

Quarterly Market Review Second Quarter 2016



Quarterly Market Review

Second Quarter 2016

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 performance of globally diversified portfolios and features quarterly topics.

Overview:

Market Summary

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World Asset Classes

US Stocks

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Emerging Markets Stocks

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Real Estate Investment Trusts (REITs)

Fixed Income

Global Diversification

Quarterly Topics: 10 Reasons to be Cheerful

GDP Growth and Equity Returns



Market Summary

Index Returns

	US Stock Market	International Developed Stocks	Emerging Markets Stocks	Global Real Estate	US Bond Market	Global Bond Market ex US
2Q 2016			CKS		ВС	NDS
	2.63%	-1.05%	0.66%	4.48%	2.21%	3.11%

Since Jan. 2001						
Avg. Quarterly Return	1.7%	1.3%	2.9%	2.9%	1.3%	1.2%
Best	16.8%	25.9%	34.7%	32.3%	4.6%	5.5%
Quarter	Q2 2009	Q2 2009	Q2 2009	Q3 2009	Q3 2001	Q4 2008
Worst	-22.8%	-21.2%	-27.6%	-36.1%	-2.4%	-3.2%
Quarter	Q4 2008	Q4 2008	Q4 2008	Q4 2008	Q2 2004	Q2 2015

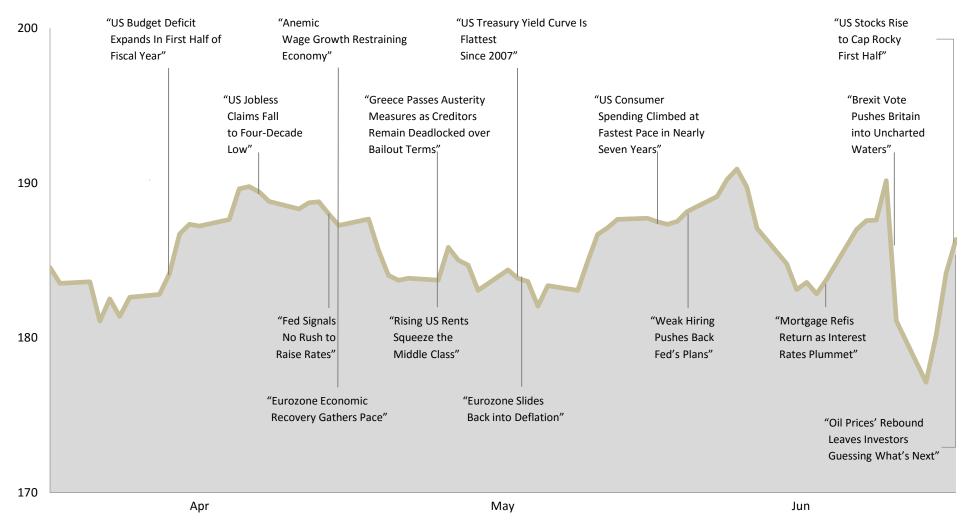
Past performance is not a guarantee of future results. Indices are not available for direct investment. Index performance does not reflect the expenses associated with the management of an actual portfolio.

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), US Bond Market (Barclays US Aggregate Bond Index), and Global Bond ex US Market (Citigroup WGBI ex USA 1–30 Years [Hedged to USD]). The S&P data are 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 2016, all rights reserved. Barclays data provided by Barclays Bank PLC. Citigroup bond indices © 2016 by Citigroup.



World Stock Market Performance

MSCI All Country World Index with selected headlines from Q2 2016



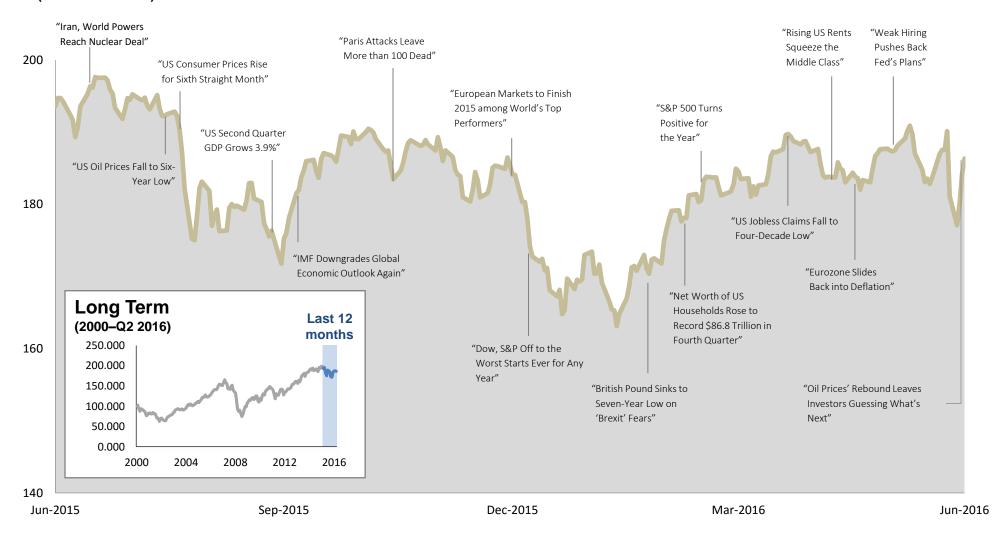
These headlines are not offered to explain market returns. Instead, they serve as a reminder that investors should view daily events from a long-term perspective and avoid making investment decisions based solely on the news.



World Stock Market Performance

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

Short Term (Q3 2015–Q2 2016)



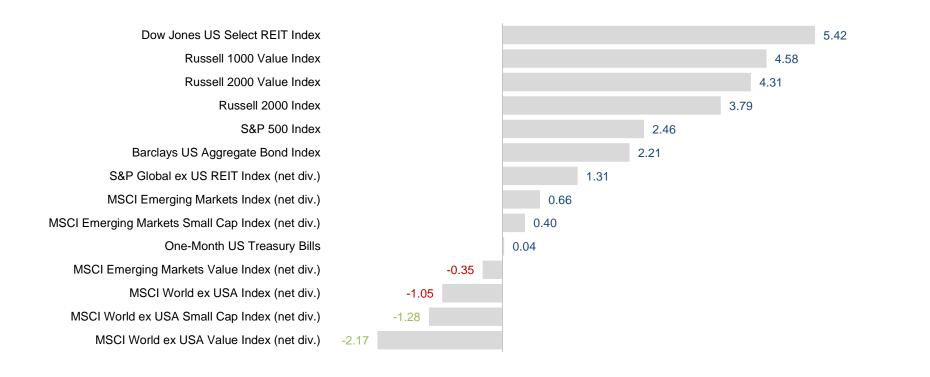


World Asset Classes

Second Quarter 2016 Index Returns (%)

Looking at broad market indices, the US outperformed developed markets outside the US and emerging markets. US REITs recorded the highest returns, outperforming the broad equity market.

The value effect was positive in the US but negative in developed and emerging markets. Small caps outperformed large caps in the US but slightly underperformed in the developed and emerging markets.





US Stocks

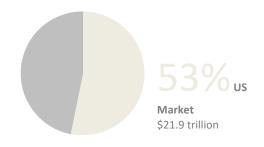
Second Quarter 2016 Index Returns

The broad US equity market recorded positive absolute performance for the quarter.

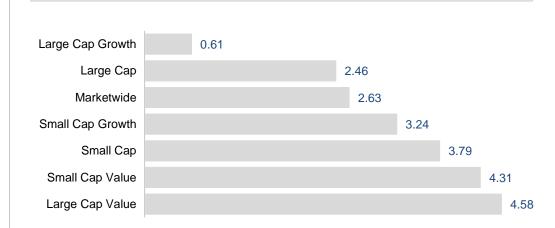
Value indices outperformed growth indices across all size ranges.

Small caps outperformed large caps.

World Market Capitalization—US



Ranked Returns for the Quarter (%)



Period Returns (%)

* Annualized

Asset Class	YTD	1 Year	3 Years*	5 Years*	10 Years*
Marketwide	3.62	2.14	11.13	11.60	7.40
Large Cap	3.84	3.99	11.66	12.10	7.42
Large Cap Value	6.30	2.86	9.87	11.35	6.13
Large Cap Growth	1.36	3.02	13.07	12.35	8.78
Small Cap	2.22	-6.73	7.09	8.35	6.20
Small Cap Value	6.08	-2.58	6.36	8.15	5.15
Small Cap Growth	-1.59	-10.75	7.74	8.51	7.15

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International Developed Stocks

Second Quarter 2016 Index Returns

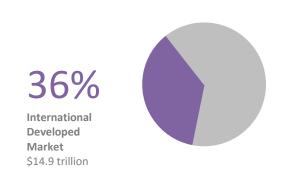
In US dollar terms, developed markets outside the US lagged both the US equity market and emerging markets indices during the quarter.

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

The value effect was negative in non-US developed markets using broad market indices across all size ranges.

Growth Large Cap -1.05 Value -2.17 Small Cap Local currency US currency 0.57 0.07

World Market Capitalization—International Developed



Period Returns (%)

Asset Class	YTD	1 Year	3 Years*	5 Years*	10 Years*
Large Cap	-2.98	-9.84	1.88	1.23	1.63
Small Cap	-0.69	-3.35	6.34	3.61	3.33
Value	-4.68	-14.35	-0.24	-0.17	0.43
Growth	-1.29	-5.25	3.94	2.58	2.75



Emerging Markets Stocks

Second Quarter 2016 Index Returns

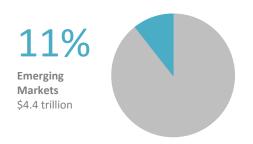
In US dollar terms, emerging markets indices underperformed the US but outperformed developed markets outside the US.

The value effect was negative in emerging markets using broad market indices. Large cap value indices underperformed large cap growth indices. The opposite was true among small caps: Small cap value indices outperformed small cap growth indices.

Small cap indices slightly underperformed large cap indices in emerging markets.



World Market Capitalization—Emerging Markets



Period Returns (%)

Asset Class	YTD	1 Year	3 Years*	5 Years*	10 Years*
Large Cap	6.41	-12.05	-1.56	-3.78	3.54
Small Cap	1.38	-12.76	-0.01	-2.29	5.98
Value	7.41	-14.41	-3.30	-5.53	3.29
Growth	5.43	-9.83	0.08	-2.11	3.71

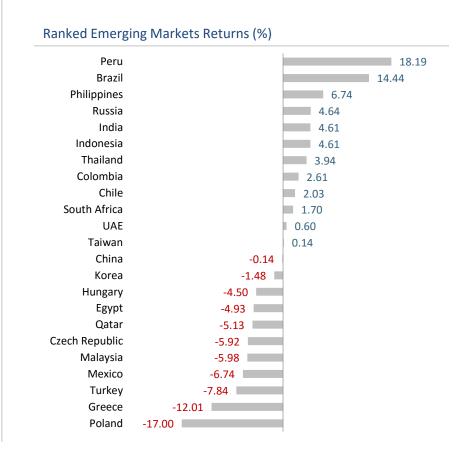


Select Country Performance

Second Quarter 2016 Index Returns

New Zealand recorded the highest country performance in developed markets, while Italy and Ireland posted the lowest performance for the quarter. In emerging markets, Peru and Brazil again posted the highest country returns, while Poland and Greece recorded the lowest performance.

Ranked Developed Markets Returns (%) New Zealand 5.30 Canada 4.72 Norway 2.98 US 2.62 Belgium 1.88 Switzerland 1.77 Japan 1.50 Australia 0.64 Singapore 0.49 Hong Kong 0.38 Finland -1.21 Denmark -1.22 UK -2.07 Israel -3.12 France -4.24 Germany -5.36 Netherlands -5.44 Sweden -5.46 Spain Portugal Austria Ireland -10.67 Italy -10.99





Real Estate Investment Trusts (REITs)

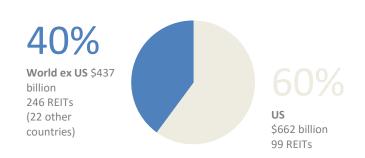
Second Quarter 2016 Index Returns

US REITs had very strong positive returns for the quarter, outperforming the broad equity market. REITs in developed markets recorded positive returns, also outperforming broad developed equity markets indices.





Total Value of REIT Stocks



Period Returns (%)

Asset Class	YTD	1 Year	3 Years*	5 Years*	10 Years*
US REITs	10.82	22.85	13.55	12.30	6.86
Global REITs (ex US)	10.02	7.25	6.96	5.91	3.31

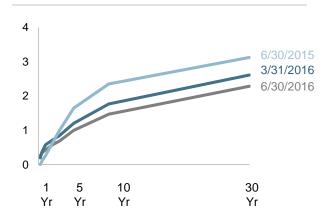


Fixed Income

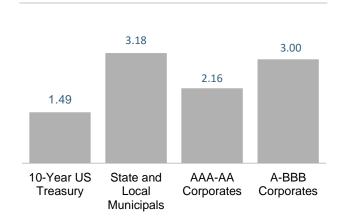
Second Quarter 2016 Index Returns

- Interest rates across the US markets generally decreased during the quarter. The yield on the 5-year Treasury note fell 20 basis points (bps) to end at 1.01%. The yield on the 10-year T-note decreased 29 bps to 1.49%. The 30-year Treasury bond declined 31 bps to finish with a yield of 2.30%.
- The 1-year T-bill ended the quarter yielding 0.45% and the 2-year T-note finished at 0.58%, for declines of 14 and 15 bps, respectively. The 3-month T-bill increased 5 bps to yield 0.26%, while the 6-month T-bill dipped 3 bps to 0.36%.
- Short-term corporate bonds gained 1.05%. Intermediate-term corporates returned 2.24%, while long-term corporate bonds returned 6.64%.¹
- Short-term municipal bonds returned 0.66%, while intermediate-term municipal bonds gained 1.84%.
 Revenue bonds slightly outperformed general obligation bonds.²





Bond Yields across Issuers (%)



Period Returns (%)

Asset Class YTD 1 Year 3 Years* 5 Years* 10 Years* BofA Merrill Lynch Three-Month US Treasury Bill Index 0.15 1.04 0.19 0.09 0.09 BofA Merrill Lynch 1-Year US Treasury Note Index 0.34 0.65 0.59 0.38 1.69 Citigroup WGBI 1-5 Years (hedged to USD) 1.86 2.36 1.82 1.84 2.98 Barclays Long US Government Bond Index 14.94 18.98 10.38 10.17 8.69 Barclays US Aggregate Bond Index 6.00 4.06 3.76 5.13 5.31 Barclays US Corporate High Yield Index 1.62 4.18 5.84 7.56 9.06 Barclays Municipal Bond Index 4.33 7.65 5.58 5.33 5.13 Barclays US TIPS Index 6.24 2.31 2.63 4.76 4.35

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1. Barclays US Corporate Bond Index. 2. Barclays Municipal Bond Index. Yield curve data from Federal Reserve. State and local bonds are from the Bond Buyer Index, general obligation, 20 years to maturity, mixed quality.

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. Barclays data provided by Barclays Bank PLC. 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). Citigroup bond indices © 2016 by Citigroup. The BofA Merrill Lynch Indices are used with permission; © 2016 Merrill Lynch, Pierce, Fenner & Smith Incorporated; all rights reserved. Merrill Lynch, Pierce, Fenner & Smith Incorporated is a wholly owned subsidiary of Bank of America Corporation.



Global Diversification

Second Quarter 2016 Index Returns

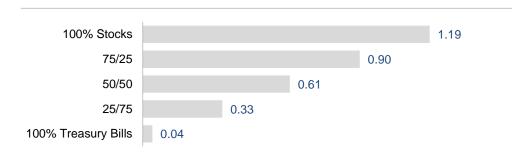
These portfolios illustrate the performance of different global stock/bond mixes and highlight the benefits of diversification. Mixes with larger allocations to stocks are considered riskier but have higher expected returns over time.

Period Returns (%)

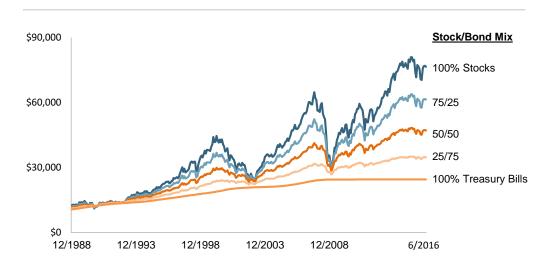
* Annualized

ears* 5 Years* 10 Years*
6.60 5.95 4.82
5.06 4.62 4.12
3.45 3.19 3.23
1.78 1.66 2.16
0.04 0.04 0.91

Ranked Returns (%)



Growth of Wealth: The Relationship between Risk and Return





10 Reasons to be Cheerful

Do you ever listen to the news and find yourself thinking that the world has gone to the dogs? The roll call of depressing headlines seems endless. But look beyond what the media calls news, and there also are a lot of things going right.

It's true the world faces challenges in many areas, and the headlines reflect that. Europe has been grappling with a flood of refugees; as of May, the Chinese local A-share market declined by almost 20 percent¹; and the US is in the middle of a sometimes rancorous election campaign.

More recently, citizens of the United Kingdom voted to leave the European Union, creating significant uncertainty in markets over the long-term implications.

But it's also easy to overlook the significant advances made in raising the living standards of millions, increasing global cooperation on various issues, and improving access to healthcare and other services across the world. Many of the 10 developments cited below don't tend to make the front pages of daily newspapers or the lead items in the TV news, but they're worth keeping in mind on those occasions when you feel overwhelmed by all the grim headlines.

So here's an alternative news bulletin:

- 1. Over the last 25 years ending May 2016, one dollar invested in a global portfolio of stocks would have grown to more than five and a half dollars.²
- 2. Over the last 25 years, 2 billion people globally have moved out of extreme poverty, according to the latest United Nations Human Development Report.³
- 3. Over the same period, mortality rates among children under the age of 5 have fallen by 53%, from 91 deaths per 1000 to 43 deaths per 1000.
- 4. Globally, life expectancy has been improving. From 2000 to 2015, according to the World Health Organization, the global increase was 5.0 years, with an even larger increase of 9.4 years in parts of Africa.⁴
- 5. Global trade has expanded as a proportion of GDP from 20% in 1995 to 30% by 2014, signaling greater global integration.⁵
- Access to financial services has greatly expanded in developing countries. According to the World Bank, among adults in the poorest

- 40% of households within developing economies, the share without a bank account fell by 17 percentage points on average between 2011 and 2014.6
- 7. The world's biggest economy, the US, has been recovering. Unemployment has halved in six years from nearly 10% to 5%.⁷
- 8. The world is exploring new sources of renewable energy. According to the International Energy Agency, in 2014, renewable energy such as wind and solar expanded at its fastest rate to date and accounted for more than 45% of net additions to world capacity in the power sector.⁸
- 9. We live in an era of innovation. One report estimates the digital economy now accounts for 22.5% of global economic output.⁹
- 10. The growing speed and scale of data is increasing global connectedness. According to a report by McKinsey & Company, cross-border bandwidth has grown by a factor of 45 in the past decade, boosting productivity and GDP.¹⁰

(CONTINUED ON PAGE 15)



10 Reasons to be Cheerful (continued from page 14)

No doubt many of these advances will lead to new business and investment opportunities. Of course, not all will succeed. But the important point is that science and innovation are evolving in ways that may help mankind.

The world is far from perfect. The human race faces challenges. But just as it is important to be realistic and aware of the downside of our condition, we must also recognize the major advances that we are making.

Just as there is reason for caution, there is always room for hope. And keeping those good things in mind can help when you feel overwhelmed by all the bad news.

- 1. As measured by the MSCI A Share Net Dividends Index in CNY.
- 2. As measured by the MSCI All Country World Index (gross dividends) in USD.
- 3. "Human Development Report 2015: Work for Human Development," United Nations.
- 4. "World Health Statistics 2016," World Health Organization.
- 5. "International Trade Statistics 2015," World Trade Organization.
- 6. "The Global Findex Database 2014: Measuring Financial Inclusion Around the World," World Bank.
- 7. US Bureau of Labor Statistics, 15 March 2016.
- 8. "Renewable Energy Market Report 2015," International Energy Agency.
- 9. "Digital Disruption: The Growth Multiplier," Accenture and Oxford Economics, February 2016.
- 10. "Digital Globalization: The New Era of Global Flows," McKinsey and Company, March 2016.

Adapted from "Free Throws," Jim Parker VP,DFA Australia Ltd., a subsidiary of Dimensional Fund Advisors LP. June 2016. Dimensional Fund Advisors LP ("Dimensional") is an investment advisor registered with the Securities and Exchange Commission. All expressions of opinion reflect the author's judgment at the date of publication and are subject to change without notice in reaction to shifting market conditions. This material is provided for informational purposes, and it is not to be construed as general financial product advice nor an offer, solicitation, recommendation or endorsement of any particular security, products, or services. ©2016 Dimensional Fund Advisors LP. All rights reserved. Unauthorized copying, reproducing, duplicating, or transmitting of this material is prohibited. Past performance is not a guarantee of future results. Indices are not available for direct investment; therefore, their performance does not reflect the expenses associated with the management of an actual portfolio. © MSCI 2016, all rights reserved.



GDP Growth and Equity Returns

Many investors look to gross domestic product (GDP) as an indicator of future equity returns

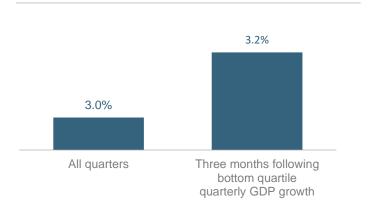
According to the advance GDP estimate released by the Bureau of Economic Analysis (BEA) on April 28, annualized real US GDP growth was 0.5% in the first quarter of 2016—below the historical average of 3.2%. This might prompt some investors to ask whether below-average quarterly GDP growth has implications for their portfolios.

Market participants continually update their expectations about the future, including expectations about the future state of the economy. The current prices of the stocks and bonds held by investors therefore contain up-to-date information about expected GDP growth and a multitude of other considerations that inform aggregate market expectations. Accordingly, only new information that is not already incorporated in market prices should impact stock and bond returns.

Quarterly GDP estimates are released with a one-month lag and are frequently revised at a later point in time. Initial quarterly GDP estimates were revised for 54 of the 56 quarters from 2002 to 2015.² Thus, the final estimate for last quarter may end up being higher or lower than 0.5%.

Prices already reflect expected GDP growth prior to the official release of quarterly GDP estimates. The unexpected component (positive or negative) of a GDP growth estimate is quickly incorporated into prices when a new estimate is released. A relevant question for investors is whether a period of low quarterly GDP growth has information about short-term stock returns going forward.

Quarterly S&P 500 Index Returns, 1948–2016



From 1948 to 2016, the average quarterly return for the S&P 500 Index was 3%. When quarterly GDP growth was in the lowest quartile of historical observations, the average S&P 500 return in the subsequent quarter was 3.2%, which is similar to the historical average for all quarters. This data suggests there is little evidence that low quarterly GDP growth is associated with short-term stock returns above or below returns in other periods.

Sources: S&P Dow Jones Indices, Bureau of Economic Analysis.
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or services.

^{1.} Source: Bureau of Economic Analysis.

^{2. 2002} to 2015 is the longest time period for which BEA provides data comparing initial to final estimates. The average difference between an initial and final estimate was 1% in absolute magnitude over this time period.

Adapted from "GDP Growth and Equity Returns," Issue Brief, May 2016. Dimensional Fund Advisors LP is an investment advisor registered with the Securities and Exchange Commission.

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