

Quarterly Market Review

Third Quarter 2019



Third quarter equity returns were mixed, with domestic large cap stocks posting small gains, while domestic small cap, international and emerging market equities all posted losses. The bond markets performed better, as fixed income securities reacted well to the Fed's lowering of interest rates.

The rate reduction was another attempt to delay the onset of a recession, and keep the current 10-year period of growth alive. Recession fears were flamed in August, as global growth showed signs of slowing and the implementation of new tariffs signaled an intensification of the trade war with China.

Looking forward, we are increasingly cautious about 2020. It seems pretty clear at this point that the trade war is negatively impacting global growth. Further, there is evidence that corporations are pulling back on spending. A key thing to look out for will be if the unemployment rate begins to rise. When that happens, a recession may not be far behind.

Another significant wild card is the impeachment process that is now underway. If the odds of the president actually being removed from office begin to increase, such tumult would not likely be viewed positively by the market, at least in the near-term until stability (in whatever manner that takes shape) returns.

Overview:

Market Summary

World Stock Market Performance

World Asset Classes

US Stocks

International Developed Stocks

Emerging Markets Stocks

Real Estate Investment Trusts (REITs)

Commodities

Fixed Income

Quarterly Topic: Timing Isn't Everything

Quarterly Market Review

(continued from page 2)

There certainly is no reason for panic, though. A recession will occur at some point. Another stock market correction will occur at some point. When it does, we may look to be strategic buyers when everyone else is selling. In the meantime, as we wade through what are virtually unprecedented political waters, we may look to use hedging techniques to mitigate any near-term volatility that might result.

Our quarterly topic at the end of this report focuses on attempts to "time the market". Such attempts are actually fraught with risk, as wholesale changes to one's portfolio are often made with the impulse of emotions. Staying levelheaded through the good times and bad is possibly the best recipe for investment success!

As this is our last formal communication before the holiday season is upon us, we want to wish you and yours the very best of times, for the love of friends and family members is what truly makes the pursuit of financial gains worthwhile.

Warm regards,

Tony Reed, CPA, CFP

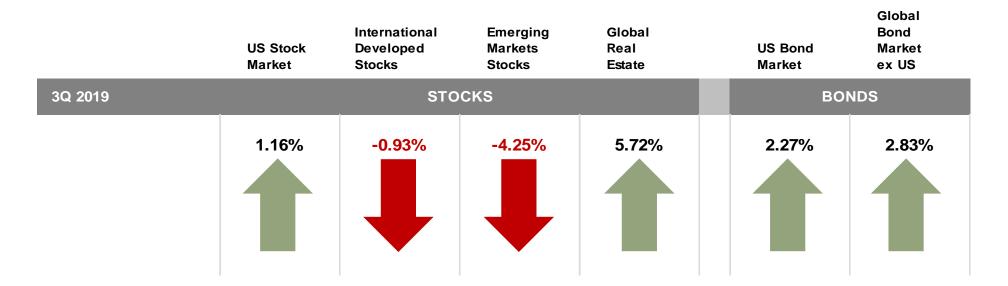
President



Quarterly Market Summary



Index Returns



Since Jan. 2001						
Avg. Quarterly Return	2.0%	1.4%	2.8%	2.6%	1.2%	1.2%
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

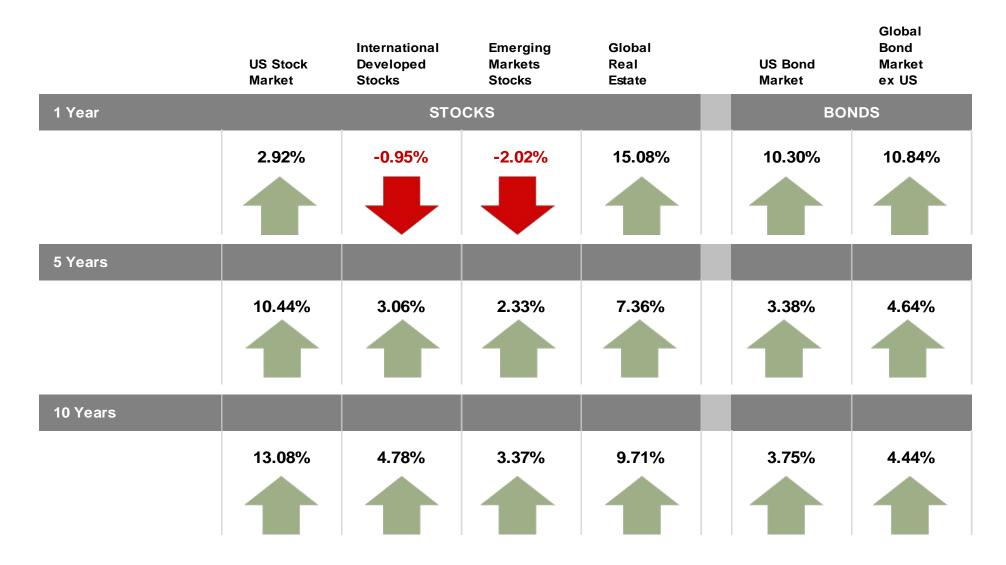
Past performance is not a guarantee of future results. Indices are not available for direct investment. Index performance does not reflect the expenses associated with the management of an actual portfolio.

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 © 2019 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved. Frank Russell Company is the source and owner of the trademarks, service marks, and copyrights related to the Russell Indexes. MSCI data © MSCI 2019, all rights reserved. Bloomberg Barclays data provided by Bloomberg.





Index Returns



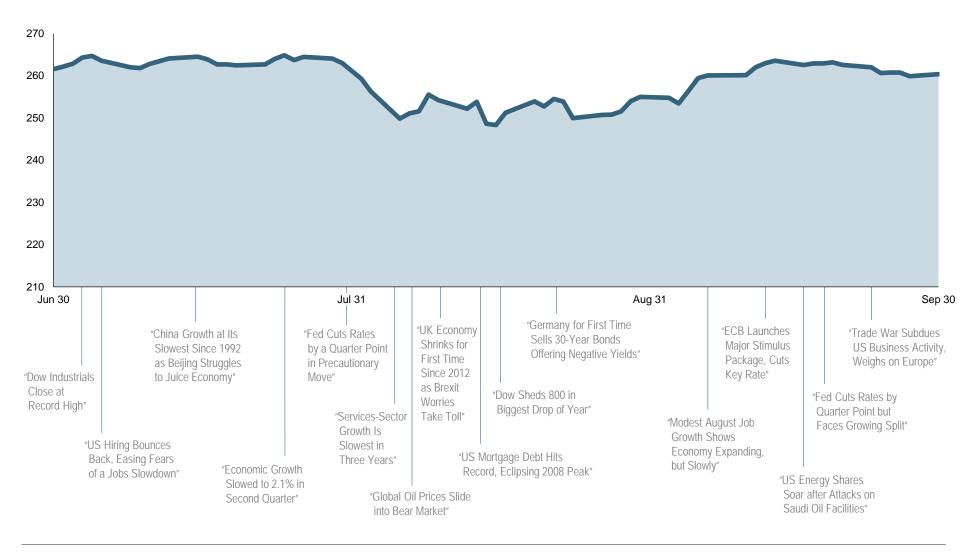
Past performance is not a guarantee of future results. Indices are not available for direct investment. Index performance does not reflect the expenses associated with the management of an actual portfolio.

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 © 2019 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved. Frank Russell Company is the source and owner of the trademarks, service marks, and copyrights related to the Russell Indexes. MSCI data © MSCI 2019, all rights reserved. Bloomberg Barclays data provided by Bloomberg.



World Stock Market Performance

MSCI All Country World Index with selected headlines from Q3 2019

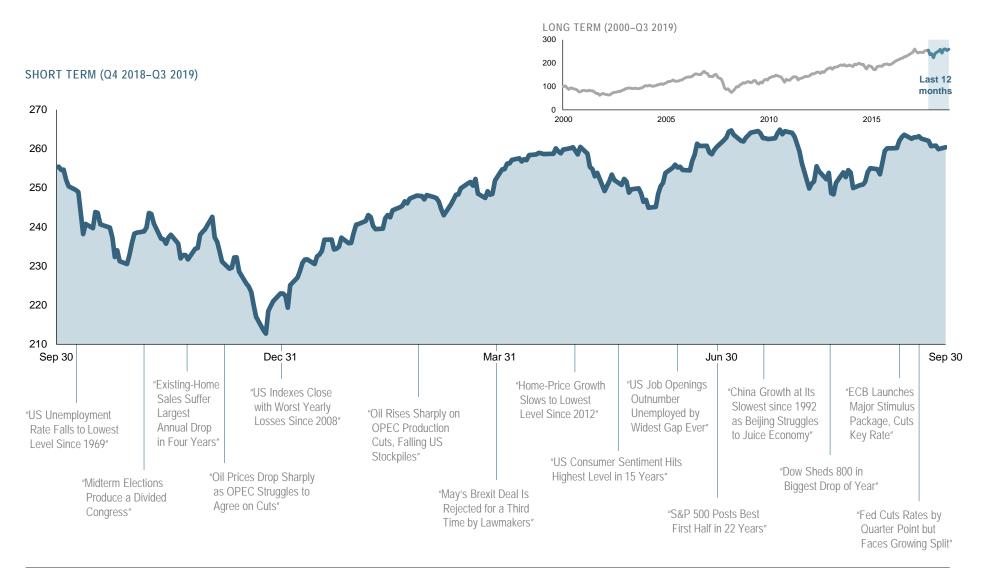


These headlines are not offered to explain market returns. Instead, they serve as a reminder that investors should view daily events from a long-term perspective and avoid making investment decisions based solely on the news.



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

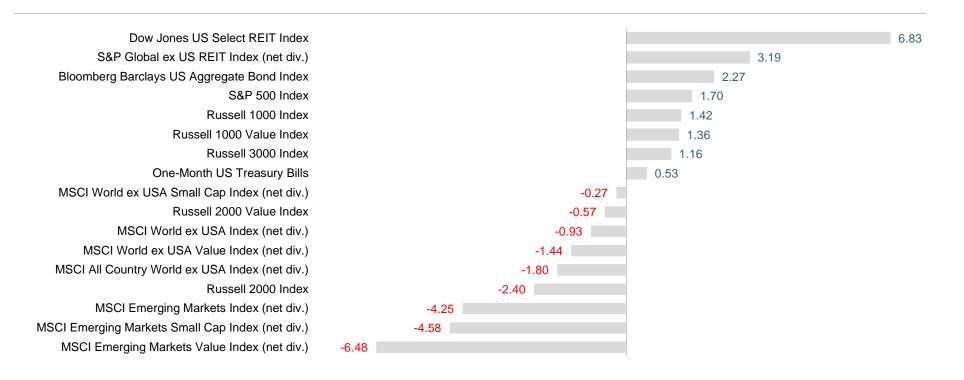


Third Quarter 2019 Index Returns (%)

Looking at broad market indices, US equities outperformed non-US developed and emerging markets during the third quarter.

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

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



Past performance is not a guarantee of future results. Indices are not available for direct investment. Index performance does not reflect the expenses associated with the management of an actual portfolio. The S&P data is provided by Standard & Poor's Index Services Group. Frank Russell Company is the source and owner of the trademarks, service marks, and copyrights related to the Russell Indexes. MSCI data © MSCI 2019, all rights reserved. Dow Jones data © 2019 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved. 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

INVESTMENT SERVICES

Third Quarter 2019 Index Returns

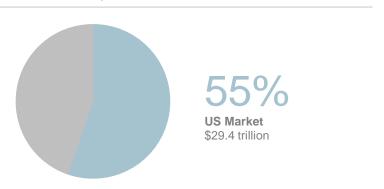
US equities outperformed both non-US developed and emerging markets in the third quarter.

Value outperformed growth on a marketwide basis in the US. However, value underperformed growth across large cap stocks but outperformed in small caps.

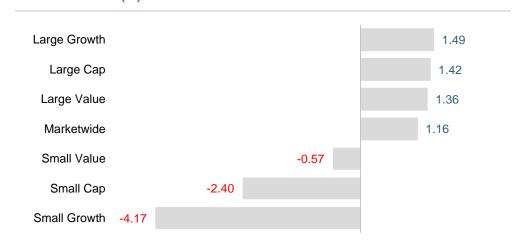
Small caps underperformed large caps in the US.

REIT indices outperformed equity market indices.

World Market Capitalization—US



Ranked Returns (%)



Period Returns (%)

* Annualized

Asset Class	YTD	1 Year	3 Years*	5 Years*	10 Years*
Large Growth	23.30	3.71	16.89	13.39	14.94
Large Cap	20.53	3.87	13.19	10.62	13.23
Marketwide	20.09	2.92	12.83	10.44	13.08
Large Value	17.81	4.00	9.43	7.79	11.46
Small Growth	15.34	-9.63	9.79	9.08	12.25
Small Cap	14.18	-8.89	8.23	8.19	11.19
Small Value	12.82	-8.24	6.54	7.17	10.06

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 2019, all rights reserved.





Third Quarter 2019 Index Returns

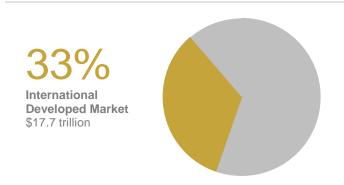
In US dollar terms, developed markets outside the US outperformed emerging markets but underperformed the US market during the third quarter.

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

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



World Market Capitalization—International Developed



Period Returns (%)

۸				
 An	nu	ıaı	ıΖŧ	эа

Asset Class	YTD	1 Year	3 Years*	5 Years*	10 Years*
Growth	18.35	2.39	7.50	5.05	6.13
Large Cap	13.57	-0.95	6.49	3.06	4.78
Small Cap	12.58	-5.62	5.54	5.14	6.93
Value	8.79	-4.31	5.38	1.01	3.37

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

Market segment (index representation) as follows: Large Cap (MSCI World ex USA Index), Small Cap (MSCI World ex USA Small Cap Index), Value (MSCI World ex USA Value Index), and Growth (MSCI World ex USA Growth Index). All index returns are net of withholding tax on dividends. World Market Cap represented by Russell 3000 Index, MSCI World ex USA IMI Index, and MSCI Emerging Markets IMI Index. MSCI World ex USA IMI Index is used as the proxy for the International Developed market. MSCI data © MSCI 2019, all rights reserved. Frank Russell Company is the source and owner of the trademarks, service marks, and copyrights related to the Russell Indexes.

Emerging Markets Stocks

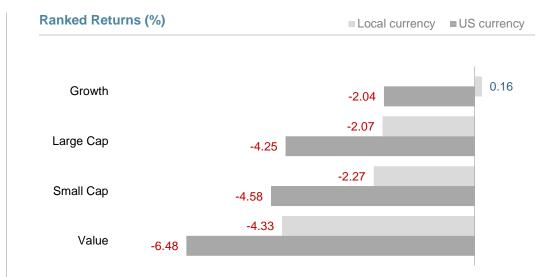


Third Quarter 2019 Index Returns

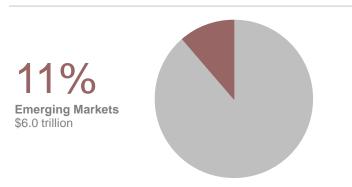
In US dollar terms, emerging markets underperformed developed markets, including the US, in the third quarter.

Value stocks underperformed growth stocks.

Small caps underperformed large caps.



World Market Capitalization—Emerging Markets



Period Returns (%)

*	Α	nı	าน	al	iz	e	a
				u,	-	•	·

Asset Class	YTD	1 Year	3 Years*	5 Years*	10 Years*
Growth	10.04	1.01	7.04	4.17	4.75
Large Cap	5.89	-2.02	5.97	2.33	3.37
Value	1.82	-5.03	4.81	0.38	1.92
Small Cap	1.81	-5.49	1.32	-0.13	3.21

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

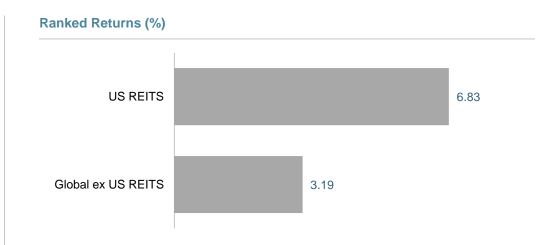
MSCI 2019, all rights reserved. Frank Russell Company is the source and owner of the trademarks, service marks, and copyrights related to the Russell Indexes.



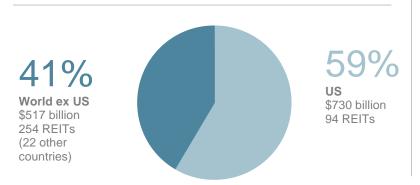


Third Quarter 2019 Index Returns

In the third quarter, US real estate investment trusts outperformed non-US REITs in US dollar terms.



Total Value of REIT Stocks



Period Returns (%)

Asset Class	YTD	1 Year	3 Years*	5 Years*	10 Years*
US REITS	24.64	16.41	6.48	9.70	12.69
Global ex US REITS	18 34	12 80	5 10	5.35	7 29

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

Number of REIT stocks and total value based on the two indices. All index returns are net of withholding tax on dividends. Total value of REIT stocks represented by Dow Jones US Select REIT Index and the S&P Global ex US REIT Index. Dow Jones US Select REIT Index used as proxy for the US market, and S&P Global ex US REIT Index used as proxy for the World ex US market. Dow Jones and S&P data © 2019 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved.

* Annualized



Commodities

Third Quarter 2019 Index Returns

The Bloomberg Commodity Index Total Return declined by 1.84% in the third quarter.

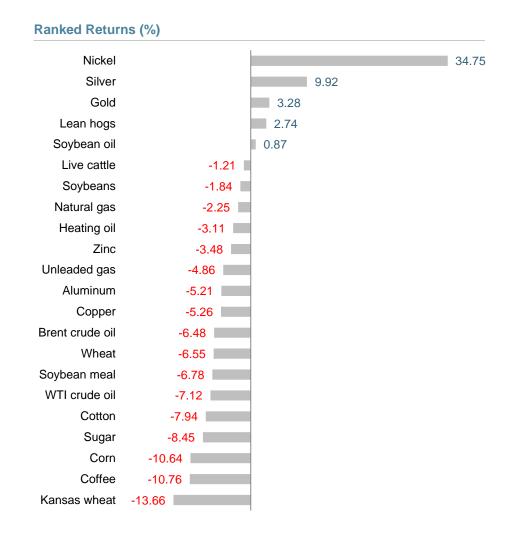
Nickel and silver led quarterly performance, returning 34.75% and 9.92%, respectively.

Kansas wheat and coffee were the worst performers, declining by 13.66% and 10.76%, respectively.

Period Returns (%)

* Annualized

Asset Class	QTR	YTD	1 Year	3 Years*	5 Years*	10 Years*
Commodities	-1.84	3.13	-6.57	-1.50	-7.18	-4.32



Fixed Income

INVESTMENT SERVICES

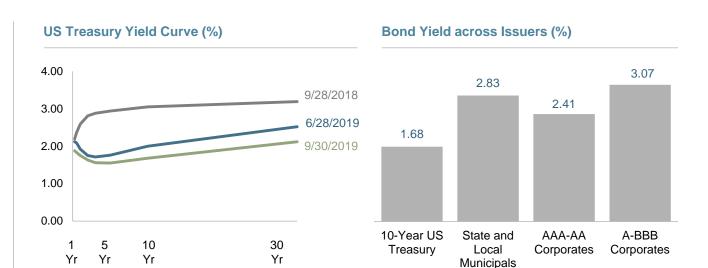
Third Quarter 2019 Index Returns

Interest rates in the US Treasury market decreased during the third quarter. The yield on the 5-year Treasury note declined by 21 basis points (bps), ending at 1.55%. The yield on the 10-year Treasury note decreased by 32 bps to 1.68%. The 30-year Treasury bond yield fell by 40 bps to 2.12%.

On the short end of the yield curve, the 1-month Treasury bill yield decreased to 1.91%, while the 1-year Treasury bill yield decreased by 17 bps to 1.75%. The 2-year Treasury note yield finished at 1.63% after a decrease of 12 bps.

In terms of total returns, short-term corporate bonds gained 1.17%. Intermediate-term corporate bonds had a total return of 1.74%.

The total return for short-term municipal bonds was 0.33%, while intermediate-term muni bonds returned 1.02%. Revenue bonds outperformed general obligation bonds.



Period Returns (%)

*Annualized

Asset Class	QTR	YTD	1 Year	3 Years*	5 Years*	10 Years*
Bloomberg Barclays US Government Bond Index Long	7.83	19.61	24.58	4.11	6.73	6.86
Bloomberg Barclays US Aggregate Bond Index	2.27	8.52	10.30	2.92	3.38	3.75
Bloomberg Barclays Municipal Bond Index	1.58	6.75	8.55	3.19	3.66	4.16
Bloomberg Barclays US TIPS Index	1.35	7.58	7.13	2.21	2.45	3.46
Bloomberg Barclays US High Yield Corporate Bond Index	1.33	11.41	6.36	6.07	5.37	7.94
FTSE World Government Bond Index 1-5 Years (hedged to USD)	0.96	3.68	5.26	2.14	1.98	1.86
ICE BofAML 1-Year US Treasury Note Index	0.56	2.33	3.13	1.60	1.12	0.79
ICE BofAML US 3-Month Treasury Bill Index	0.56	1.81	2.39	1.54	0.98	0.54
FTSE World Government Bond Index 1-5 Years	-0.84	1.41	2.36	0.25	-0.07	-0.05

One basis point equals 0.01%. Past performance is not a guarantee of future results. Indices are not available for direct investment. Index performance does not reflect the expenses associated with the management of an actual portfolio. Yield curve data from Federal Reserve. State and local bonds are from the S&P National AMT-Free Municipal Bond Index. AAA-AA Corporates represent the Bank of America Merrill Lynch US Corporates, AA-AAA rated. A-BBB Corporates represent the ICE BofAML Corporates, BBB-A rated. Bloomberg Barclays data provided by Bloomberg. US long-term bonds, bills, inflation, and fixed income factor data © Stocks, Bonds, Bills, and Inflation (SBBI) Yearbook[™], Ibbotson Associates, Chicago (annually updated work by Roger G. Ibbotson and Rex A. Sinquefield). FTSE fixed income indices © 2019 FTSE Fixed Income LLC, all rights reserved. ICE BofAML index data © 2019 ICE Data Indices, LLC. S&P data © 2019 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved.

Timing Isn't Everything

Third Quarter 2019



Over the course of a summer, it's not unusual for the stock market to be a topic of conversation at barbeques or other social gatherings.

A neighbor or relative might ask about which investments are good at the moment. The lure of getting in at the right time or avoiding the next downturn may tempt even disciplined, long-term investors. The reality of successfully timing markets, however, isn't as straightforward as it sounds.

OUTGUESSING THE MARKET IS DIFFICULT

Attempting to buy individual stocks or make tactical asset allocation changes at exactly the "right" time presents investors with substantial challenges. First and foremost, markets are fiercely competitive and adept at processing information. During 2018, a daily average of \$462.8 billion in equity trading took place around the world. The combined effect of all this buying and selling is that available information, from economic data to investor preferences and so on, is quickly incorporated into market prices. Trying to time the market based on an article from this morning's newspaper or a segment from financial television? It's likely that information is already reflected in prices by the time an investor can react to it.

Dimensional recently studied the performance of actively managed US-based mutual funds and found that even professional investors have difficulty beating the market: over the last 20 years, 77% of equity funds and 92% of fixed income funds failed to survive and outperform their benchmarks after costs.²

Further complicating matters, for investors to have a shot at successfully timing the market, they must make the call to buy or sell stocks correctly not just once, but twice. Professor Robert Merton, a Nobel laureate, said it well in a recent interview with Dimensional:

"Timing markets is the dream of everybody. Suppose I could verify that I'm a .700 hitter in calling market turns. That's pretty good; you'd hire me right away. But to be a good market timer, you've got to do it twice. What if the chances of me getting it right were independent each time? They're not. But if they were, that's 0.7 times 0.7. That's less than 50-50. So, market timing is horribly difficult to do."

TIME AND THE MARKET

The S&P 500 Index has logged an incredible decade. Should this result impact investors' allocations to equities? **Exhibit 1** suggests that new market highs have not been a harbinger of negative returns to come. The S&P 500 went on to provide positive average annualized returns over one, three, and five years following new market highs.

^{1.} In US dollars. Source: Dimensional, using data from Bloomberg LP. Includes primary and secondary exchange trading volume globally for equities. ETFs and funds are excluded. Daily averages were computed by calculating the trading volume of each stock daily as the closing price multiplied by shares traded that day. All such trading volume is summed up and divided by 252 as an approximate number of annual trading days.

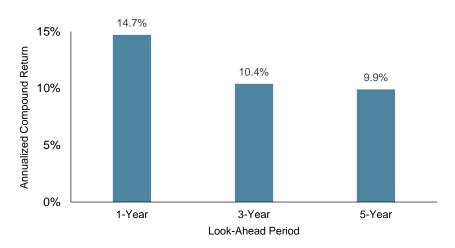
^{2.} Past performance is no guarantee of future results. US-domiciled open-end mutual fund data is from Morningstar. The sample includes funds at the beginning of the 20-year period ending December 31, 2018. For further details, see the Mutual Fund Landscape 2019.

Timing Isn't Everything

(continued from page 15)

S&P 500, January 1926–December 2018





In US dollars. Past performance is no guarantee of future results. New market highs are defined as months ending with the market above all previous levels for the sample period. Annualized compound returns are computed for the relevant time periods subsequent to new market highs and averaged across all new market high observations. There were 1,115 observation months in the sample. January 1990–December 2018: S&P 500 Total Returns Index. S&P data © 2019 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved. January 1926–December 1989; S&P 500 Total Return Index, Stocks, Bonds, Bills and Inflation YearbookTM, Ibbotson Associates, Chicago. For illustrative purposes only. Index is not available for direct investment; therefore, its performance does not reflect the expenses associated with the management of an actual portfolio. There is always a risk that an investor may lose money.



CONCLUSION

Outguessing markets is more difficult than many investors might think. While favorable timing is theoretically possible, there isn't much evidence that it can be done reliably, even by professional investors. The positive news is that investors don't need to be able to time markets to have a good investment experience. Over time, capital markets have rewarded investors who have taken a long-term perspective and remained disciplined in the face of short-term noise. By focusing on the things they can control (like having an appropriate asset allocation, diversification, and managing expenses, turnover, and taxes) investors can better position themselves to make the most of what capital markets have to offer.

Source: Dimensional Fund Advisors LP.

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 quarantee of future results. Diversification does not eliminate the risk of market loss.

All expressions of opinion are subject to change. This article is distributed for informational purposes, and it is not to be construed as an offer, solicitation, recommendation, or endorsement of any particular security, products, or services Robert Merton provides consulting services to Dimensional Fund Advisors LP.

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.



Past performance is no guarantee of future results. The information provided herein reflects Millennium's views as of the date of this newsletter. Such views are subject to change at any point without notice. Millennium obtained the information provided herein from third party sources believed to be reliable but we do not warrant or guarantee the accuracy or completeness of the information. This newsletter is being provided for informational purposes only and should not be considered a recommendation to buy or sell any securities. Nothing presented herein is or is intended to constitute investment advice, and no investment decision should be made based solely on any information provided herein. Millennium has not taken into account the investment objectives, financial situation or particular needs of any individual investor. There is a risk of loss from an investment in securities, including the risk of loss of principal. Different types of investments involve varying degrees of risk, and there can be no assurance that any specific investment will be profitable or suitable for a particular investor's financial situation or risk tolerance. Asset allocation and portfolio diversification cannot assure or guarantee better performance and cannot eliminate the risk of investment losses.

Any forward looking statements or forecasts are based on assumptions and actual results are expected to vary from any such statements or forecasts. No reliance should be placed on any such statements or forecasts when making any investment decision. The assumptions and projections displayed are estimates, hypothetical in nature, and meant to serve solely as our opinion.

The performance of each index mentioned in this newsletter is shown for illustrative purposes only and should not be considered benchmarks for any Millennium strategies, unless otherwise noted. Indexes are unmanaged so the performance shown does not reflect deduction of advisory fees. Indexes are not available for direct investment.

Millennium is an SEC registered investment advisor. However, such registration does not imply a certain level of skill or training and no inference to the contrary should be made. Advisory services are only offered to clients or prospective clients where Millennium and its representatives are properly licensed or exempt from licensing requirements.