



Quarterly Market Review First Quarter 2019





Quarterly Market Review

First Quarter 2019

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.

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 Global Fixed Income** Impact of Diversification



Quarterly Market Summary

2008 Q4

Index Returns

Worst Quarter

	US Stock Market	International Developed Stocks	Emerging Markets Stocks	Global Real Estate	US Bond Market	Global Bond Market ex US		
Q1 2019		STO	CKS		ВО	BONDS		
	14.04%	10.45%	9.92%	14.07%	2.94%	2.96%		
Since Jan. 2001								
Avg. Quarterly Return	2.0%	1.4%	2.9%	2.6%	1.1%	1.1%		
Best	16.8%	25.9%	34.7%	32.3%	4.6%	4.6%		
Quarter	2009 Q2	2009 Q2	2009 Q2	2009 Q3	2001 Q3	2008 Q4		
Worst	-22.8%	-21.2%	-27.6%	-36.1%	-3.0%	-2.7%		

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.

2008 Q4

2008 Q4

2016 Q4

2008 Q4

2015 Q2



Long-Term Market Summary

Index Returns

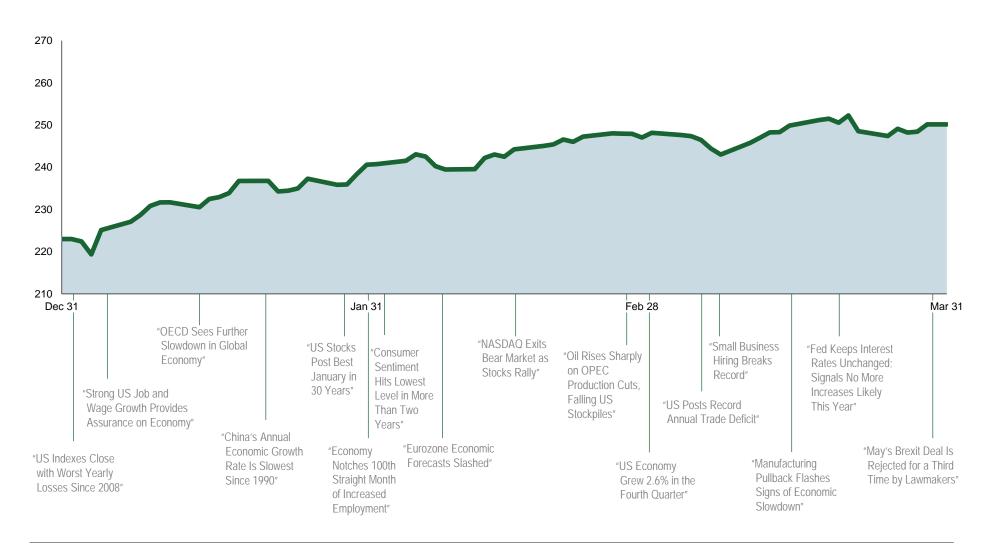
	US Stock Market	International Developed Stocks	Emerging Markets Stocks	Global Real Estate	US Bond Market	Global Bond Market ex US	
1 Year		STO	СКЅ		ВО	BONDS	
	8.77%	-3.14%	-7.41%	13.93%	4.48%	5.23%	
5 Years							
	10.36%	2.20%	3.68%	6.63%	2.74%	4.27%	
10 Years							
	16.00%	8.82%	8.94%	14.84%	3.77%	4.29%	

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.



World Stock Market Performance

MSCI All Country World Index with selected headlines from Q1 2019



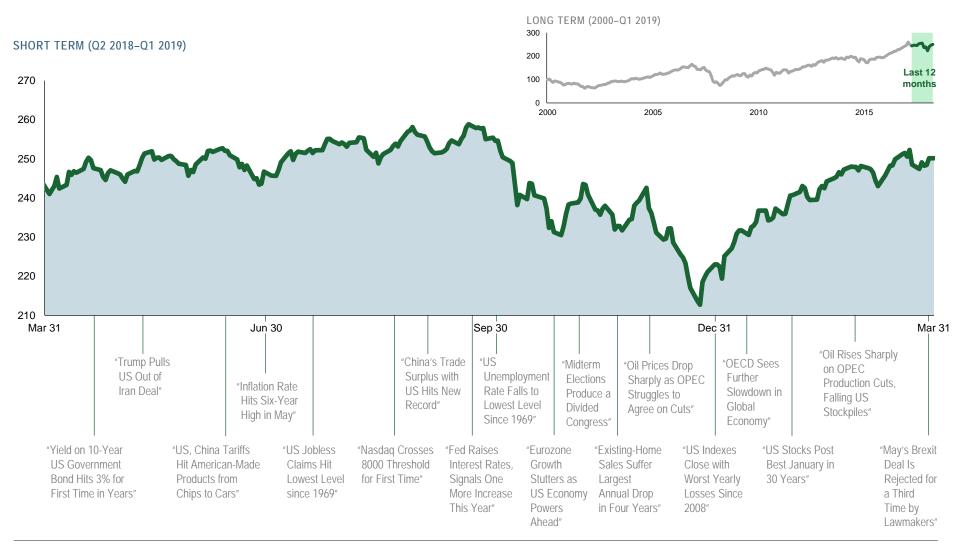
These headlines are not offered to explain market returns. Instead, they serve as a reminder that investors should view daily events from a long-term perspective and avoid making investment decisions based solely on the news.

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.



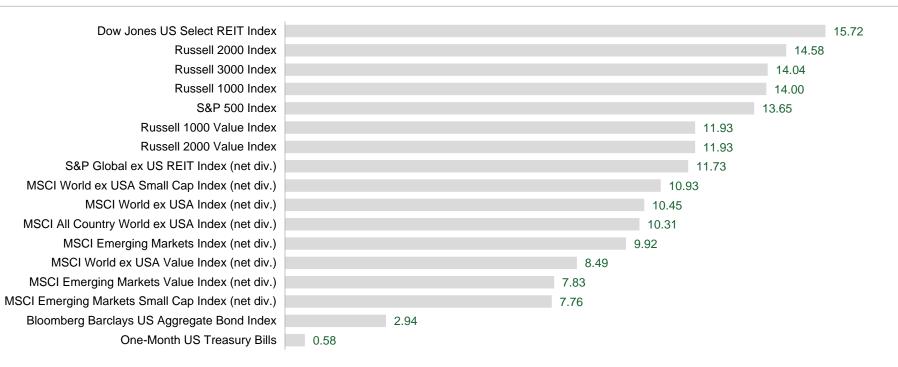
World Asset Classes

First Quarter 2019 Index Returns (%)

Equity markets posted positive returns around the globe in the first quarter. Looking at broad market indices, US equities outperformed non-US developed and emerging markets.

Small caps outperformed large caps in the US and non-US developed markets but underperformed in emerging markets. Value stocks generally underperformed growth stocks in all regions.

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



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. The S&P data is 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 2019, all rights reserved. Dow Jones data © 2019 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved. S&P data © 2019 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved. Bloomberg Barclays data provided by Bloomberg. Treasury bills © Stocks, Bonds, Bills, and Inflation Yearbook[™], Ibbotson Associates, Chicago (annually updated work by Roger G. Ibbotson and Rex A. Sinquefield).



US Stocks First Quarter 2019 Index Returns

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

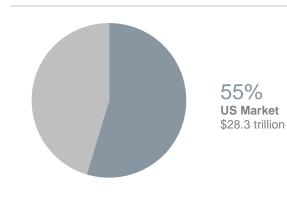
Small caps outperformed large caps in the US.

Value underperformed growth across large and small cap stocks.

Ranked Returns for the Quarter (%)



World Market Capitalization—US



Period Returns (%)

* Annualized

Asset Class	1 Year	3 Years*	5 Years*	10 Years*
Large Growth	12.75	16.53	13.50	17.52
Large Cap	9.30	13.52	10.63	16.05
Large Value	5.67	10.45	7.72	14.52
Small Growth	3.85	14.87	8.41	16.52
Small Cap	2.05	12.92	7.05	15.36
Small Value	0.17	10.86	5.59	14.12
Marketwide	8.77	13.48	10.36	16.00

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), 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 2019, all rights reserved.



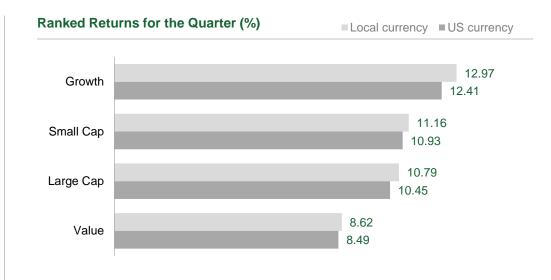
International Developed Stocks

First Quarter 2019 Index Returns

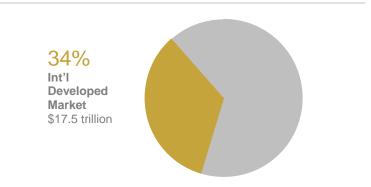
In US dollar terms, developed markets outside the US outperformed emerging markets but underperformed the US equity market during the quarter.

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

Value underperformed growth across large and small cap stocks.



World Market Capitalization—International Developed



Period Returns (%) * Annualized							
1 Year	3 Years*	5 Years*	10 Years*				
-0.82	7.42	3.67	9.35				
-3.14	7.29	2.20	8.82				
-5.46	7.13	0.68	8.25				
-8.66	7.28	3.69	12.25				
	1 Year -0.82 -3.14 -5.46	1 Year 3 Years* -0.82 7.42 -3.14 7.29 -5.46 7.13	1 Year 3 Years* 5 Years* -0.82 7.42 3.67 -3.14 7.29 2.20 -5.46 7.13 0.68				

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 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 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 World ex USA IMI Index is used as the proxy for the International Developed 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.



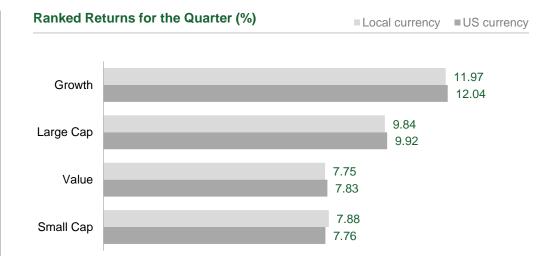
Emerging Markets Stocks

First Quarter 2019 Index Returns

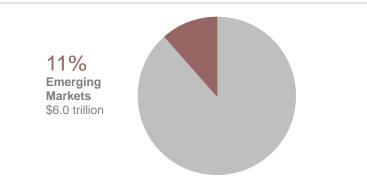
In US dollar terms, emerging markets underperformed developed markets, including the US.

Value outperformed growth across small cap stocks but underperformed in large caps.

Small caps underperformed large caps.



World Market Capitalization—Emerging Markets



Period Returns (%) * Annualize							
1 Year	3 Years*	5 Years*	10 Years*				
-5.27	9.54	2.21	7.83				
-7.41	10.68	3.68	8.94				
-9.52	11.75	5.04	9.98				
-12.42	5.95	1.76	10.37				
	1 Year -5.27 -7.41 -9.52	1 Year3 Years*-5.279.54-7.4110.68-9.5211.75	1 Year3 Years*5 Years*-5.279.542.21-7.4110.683.68-9.5211.755.04				

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. 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.

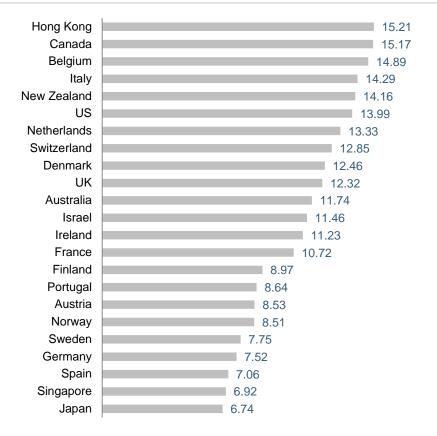


Select Country Performance

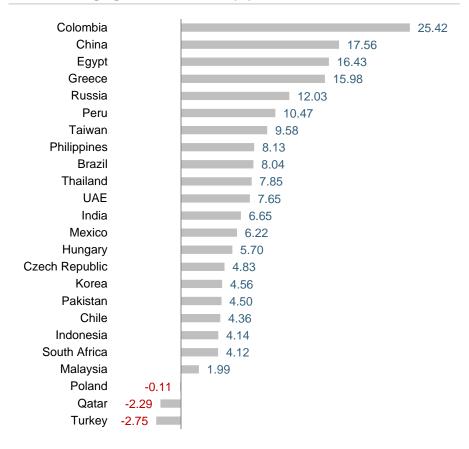
First Quarter 2019 Index Returns

In US dollar terms, Hong Kong and Canada recorded the highest country performance in developed markets, while Japan and Singapore posted the lowest returns for the quarter. In emerging markets, Columbia and China recorded the highest country performance, while Turkey and Qatar posted the lowest performance.

Ranked Developed Markets Returns (%)



Ranked Emerging Markets Returns (%)



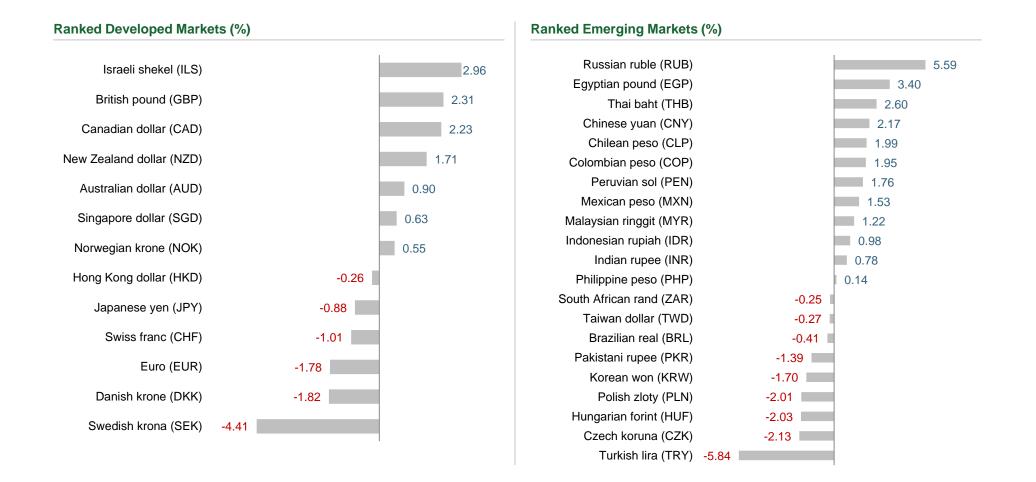
Past performance is not a guarantee of future results. Indices are not available for direct investment. Index performance does not reflect the expenses associated with the management of an actual portfolio. Country performance based on respective indices in the MSCI World ex US IMI Index (for developed 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 2019, all rights reserved. UAE and Qatar have been reclassified as emerging markets by MSCI, effective May 2014.



Select Currency Performance vs. US Dollar

First Quarter 2019

Currencies were mixed against the US dollar in both developed and emerging markets.

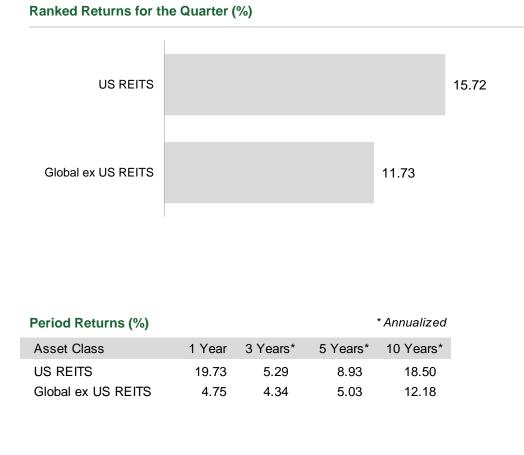




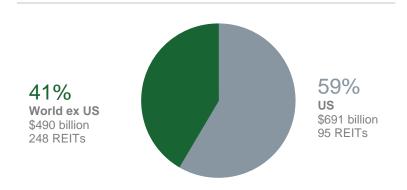
Real Estate Investment Trusts (REITs)

First Quarter 2019 Index Returns

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



Total Value of REIT Stocks



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.



Commodities

First Quarter 2019 Index Returns

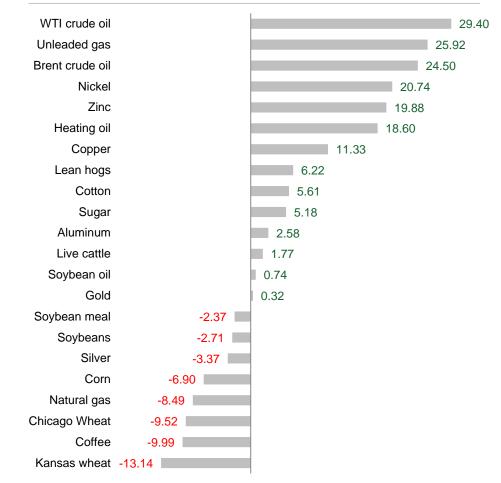
The Bloomberg Commodity Index Total Return returned 6.32% for the first quarter of 2019.

The energy complex led quarterly performance. Crude oil gained 29.40%, and unleaded gas added 25.92%.

Grains was the worst-performing complex. Wheat (Kansas) and wheat (Chicago) declined by 13.14% and 9.52%, respectively.

Period Returns (%) * Annualized						
	Asset Class	QTR	1 Year	3 Years*	5 Years*	10 Years*
	Commodities	6.32	-5.25	2.22	-8.92	-2.56

Ranked Returns for Individual Commodities (%)





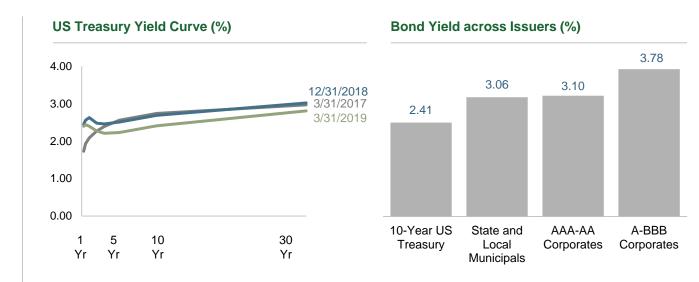
Fixed Income First Quarter 2019 Index Returns

Interest rates decreased in the US Treasury fixed income market during the first quarter. The yield on the 5year Treasury note declined 28 basis points (bps), ending at 2.23%. The yield on the 10-year Treasury note decreased 28 bps to 2.41%. The 30year Treasury bond yield fell 21 bps to finish at 2.81%.

On the short end of the curve, the 1month T-bill yield was relatively unchanged at 2.43%, while the 1-year T-bill yield dipped 23 bps to 2.40%. The 2-year Treasury note finished at 2.27% after a 21 bps decrease.

In terms of total returns, short-term corporate bonds gained 1.83%. Intermediate-term corporate bonds had a total return of 3.82%.

Total returns for short-term municipal bonds were 1.33%, while intermediate munis gained 2.78%. Revenue bonds outperformed general obligation bonds.



Period Returns (%)

Asset Class 3 Years* 5 Years* 10 Years* QTR 1 Year Bloomberg Barclays Municipal Bond Index 2.90 5.38 2.71 3.73 4.72 Bloomberg Barclays US Aggregate Bond Index 2.94 4.48 2.03 2.74 3.77 Bloomberg Barclays US Government Bond Index Long 4.64 6.20 1.54 5.43 5.19 Bloomberg Barclays US High Yield Corporate Bond Index 7.26 5.93 8.56 4.68 11.26 Bloomberg Barclays US TIPS Index 2.70 3.41 3.19 1.70 1.94 FTSE World Government Bond Index 1-5 Years 0.34 -2.04 0.40 -0.95 0.71 FTSE World Government Bond Index 1-5 Years (hedged to USD) 1.73 1.16 3.13 1.59 1.65 ICE BofAML 1-Year US Treasury Note Index 0.82 2.44 1.21 0.85 0.70 ICE BofAML US 3-Month Treasury Bill Index 0.60 2.12 1.19 0.74 0.43

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 (SBBI) Yearbook[™], Ibbotson Associates, Chicago (annually updated work by Roger G. Ibbotson and Rex A. Sinquefield). 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.

*Annualized



Global Fixed Income

First Quarter 2019 Yield Curves

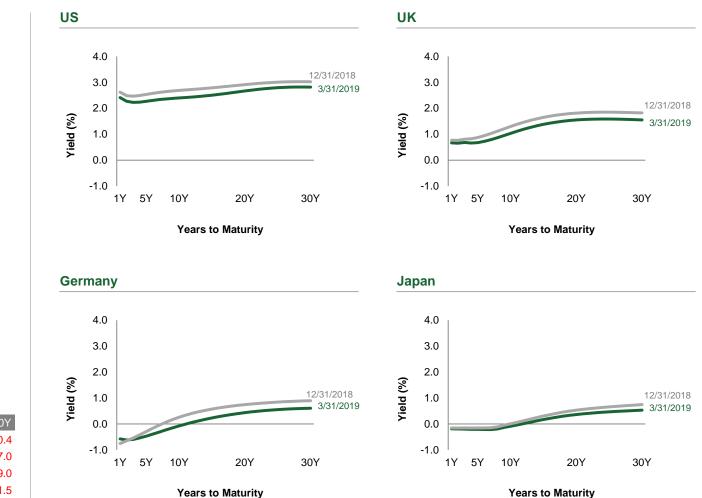
Interest rates in the global developed markets generally decreased during the quarter.

Longer-term bonds generally outperformed shorter-term bonds.

Nominal rates in Germany and Japan are negative out to approximately 10 years.

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

	1Y	5Y	10Y	20Y	30Y
US	-20.7	-26.5	-29.1	-24.5	-20.4
UK	-10.2	-19.5	-26.4	-26.4	-27.0
Germany	17.9	-17.9	-33.6	-31.0	-29.0
Japan	-3.4	-5.6	-9.5	-16.8	-21.5

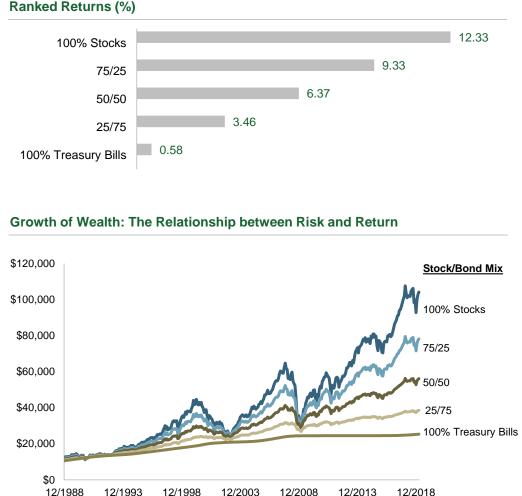




Impact of Diversification

First Quarter 2019 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.



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. Sinquefield).

* Annualized

10-Year Asset Class 1 Year 3 Years* 5 Years* 10 Years* STDEV¹ 100% Stocks 3.16 11.27 7.03 12.58 13.92 75/25 3.07 8.75 5.53 9.60 10.44 50/50 2.85 6.21 3.97 6.57 6.95 25/75 2.51 3.67 2.35 3.49 3.48 100% Treasury Bills 2.05 1.11 0.68 0.37 0.18

Period Returns (%)



Source: Dimensional Fund Advisors LP.

Past performance is no guarantee of future results. This information is provided for educational purposes only and should not be considered investment advice or a solicitation to buy or sell securities. There is no guarantee an investing strategy will be successful. Diversification does not eliminate the risk of market loss.

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.

Eugene Fama is a member of the Board of Directors of the general partner of, and provides consulting services to, Dimensional Fund Advisors LP.