

Q4

Quarterly Market Review

Fourth Quarter 2019



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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 Market Performance

Select Currency Performance vs. US Dollar

Real Estate Investment Trusts (REITs)

Commodities

Fixed Income

Global Fixed Income

Impact of Diversification

Quarterly Topic: Tuning Out the Noise



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
4Q 2019	STOCKS					BONDS	
	9.10% 	7.86% 	11.84% 	0.80% 		0.18% 	-1.11%
Since Jan. 2001							
Avg. Quarterly Return	2.1%	1.5%	2.9%	2.6%		1.2%	1.1%
Best Quarter	16.8%	25.9%	34.7%	32.3%		4.6%	4.6%
	2009 Q2	2009 Q2	2009 Q2	2009 Q3		2001 Q3	2008 Q4
Worst Quarter	-22.8%	-21.1%	-27.6%	-36.1%		-3.0%	-2.7%
	2008 Q4	2008 Q4	2008 Q4	2008 Q4		2016 Q4	2015 Q2

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.



Long-Term Market Summary

Index Returns

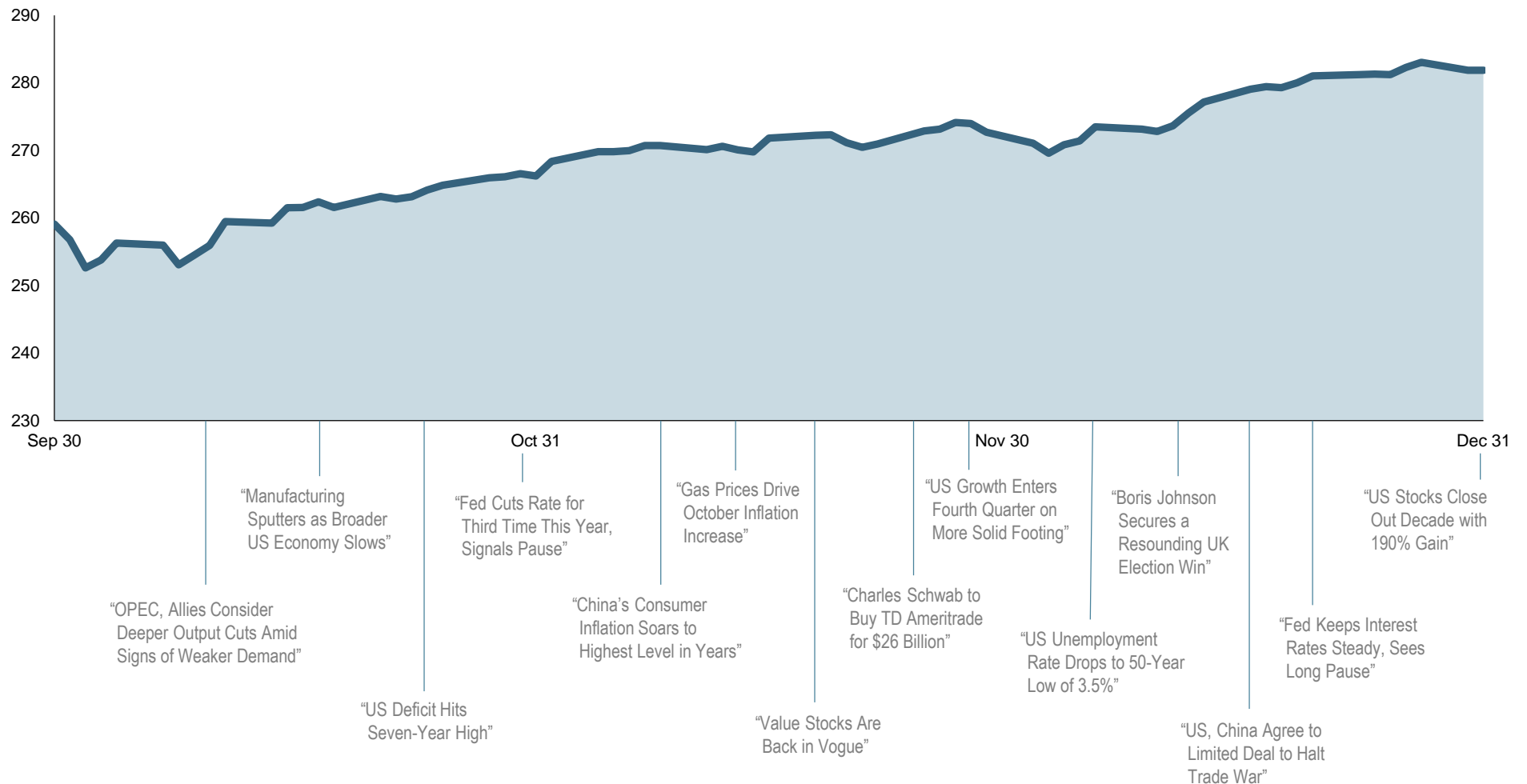
	US Stock Market	International Developed Stocks	Emerging Markets Stocks	Global Real Estate	US Bond Market	Global Bond Market ex US
1 Year	STOCKS				BONDS	
	31.02%	22.49%	18.42%	23.12%	8.72%	7.57%
5 Years						
	11.24%	5.42%	5.61%	5.56%	3.05%	3.87%
10 Years						
	13.42%	5.32%	3.68%	9.31%	3.75%	4.29%

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World Stock Market Performance

MSCI All Country World Index with selected headlines from Q4 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 2020, all rights reserved.

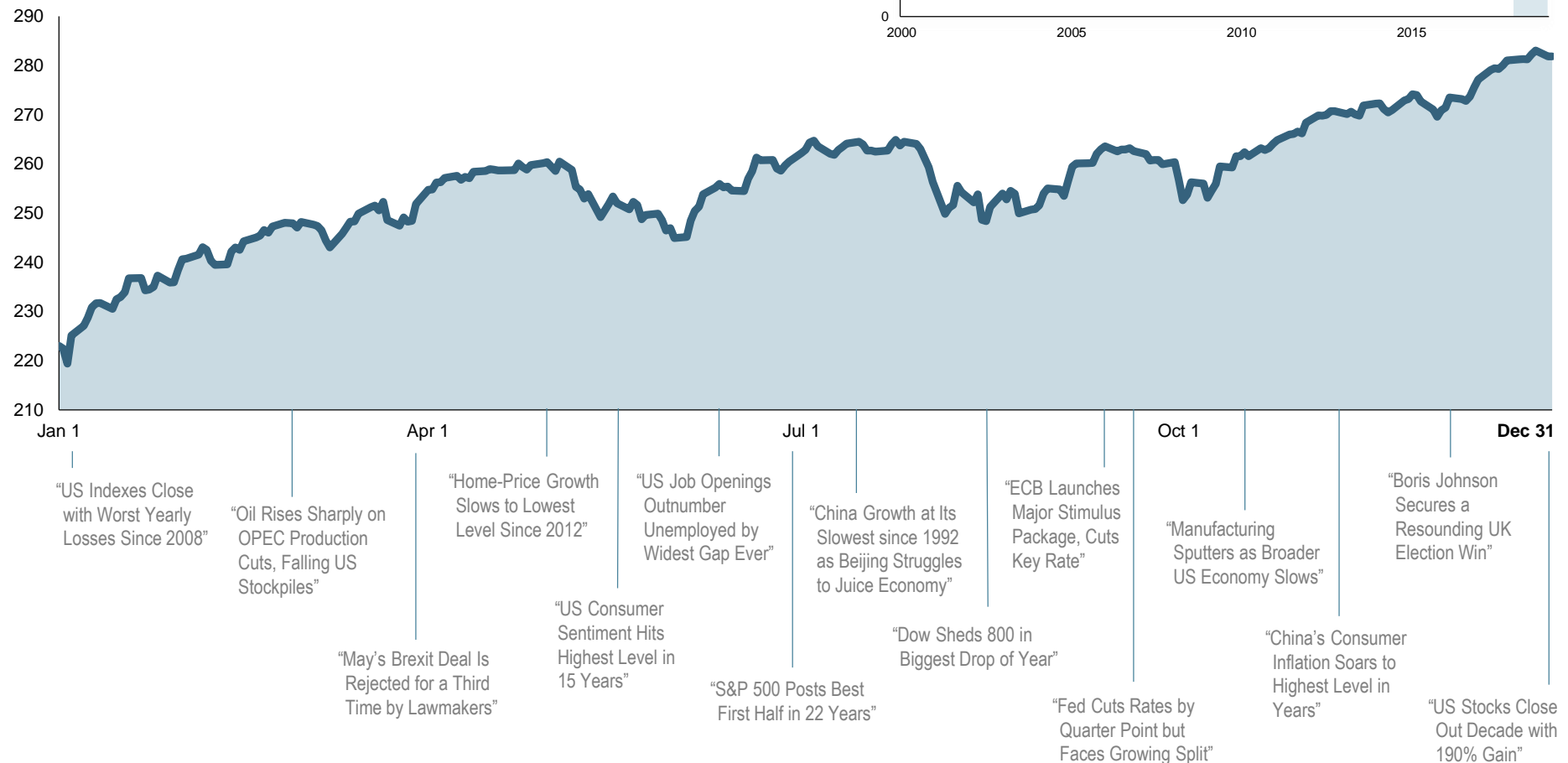
It is not possible to invest directly in an index. Performance does not reflect the expenses associated with management of an actual portfolio. **Past performance is not a guarantee of future results.**



World Stock Market Performance

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

SHORT TERM (Q1 2019–Q4 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 2020, all rights reserved.

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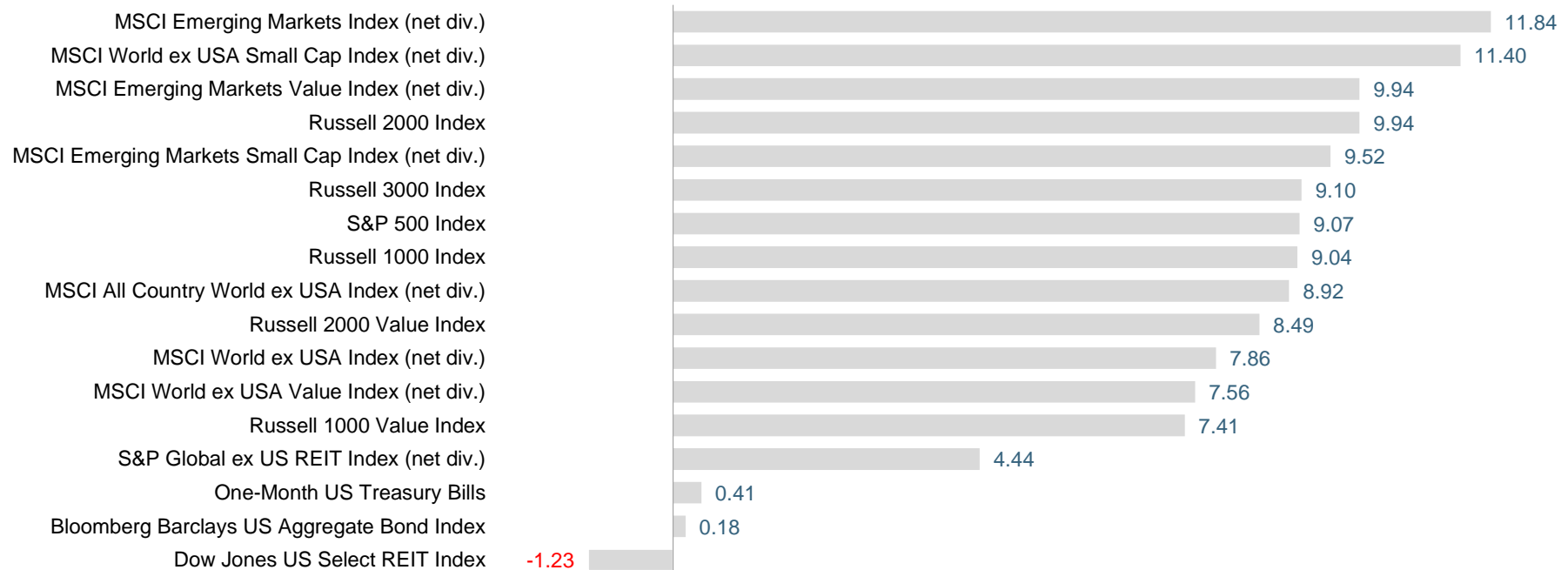
World Asset Classes

Fourth Quarter 2019 Index Returns (%)

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

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

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



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US Stocks

Fourth Quarter 2019 Index Returns

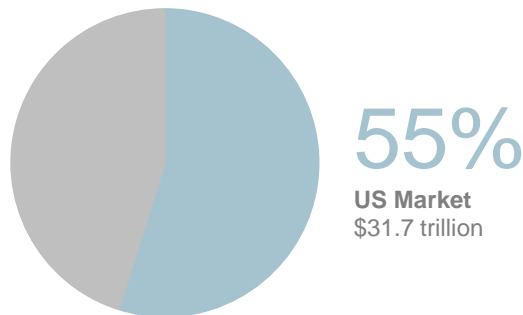
US equities outperformed non-US developed equities but underperformed emerging markets stocks in the fourth quarter.

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

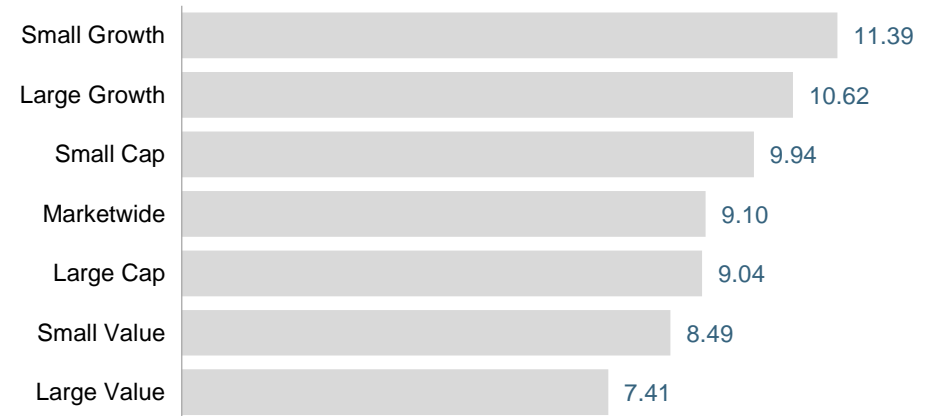
Small caps outperformed large caps in the US.

REIT indices underperformed equity market indices.

World Market Capitalization—US



Ranked Returns (%)



Period Returns (%)

* Annualized

Asset Class	QTR	1 Year	3 Years*	5 Years*	10 Years*
Small Growth	11.39	28.48	12.49	9.34	13.01
Large Growth	10.62	36.39	20.49	14.63	15.22
Small Cap	9.94	25.52	8.59	8.23	11.83
Marketwide	9.10	31.02	14.57	11.24	13.42
Large Cap	9.04	31.43	15.05	11.48	13.54
Small Value	8.49	22.39	4.77	6.99	10.56
Large Value	7.41	26.54	9.68	8.29	11.80

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. Dow Jones US Select REIT Index used as proxy for the US REIT market. 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.



International Developed Stocks

Fourth Quarter 2019 Index Returns

In US dollar terms, developed markets outside the US underperformed both the US equity market and emerging markets equities during the quarter.

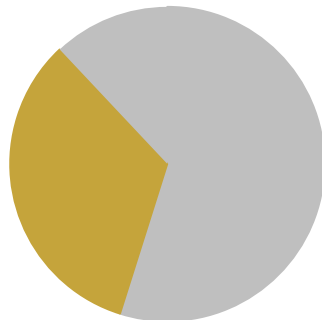
Small caps outperformed large caps in non-US developed markets.

Value underperformed growth across large and small cap stocks.

World Market Capitalization—International Developed

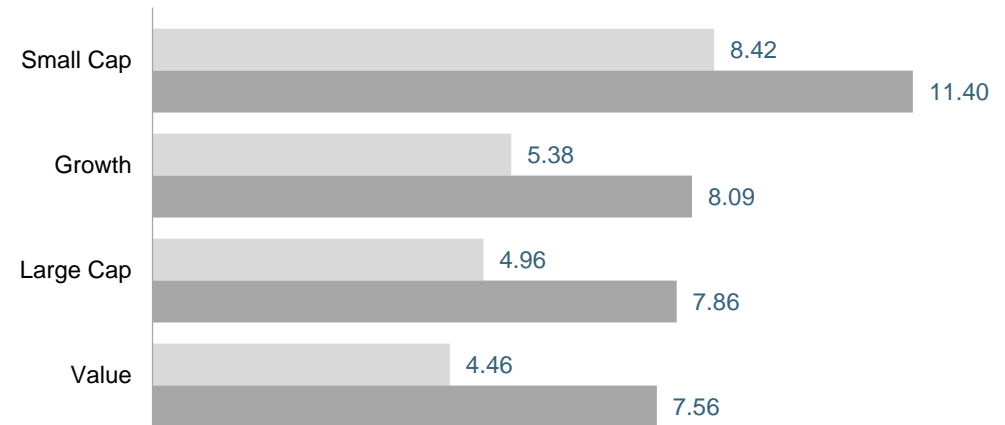
33%

International
Developed Market
\$19.2 trillion



Ranked Returns (%)

■ Local currency ■ US currency



Period Returns (%)

* Annualized

Asset Class	QTR	1 Year	3 Years*	5 Years*	10 Years*
Small Cap	11.40	25.41	10.42	8.17	8.04
Growth	8.09	27.92	12.34	7.18	6.51
Large Cap	7.86	22.49	9.34	5.42	5.32
Value	7.56	17.02	6.36	3.59	4.05

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Emerging Markets Stocks

Fourth Quarter 2019 Index Returns

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

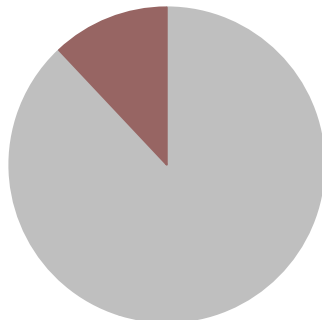
Value stocks underperformed growth stocks.

Small caps underperformed large caps.

World Market Capitalization—Emerging Markets

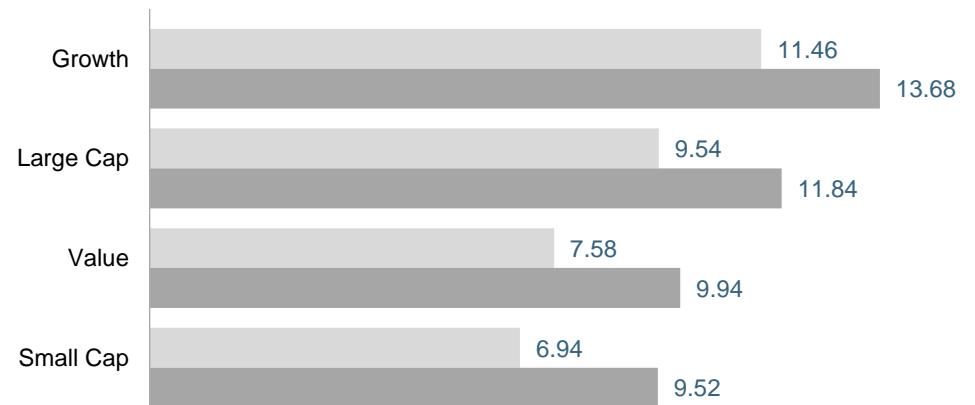
12%

Emerging Markets
\$6.9 trillion



Ranked Returns (%)

■ Local currency ■ US currency



Period Returns (%)

* Annualized

Asset Class	QTR	1 Year	3 Years*	5 Years*	10 Years*
Growth	13.68	25.10	14.50	7.45	5.20
Large Cap	11.84	18.42	11.57	5.61	3.68
Value	9.94	11.94	8.57	3.67	2.08
Small Cap	9.52	11.50	6.70	2.97	2.95

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

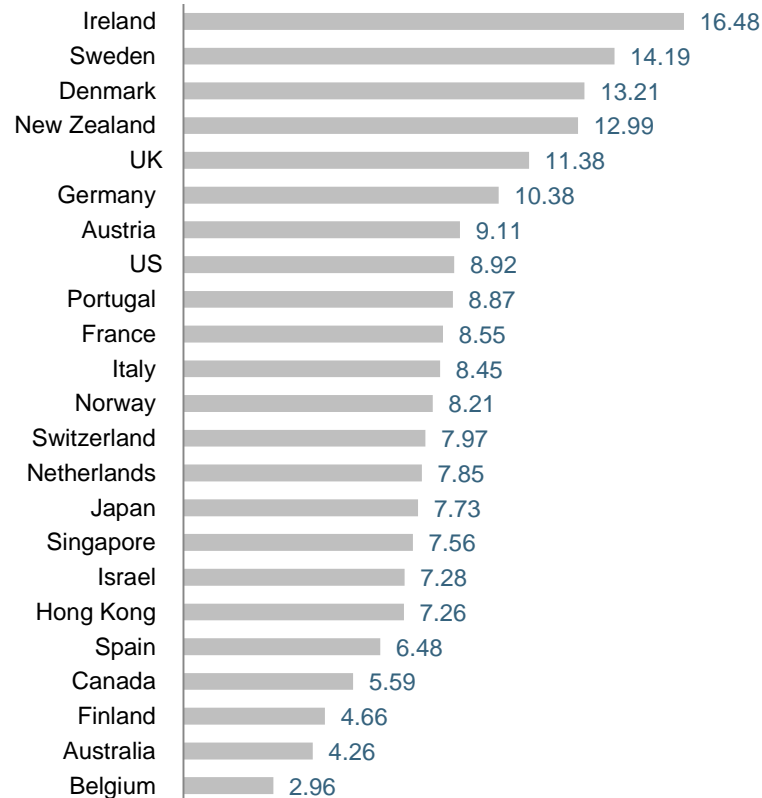


Select Market Performance

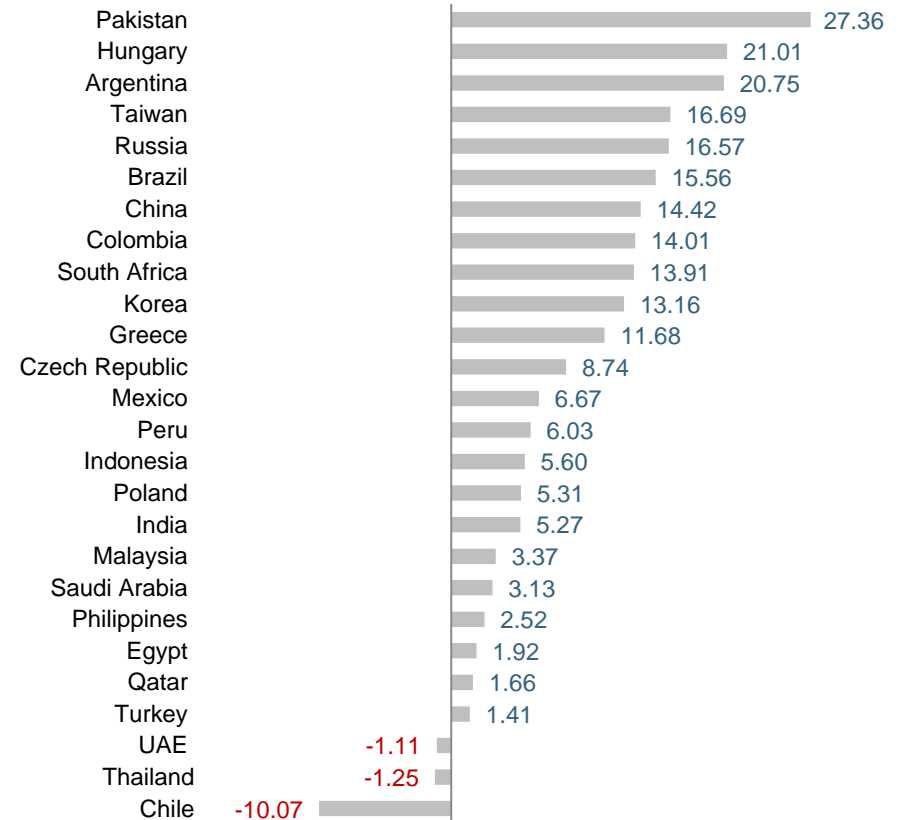
Fourth Quarter 2019 Index Returns

In US dollar terms, Ireland and Sweden recorded the highest country performance in developed markets in the fourth quarter, while Australia and Belgium posted the lowest returns. In emerging markets, Pakistan and Hungary were the top performers, while Chile and Thailand 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 2020, all rights reserved. UAE and Qatar have been reclassified as emerging markets by MSCI, effective May 2014. Saudi Arabia and Argentina have been reclassified as emerging markets by MSCI, effective May 2019.

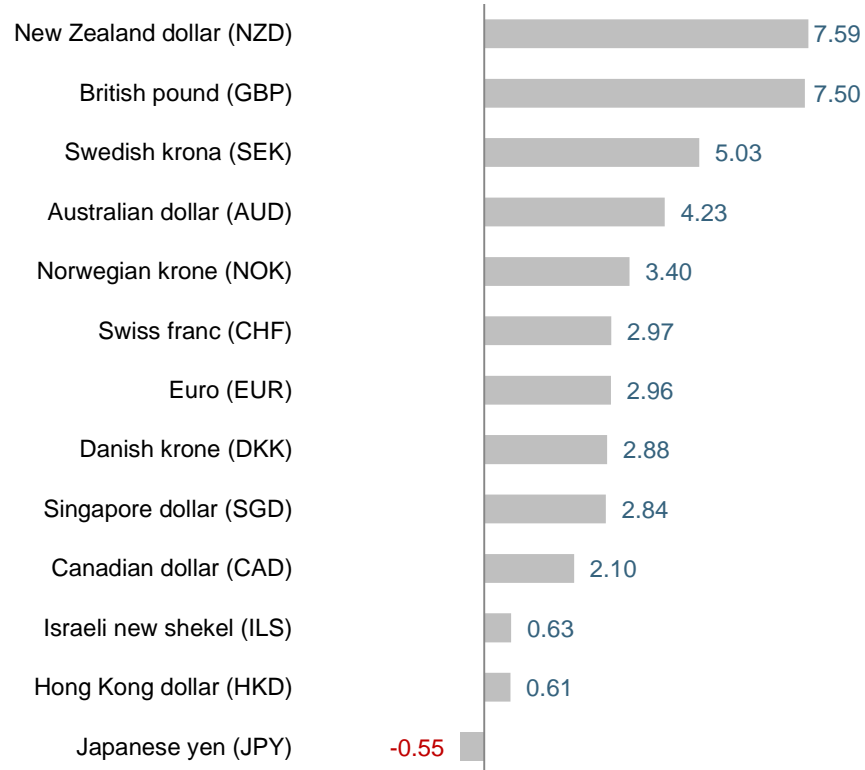


Select Currency Performance vs. US Dollar

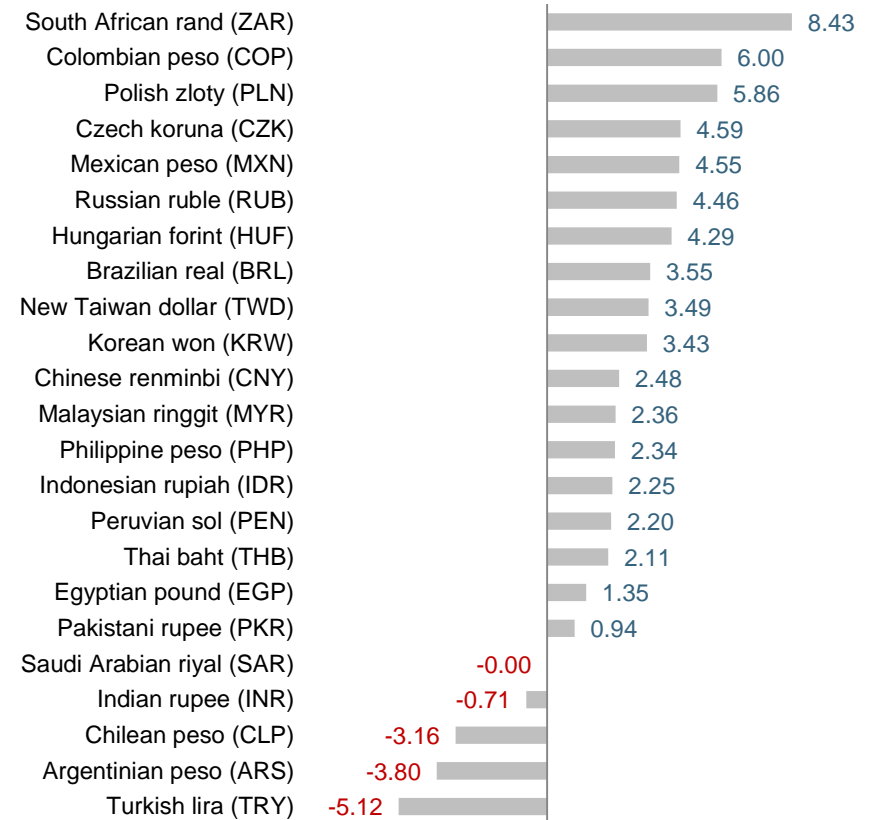
Fourth Quarter 2019

In developed and emerging markets, most currencies appreciated vs. the US dollar. The few exceptions included the Japanese yen and the Turkish lira.

Ranked Developed Markets (%)



Ranked Emerging Markets (%)

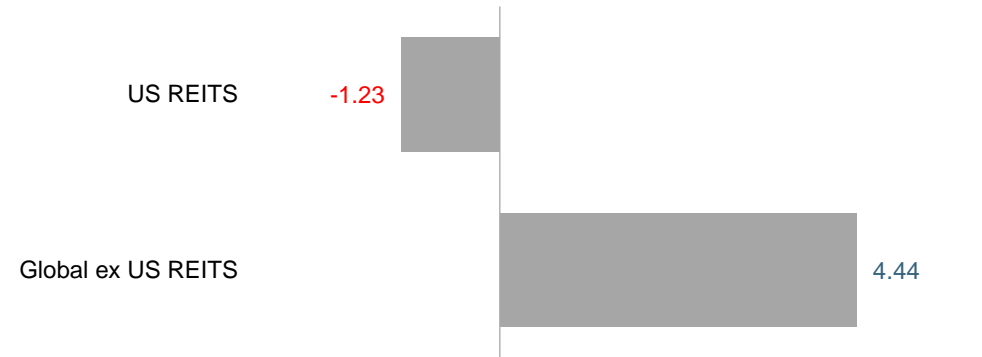


Real Estate Investment Trusts (REITs)

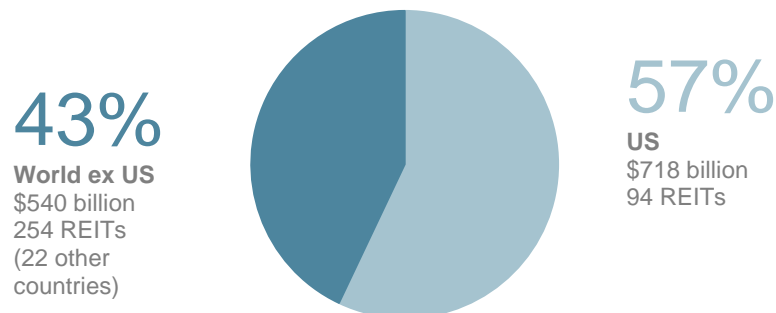
Fourth Quarter 2019 Index Returns

US real estate investment trusts (REITs) underperformed non-US REITs in US dollar terms during the fourth quarter.

Ranked Returns (%)



Total Value of REIT Stocks



Period Returns (%)

Asset Class	* Annualized				
	QTR	1 Year	3 Years*	5 Years*	10 Years*
Global ex US REITS	4.44	23.59	9.79	5.65	7.74
US REITS	-1.23	23.10	6.95	6.40	11.57

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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

Fourth Quarter 2019 Index Returns

The Bloomberg Commodity Index Total Return increased 4.42% in the fourth quarter.

Coffee and soybean oil were the top performers, gaining 24.33% and 17.62%, respectively.

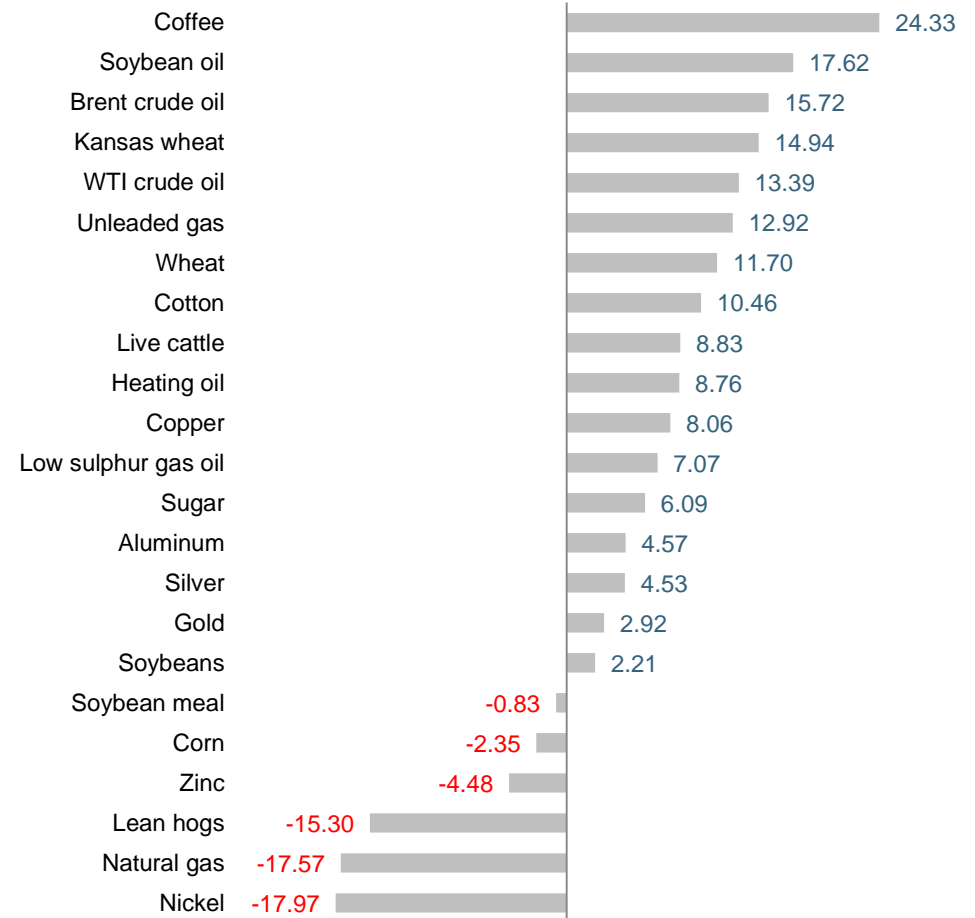
Nickel and natural gas were the worst performers, declining by 17.97% and 17.57%, respectively.

Period Returns (%)

* Annualized

Asset Class	QTR	1 Year	3 Years*	5 Years*	10 Years*
Commodities	4.42	7.69	-0.94	-3.92	-4.73

Ranked Returns (%)





Fixed Income

Fourth Quarter 2019 Index Returns

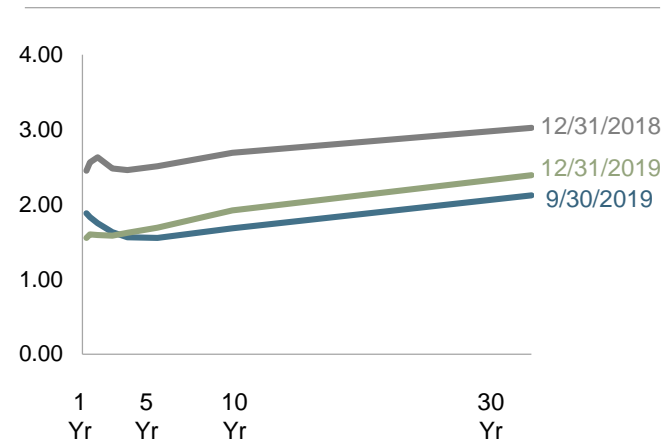
Interest rate changes were mixed in the US Treasury market during the fourth quarter. The yield on the 5-year Treasury note increased 14 basis points (bps), ending at 1.69%. The yield on the 10-year note rose 24 bps to 1.92%. The 30-year Treasury bond yield increased 27 bps to 2.39%.

On the short end of the yield curve, the 1-month Treasury bill yield decreased to 1.48%, while the yield on the 1-year bill dipped 16 bps to 1.59%. The 2-year note yield finished at 1.58% after a decrease of 5 bps.

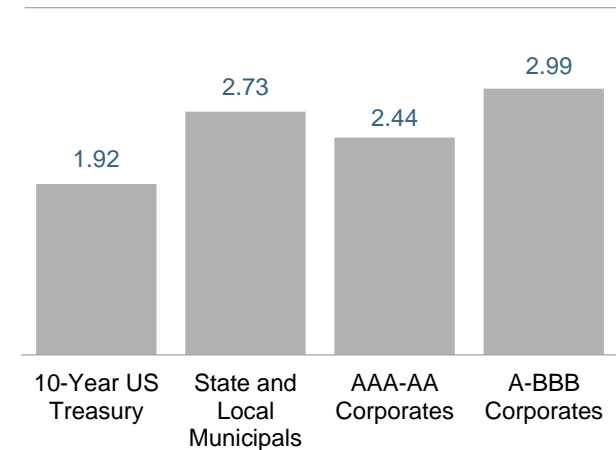
In terms of total returns, short-term corporate bonds gained 0.95%. Intermediate corporate bonds had a total return of 1.10%.

The total return for short-term municipal bonds was 0.84%, while intermediate-term munis returned 0.93%. General obligation bonds outperformed revenue bonds.

US Treasury Yield Curve (%)



Bond Yield across Issuers (%)



Period Returns (%)

Asset Class	QTR	1 Year	3 Years*	5 Years*	10 Years*
Bloomberg Barclays US High Yield Corporate Bond Index	2.61	14.32	6.37	6.13	7.57
FTSE World Government Bond Index 1-5 Years	1.01	2.43	2.40	0.74	0.19
Bloomberg Barclays US TIPS Index	0.79	8.43	3.32	2.62	3.36
Bloomberg Barclays Municipal Bond Index	0.74	7.54	4.72	3.53	4.34
ICE BofA 1-Year US Treasury Note Index	0.59	2.93	1.78	1.25	0.83
ICE BofA US 3-Month Treasury Bill Index	0.46	2.28	1.67	1.07	0.58
Bloomberg Barclays US Aggregate Bond Index	0.18	8.72	4.03	3.05	3.75
FTSE World Government Bond Index 1-5 Years (hedged to USD)	0.18	3.86	2.37	1.92	1.85
Bloomberg Barclays US Government Bond Index Long	-4.06	14.75	6.95	4.16	6.97

*Annualized

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 (S&BBI) 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

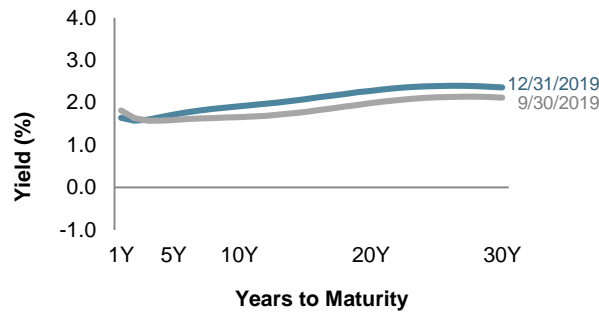
Fourth Quarter 2019 Yield Curves

Interest rates in global developed markets generally increased during the fourth quarter.

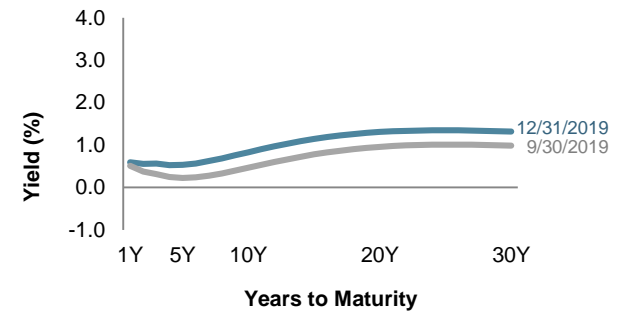
Longer-term bonds generally underperformed shorter-term bonds in the global developed markets.

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

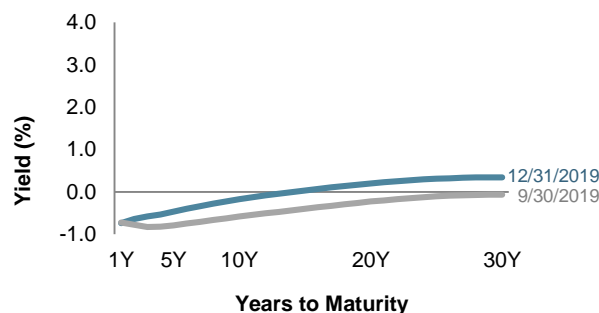
US



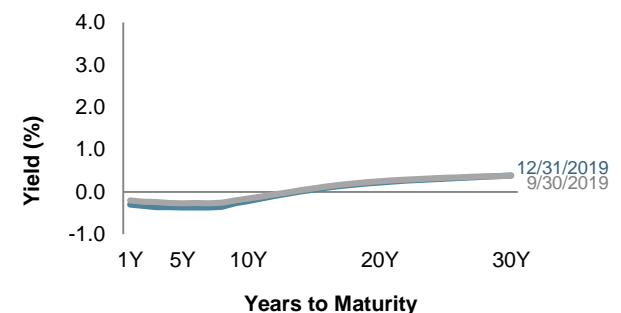
UK



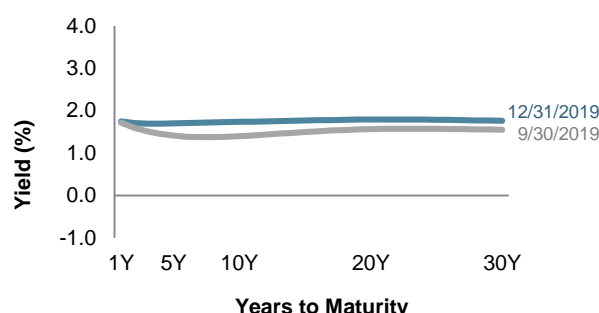
Germany



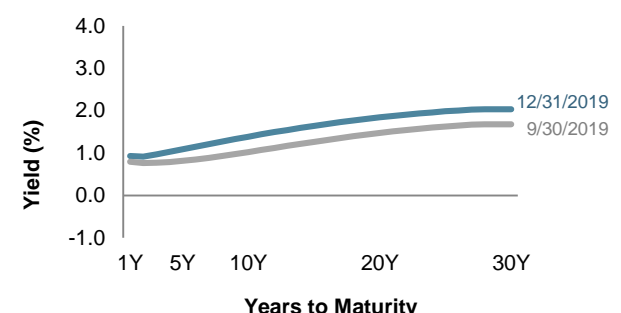
Japan



Canada



Australia



Changes in Yields (bps) since 9/30/2019

	1Y	5Y	10Y	20Y	30Y
US	-17.2	12.7	25.4	29.3	24.1
UK	8.2	30.6	36.8	34.9	33.1
Germany	-1.4	32.2	40.9	42.7	40.3
Japan	16.9	23.8	19.6	7.0	3.9
Canada	3.0	29.0	33.7	22.7	21.0
Australia	13.7	27.4	36.2	36.7	35.3



Impact of Diversification

Fourth Quarter 2019

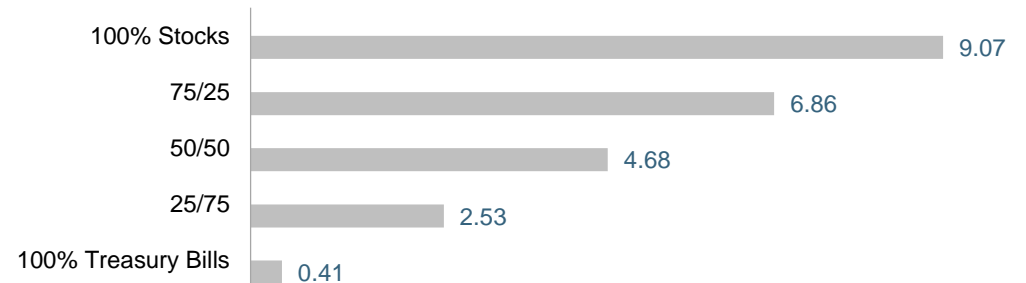
These portfolios illustrate the performance of different global stock/bond mixes and highlight the benefits of diversification. Mixes with larger allocations to stocks are considered riskier but have higher expected returns over time.

Period Returns (%)

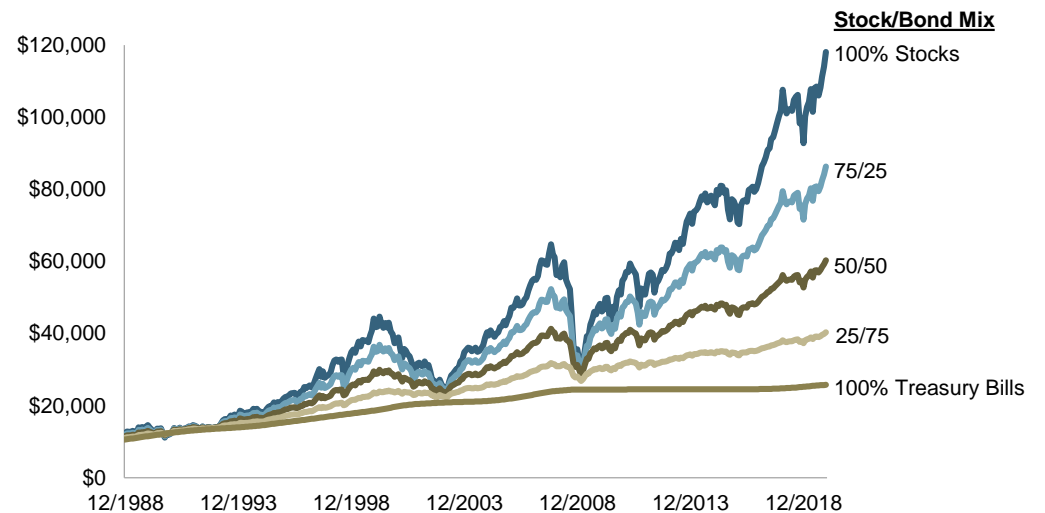
* Annualized

Asset Class	QTR	1 Year	3 Years*	5 Years*	10 Years*	10-Year STDEV ¹
100% Stocks	9.07	27.30	13.05	9.00	9.37	13.18
75/25	6.86	20.69	10.21	7.08	7.27	9.89
50/50	4.68	14.29	7.35	5.10	5.09	6.59
25/75	2.53	8.11	4.47	3.07	2.83	3.30
100% Treasury Bills	0.41	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).



Tuning Out the Noise

Fourth Quarter 2019

When faced with short-term noise, it is easy to lose sight of the potential long-term benefits of staying invested.

For investors, it can be easy to feel overwhelmed by the relentless stream of news about markets. Being bombarded with data and headlines presented as impactful to your financial well-being can evoke strong emotional responses from even the most experienced investors. Headlines from the “lost decade”¹ can help illustrate several periods that may have led market participants to question their approach.

May 1999:

Dow Jones Industrial Average Closes Above 11,000 for the First Time

March 2000:

Nasdaq Stock Exchange Index Reaches an All-Time High of 5,048

April 2000:

In Less Than a Month, Nearly a Trillion Dollars of Stock Value Evaporates

October 2002:

Nasdaq Hits a Bear-Market Low of 1,114

September 2005:

Home Prices Post Record Gains

September 2008:

Lehman Files for Bankruptcy, Merrill Is Sold

While these events are now a decade or more behind us, they can still serve as an important reminder for investors today. For many, feelings of elation or despair can accompany headlines like these. We should remember that markets can be volatile and recognize that, in the moment, doing nothing may feel paralyzing. Throughout these ups and downs, however, if one had hypothetically invested \$10,000 in US stocks in May 1999 and stayed invested, that investment would be worth approximately \$28,000 today.²

When faced with short-term noise, it is easy to lose sight of the potential long-term benefits of staying invested. While no one has a crystal ball, adopting a long-term perspective can help change how investors view market volatility and help them look beyond the headlines.

The Value of a Trusted Advisor

Part of being able to avoid giving in to emotion during periods of uncertainty is having an appropriate asset allocation that is aligned with an investor’s willingness and ability to bear risk. It also helps to remember that if returns were guaranteed, you would not expect to earn a premium. Creating a portfolio investors are comfortable with, understanding that uncertainty is a part of investing, and sticking to a plan may ultimately lead to a better investment experience.

1. For the US stock market, this is generally understood as the period inclusive of 1999–2009.

2. In USD. As measured by the S&P 500 Index. A hypothetical portfolio of \$10,000 invested on April 30, 1999, and tracking the S&P 500 Index, would have grown to \$28,408 on March 31, 2018. However, performance of a hypothetical investment does not reflect transaction costs, taxes, or returns that any investor actually attained and may not reflect the true costs, including management fees, of an actual portfolio. Changes in any assumption may have a material impact on the hypothetical returns presented. It is not possible to invest directly in an index.

Tuning Out the Noise

(continued from page 18)

However, as with many aspects of life, we can all benefit from a bit of help in reaching our goals. The best athletes in the world work closely with a coach to increase their odds of winning, and many successful professionals rely on the assistance of a mentor or career coach to help them manage the obstacles that arise during a career. Why? They understand that the wisdom of an experienced professional, combined with the discipline to forge ahead during challenging times, can keep them on the right track. The right financial advisor can play this vital role for an investor. A financial advisor can provide the expertise, perspective, and encouragement to keep you focused on your destination and in your seat when it matters most.

A recent survey conducted by Dimensional Fund Advisors (see **Exhibit 1**) found that, along with progress towards their goals, investors place a high value on the sense of security they receive from their relationship with a financial advisor.

Having a strong relationship with an advisor can help you be better prepared to live your life through the ups and downs of the market. That's the value of discipline, perspective, and calm. That's the difference the right financial advisor makes.

EXHIBIT 1

How Do You Primarily Measure the Value Received from Your Advisor?

Top Four Responses



Indices are not available for direct investment. Their performance does not reflect the expenses associated with the management of an actual portfolio. Past performance is not a guarantee of future results. 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. There is always the risk that an investor may lose money. A long-term investment approach cannot guarantee a profit.

"Dimensional" refers to the Dimensional separate but affiliated entities generally, rather than to one particular entity. These entities are Dimensional Fund Advisors LP, Dimensional Fund Advisors Ltd., Dimensional Ireland Limited, DFA Australia Limited, Dimensional Fund Advisors Canada ULC, Dimensional Fund Advisors Pte. Ltd, Dimensional Ireland Limited, Dimensional Japan Ltd., and Dimensional Hong Kong Limited. Dimensional Hong Kong Limited is licensed by the Securities and Futures Commission to conduct Type 1 (dealing in securities) regulated activities only and does not provide asset management services.