INVESTMENT SERVICES



Quarterly Market Review Second Quarter 2018

Quarterly Market Review

Second Quarter 2018

The first half of 2018 ended on a mixed note, as the second quarter produced gains for US equity investors, but losses for their international counterparts. A similar mixed bag could be found in the fractional returns for fixed income investors.

As we outlined in our recent letter about the potential risks of a trade war, the coming weeks and months might very well define the tipping point in terms of market sentiment. On page 3, we are including an interesting chart that depicts the seven most recent periods of economic expansion in the United States.

The first thing to note is how long these cycles typically last. The most durable one, which began in 1991, lasted 10 years. Right now, we are in year nine of the current expansion. Next, please note the three instances where the president and congress enacted substantial legislation in an attempt to boost the economy. Each of these three instances – the Reagan tax cuts of 1981, the GW Bush tax cuts of 2003, and the Obama stimulus of 2010 – came at the very early stages of economic recovery.

All of the above should be taken into context when examining the potential impact of the tax cuts and fiscal stimulus package recently passed by president Trump and congress.

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: E+R=O, a Formula for Success





Quarterly Market Review

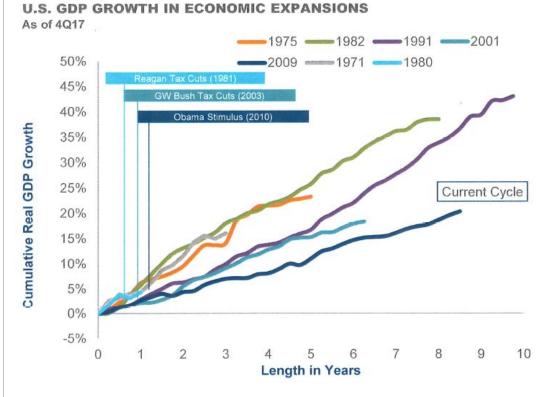
Second Quarter 2018 (continued from page 2)

As the chart indicates, it is unprecedented to implement such stimulus measures so late into an economic expansion. If nothing else, the deficit spending that will result runs the risk of overheating the economy and causing a dramatic uptick in inflation.

Add to the mix the possibility of an all-out trade war, which in and of itself would cause prices on all sorts of consumer goods to increase, and we are inclined to take a more cautious approach with equity investments during the second half of the year.

Hopefully, the rhetoric over tariffs will end up being nothing more than that, with cooler heads prevailing before new policies have the impact that is feared by most economists.

In the meantime, go out and have fun this summer, and leave the worrying to us!

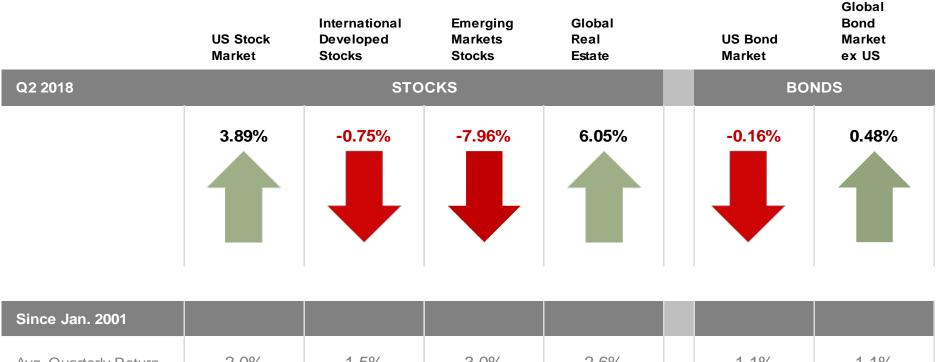


Graph Source: T. Rowe Price



Market Summary

Index Returns



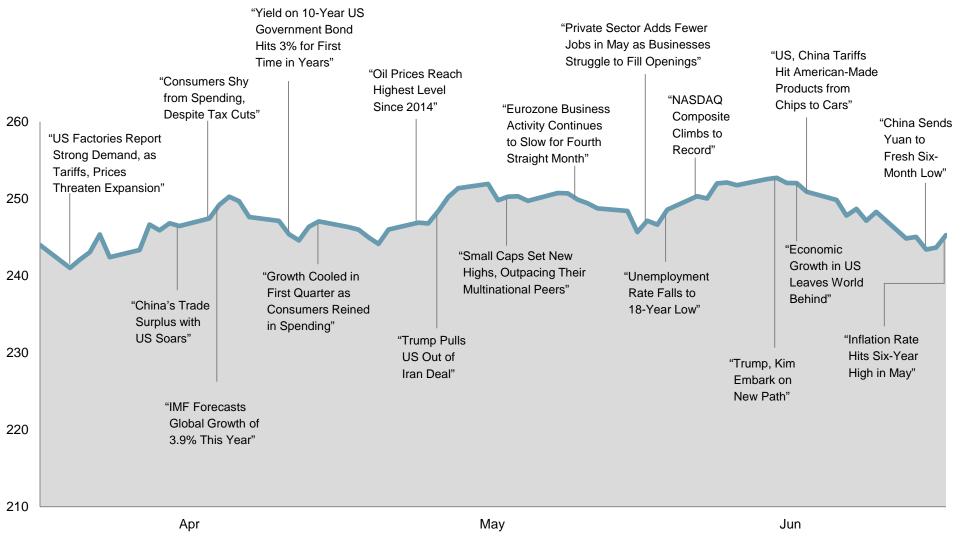
Avg. Quarterly Return	2.0%	1.5%	3.0%	2.6%	1.1%	1.1%
Best Quarter	16.8%	25.9%	34.7%	32.3%	4.6%	4.6%
	Q2 2009	Q2 2009	Q2 2009	Q3 2009	Q3 2001	Q4 2008
Worst Quarter	-22.8%	-21.2%	-27.6%	-36.1%	-3.0%	-2.7%
	Q4 2008	Q4 2008	Q4 2008	Q4 2008	Q4 2016	Q2 2015

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 © 2018 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 2018, all rights reserved. Bloomberg Barclays data provided by Bloomberg. FTSE fixed income © 2018 FTSE Fixed Income LLC, all rights reserved.



World Stock Market Performance

MSCI All Country World Index with selected headlines from Q2 2018



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.

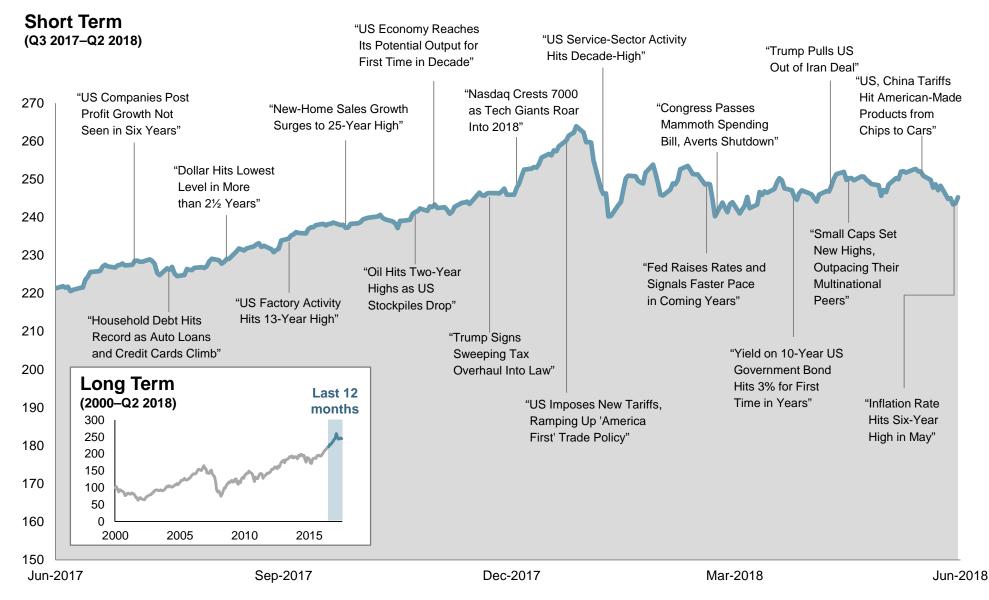
Graph Source: MSCI ACWI Index [net div.]. MSCI data © MSCI 2018, all rights reserved.

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

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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 2018, all rights reserved.

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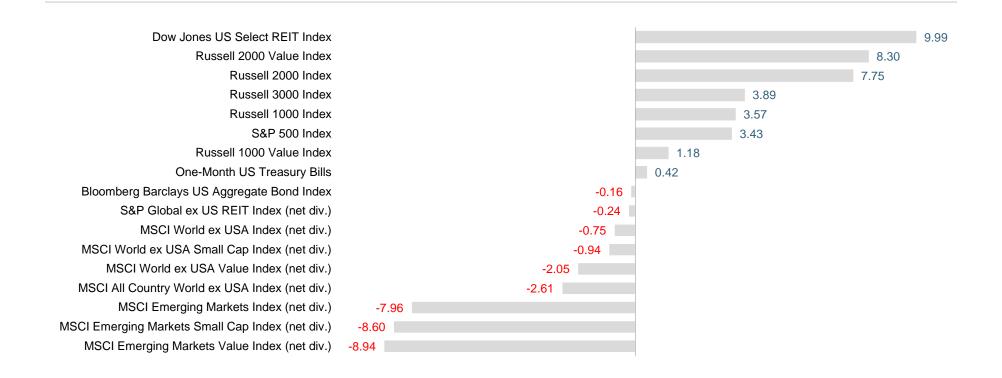
World Asset Classes



Second Quarter 2018 Index Returns (%)

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

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



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US Stocks Second Quarter 2018 Index Returns

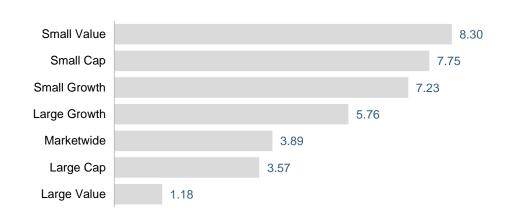


The US equity market posted a positive return, outperforming both non-US developed and emerging markets in the second quarter.

Large cap value stocks underperformed large cap growth stocks in the US; however, small cap value stocks outperformed small cap growth.

There was a positive size premium, as small cap stocks generally outperformed large cap stocks in the US.

Ranked Returns for the Quarter (%)



World Market Capitalization—US



Period Returns (%)

Asset Class	QTR	1 Year	3 Years*	5 Years*	10 Years*
Small Value	8.30	13.10	11.22	11.18	9.88
Small Cap	7.75	17.57	10.96	12.46	10.60
Small Growth	7.23	21.86	10.60	13.65	11.24
Large Growth	5.76	22.51	14.98	16.36	11.83
Marketwide	3.89	14.78	11.58	13.29	10.23
Large Cap	3.57	14.54	11.64	13.37	10.20
Large Value	1.18	6.77	8.26	10.34	8.49

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), 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 2018, all rights reserved.

* Annualized

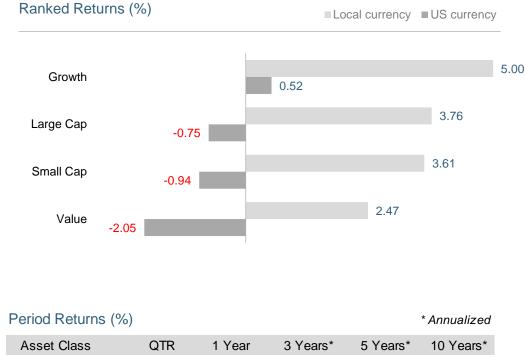
International Developed Stocks

Second Quarter 2018 Index Returns

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

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

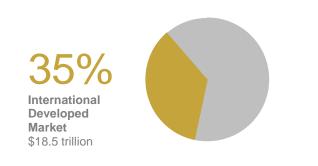
Small caps underperformed large caps in non-US developed markets.



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World Market Capitalization—International Developed



(,)					
Asset Class	QTR	1 Year	3 Years*	5 Years*	10 Years*
Growth	0.52	9.26	5.95	7.11	2.92
Large Cap	-0.75	7.04	4.87	6.23	2.63
Small Cap	-0.94	11.87	9.45	10.28	6.09
Value	-2.05	4.80	3.70	5.27	2.29

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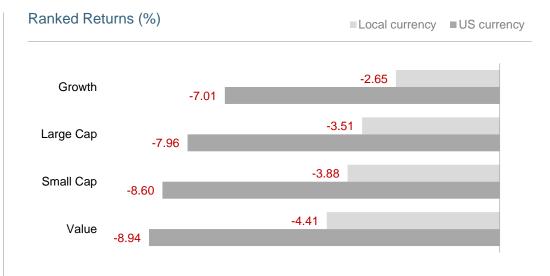
Emerging Markets Stocks

Second Quarter 2018 Index Returns

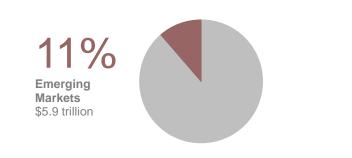
In US dollar terms, emerging markets posted negative returns in the second quarter, underperforming developed markets including the US.

The value effect was negative in large caps; however, value and growth stocks had similar performance among small cap stocks within emerging markets.

Small caps underperformed large caps in emerging markets.



World Market Capitalization—Emerging Markets



Period Returns (%)

Asset Class	QTR	1 Year	3 Years*	5 Years*	10 Years*
Growth	-7.01	11.92	8.34	7.16	3.28
Large Cap	-7.96	8.20	5.60	5.01	2.26
Small Cap	-8.60	5.64	2.55	4.32	4.44
Value	-8.94	4.28	2.76	2.77	1.14

Past performance is not a guarantee of future results. Indices are not available for direct investment. Index performance does not reflect the expenses associated with the management of an actual portfolio. Market segment (index representation) as follows: Large Cap (MSCI Emerging Markets Index), Small Cap (MSCI Emerging Markets Small Cap Index), Value (MSCI Emerging Markets Value Index), and Growth (MSCI Emerging Markets Growth Index). All index returns are net of withholding tax on dividends. World Market Cap represented by Russell 3000 Index, MSCI World ex USA IMI Index, and MSCI Emerging Markets IMI Index. MSCI Emerging Markets IMI Index. MSCI data © MSCI 2018, all rights reserved. Frank Russell Company is the source and owner of the trademarks, service marks, and copyrights related to the Russell Indexes.

* Annualized

Real Estate Investment Trusts (REITs)

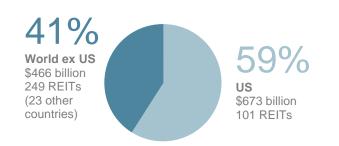


Second Quarter 2018 Index Returns

US real estate investment trusts outperformed non-US REITs in US dollar terms.



Total Value of REIT Stocks



Asset Class	QTR [·]	1 Year	3 Years*	5 Years*	10 Years*
Dow Jones US Select REIT Index	9.99	4.23	7.71	8.29	7.63
S&P Global ex US REIT Index (net div.)	-0.24	7.17	4.62	5.49	3.83

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 data © 2018 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved.

Commodities

Second Quarter 2018 Index Returns

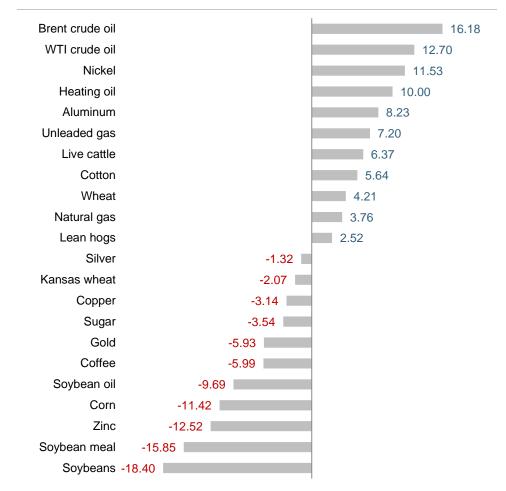
The Bloomberg Commodity Index Total Return gained 0.40% during the second quarter.

The energy complex led performance with Brent oil returning 16.18% and WTI crude oil 12.70%.

Grains was the worst-performing complex; soybeans declined 18.40%, and soybean meal lost 15.85%.

Period Returns (%) * Annualized							
Asset Class	QTR	1 Year	3 Years*	5 Years*	10 Years*		
Commodities	0.40	7.35	-4.54	-6.40	-9.04		

Ranked Returns for Individual Commodities (%)





Fixed Income Second Quarter 2018 Index Returns

Interest rates increased in the US during the second quarter. The yield on the 5-year Treasury note rose 17 basis points (bps), ending at 2.73%. The yield on the 10-year T-note rose 11 bps to 2.85%. The 30-year Treasury bond yield climbed 1 bps to 2.98%.

The 1-month Treasury bill yield rose 14 bps to 1.77%, while the 1-year Treasury bill yield increased 24 bps to 2.33%. The 2-year Treasury note yield finished at 2.52% after increasing 25 bps.

In terms of total return, short-term corporate bonds gained 0.29%, while intermediate-term corporate bonds declined 0.10%.

Short-term municipal bonds added 0.66%, while intermediate-term munis returned 0.81%. Revenue bonds performed in-line with general obligation bonds, returning 0.90% and 0.87%, respectively.



US Treasury Yield Curve (%)

4.00

3.00

2.00

1.00

Period Returns (%)

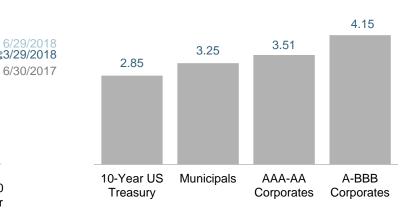
Asset Class QTR 1 Year 3 Years* 5 Years* 10 Years* Bloomberg Barclays US High Yield Corporate Bond Index 1.03 2.62 5.53 5.51 8.19 Bloomberg Barclays Municipal Bond Index 3.53 0.87 1.56 2.85 4.43 Bloomberg Barclays US TIPS Index 3.03 0.77 2.11 1.93 1.68 ICE BofAML 3-Month US Treasury Bill Index 0.45 1.36 0.68 0.42 0.35 0.92 0.77 ICE BofAML 1-Year US Treasury Note Index 0.40 0.64 0.49 Bloomberg Barclays US Government Bond Index Long 0.26 -0.13 3.40 4.56 6.02 FTSE World Government Bond Index 1-5 Years (hedged to USD) 0.24 0.89 1.18 1.33 2.08 Bloomberg Barclays US Aggregate Bond Index -0.16 -0.401.72 2.27 3.72 FTSE World Government Bond Index 1-5 Years -2.660.73 1.19 -0.580.63

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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 Bank of America Merrill Lynch US 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 [©] 2018 FTSE Fixed Income LLC, all rights reserved. ICE BofAML index data [©] 2018 ICE Data Indices, LLC.

Bond Yields across Issuers (%)





* Annualized

E+R=O, a Formula for Success¹

Second Quarter 2018

Combining an enduring investment philosophy with a simple formula that helps maintain investment discipline can increase the odds of having a positive financial experience.

"The important thing about an investment philosophy is that you have one you can stick with."

David Booth Founder and Executive Chairman Dimensional Fund Advisors

AN ENDURING INVESTMENT PHILOSOPHY

Investing is a long-term endeavor. Indeed, people will spend decades pursuing their financial goals. But being an investor can be complicated, challenging, frustrating, and sometimes frightening. This is exactly why, as David Booth says, it is important to have an investment philosophy you can stick with, one that can help you stay the course.

This simple idea highlights an important question: How can investors maintain discipline through bull markets, bear markets, political strife, economic instability, or whatever crisis du jour threatens progress towards their investment goals?

Over their lifetimes, investors face many decisions, prompted by events that are both within and outside their control. Without an enduring philosophy to inform their choices, they can potentially suffer unnecessary anxiety, leading to poor decisions and outcomes that are damaging to their long-term financial well-being. When they don't get the results they want, many investors blame things outside their control. They might point the finger at the government, central banks, markets, or the economy. Unfortunately, the majority will not do the things that might be more beneficial—evaluating and reflecting on their own responses to events and taking responsibility for their decisions.

e+r=o

Some people suggest that among the characteristics that separate highly successful people from the rest of us is a focus on influencing outcomes by controlling one's reactions to events, rather than the events themselves. This relationship can be described in the following formula:

e+r=o (Event + Response = Outcome)

Simply put, this means an outcome—either positive or negative—is the result of how you respond to an event, not just the result of the event itself. Of course, events are important and influence outcomes, but not exclusively. If this were the case, everyone would have the same outcome regardless of their response.

Let's think about this concept in a hypothetical investment context. Say a major political surprise, such as Brexit, causes a market to fall (event). In a panicked response, potentially fueled by gloomy media speculation of the resulting uncertainty, an investor sells some or all of his or her investment (response). Lacking a long-term perspective and reacting to the short-term news, our investor misses out on the subsequent market recovery and suffers anxiety about when, or if, to get back in, leading to suboptimal investment returns (outcome).

To see the same hypothetical example from a different perspective, a surprise event causes markets to fall suddenly (e). Based on his or her understanding of the long-term nature of returns and the short-term nature of volatility spikes around news events, an investor is able to control his or her emotions (r) and maintain investment discipline, leading to a higher chance of a successful long-term outcome (o).



^{1.} Jack Canfield, The Success Principles: How to Get from Where You Are to Where You Want to Be (New York: HarperCollins Publishers, 2004).

E+R=O, a Formula for Success¹



(continued from page 14)

This example reveals why having an investment philosophy is so important. By understanding how markets work and maintaining a long-term perspective on past events, investors can focus on ensuring that their responses to events are consistent with their long-term plan.

THE FOUNDATION OF AN ENDURING PHILOSOPHY

An enduring investment philosophy is built on solid principles backed by decades of empirical academic evidence. Examples of such principles might be: trusting that prices are set to provide a fair expected return; recognizing the difference between investing and speculating; relying on the power of diversification to manage risk and increase the reliability of outcomes; and benchmarking your progress against your own realistic long-term investment goals.

Combined, these principles might help us react better to market events, even when those events are globally significant or when, as some might suggest, a paradigm shift has occurred, leading to claims that "it's different this time." Adhering to these principles can also help investors resist the siren calls of new investment fads or worse, outright scams.

THE GUIDING HAND OF A TRUSTED ADVISOR

Without education and training—sometimes gained from bitter experience—it is hard for non-investment professionals to develop a cogent investment philosophy. And even the most self-aware find it hard to manage their own responses to events. This is why a financial advisor can be so valuable—by providing the foundation of an investment philosophy and acting as an experienced counselor when responding to events.

Investing will always be both alluring and scary at times, but a view of how to approach investing combined with the guidance of a professional advisor can help people stay the course through challenging times. Advisors can provide an objective view and help investors separate emotions from investment decisions. Moreover, great advisors can educate, communicate, set realistic financial goals, and help their clients deal with their responses even to the most extreme market events.

In the spirit of the e+r=o formula, good advice, driven by a sound philosophy, can help increase the probability of having a successful financial outcome.

Dimensional Fund Advisors LP is an investment advisor registered with the Securities and Exchange Commission.

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Adapted from "E+R=O, a Formula for Success," The Front Foot Adviser, by David Jones, Vice President and Head of Financial Adviser Services, EMEA.



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