



# 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
<b>4Q 2019</b>	<b>STOCKS</b>				<b>BONDS</b>	
	<b>9.10%</b> 	<b>7.86%</b> 	<b>11.84%</b> 	<b>0.80%</b> 	<b>0.18%</b> 	<b>-1.11%</b> 
<b>Since Jan. 2001</b>						
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%
	<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%	-21.1%	-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 © 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

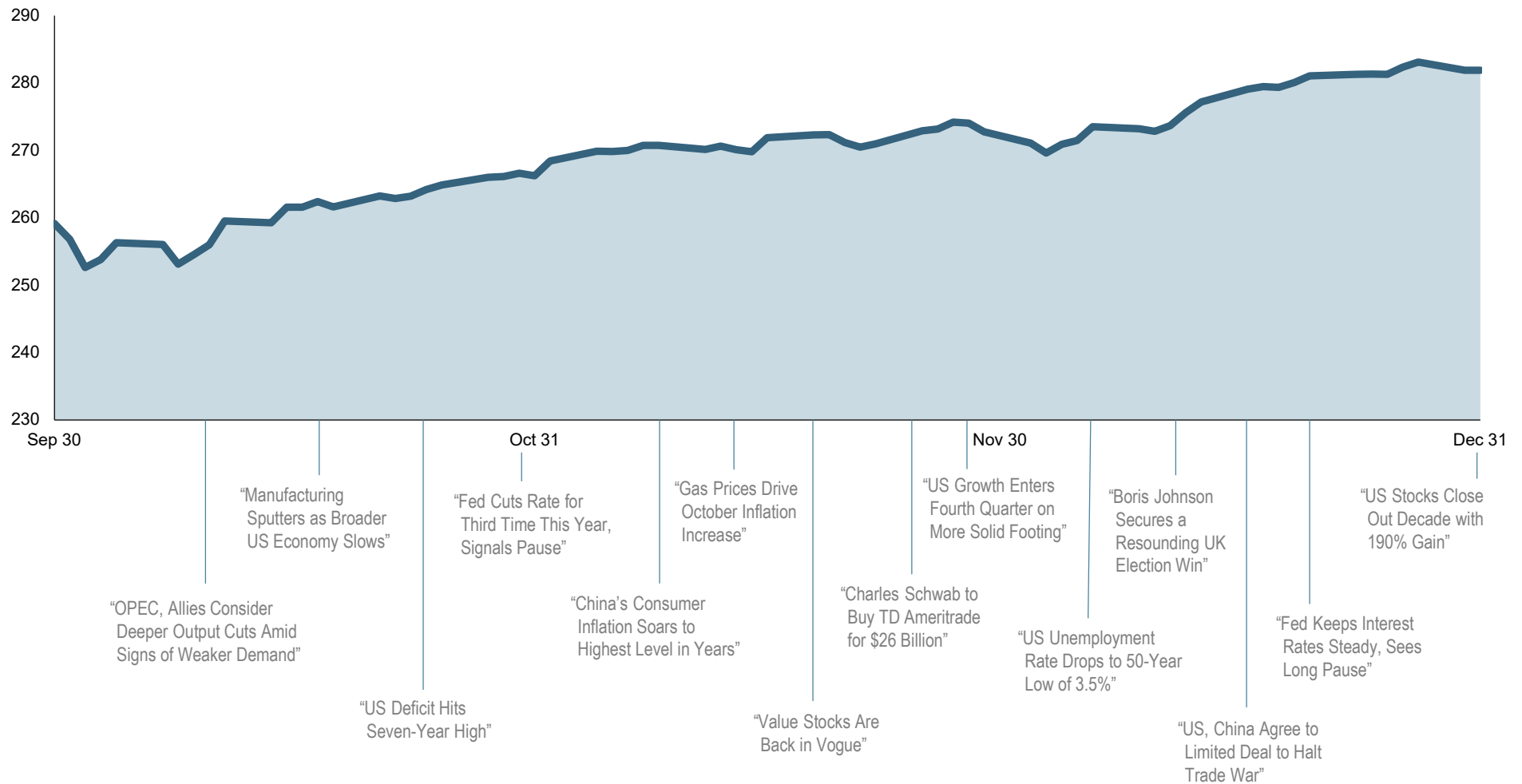
## Index Returns

	US Stock Market	International Developed Stocks	Emerging Markets Stocks	Global Real Estate	US Bond Market	Global Bond Market ex US
<b>1 Year</b>	<b>STOCKS</b>				<b>BONDS</b>	
	31.02%	22.49%	18.42%	23.12%	8.72%	7.57%
						
<b>5 Years</b>						
	11.24%	5.42%	5.61%	5.56%	3.05%	3.87%
						
<b>10 Years</b>						
	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



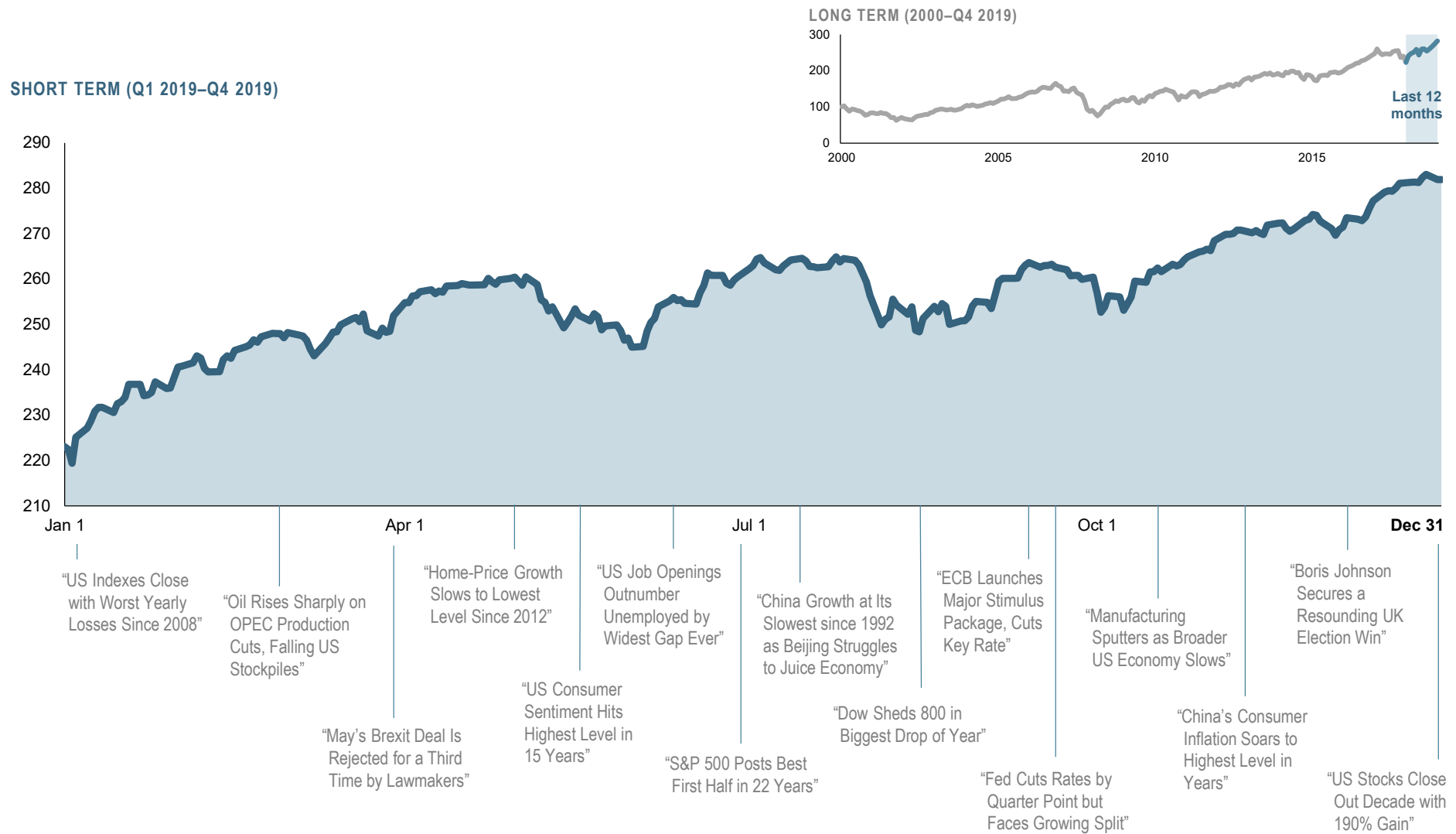
*These headlines are not offered to explain market returns. Instead, they serve as a reminder that investors should view daily events from a long-term perspective and avoid making investment decisions based solely on the news.*

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



*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.**

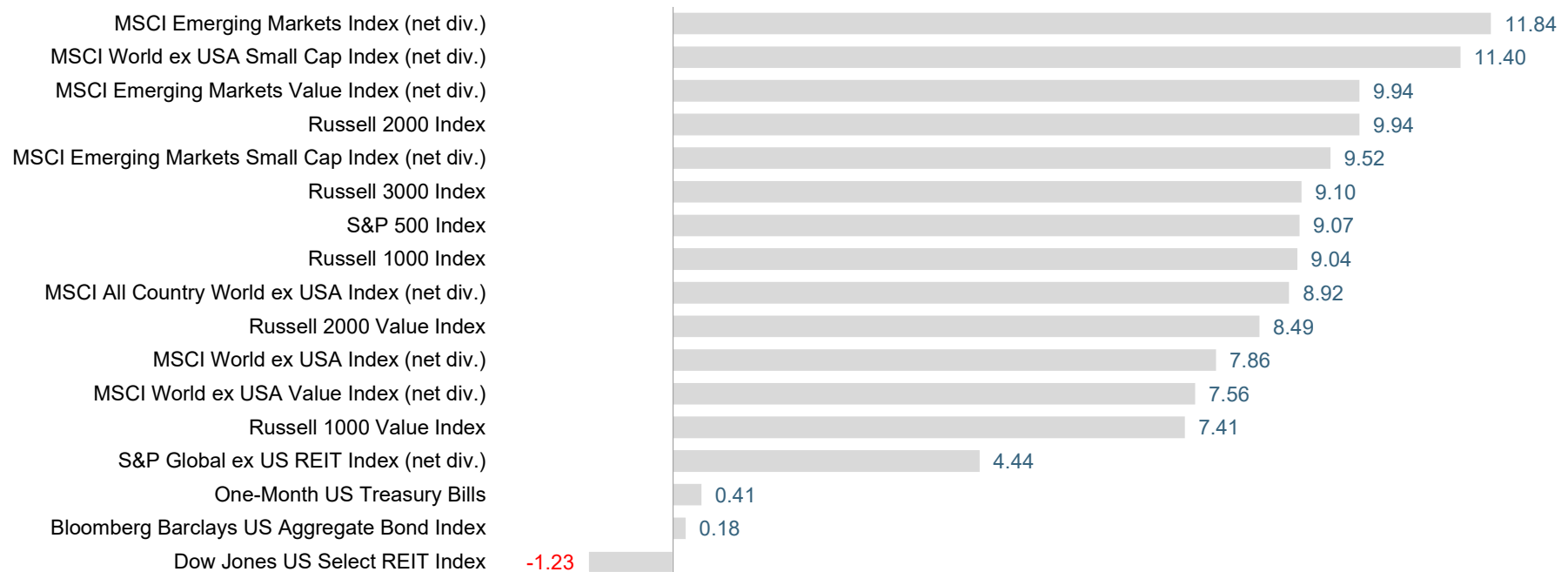
# World Asset Classes

## 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

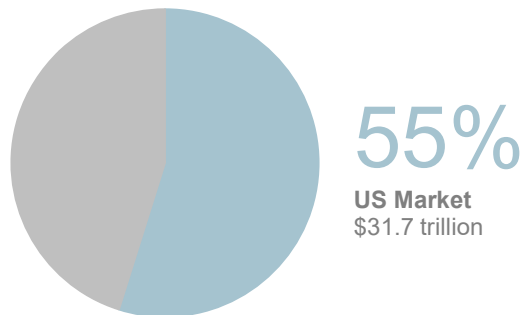
US equities outperformed non-US developed equities but underperformed emerging markets stocks in the fourth quarter.

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

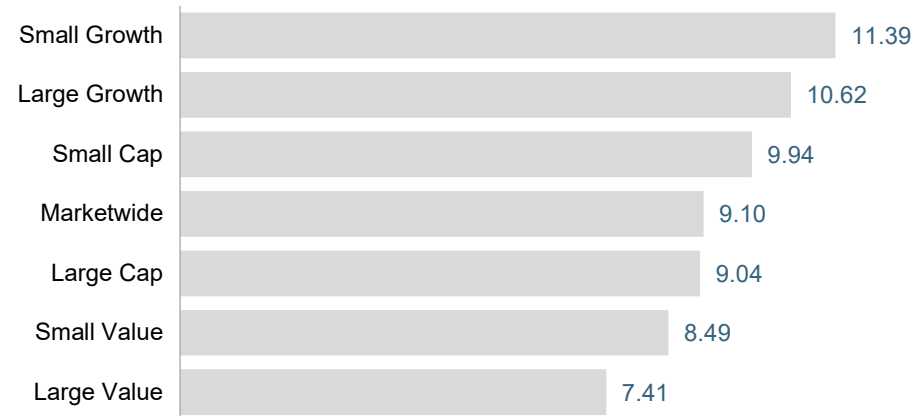
Small caps outperformed large caps in the US.

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.

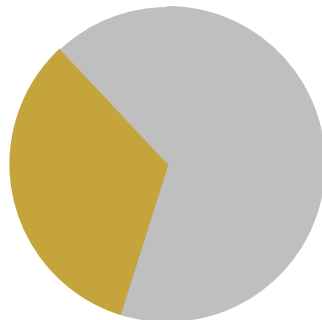
Small caps outperformed large caps in non-US developed markets.

Value underperformed growth across large and small cap stocks.

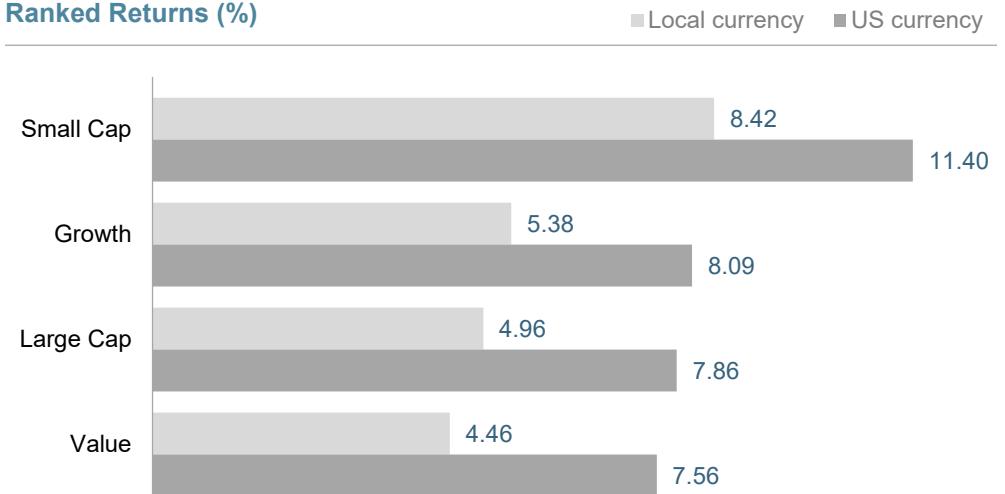
### World Market Capitalization—International Developed

33%

International  
Developed Market  
\$19.2 trillion



### Ranked Returns (%)



### Period Returns (%)

Asset Class	QTR	* Annualized			
		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.

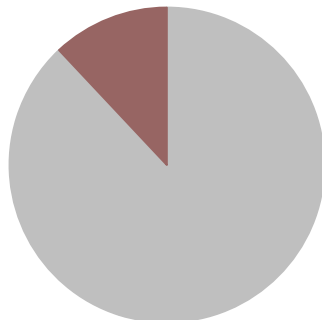
Value stocks underperformed growth stocks.

Small caps underperformed large caps.

### World Market Capitalization—Emerging Markets

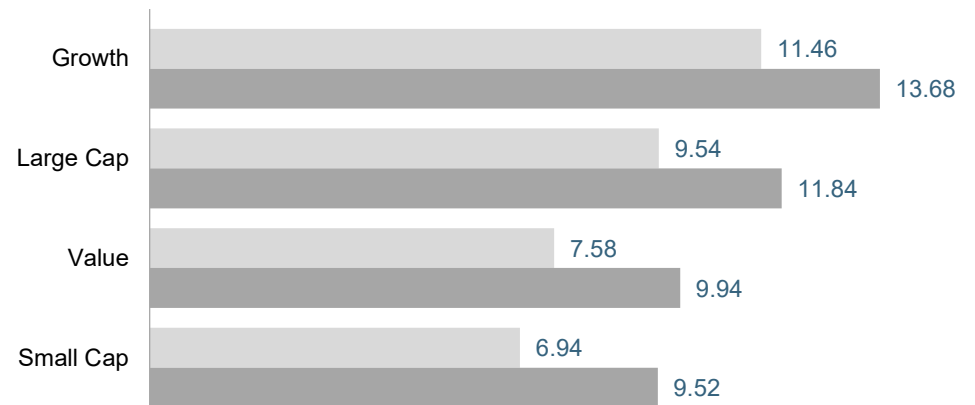
**12%**

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

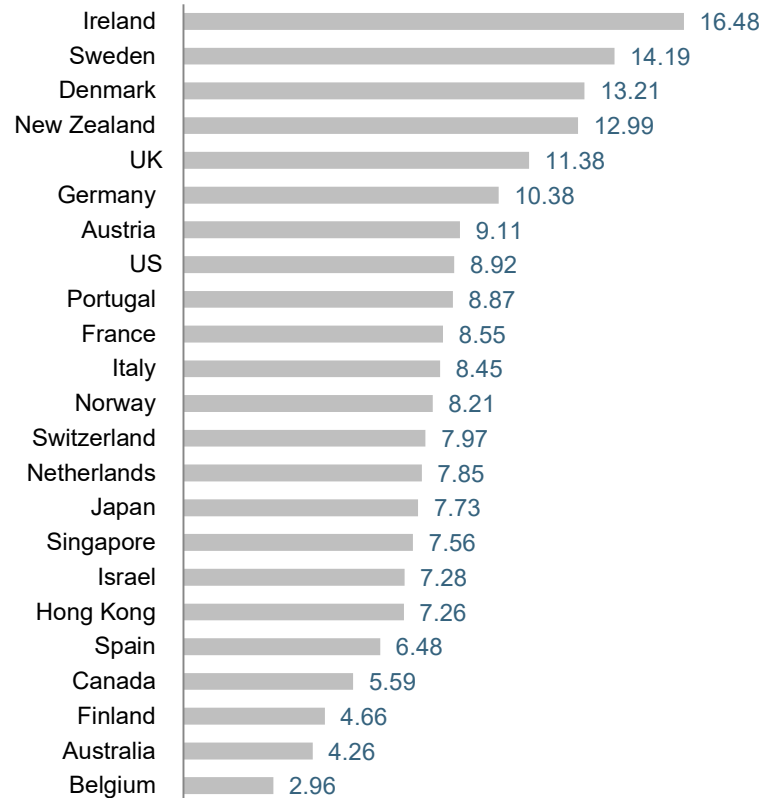
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# Select Market Performance

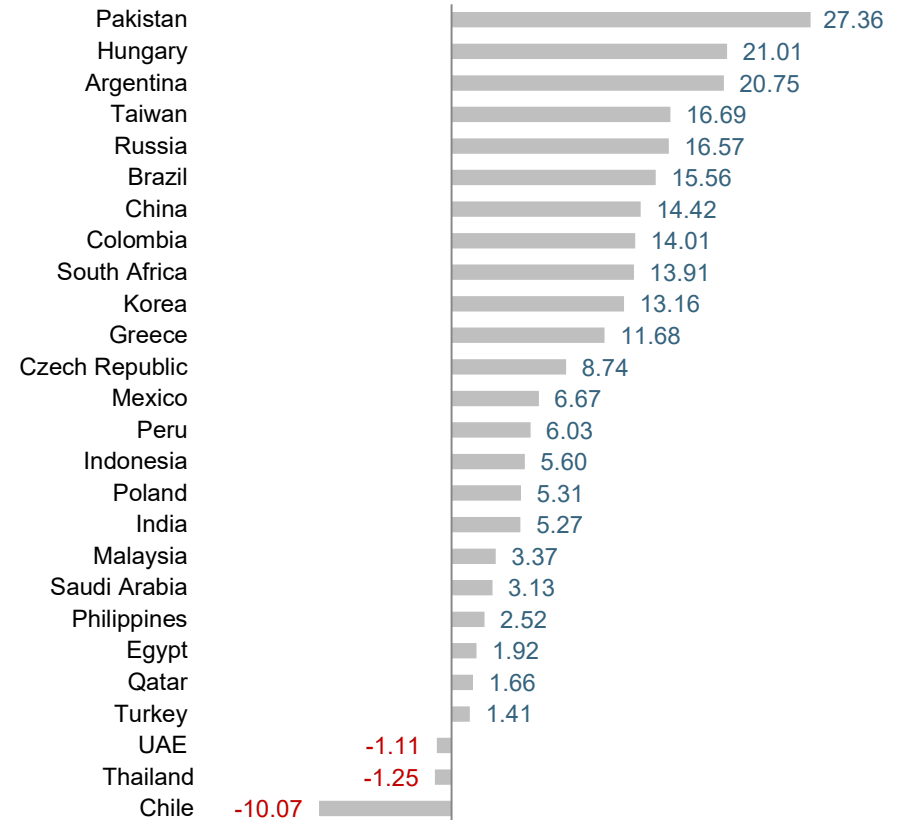
## Fourth Quarter 2019 Index Returns

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 (%)



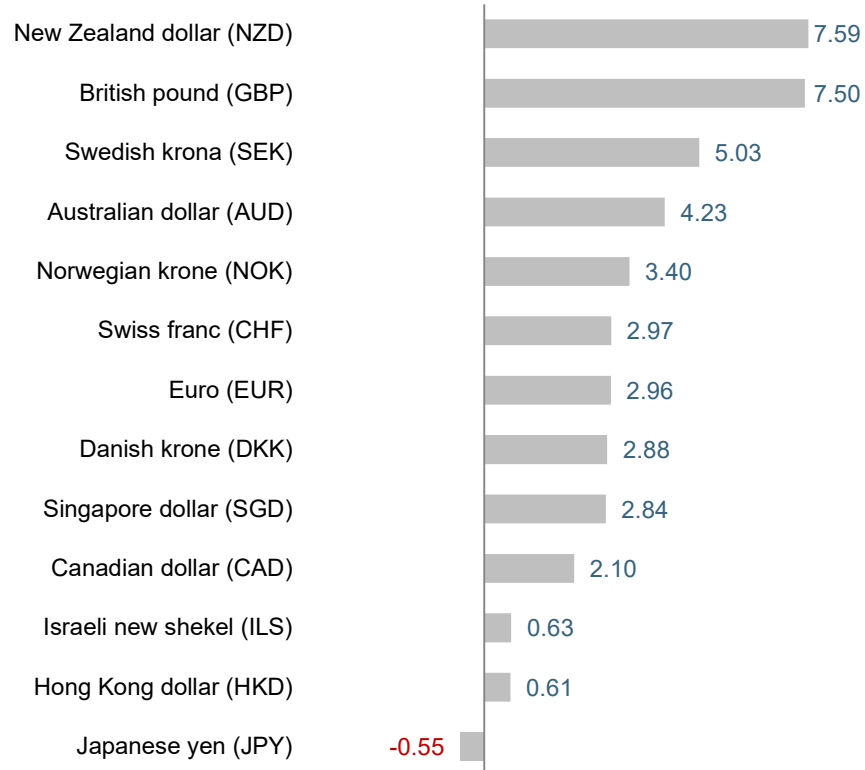
Past performance is not a guarantee of future results. Indices are not available for direct investment. Index performance does not reflect the expenses associated with the management of an actual portfolio. Country performance based on respective indices in the MSCI World ex US IMI Index (for developed 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

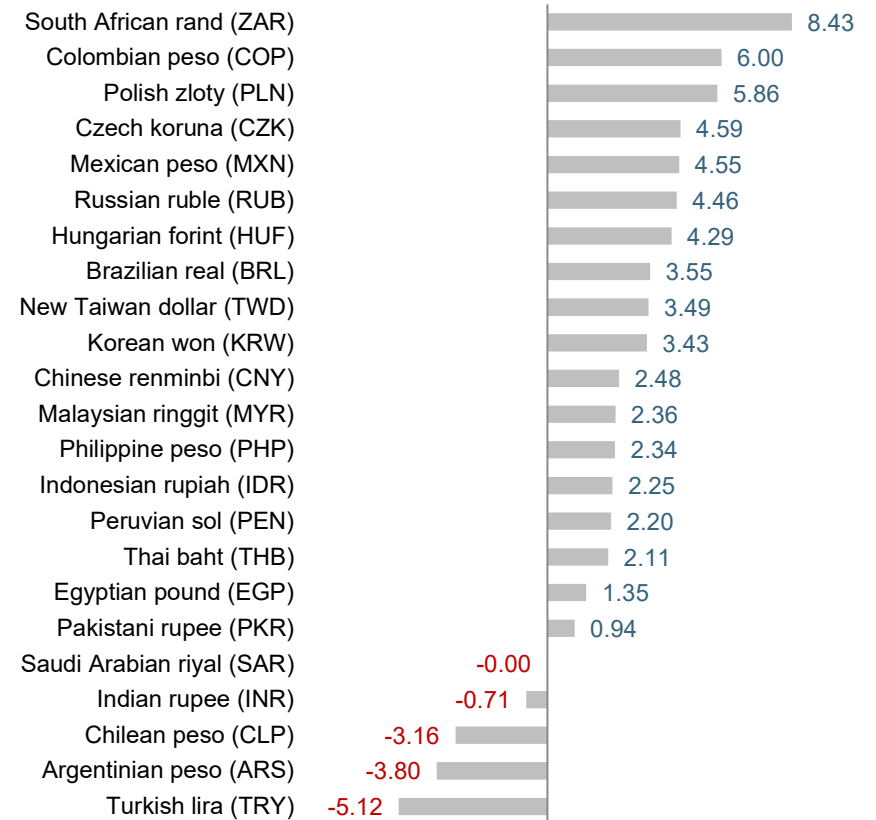
Fourth Quarter 2019

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 (%)

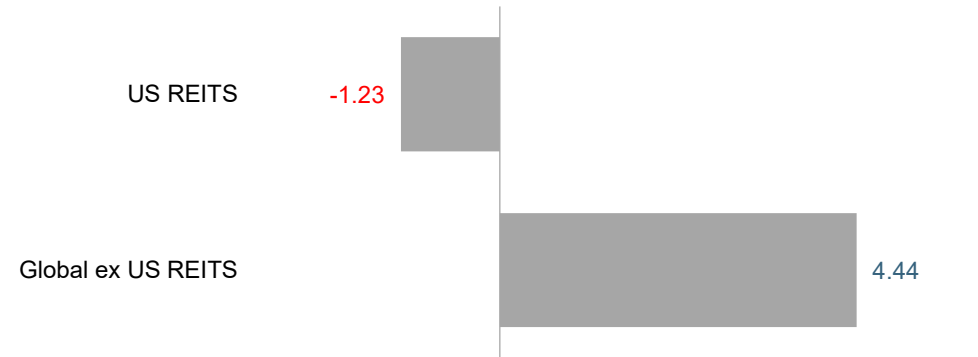


# Real Estate Investment Trusts (REITs)

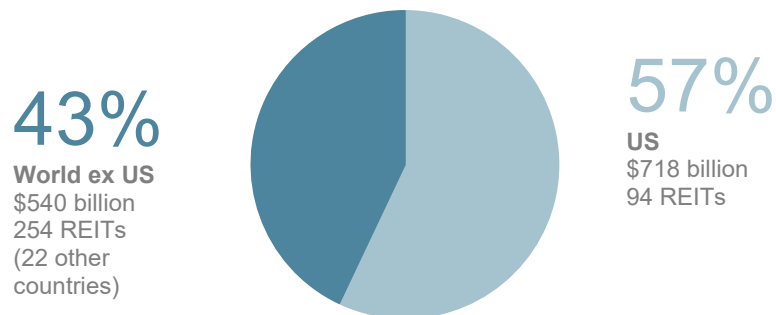
## Fourth Quarter 2019 Index Returns

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

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

## 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.

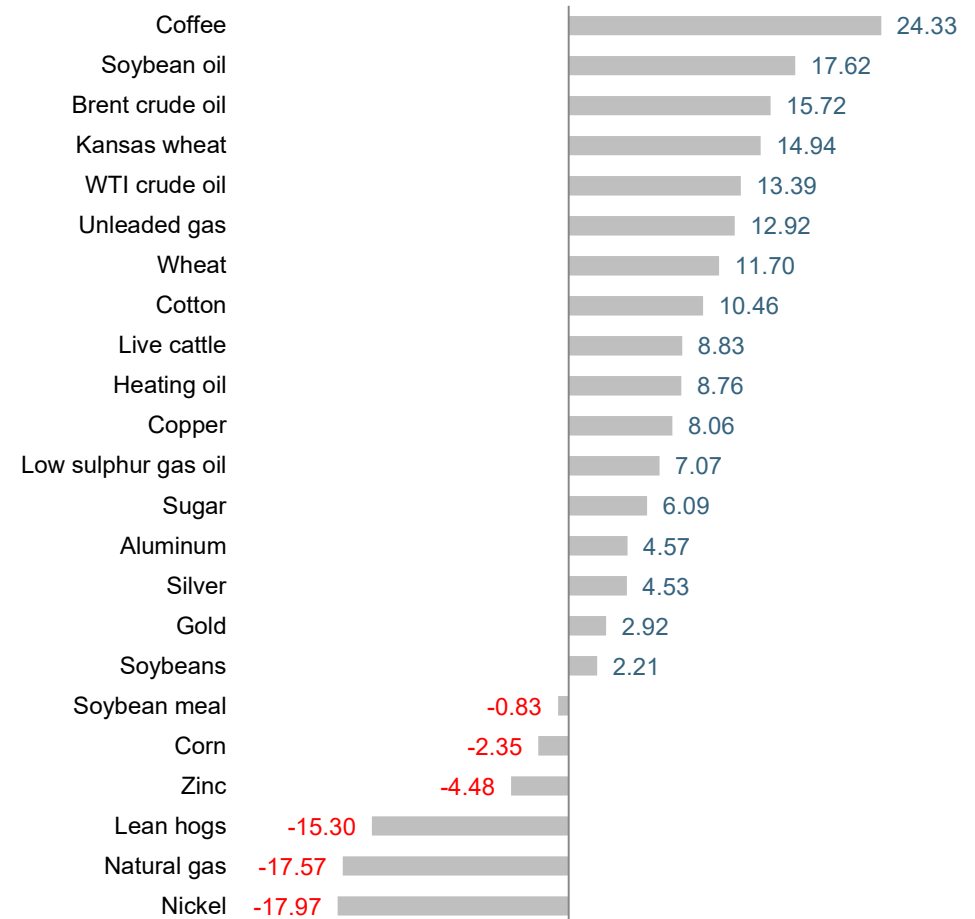
Nickel and natural gas were the worst performers, declining by 17.97% and 17.57%, respectively.

### 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

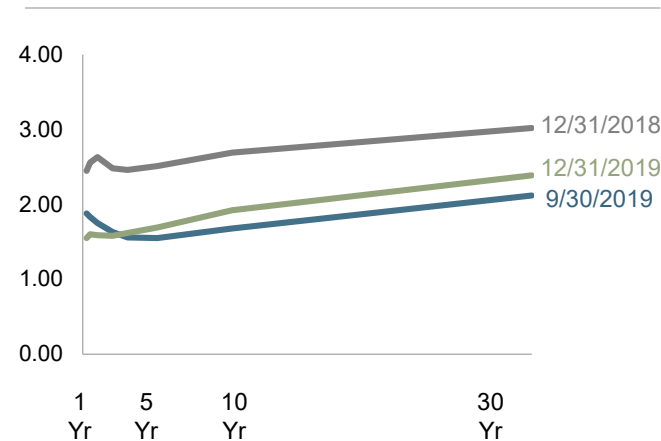
Interest rate changes were mixed in the US Treasury market during the fourth quarter. The yield on the 5-year Treasury note increased 14 basis points (bps), ending at 1.69%. The yield on the 10-year note rose 24 bps to 1.92%. The 30-year Treasury bond yield increased 27 bps to 2.39%.

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.

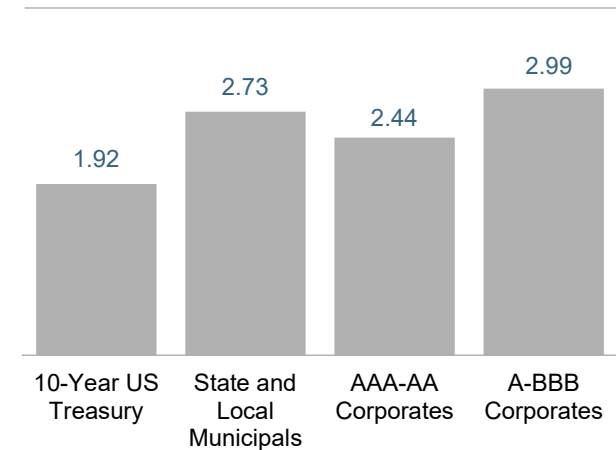
In terms of total returns, short-term corporate bonds gained 0.95%. Intermediate corporate bonds had a total return of 1.10%.

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

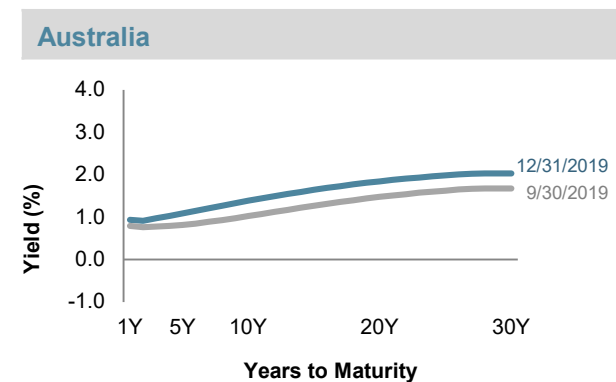
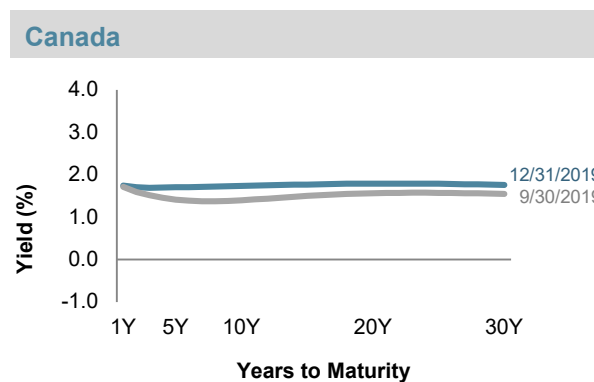
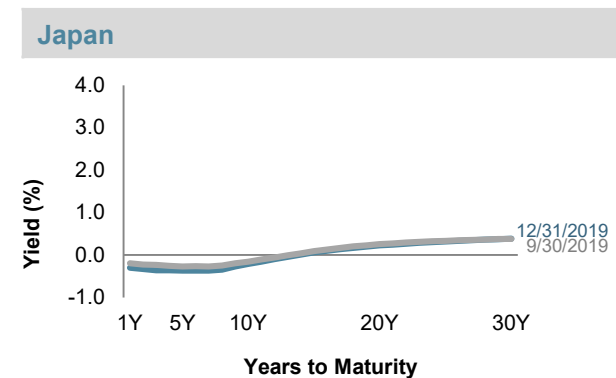
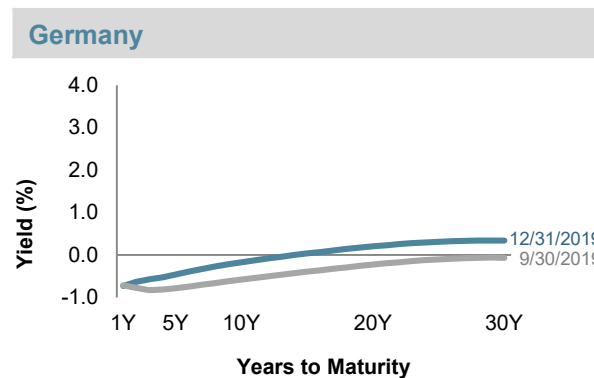
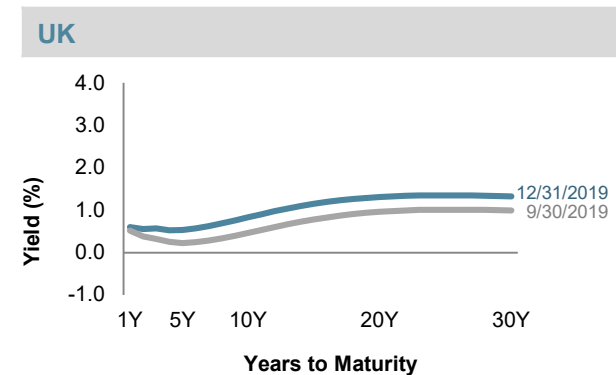
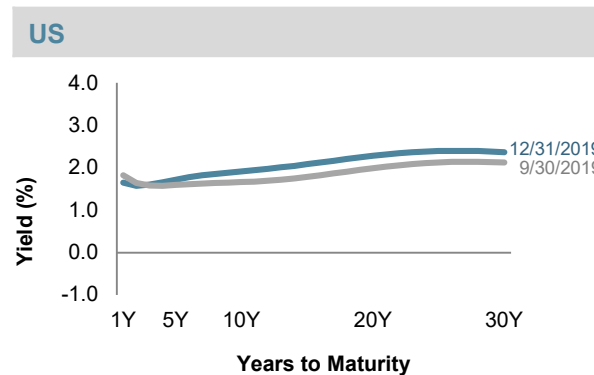
Interest rates in global developed markets generally increased during the fourth quarter.

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.

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

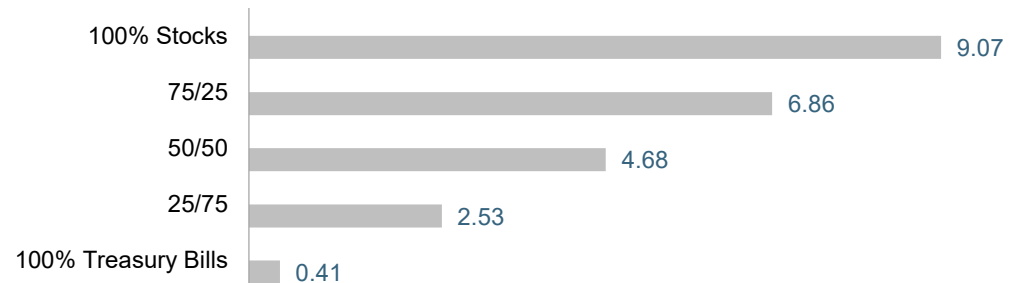
These portfolios illustrate the performance of different global stock/bond mixes and highlight the benefits of diversification. Mixes with larger allocations to stocks are considered riskier but have higher expected returns over time.

## Period Returns (%)

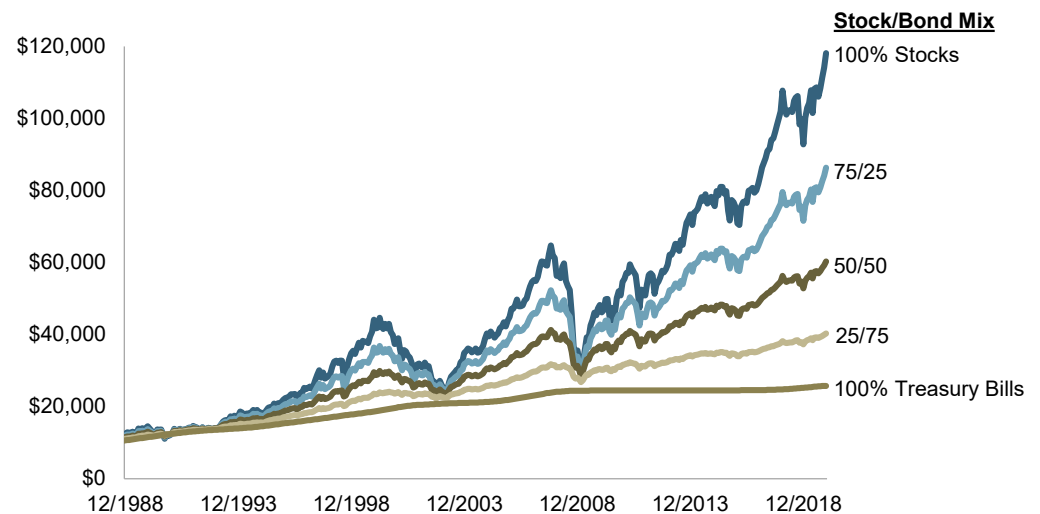
\* Annualized

Asset Class	QTR	1 Year	3 Years*	5 Years*	10 Years*	10-Year STDEV <sup>1</sup>
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”<sup>1</sup> 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.<sup>2</sup>

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.

# Important Risk Disclosures

The fast price swings in commodities and currencies will result in significant volatility in an investor's holdings.

Currency Risk -because the security invests in stocks denominated in foreign currencies, changes in currency exchange rates may negatively impact the securities return. The values of the foreign currencies may be subject to a high degree of fluctuation due to changes in interest rates, the TS-8 effects of monetary policies issued by the United States, foreign governments, central banks or supranational entities, the imposition of currency controls or other national or global political or economic developments.

International and emerging market investing involves special risks such as currency fluctuation and political instability and may not be suitable for all investors.

Investing in Real Estate Investment Trusts (REITs) involves special risks such as potential illiquidity and may not be suitable for all investors. There is no assurance that the investment objectives of this program will be attained.

Small Cap stocks may be subject to a higher degree of risk than more established companies' securities. The illiquidity of the Small Cap market may adversely affect the value of these investments.

Value investments can perform differently from the market as a whole. They can remain undervalued by the market for long periods of time.

Municipal bonds are subject to availability, price, and to market and interest rate risk if sold prior to maturity. Bond values will decline as interest rate rise. Interest income may be subject to the alternative minimum tax. Federally tax-free but other state and local taxes may apply.

High yield/junk bonds (grade BB or below) are not investment grade securities, and are subject to higher interest rate, credit, and liquidity risks than those graded BBB and above. They generally should be part of a diversified portfolio for sophisticated investors.

Government bonds and Treasury Bills are guaranteed by the U.S. government as to the timely payment of principal and interest and, if held to maturity, offer a fixed rate of return and fixed principal value.

Bonds are subject to market and interest rate risk if sold prior to maturity. Bond values will decline as interest rates rise and bonds are subject to availability and change in price.

Credit Quality is one of the principal criteria for judging the investment quality of a bond or bond mutual fund. As the term implies, credit quality informs investors of a bond or bond portfolio's credit worthiness, or risk of default.

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

# Indexes Definitions

## Index Definition:

An index is a statistical measure that shows changes in the economy or financial markets and serves as a benchmark against which economic and financial performance is measured.

Indices are not available for direct investment; its performance does not reflect the expenses associated with the management of an actual portfolio. Past performance is no guarantee of future results.

## Barclays Capital Municipal Bond Index 3 Years

This is a broad-based market index. To be included in the index, bonds must have a minimum credit rating of Baa. They must have an outstanding par value of at least \$5 million and be issued as part of a transaction of at least \$50 million. The bonds must have a dated-date after December 31, 1990 and must be at least one year from their maturity date.

## Barclays Capital US Corporate High Yield Index

This index covers the universe of fixed rate, non-investment grade debt. Pay-in-kind (PIK) bonds, Eurobonds, and debt issues from countries designated as emerging markets (e.g., Argentina, Brazil, Venezuela, etc.) are excluded, but Canadian and global bonds (SEC registered) of issuers in non-EMG countries are included. Original issue zeroes, step-up coupon structures, and 144-As are also included.

## Barclays Capital US Government Bond Index Intermediate

The index comprised of all publicly issued non-convertible domestic debt of the U.S. government or any agency thereof, or any quasi-federal corporation and of corporate debt guaranteed by the U.S. government. Only notes and bonds with minimum outstanding principal of \$1 million and minimum maturity of one year and maximum maturity of ten years are included.

## Barclays Capital US Government Bond Index

Market value weighted index of U.S. government and government agency securities (other than mortgage securities) with maturities of one year or more.

## Barclays Capital US Tips Index

The index represents securities that protect against adverse inflation and provide a minimum level of real return. To be included in this index, bonds must have cash flows linked to an inflation index, be sovereign issues denominated in U.S. currency, and have more than one year to maturity, and, as a portion of the index, total a minimum amount outstanding of 100 million U.S. dollars. TIPS stands for Treasury Inflation Protected Securities.

## Citigroup World Government Bond (WGBI) Index

This index is a broad market benchmark measuring the performance of government and foreign bonds. The index includes the 22 government bond markets of Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Japan, the Netherlands, Norway, Poland, Portugal, Singapore, Spain, Sweden, Switzerland, the United Kingdom, and the United States.

## Dow Jones US Select REIT Index

Is comprised of all publicly traded real estate investment trusts in the Dow Jones U.S. stock universe (i.e. real estate investment trusts (REITs) and real estate operating companies (REOCs) traded in the U.S). The indexes are designed to serve as proxies for direct real estate investment, in part by excluding companies whose performance may be driven by factors other than the value of real estate. Date of introduction Total Return: January 30, 1987; Price Return: December 31, 1998

## The MSCI ACWI (All Country World Index)

The MSCI ACWI (All Country World Index) Index is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed and emerging markets. The MSCI All Country World Index includes 48 markets. The index has been calculated since 1995

## MSCI EAFE

The MSCI EAFE Index (Europe, Australasia, Far East) is a free float-adjusted market capitalization index that is designed to measure the equity market performance of developed markets, excluding the US & Canada. The index has been calculated since 31 December 1969. The EAFE acronym stands for Europe, Australasia, and Far East.

# Indexes Definitions

## MSCI Emerging Markets Index

The MSCI Emerging Markets Index has a base date of December 31, 1987. It is a free float-adjusted market capitalization index that is designed to measure equity market performance of emerging markets.

## MSCI Frontier Markets Index

The MSCI Frontier Markets Index is a free float-adjusted market capitalization index that is designed to measure equity market performance of frontier markets. The index has been calculated since 2007.

## MSCI Small Cap

The objective of the MSCI Small Cap Indices is to represent the business activities of small cap companies across developed markets. MSCI selects the most liquid securities relative to their market capitalization, and targets for index inclusion 40% of the full market capitalization of the eligible small cap universe within each industry group, within each country.

## MSCI World Index

The MSCI World Index is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed markets. As of June 2007 the MSCI World Index consisted of the following 23 developed market country indices: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Hong Kong, Ireland, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, the United Kingdom, and the United States. The index has been calculated since 1995.

The MSCI Indices are maintained by Morgan Stanley Capital International/Barra

## Russell 1000 Growth Index

Measures the performance of those Russell 1000 companies with higher price-to book ratios and higher forecasted growth values.

## Russell 1000 Value Index

The Russell 1000 Value Index measures the performance of the large-cap value segment of the U.S. equity universe. It includes those Russell 1000 companies with lower price-to-book ratios and lower expected growth values. . The index is a subset of the much larger Russell 3000 Index It is reconstituted annually.

## Russell 2000 Index

The Russell 2000 Index measures the performance of the small-cap segment of the U.S. equity universe. The Russell 2000 Index is a subset of the Russell 3000® Index representing approximately 10% of the total market capitalization of that index. It includes approximately 2000 of the smallest securities based on a combination of their market cap and current index membership. It is reconstituted annually and was launched in 1984.

## Russell 2000 Growth Index

Measures the performance of those Russell 2000 companies with higher price-to book ratios and higher forecasted growth values.

## Russell 3000 Index

The Russell 3000 Index measures the performance of the largest 3000 U.S. companies representing approximately 98% of the investable U.S. equity market. The U.S.-based requirement disqualifies many large international firms from inclusion into the index. It is reconstituted annually and was started in 1984.

The Russell indices are owned and maintained by Russell Investments.

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