Q4/Annual

Quarterly Market Review / Annual Market Review

F5 FINANCIAL

Fourth Quarter 2019 / 2019

F5 FINANCIAL

Quarterly Market Review

Fourth 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.

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

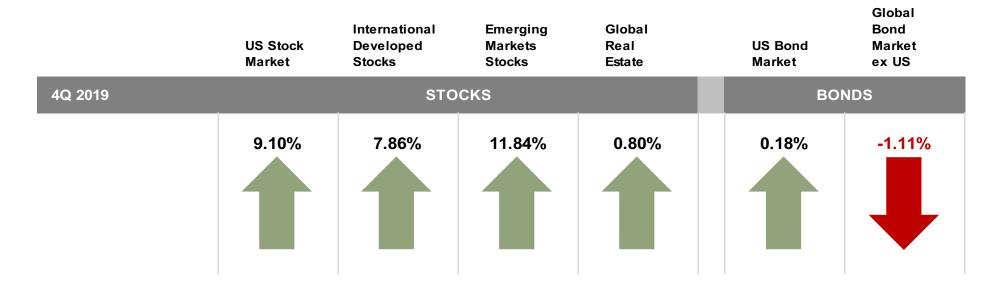
Impact of Diversification

Quarterly Topic: Tuning Out the Noise



Quarterly Market Summary

Index Returns



Since Jan. 2001						
Avg. Quarterly Return	2.1%	1.5%	2.9%	2.6%	1.2%	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%	-21.1%	-27.6%	-36.1%	-3.0%	-2.7%
Quarter	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



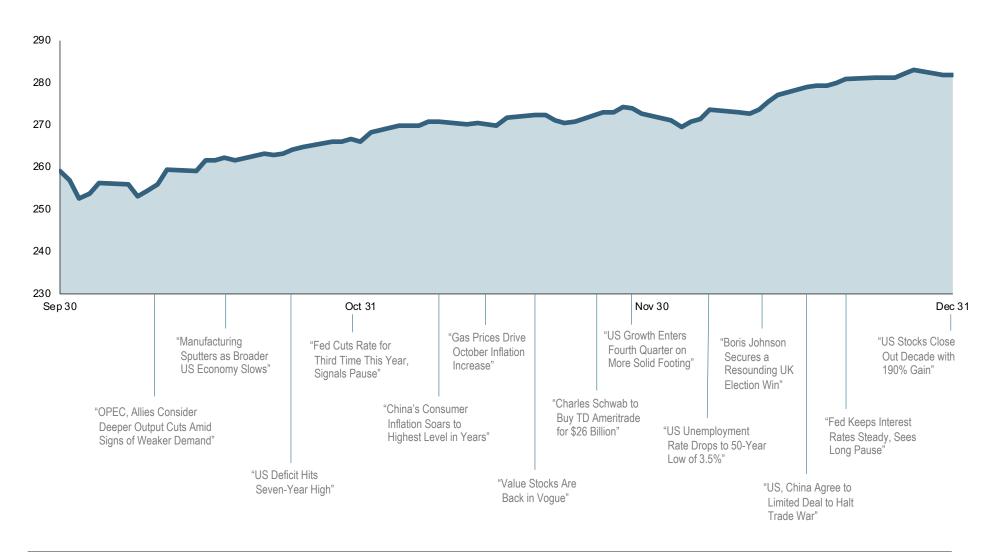
Past performance is not a guarantee of future results. Indices are not available for direct investment. Index performance does not reflect the expenses associated with the management of an actual portfolio.

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 Stock Market Performance

MSCI All Country World Index with selected headlines from Q4 2019

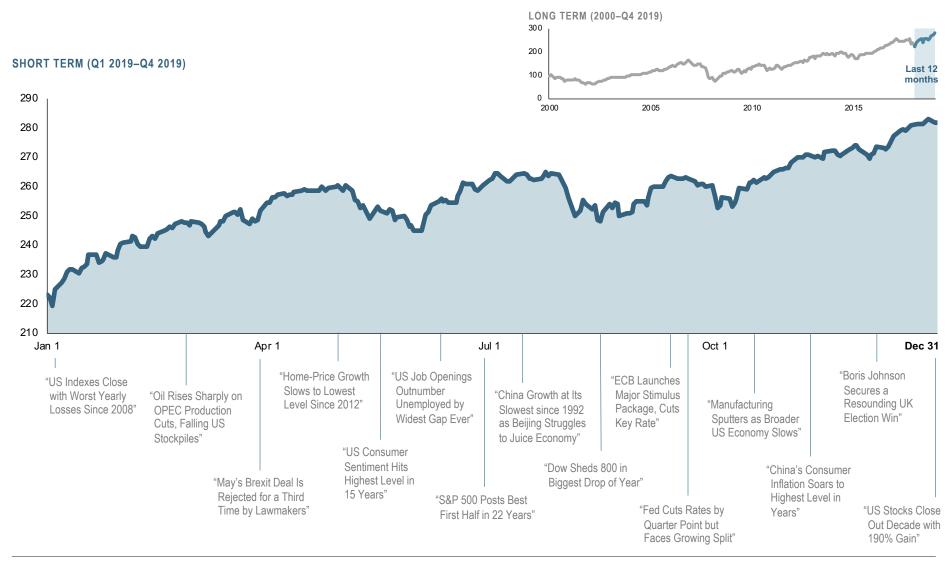


These headlines are not offered to explain market returns. Instead, they serve as a reminder that investors should view daily events from a long-term perspective and avoid making investment decisions based solely on the news.



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.



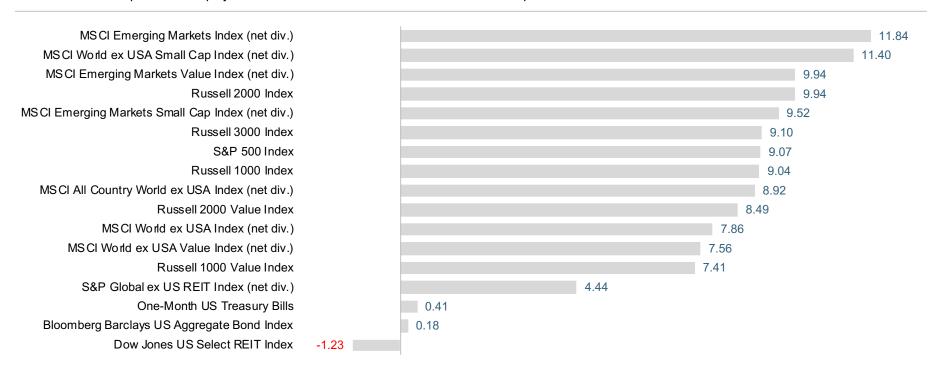
World Asset Classes

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.





US Stocks

Fourth Quarter 2019 Index Returns

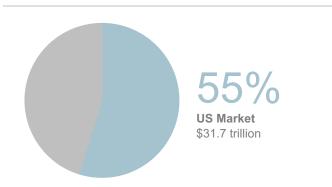
US equities outperformed non-US developed equities but underperformed emerging markets stocks in the fourth quarter.

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

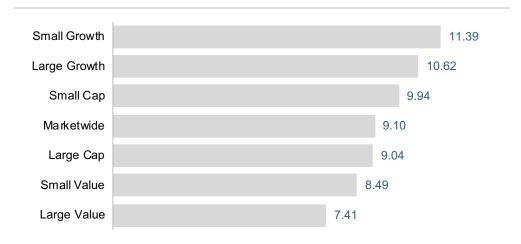
Small caps outperformed large caps in the US.

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.



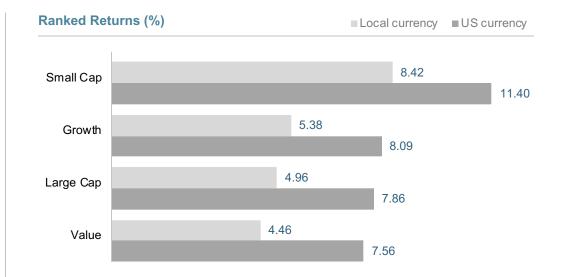
International Developed Stocks

Fourth Quarter 2019 Index Returns

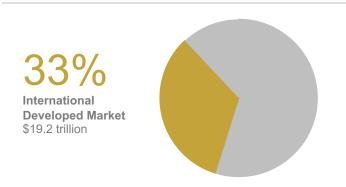
In US dollar terms, developed markets outside the US underperformed both the US equity market and emerging markets equities during the quarter.

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

Value underperformed growth across large and small cap stocks.



World Market Capitalization—International Developed



Period Returns (%)

^	Α	n	n	,,	2	ı	7	Δ.	1

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

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 2020, all rights reserved. Frank Russell Company is the source and owner of the trademarks, service marks, and copyrights related to the Russell Indexes.



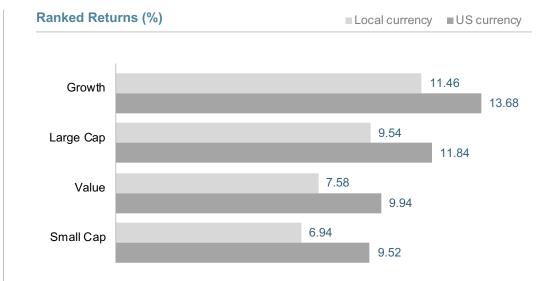
Emerging Markets Stocks

Fourth Quarter 2019 Index Returns

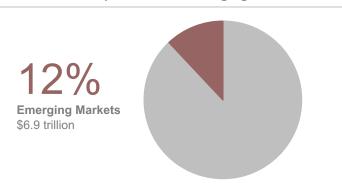
In US dollar terms, emerging markets outperformed developed markets, including the US, in the fourth quarter.

Value stocks underperformed growth stocks.

Small caps underperformed large caps.



World Market Capitalization—Emerging Markets



Period Returns (%)

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 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.

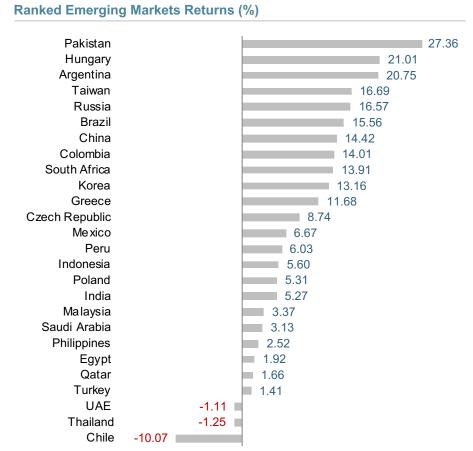


Select Market Performance

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.





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.

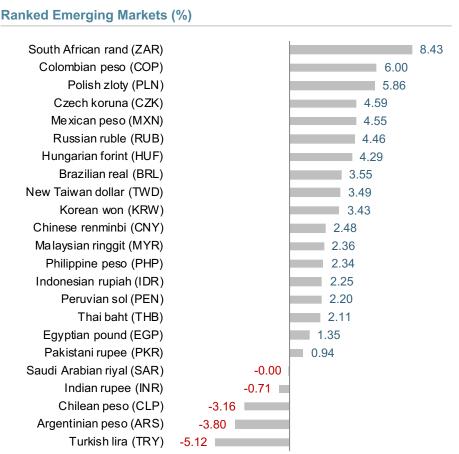


Select Currency Performance vs. US Dollar

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.







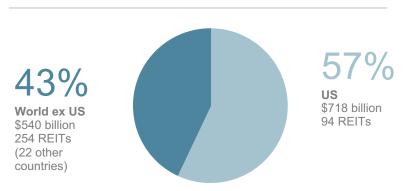
Real Estate Investment Trusts (REITs)

Fourth Quarter 2019 Index Returns

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



Total Value of REIT Stocks



Period Returns (%)

Years*	10 Years*
5 65	7 74

* Annualized

Asset Class	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 (%) Coffee 24.33 Soybean oil 17.62 Brent crude oil 15.72 Kansas wheat 14.94 WTI crude oil 13.39 Unleaded gas 12.92 Wheat 11.70 Cotton 10.46 Live cattle 8.83 Heating oil 8.76 Copper 8.06 Low sulphur gas oil 7.07 6.09 Sugar Aluminum 4.57 Silver 4.53 Gold 2.92 Soybeans 2.21 Soybean meal -0.83 Corn -2.35 Zinc -4.48 **-15.30** ■ Lean hogs Natural gas -17.57

Nickel -17.97 ■



Fixed Income

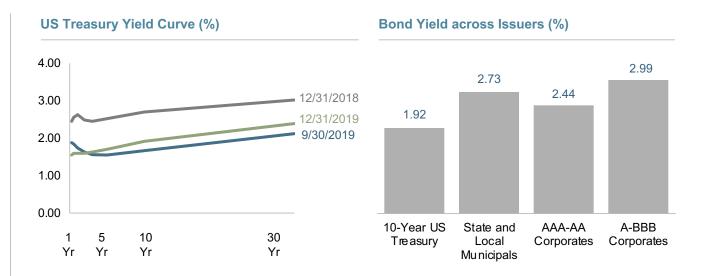
Fourth Quarter 2019 Index Returns

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.



Period Returns (%)

*Annualized

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

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. Sinquefield). 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.

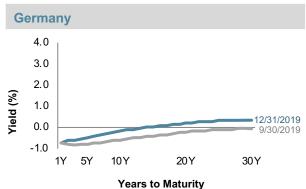
Longer-term bonds generally underperformed shorter-term bonds in the global developed markets.

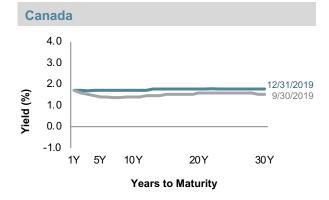
Short- and intermediate-term nominal rates are negative in Japan and Germany.

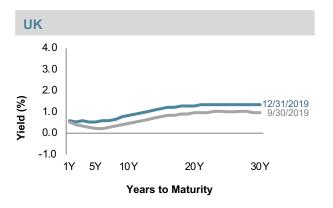
Changes in Yields (bps) since 9/30/2019

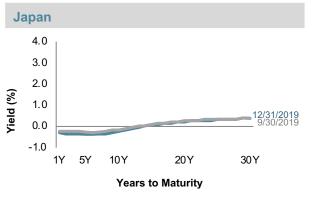
	1Y	5Y	10Y	20Y	30Y
US	-17.2	12.7	25.4	29.3	24.1
UK	8.2	30.6	36.8	34.9	33.1
Germany	-1.4	32.2	40.9	42.7	40.3
Japan	16.9	23.8	19.6	7.0	3.9
Canada	3.0	29.0	33.7	22.7	21.0
Australia	13.7	27.4	36.2	36.7	35.3

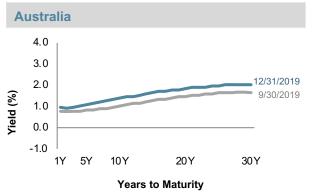










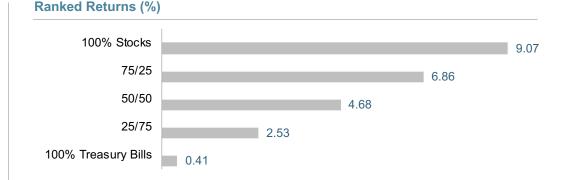




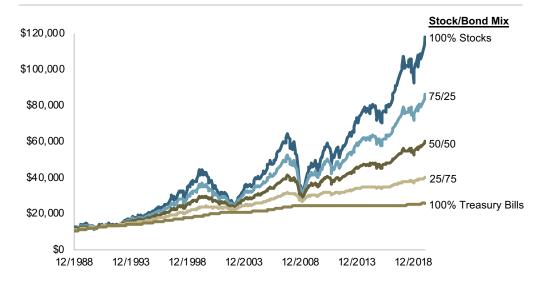
Impact of Diversification

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.



Growth of Wealth: The Relationship between Risk and Return



Period Returns (%)

* Annualized

Asset Class	QTR	1 Year	3 Years*	5 Years*	10 Years*	10-Year STDEVÊ
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

^{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 M, Ibbotson Associates, Chicago (annually updated work by Roger G. Ibbotson and Rex A. Sinquefield).

F5 FINANCIAL

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" 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:

Nasdag 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:

Nasdag 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.



2019 Annual Market Review



2019 Annual Market Review

This report features world capital market performance for the past year.

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		STO	CKS		ВО	NDS
	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	33.6%	39.4%	78.5%	37.4%	10.3%	8.8%
Year	2013	2003	2009	2006	2002	2014
Worst	-37.3%	-43.6%	-53.3%	-45.7%	-2.0%	1.2%
Year	2008	2008	2008	2008	2013	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.

F5 FINANCIAL

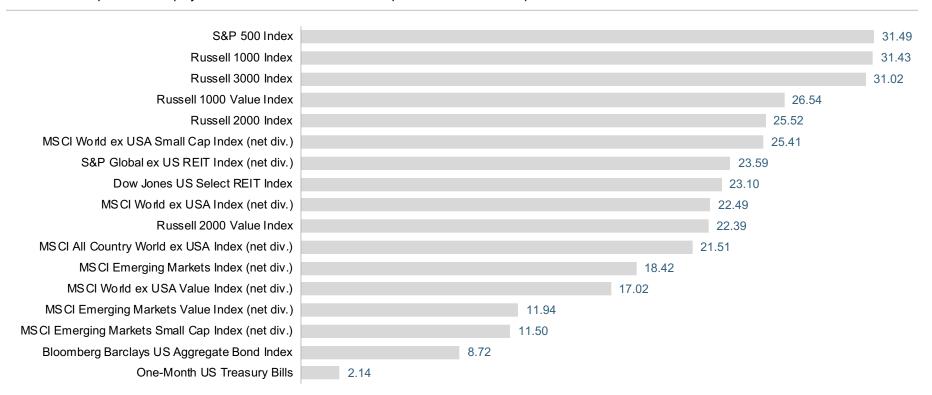
World Asset Classes

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.



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

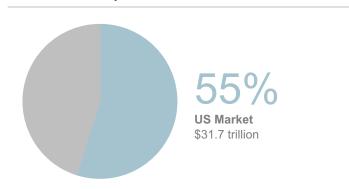
2019 Index Returns

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

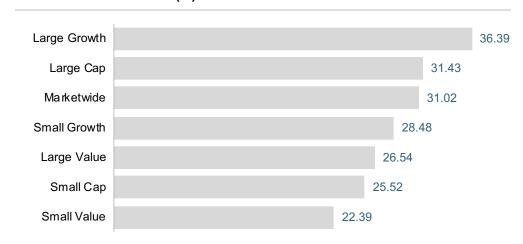
Value underperformed growth in the US across large and small cap stocks.

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

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. 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.



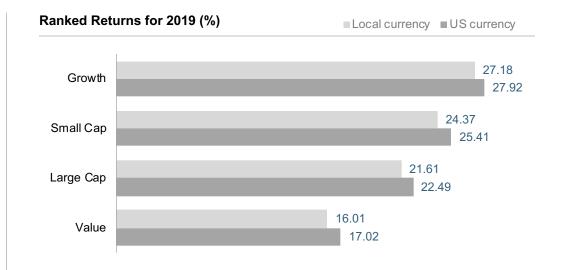
International Developed Stocks

2019 Index Returns

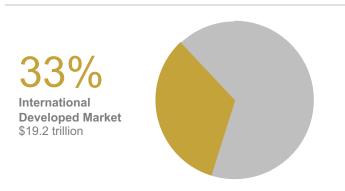
In US dollar terms, developed markets outside the US outperformed emerging markets but underperformed the US during 2019.

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



Period Returns (%)

*	Ann	iual	ized
---	-----	------	------

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

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). 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.



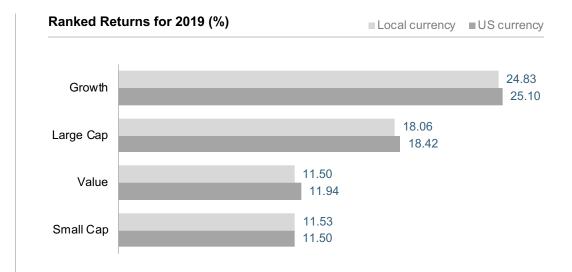
Emerging Markets Stocks

2019 Index Returns

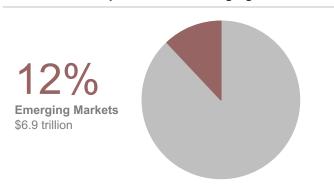
In US dollar terms, emerging markets underperformed developed markets, including the US, in 2019.

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



Period Returns (%)

* /	۱nn	uai	lize	d

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

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 used as the proxy for the emerging market portion of the market. MSCI data © MSCI 2020, all rights reserved.

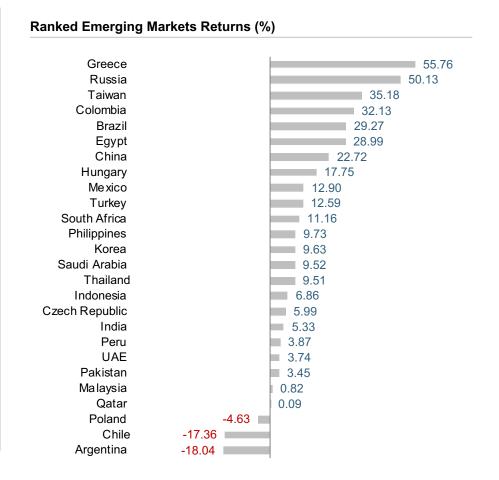


Select Market Performance

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.



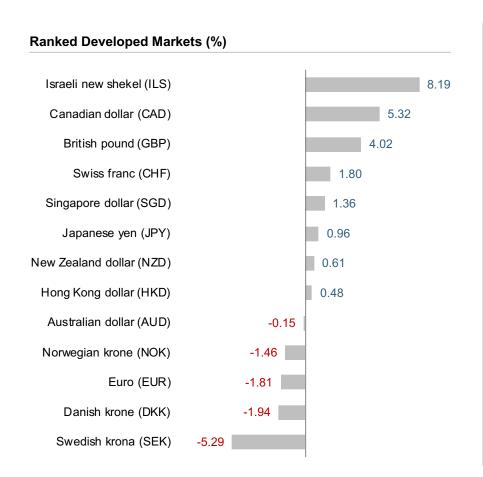


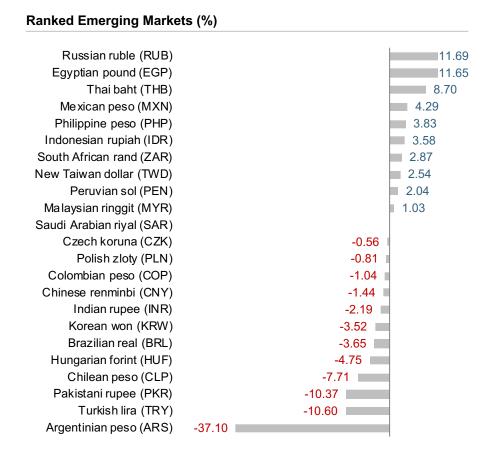


Select Currency Performance vs. US Dollar

2019

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







Real Estate Investment Trusts (REITs)

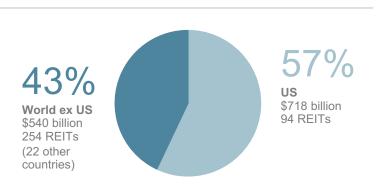
2019 Index Returns

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





Total Value of REIT Stocks



Period Returns (%)

		al		

Asset Class	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 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.

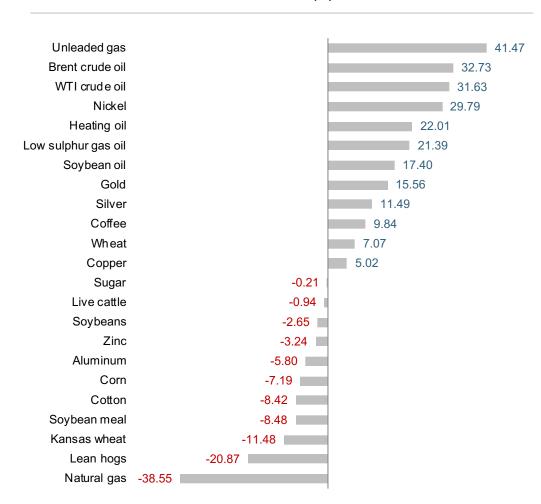
Natural gas and lean hogs were the worst performers, declining 38.55% and 20.87%, respectively.

Period Returns (%)

* Annualized

Asset Class	1 Year	3 Years*	5 Years*	10 Years*
Commodities	7 69	-0.94	-3.92	-4 73

Ranked Returns for Individual Commodities (%)





Fixed Income

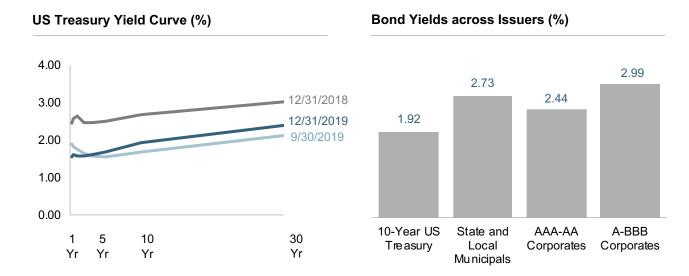
2019 Index Returns

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.



Period Returns (%)

Asset Class	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) YearbookTM, Ibbotson Associates, Chicago (annually updated work by Roger G. Ibbotson and Rex A. Sinquefield). 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.

*Annualized



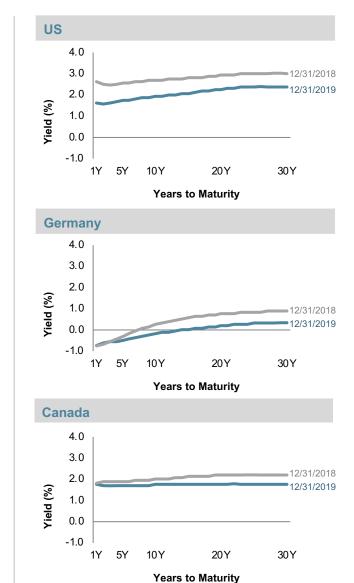
Global Fixed Income

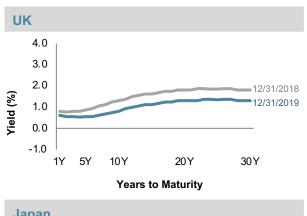
2019 Yield Curves

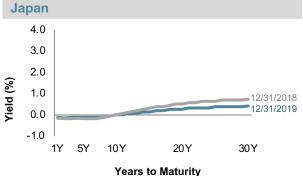
Interest rates in the global developed markets generally decreased in 2019.

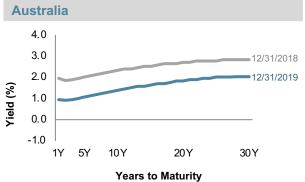
Longer-term bonds generally outperformed shorter-term bonds.

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

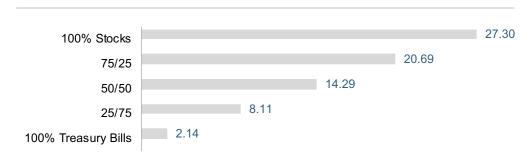
These portfolios illustrate the performance of different global stock/bond mixes. Mixes with larger allocations to stocks are considered riskier but have higher expected returns over time.

Period Returns (%)

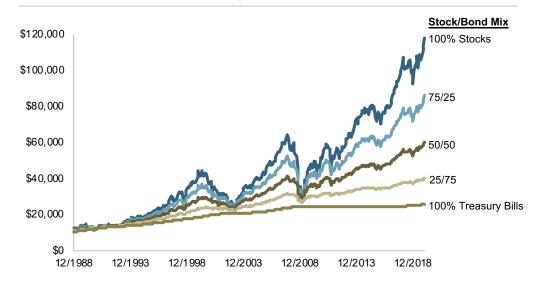
* Annualized

Asset Class	1 Year	3 Years*	5 Years*	10 Years*	10-Year STDEVÊ
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 M, Ibbotson Associates, Chicago (annually updated work by Roger G. Ibbotson and Rex A. Sinquefield).



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 quarantee a profit.

[&]quot;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.