an actual portfolio. Market segment (index representation) as follows: Large Cap (MSCI Emerging Markets Index), Small 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 2019, all rights reserved. Frank Russell Company is the source and owner of the trademarks, service marks, and copyrights related to the Russell Indexes.

# Real Estate Investment Trusts (REITs)

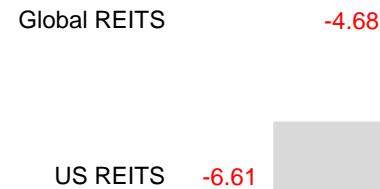
## Fourth Quarter 2018 Index Returns

Non-US real estate investment trusts outperformed US REITs in US dollar terms.

### Total Value of REIT Stocks



### Ranked Returns for the Quarter (%)



### Period Returns (%)

\* Annualized

Asset Class	1 Year	3 Years*	5 Years*	10 Years*
US REITS	-4.22	1.97	7.89	12.05
Global REITS	-7.42	3.35	3.39	8.94

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 and S&P data © 2019 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved.



# Fixed Income

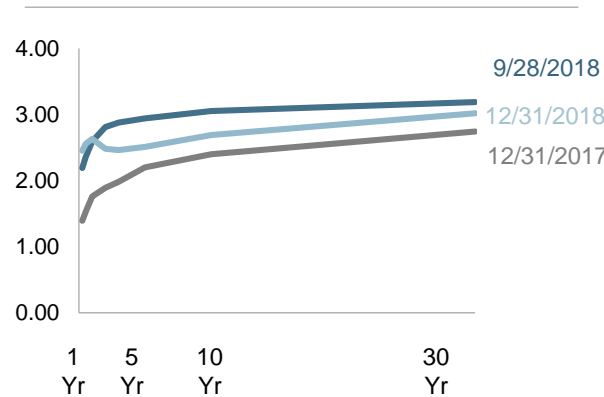
## Fourth Quarter 2018 Index Returns

Interest rate changes across the US fixed income market were mixed during the fourth quarter of 2018. The yield on the 5-year Treasury note declined 43 basis points (bps), ending the quarter at 2.51%. The yield on the 10-year Treasury note decreased 36 bps to 2.69%. The 30-year Treasury bond yield decreased 17 bps to finish at 3.02%. For 2018, yields on the 10-year Treasury and 30-year Treasury increased 29 bps and 28 bps, respectively.

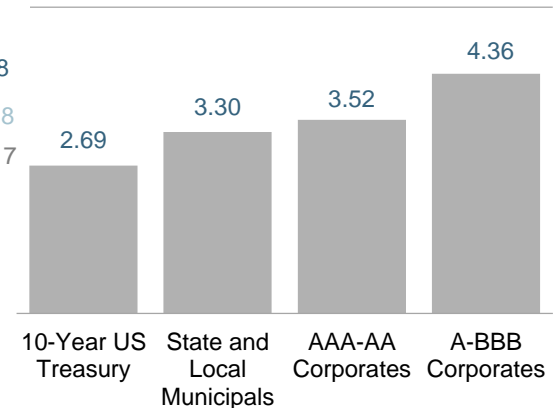
In terms of total returns, short-term corporate bonds increased 0.78% during the quarter. Intermediate-term corporate bonds had a total return of 0.58%.

Total returns for short-term municipal bonds were 1.10% for the quarter. Intermediate-term municipal bonds returned 2.00%.

**US Treasury Yield Curve (%)**



**Bond Yield across Issuers (%)**



**Period Returns (%)**

Asset Class	QTR	1 Year	*Annualized		
			3 Years*	5 Years*	10 Years*
Bloomberg Barclays US Government Bond Index Long	4.16	-1.79	2.63	5.90	4.15
Bloomberg Barclays Municipal Bond Index	1.69	1.28	2.30	3.82	4.85
Bloomberg Barclays US Aggregate Bond Index	1.64	0.01	2.06	2.52	3.48
FTSE World Government Bond Index 1-5 Years (hedged to USD)	1.53	2.12	1.58	1.53	1.69
FTSE World Government Bond Index 1-5 Years	0.94	-0.76	1.56	-0.82	0.29
ICE BofAML 1-Year US Treasury Note Index	0.78	1.86	1.06	0.70	0.62
ICE BofAML US 3-Month Treasury Bill Index	0.56	1.87	1.02	0.63	0.37
Bloomberg Barclays US TIPS Index	-0.42	-1.26	2.11	1.69	3.64
Bloomberg Barclays US High Yield Corporate Bond Index	-4.53	-2.08	7.23	3.83	11.12

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 ICE BofAML 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). FTSE fixed income indices © 2019 FTSE Fixed Income LLC, all rights reserved. ICE BofAML index data © 2019 ICE Data Indices, LLC. S&P data © 2019 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved.

# Global Fixed Income

## Fourth Quarter 2018 Yield Curves

Interest rates in the global developed markets generally decreased during the quarter.

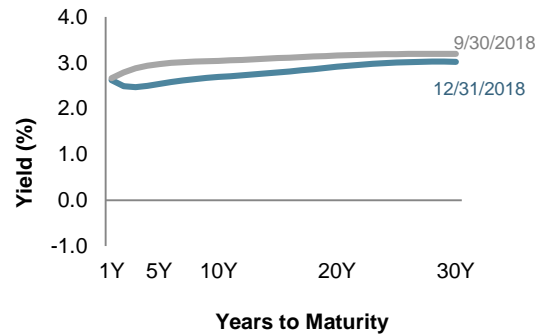
Longer-term bonds generally outperformed shorter-term bonds in the global developed markets.

For the year, longer-term bonds underperformed shorter-term bonds in the US but generally outperformed shorter-term bonds in the non-US developed markets.

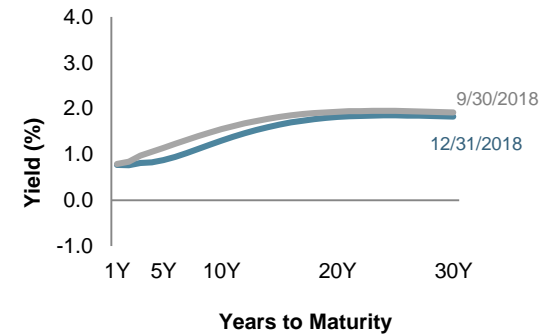
Changes in Yields (bps) since 12/31/2018

	1Y	5Y	10Y	20Y	30Y
US	-4.2	-44.0	-35.5	-24.4	-17.6
UK	-2.3	-26.9	-25.2	-11.6	-9.3
Germany	-15.2	-18.9	-21.8	-18.9	-19.6
Japan	-1.6	-9.3	-14.2	-14.6	-16.3

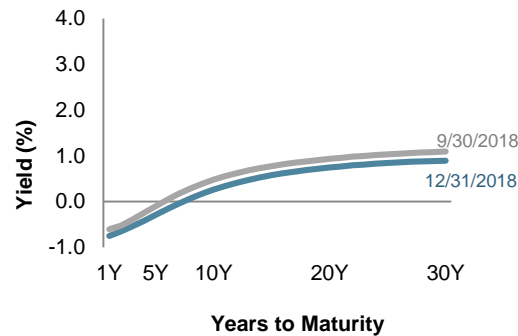
### US



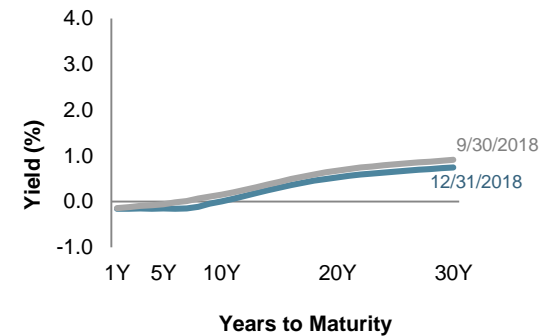
### UK



### Germany



### Japan



One basis point equals 0.01%. Source: ICE BofAML government yield. ICE BofAML index data © 2019 ICE Data Indices, LLC.

# Impact of Diversification

## Fourth Quarter 2018 Index Returns

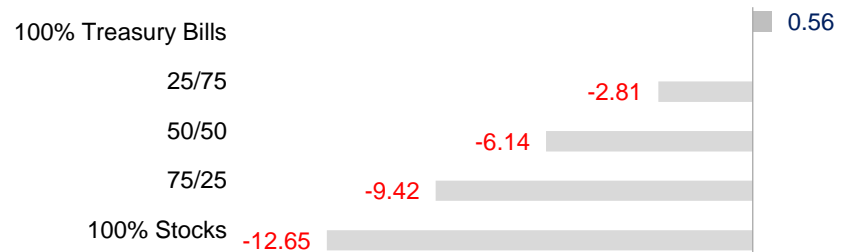
These portfolios illustrate the performance of different global stock/bond mixes and highlight the benefits of diversification. Mixes with larger allocations to stocks are considered riskier but have higher expected returns over time.

### Period Returns (%)

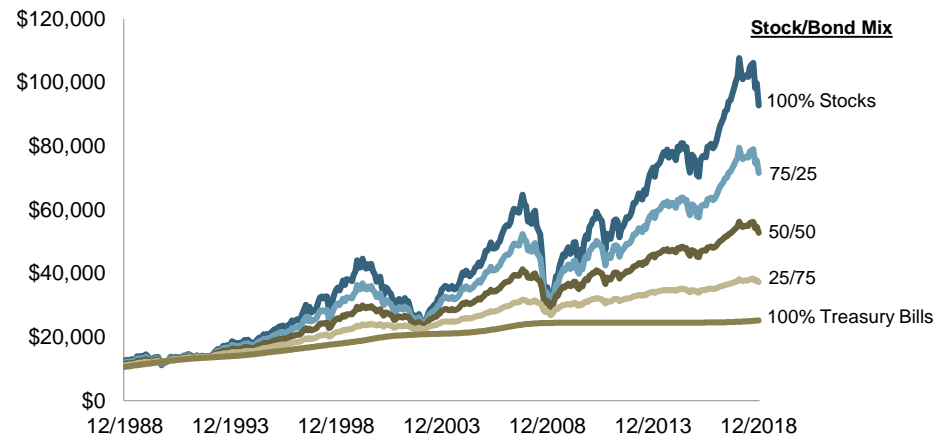
\* Annualized

Asset Class	1 Year	3 Years*	5 Years*	10 Years*	10-Year STDEV <sup>1</sup>
100% Treasury Bills	1.81	0.93	0.57	0.32	0.16
25/75	-0.82	2.57	1.73	2.88	3.65
50/50	-3.49	4.16	2.82	5.36	7.32
75/25	-6.19	5.70	3.86	7.75	10.98
100% Stocks	-8.93	7.18	4.82	10.05	14.65

### 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 2019, 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).

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## About Woodward Financial Advisors

Woodward Financial Advisors is a fee-only, independent wealth management firm in Chapel Hill, NC that specializes in helping professional women and their families

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