

2019 Annual Market Review

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This report features world capital market performance for the past year. The majority of research has been compiled by Dimensional Fund Advisors.

Overview:

Market Summary

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

Market Summary

Index Returns



	US Stock Market	International Developed Stocks	Emerging Markets Stocks	Global Real Estate	US Bond Market	Global Bond Market ex US
2019	STOCKS				BONDS	
	31.02%	22.49%	18.42%	23.12%	8.72%	7.57%
						
Since Jan. 2001						
Avg. Annual Return	8.9%	6.7%	13.4%	10.8%	4.7%	4.6%
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

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 © 2020 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 2020, all rights reserved. Bloomberg Barclays data provided by Bloomberg.

World Asset Classes

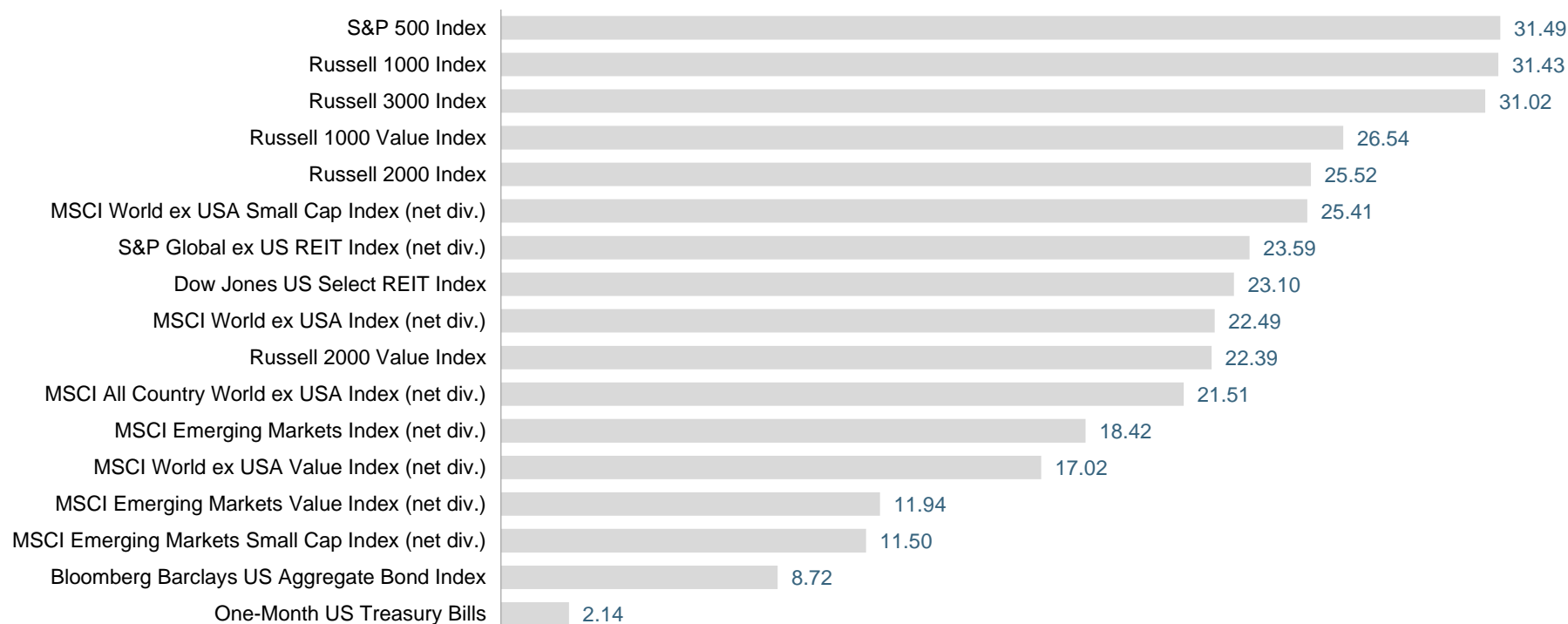
2019 Index Returns (%)



Equity markets around the globe posted positive returns in 2019. Looking at broad market indices, the US outperformed non-US developed and emerging markets for the year.

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

REIT indices outperformed equity market indices in non-US developed markets but underperformed in the US.



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US Stocks

2019 Index Returns

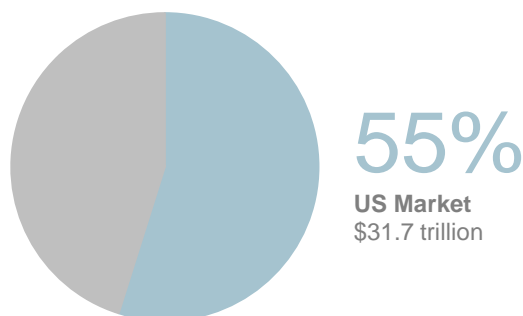


US equities outperformed both non-US developed and emerging markets equities in 2019.

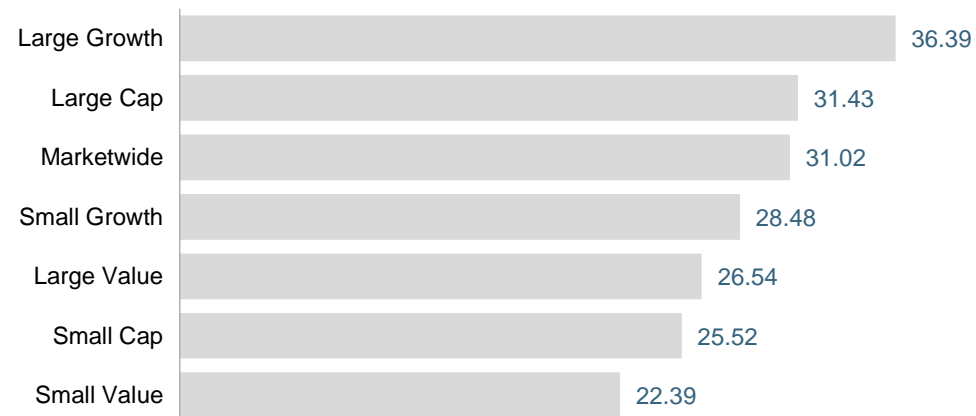
Value underperformed growth in the US across large and small cap stocks.

Small caps underperformed large caps in the US.

World Market Capitalization—US



Ranked Returns for 2019 (%)



Period Returns (%)

* Annualized

Asset Class	1 Year	3 Years*	5 Years*	10 Years*
Large Growth	36.39	20.49	14.63	15.22
Large Cap	31.43	15.05	11.48	13.54
Marketwide	31.02	14.57	11.24	13.42
Small Growth	28.48	12.49	9.34	13.01
Large Value	26.54	9.68	8.29	11.80
Small Cap	25.52	8.59	8.23	11.83
Small Value	22.39	4.77	6.99	10.56

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International Developed Stocks

2019 Index Returns

In US dollar terms, developed markets outside the US outperformed emerging markets but underperformed the US during 2019.

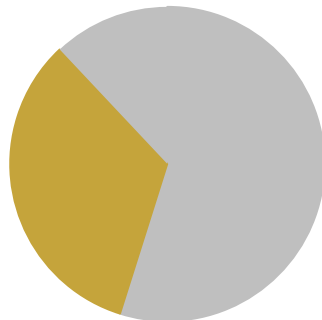
Value underperformed growth across large and small cap stocks in non-US developed markets.

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

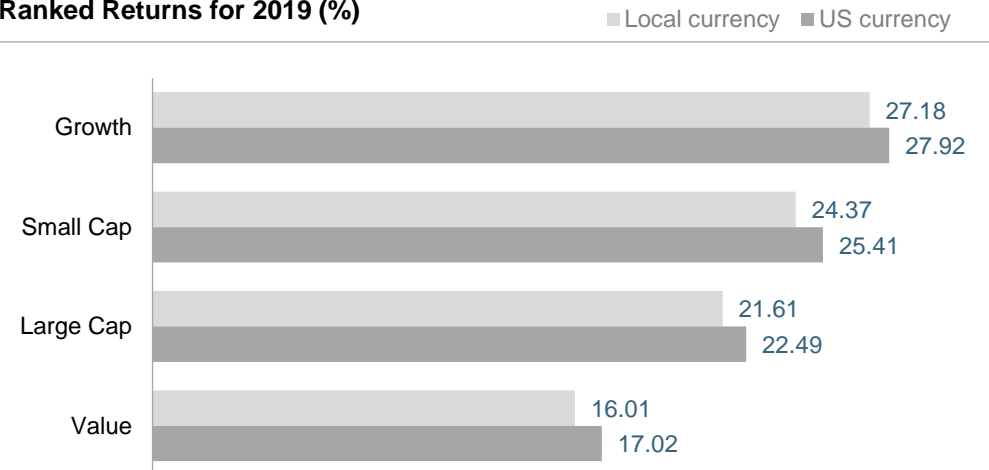
World Market Capitalization—International Developed

33%

International
Developed Market
\$19.2 trillion



Ranked Returns for 2019 (%)



Period Returns (%)

* Annualized

Asset Class	1 Year	3 Years*	5 Years*	10 Years*
Growth	27.92	12.34	7.18	6.51
Small Cap	25.41	10.42	8.17	8.04
Large Cap	22.49	9.34	5.42	5.32
Value	17.02	6.36	3.59	4.05

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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 2020, all rights reserved.

Emerging Markets Stocks

2019 Index Returns



In US dollar terms, emerging markets underperformed developed markets, including the US, in 2019.

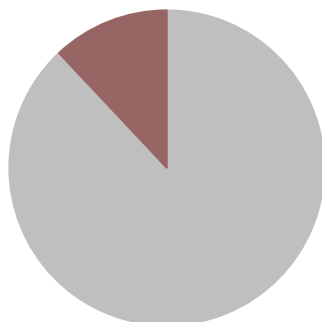
Value underperformed growth across large and small cap stocks in emerging markets.

Small caps underperformed large caps in emerging markets.

World Market Capitalization—Emerging Markets

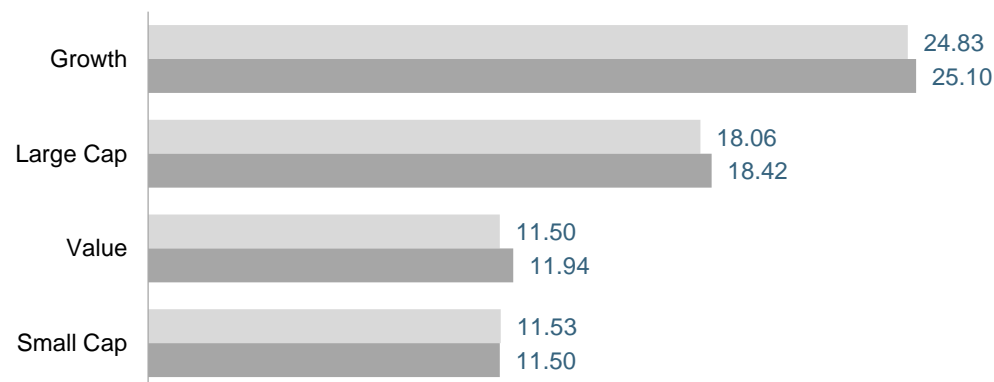
12%

Emerging Markets
\$6.9 trillion



Ranked Returns for 2019 (%)

■ Local currency ■ US currency



Period Returns (%)

* Annualized

Asset Class	1 Year	3 Years*	5 Years*	10 Years*
Growth	25.10	14.50	7.45	5.20
Large Cap	18.42	11.57	5.61	3.68
Value	11.94	8.57	3.67	2.08
Small Cap	11.50	6.70	2.97	2.95

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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 2020, all rights reserved.

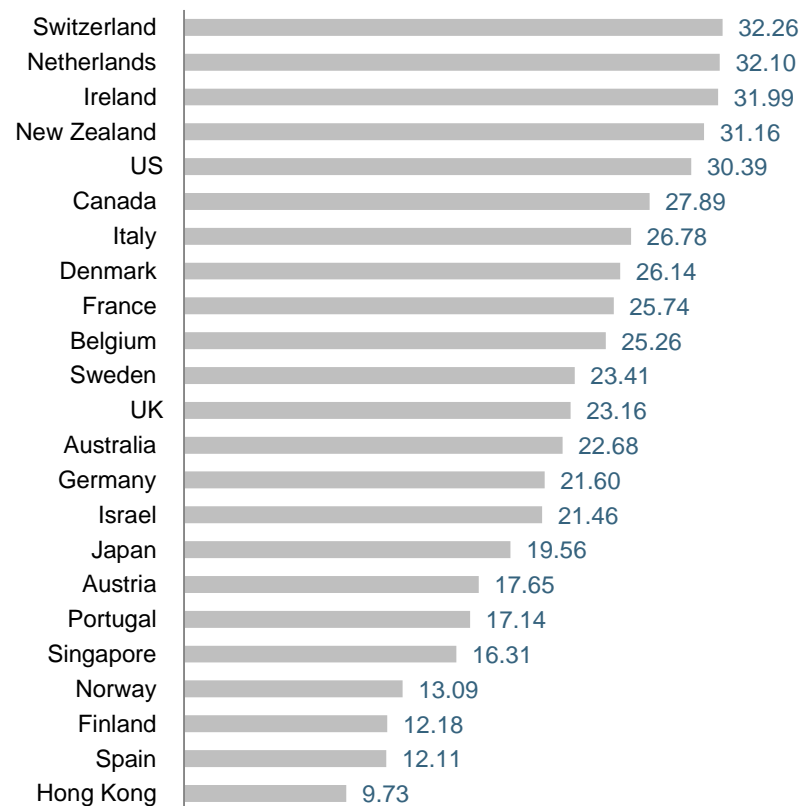
Select Market Performance

2019 Index Returns

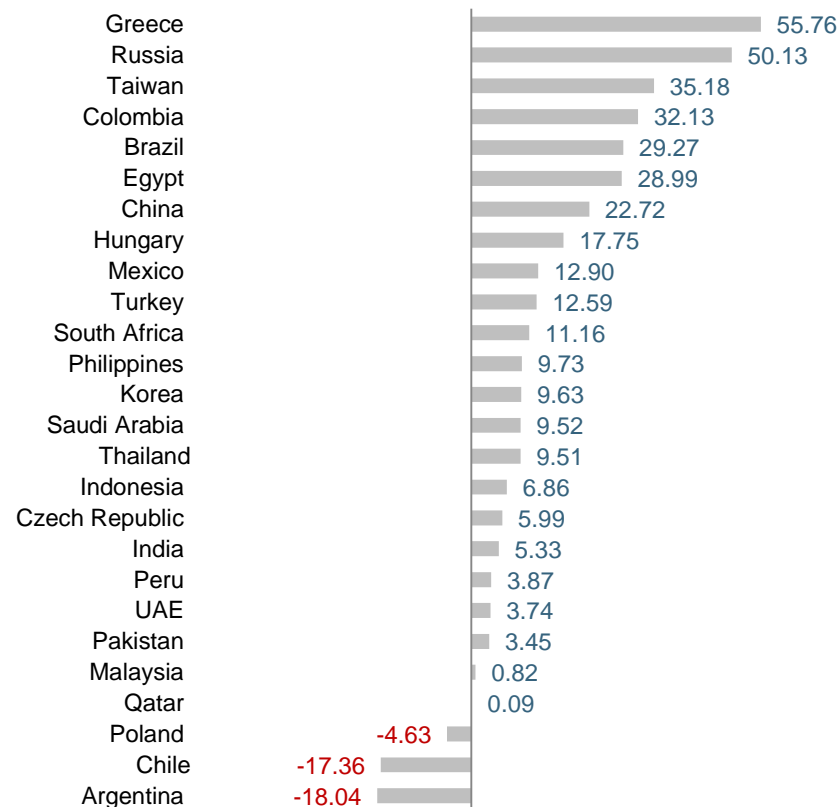


In US dollar terms, Switzerland recorded the highest country performance in non-US developed markets last year, while Hong Kong posted the lowest return. In emerging markets, Greece was the top performer, while Argentina had the lowest performance.

Ranked Developed Markets Returns (%)



Ranked Emerging Markets Returns (%)



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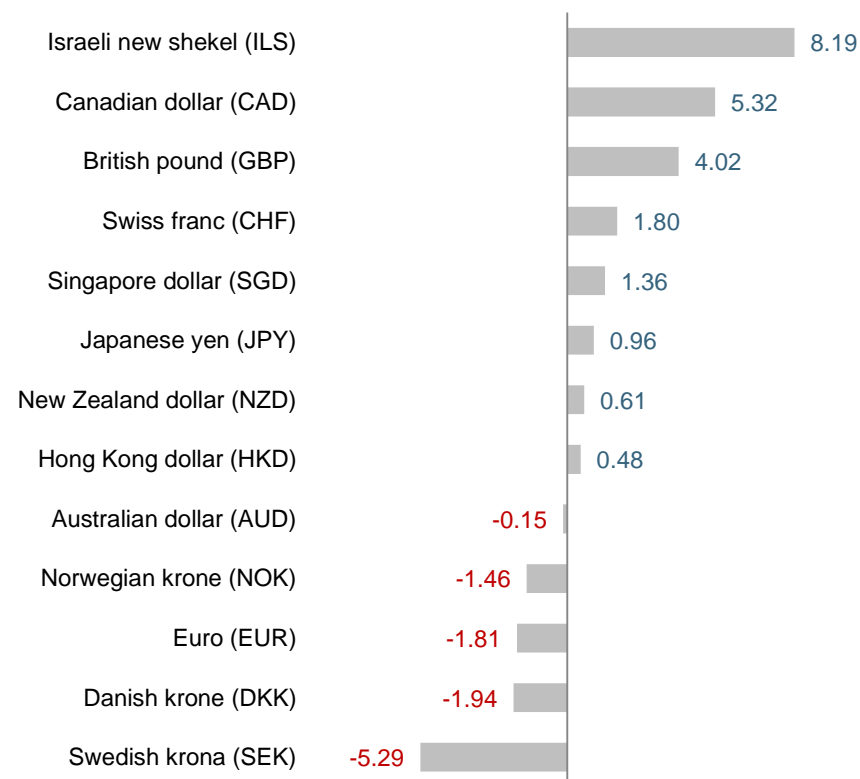
Select Currency Performance vs. US Dollar

2019

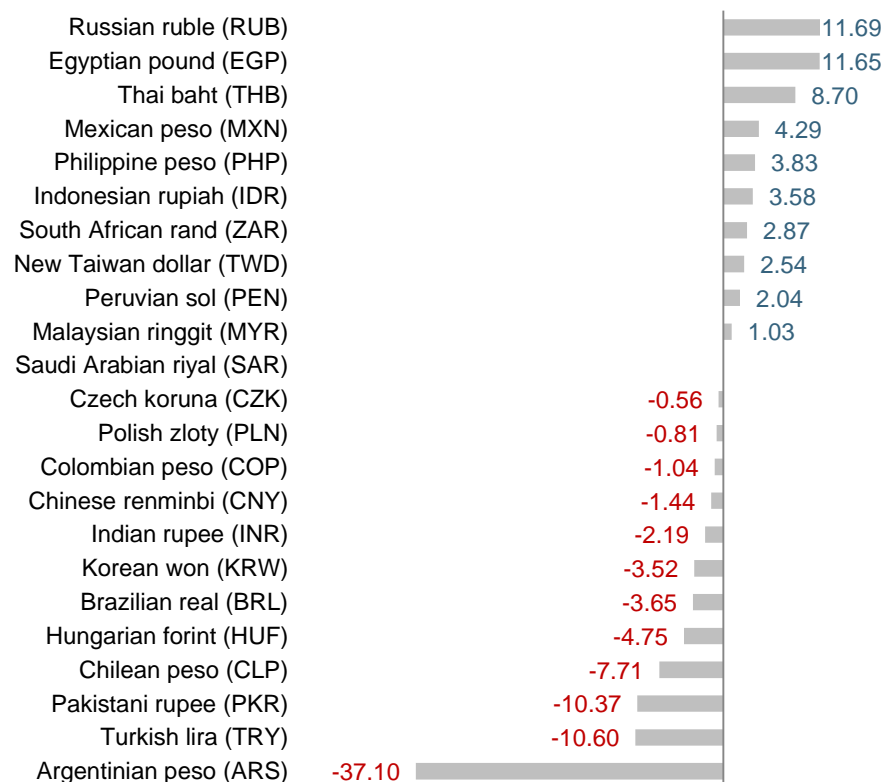


In both developed and emerging markets, currencies were mixed against the US dollar in 2019.

Ranked Developed Markets (%)



Ranked Emerging Markets (%)



Real Estate Investment Trusts (REITs)

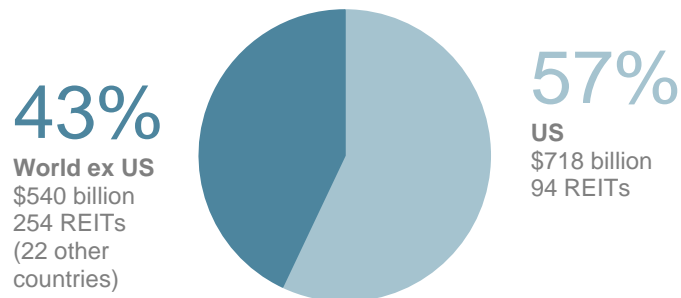
2019 Index Returns

US real estate investment trusts (REITs) underperformed non-US REITs in US dollar terms last year.

Ranked Returns for 2019 (%)



Total Value of REIT Stocks



Period Returns (%)

Asset Class	* Annualized			
	1 Year	3 Years*	5 Years*	10 Years*
Global ex US REITs	23.59	9.79	5.65	7.74
US REITs	23.10	6.95	6.40	11.57

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 © 2020 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved.

Commodities

2019 Index Returns



The Bloomberg Commodity Index Total Return increased 7.69% in 2019.

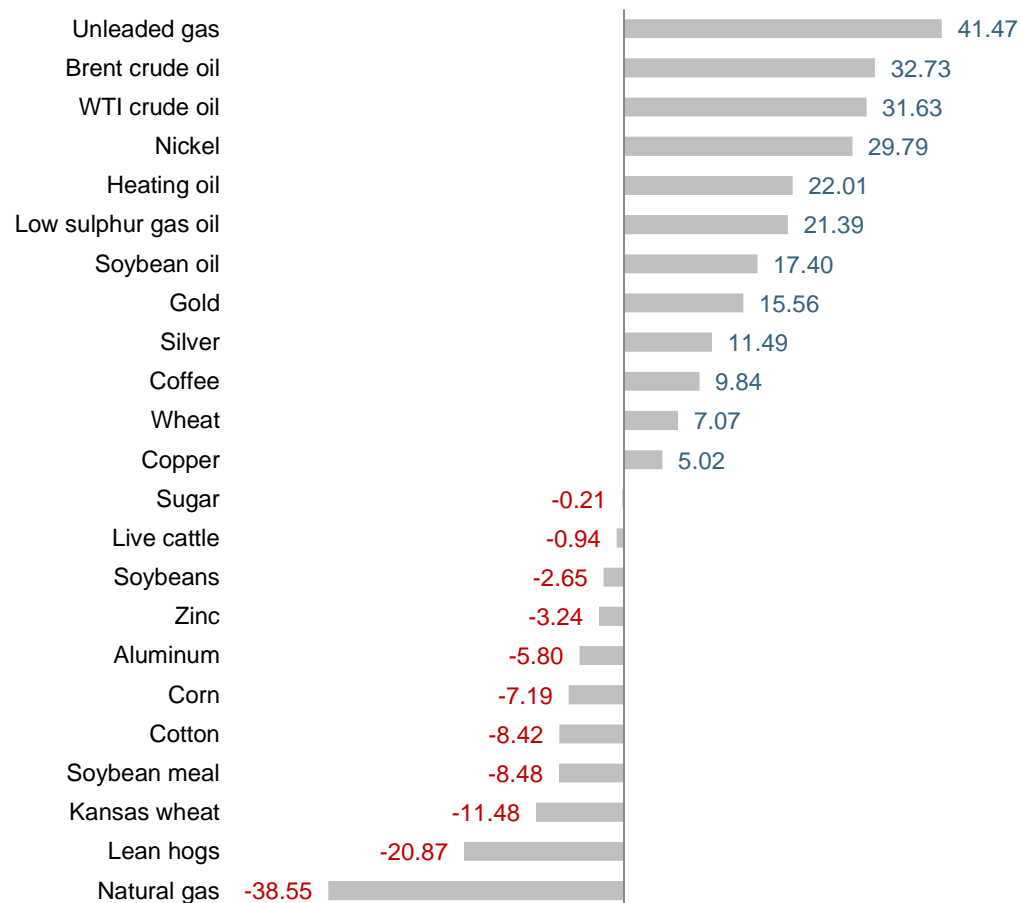
Unleaded gas and Brent crude oil led annual performance, returning 41.47% and 32.73%, respectively.

Natural gas and lean hogs were the worst performers, declining 38.55% and 20.87%, respectively.

Asset Class	Period Returns (%)			
	1 Year	3 Years*	5 Years*	10 Years*
Commodities	7.69	-0.94	-3.92	-4.73

** Annualized*

Ranked Returns for Individual Commodities (%)



Fixed Income

2019 Index Returns



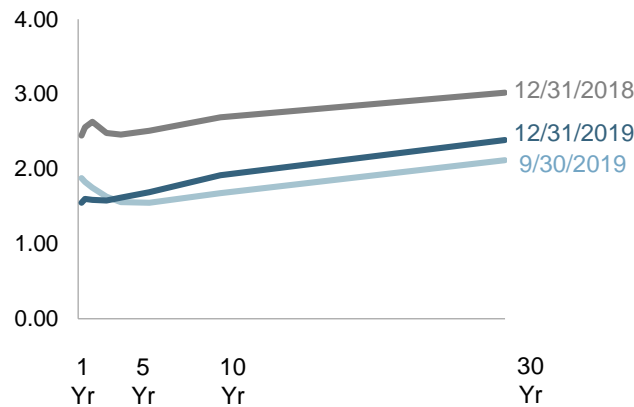
Interest rates decreased in the US Treasury market during 2019. The yield on the 5-year Treasury note declined 82 basis points (bps), ending at 1.69%. The yield on the 10-year T-note decreased 77 bps to 1.92%. The 30-year Treasury bond yield decreased 63 bps to 2.39%.

On the short end of the yield curve, the 1-month T-bill yield fell to 1.48%, while the 1-year T-bill yield decreased 104 bps to 1.59%. The yield on the 2-year Treasury note finished at 1.58% after declining 90 bps.

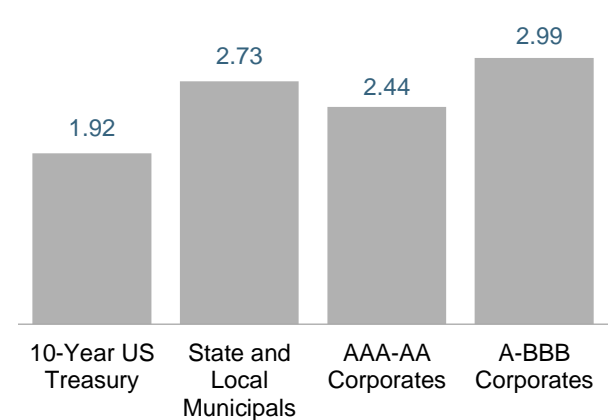
In terms of total returns, short-term corporate bonds gained 6.99%. Intermediate corporate bonds had a total return of 10.14%.

The total return for short-term municipal bonds was 3.66%, while intermediate munis returned 6.86%. Revenue bonds outperformed general obligation bonds.

US Treasury Yield Curve (%)



Bond Yields across Issuers (%)



Period Returns (%)

Asset Class	*Annualized			
	1 Year	3 Years*	5 Years*	10 Years*
Bloomberg Barclays US Government Bond Index Long	14.75	6.95	4.16	6.97
Bloomberg Barclays US High Yield Corporate Bond Index	14.32	6.37	6.13	7.57
Bloomberg Barclays US Aggregate Bond Index	8.72	4.03	3.05	3.75
Bloomberg Barclays US TIPS Index	8.43	3.32	2.62	3.36
Bloomberg Barclays Municipal Bond Index	7.54	4.72	3.53	4.34
FTSE World Government Bond Index 1-5 Years (hedged to USD)	3.86	2.37	1.92	1.85
ICE BofA 1-Year US Treasury Note Index	2.93	1.78	1.25	0.83
FTSE World Government Bond Index 1-5 Years	2.43	2.40	0.74	0.19
ICE BofA US 3-Month Treasury Bill Index	2.28	1.67	1.07	0.58

One basis point (bps) 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 BofA 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. Sinquefeld). FTSE fixed income indices © 2020 FTSE Fixed Income LLC, all rights reserved. ICE BofA index data © 2020 ICE Data Indices, LLC. S&P data © 2020 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved.

Global Fixed Income

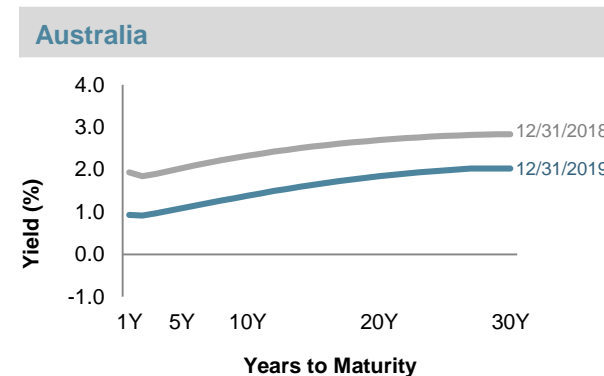
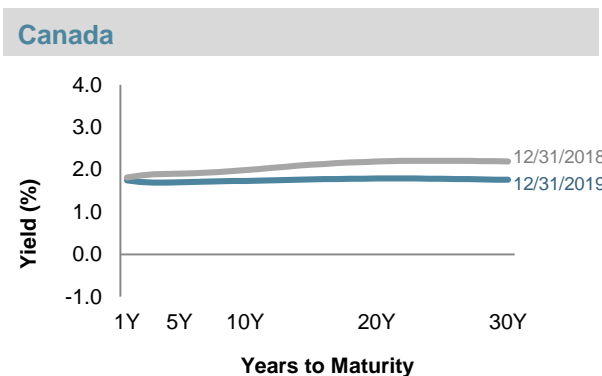
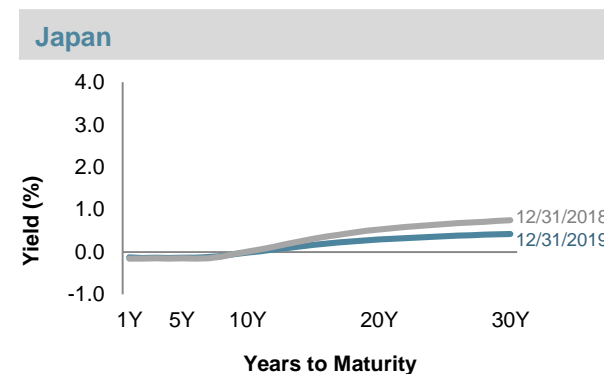
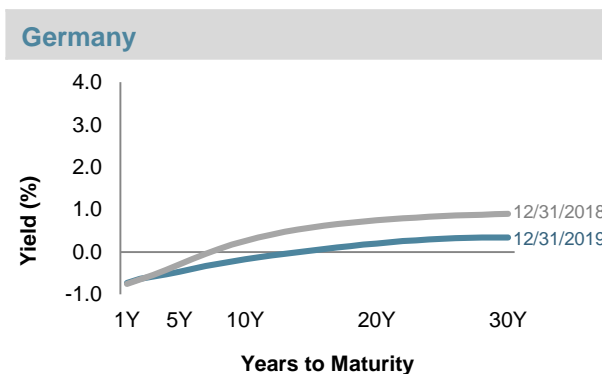
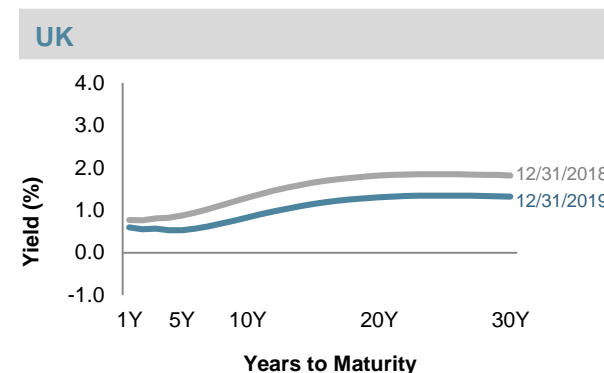
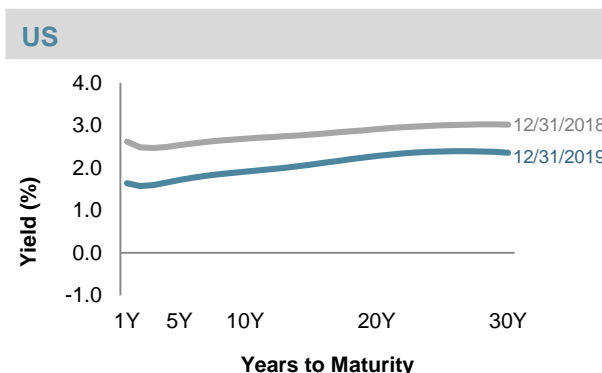
2019 Yield Curves



Interest rates in the global developed markets generally decreased in 2019.

Longer-term bonds generally outperformed shorter-term bonds.

Short- and intermediate-term nominal interest rates are negative in Japan and Germany.



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

	1Y	5Y	10Y	20Y	30Y
US	-97.6	-81.8	-77.9	-63.4	-66.1
UK	-17.6	-34.0	-46.9	-50.8	-50.3
Germany	2.1	-17.3	-43.3	-54.5	-55.4
Japan	2.6	2.0	-2.3	-23.9	-32.4
Canada	-6.9	-20.6	-25.4	-40.1	-43.7
Australia	-100.2	-94.6	-94.3	-85.4	-80.3

Impact of Diversification

2019 Returns

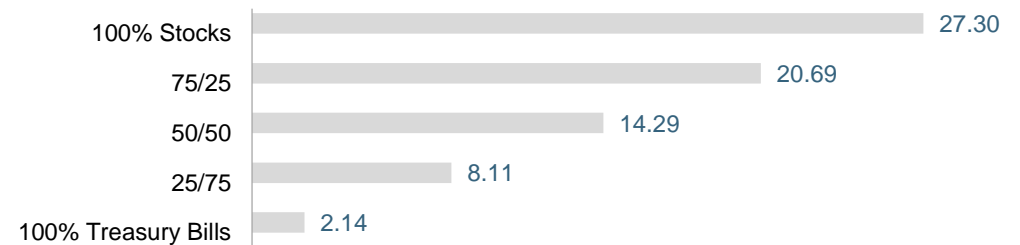
These portfolios illustrate the performance of different global stock/bond mixes. Mixes with larger allocations to stocks are considered riskier but have higher expected returns over time.

Period Returns (%)

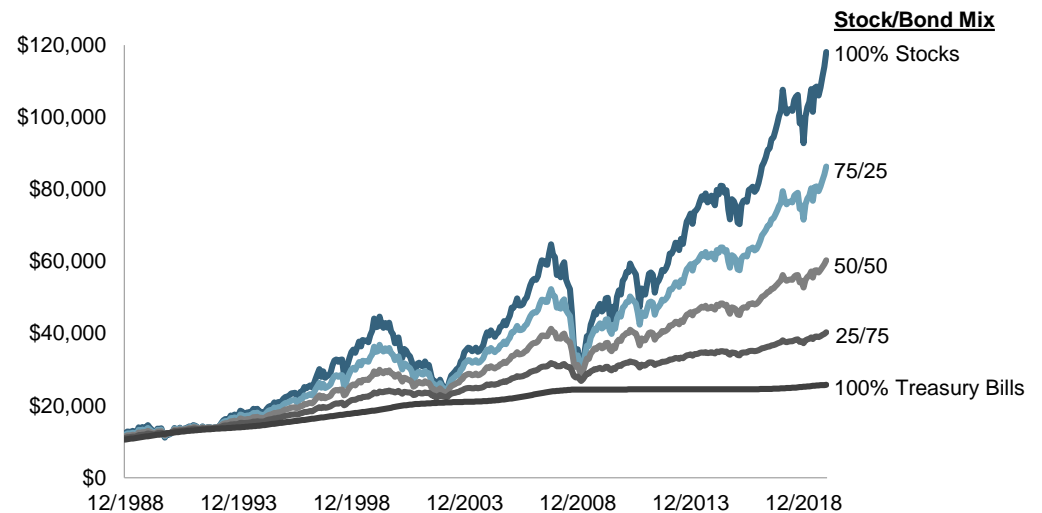
* Annualized

Asset Class	1 Year	3 Years*	5 Years*	10 Years*	10-Year STDEV ¹
100% Stocks	27.30	13.05	9.00	9.37	13.18
75/25	20.69	10.21	7.08	7.27	9.89
50/50	14.29	7.35	5.10	5.09	6.59
25/75	8.11	4.47	3.07	2.83	3.30
100% Treasury Bills	2.14	1.58	0.99	0.52	0.22

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 2020, 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).