



**HIGHTOWER**  
ACACIA WEALTH ADVISORS

# Investment Synopsis

## Second Quarter 2016

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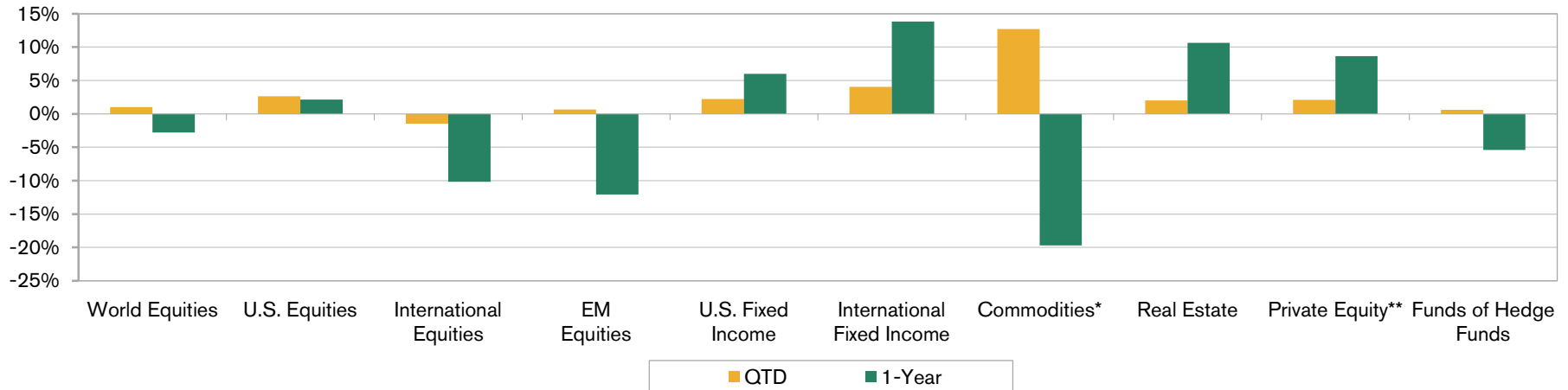


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## Second Quarter 2016 Investment Performance: Summary by Asset Class

This section provides data on investment performance for select market indices mostly for the second quarter (Q2) 2016, as well as Rogerscasey's commentary.

### Asset Class Summary: Quarter-to-Date (QTD) and One-Year Returns



Asset Class	Indices	QTD	YTD	1-Year	3-Year	5-Year	10-Year
<b>Equities</b>	MSCI World (Net of dividends)	1.01	0.66	-2.78	6.95	6.63	4.43
	Russell 3000	2.63	3.62	2.14	11.13	11.60	7.40
	MSCI EAFE (Net of dividends)	-1.46	-4.42	-10.16	2.06	1.68	1.58
	MSCI EM (Net of dividends)	0.66	6.41	-12.06	-1.56	-3.78	3.54
<b>Fixed Income</b>	Barclays Capital U.S. Aggregate	2.21	5.31	6.00	4.06	3.76	5.13
	Citigroup Non-U.S. WGBI (Unhedged)	4.04	13.50	13.85	2.36	0.31	3.97
<b>Other</b>	Commodity Splice*	12.73	11.56	-19.70	-15.18	-12.43	-7.89
	NCREIF NPI	2.03	4.29	10.64	11.61	11.52	7.41
	Thomson Reuters Private Equity**	2.11	8.65	8.65	14.11	12.45	11.03
	HFRI Fund of Funds Composite	0.61	-2.56	-5.38	1.92	1.64	1.59

World equity markets were positive in Q2. On a global developed factor\* basis for Q2, Sentiment and Risk performed well, while Value, Quality and Growth generally performed poorly. Non-U.S. developed equity underperformed U.S. and emerging market equities for the quarter.

U.S. and international fixed income performed positively in Q2. Nominal and real yield curve rates in the U.S. decreased from Q1. The Fed's decision not to raise rates along with a flight to safety surrounding the Brexit vote helped to drive a rally in Treasuries.

Commodities ended Q2 in positive territory. On a sector basis, Energy, Agriculture, Precious Metals and Industrial Metals had positive returns. The Livestock sector declined.

Hedge fund of funds gained in Q2. With regard to direct hedge funds, all of the major strategies posted positive returns.

\*Factors are attributes that explain differences in equity performance. Stocks are sorted based on their exposure to a particular factor, with the factor return being the difference in returns between stocks with high exposure and low exposure to a particular attribute.

\*Commodity Splice, a Rogerscasey index, blends the Bloomberg Commodity Index (50%) and the S&P GSCI Index (50%), rebalanced monthly.

\*\*Performance reported as of Q4 2015 because Q1 2016 and Q2 2016 performance data is not yet available.

Sources: eVestment Alliance, Investment Metrics, Thomson One and Hedge Fund Research, Inc.

# World Economy: Key Indicators

This section provides data on select economic indicators for Q2 2016 along with Rogerscasey's commentary.

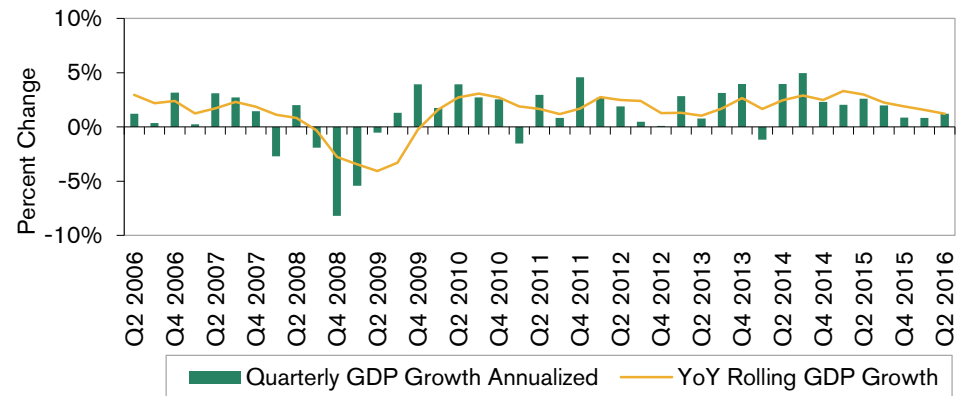
## GDP Growth

Real GDP grew at an annualized rate of 1.2 percent in Q2. The adjacent graph shows annualized GDP growth, along with the year-over-year (YoY) rolling percentage change in GDP.

Positive contributors to GDP in Q2 included personal consumption expenditures (PCE) and exports. Private inventory investment, nonresidential fixed investment, residential fixed investment, state and local government, and decreased imports detracted from GDP during the quarter.

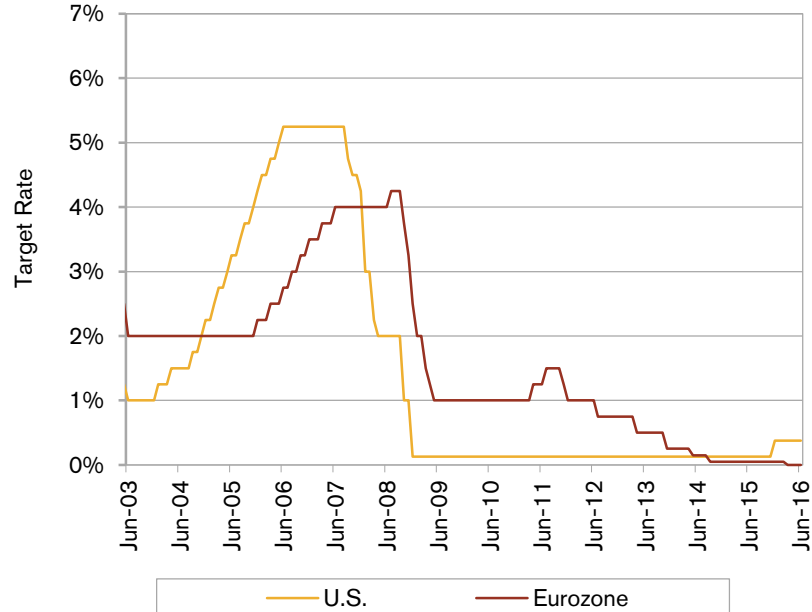
Personal and disposable income grew more in Q2 than in Q1. The personal savings rate decreased from 6.1 percent in Q1 to 5.5 percent in Q2.

## U.S. GDP Growth: Annualized Quarterly and Year-over-Year (YoY) Rolling (%)



Source: Bureau of Economic Analysis

## Target Rates: U.S. and Eurozone



Sources: Rogerscasey using data from the Federal Reserve Board and the European Central Bank

## Monetary Policy

At its June meeting, the Federal Open Market Committee (FOMC) stated the following:

- Economic activity has been expanding at an accelerated pace;
- The labor market has slowed with diminishing employment gains;
- Household spending has increased;
- Inflation remained below the Federal Reserve (Fed)'s 2 percent objective due to decreased energy prices and lower-priced non-energy imports, but should rise to 2 percent over the medium term;
- The Federal Funds Rate will remain between 0.25 and 0.50 percent; and,
- To maintain an accommodative policy, the Fed will continue reinvesting principal payments from holdings of agency debt and agency-mortgage-backed securities, and will keep rolling over maturing Treasury securities at auction.

In June, the European Central Bank held its target refinancing rate at zero percent, its marginal lending rate at 0.25 percent and its deposit rate at -0.40 percent.

The Bank of Japan (BoJ) maintained its quantitative and qualitative easing policy of purchasing Japanese government bonds (JGBs), with the goal of increasing the monetary base by approximately ¥80 trillion annually. The BoJ is purchasing JGBs flexibly based on financial market conditions in order to encourage lower interest rates across the yield curve.

# World Economy: Key Indicators

This section provides data on select economic indicators for Q2 2016 along with Rogerscasey's commentary.

## Inflation

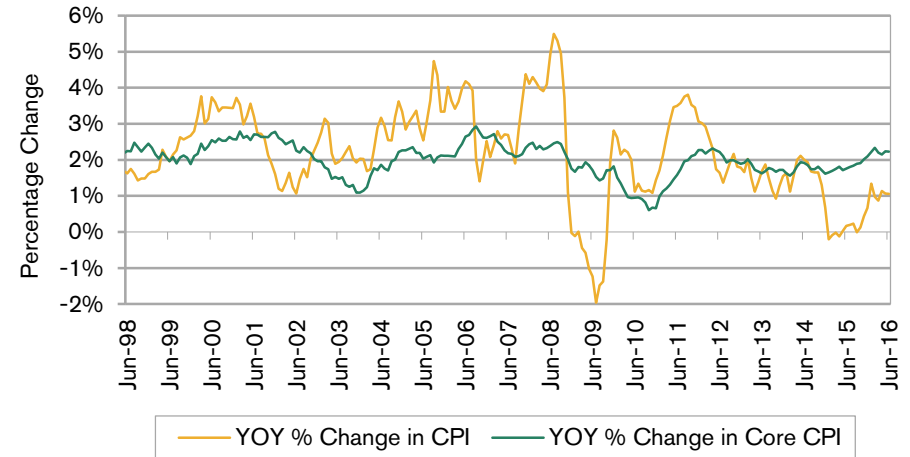
The headline seasonally adjusted Consumer Price Index (CPI)\* was up 0.84 percent in Q2, and increased 1.05 percent on a YoY basis.

Seasonally adjusted Core CPI, which excludes both food and energy prices, rose 0.57 percent in Q2, bringing the YoY core CPI increase to 2.23 percent.

On an unadjusted 12-month basis ending June 2016, the energy component fell the most at -9.4 percent. Commodities less food and energy commodities was also slightly negative. Food and services less energy services were both positive.

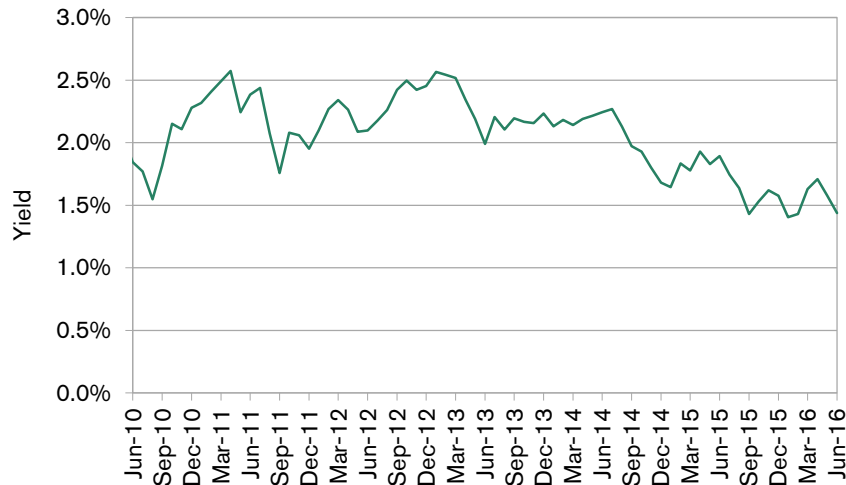
\* Headline CPI is the CPI-U, the CPI for all urban consumers.

## Headline CPI and Core CPI: Percentage Change YoY



Source: Bureau of Labor Statistics

## 10-Year Break-Even Inflation Rate



Source: Bloomberg

## Break-Even Inflation

The adjacent graph shows the 10-year break-even inflation rate, which measures the difference in yield between a nominal 10-year Treasury bond and a comparable 10-year Treasury inflation-protected security (TIPS) bond. The break-even inflation rate is an indicator of the market's inflation expectations over the horizon of the bond.

During Q2, the 10-year break-even rate decreased to 1.44 percent from Q1's 1.63 percent. As noted on page 2 (see "Monetary Policy"), the Fed expects inflation to rise to 2 percent in the medium term.

## World Economy: Key Indicators

This section provides data on select economic indicators for Q2 2016 along with Rogerscasey's commentary.

### Labor Market and the Unemployment Rate

Unemployment stood at 4.9 percent at the end of Q2, down slightly from 5.0 percent at the end of Q1.

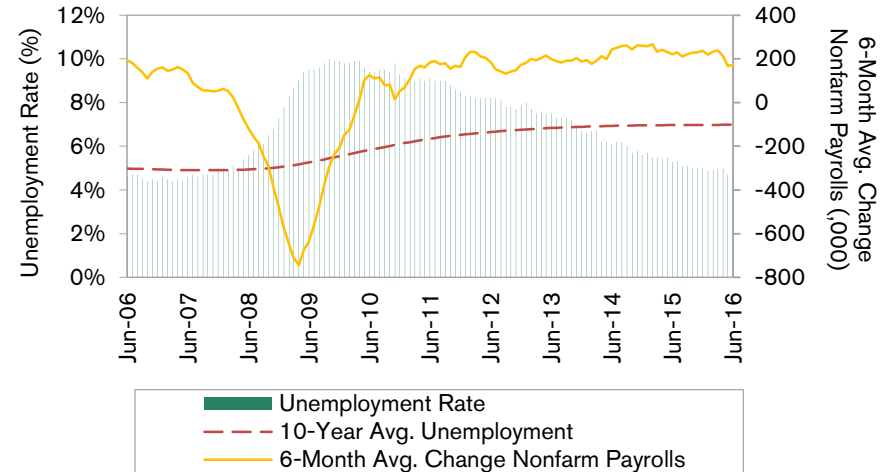
Total nonfarm payrolls increased by 442,000 jobs in Q2. Employment in private industries increased in private services-providing jobs, while goods-producing jobs registered losses. Government employment also grew during Q2.

The one-month total private diffusion index\* stood at 62.4 in June, up from 57.8 the prior year. The one-month manufacturing diffusion index was also up in June, standing at 55.1 versus 51.9 the prior year.

The labor force participation rate decreased from 63.0 in March to 62.7 percent in June.

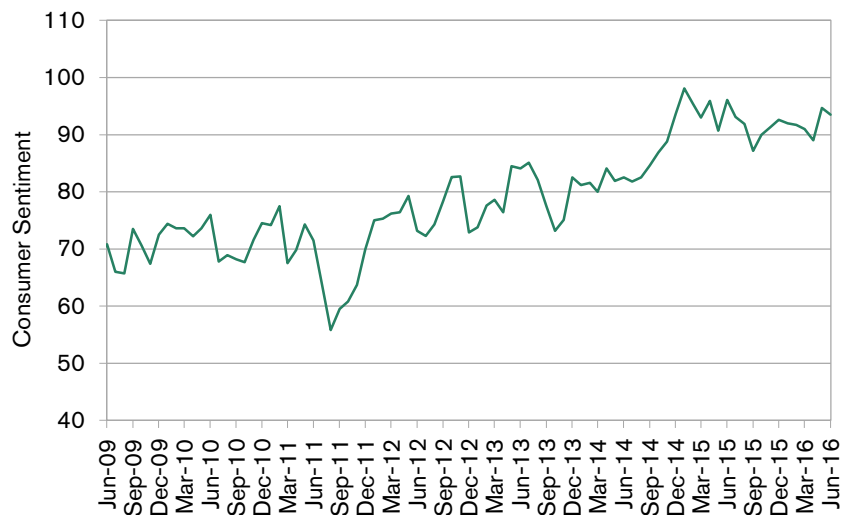
\*Per the Bureau of Labor Statistics, figures represent the percent of industries with employment increasing plus one-half of the industries with unchanged employment, where 50 percent indicates an equal balance between industries with increasing and decreasing employment.

### Unemployment and Nonfarm Payrolls



Source: Bureau of Labor Statistics

### U.S. Consumer Sentiment



Source: Moody's Economy.com using data from the Thomson Reuters/University of Michigan Consumer Sentiment Index

### Consumer Sentiment

The University of Michigan Index of U.S. Consumer Sentiment is an economic indicator that measures individuals' confidence in the stability of their incomes as well as the state of the economy. The Consumer Sentiment Index increased from 91.0 in March to 93.5 in June. Expectations and views on present conditions both increased in Q2.

The index has been relatively stable over the past year and a half. Consumers' assessments of current conditions gradually increased, which was offset by decreased expectations.

Consumers are anticipating slower economic growth over the next year, but spending is expected to remain high due to positive sentiment regarding personal finances. Real consumer spending is expected to increase by 2.5 percent in 2016 and 2.7 percent in 2017.

## Investor Sentiment: Mutual Fund Flows

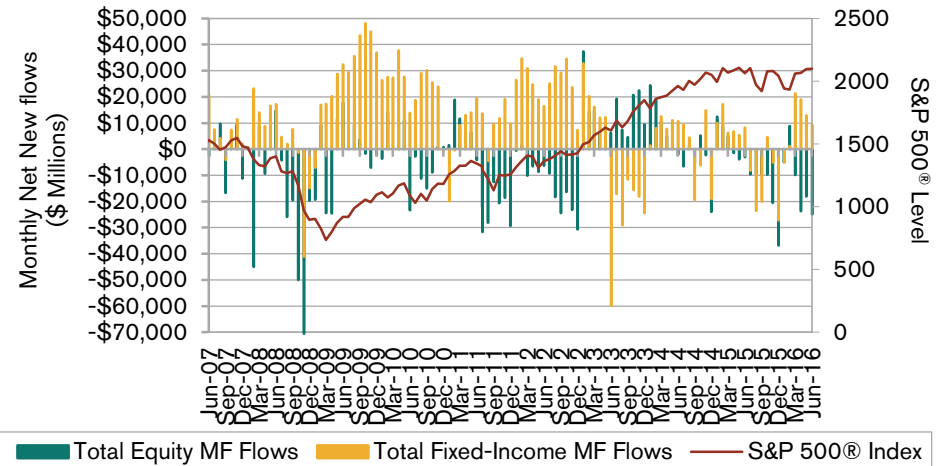
This page presents mutual fund flows across equity and fixed-income funds. Flow estimates are derived from data collected covering more than 95 percent of industry assets and are adjusted to represent industry totals.

### Net Mutual Fund Flows

The adjacent graph shows net flows into equity and fixed income mutual funds since June 2007. In Q2, mutual funds experienced net outflows of approximately  $-\$31.7$  billion, following inflows of around  $\$11.3$  billion in Q1 2016. Outflows throughout the quarter were predominantly driven by equity mutual funds, which totaled  $-\$67.1$  billion. Fixed income funds modestly offset the outflows with net inflows of  $\$41.1$  billion. Hybrid mutual funds saw outflows of  $-\$5.7$  billion. Overall, June was the weakest month of the quarter for flows into equity and fixed income funds, with outflows of  $-\$25.4$  billion and inflows of  $\$9.2$  billion, respectively.

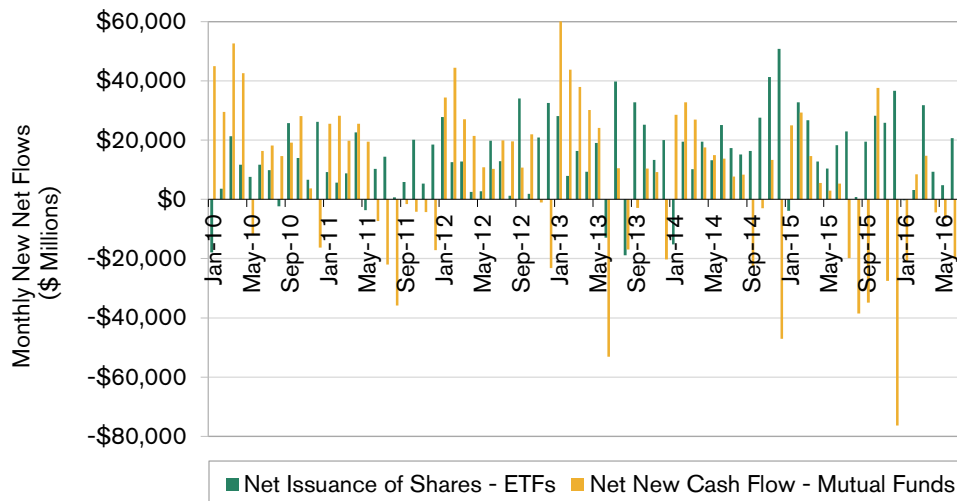
From an asset class perspective, the  $-\$67.1$  billion in equity outflows was driven by U.S. equity mutual funds, particularly all cap and large cap funds that had combined outflows of  $-\$36.1$  billion, while global equity outflows were driven by non-U.S. mutual funds. Fixed income inflows were led by investment grade and multi-sector bond funds, with positive flows of  $\$24.4$  billion and  $\$9.2$  billion, respectively. In the taxable space, global bond funds saw outflows of  $-\$14.0$  billion. Municipal bonds also saw net inflows of  $\$19.9$  billion.

### Monthly Mutual Fund Net Flows (\$ Millions) Q2 2016



Source: Investment Company Institute <http://www.ici.org>

### Mutual Fund Flows vs. ETFs (\$ Millions): New Net Cash Flows



Source: Investment Company Institute <http://www.ici.org>

### Mutual Fund Flows vs. Exchange-Traded Funds

Unlike mutual funds, ETFs experienced net inflows that totaled approximately  $\$34.8$  billion in Q2. Inflows were strongest in June with  $\$20.7$  billion of net inflows, of which  $\$11.7$  billion were in equity ETFs,  $\$4.5$  billion were in fixed income, and the balance in hybrid and commodity ETFs. In total for the quarter, equity ETFs had  $\$16.4$  billion of net inflows, driven by U.S. ETFs, followed by  $\$11.4$  billion in net inflows for fixed income, and  $\$6.9$  billion in inflows for commodity ETFs.

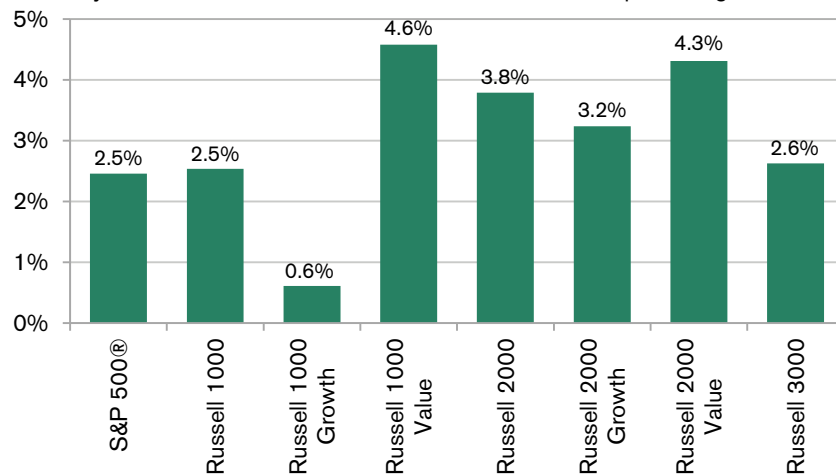
At the end of May, ETF assets totaled about  $\$2.2$  trillion, up from around  $\$2.1$  trillion in May 2015.

## Investment Performance: U.S. Equities

This section presents data and Rogerscasey's commentary on U.S. equity index returns and sector performance for Q2 2016.

### U.S. Equity Index Returns

The graph below illustrates Q2 2016 rates of return for selected U.S. equity indices. The table shows returns for the latest quarter, year-to-date, one-year, three-year, five-year and 10-year annualized timeframes. All data in the table are percentages.



Equity Indices	QTD	YTD	1 Year	3 Year	5 Year	10 Year
S&P 500® Index	2.46	3.84	3.99	11.66	12.10	7.42
Russell 1000	2.54	3.74	2.93	11.48	11.88	7.51
Russell 1000 Growth	0.61	1.36	3.02	13.07	12.35	8.78
Russell 1000 Value	4.58	6.30	2.86	9.87	11.35	6.13
Russell 2000	3.79	2.22	-6.73	7.09	8.35	6.20
Russell 2000 Growth	3.24	-1.59	-10.75	7.74	8.51	7.14
Russell 2000 Value	4.31	6.08	-2.58	6.36	8.15	5.15
Russell 3000	2.63	3.62	2.14	11.13	11.60	7.40

Sources: Standard & Poor's and FTSE Russell Investments

### S&P 500 Index® Sector Performance – Q2 2016

	QTD (%)	YTD (%)
Consumer Discretionary	-0.9	0.7
Consumer Staples	4.6	10.5
Energy	11.6	16.1
Financials	2.1	-3.0
Healthcare	6.3	0.4
Industrials	1.4	6.5
Information Technology	-2.8	-0.3
Materials	3.7	7.5
Telecommunications Services	7.1	24.8
Utilities	6.8	23.4

This table shows quarter-to-date and year-to-date price changes for each sector.  
Source: Standard & Poor's

### Index and Sector Performance

The S&P 500® Index (2.5 percent) posted a gain in Q2, as the U.S. market continued to respond positively to comments from Fed chair Janet Yellen that indicated additional increases to U.S. interest rates were likely to be postponed in the run up to the U.K.'s "Brexit" referendum. The passage of that referendum in late June increased the likelihood of a long pause in Fed tightening. Across the market capitalization range, stocks posted positive returns overall, though there was some volatility in the results, particularly around the time of the Brexit vote. The Russell 2000 Growth and Russell 2000 Value ended the quarter up 3.2 percent and 4.3 percent respectively, while the Russell 1000 Value was up 4.6 percent. The Russell 1000 Growth was more muted, only rising by 0.6 percent. As memories of the Global Financial Crisis recede, only the 10-year index returns shown in the table above incorporate those bad times; the 3- and 5-year returns for large cap equities are now above longer-term historical averages for U.S. equities.

Among large cap stocks, there was significant dispersion across sector returns. The Energy sector (11.6 percent) rallied strongest, as oil prices recovered somewhat from the lows that were reached in January 2016. Information Technology (-2.8 percent) and Consumer Discretionary (-0.9 percent) fell, but all other sectors delivered positive returns.

## Investment Performance: U.S. Equities

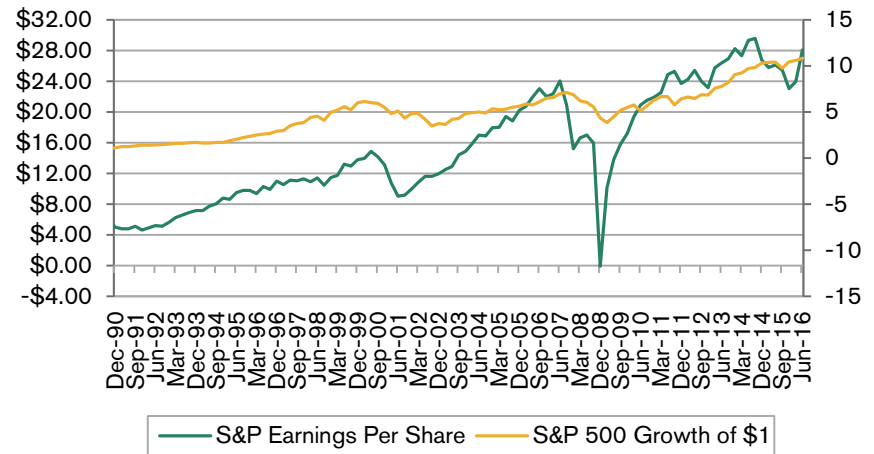
This section presents Rogerscasey's commentary on U.S. equity earnings and growth- vs. value-stock performance for Q2 2016.

### U.S. Equity Market Earnings and Volatility

The adjacent graph compares the earnings per share of companies in the S&P 500® Index and the growth of \$1.00 in that index since December 1990. While earnings per share growth does not align perfectly with the growth of stock prices, there does appear to be a directional linkage, which is something many investors count upon.

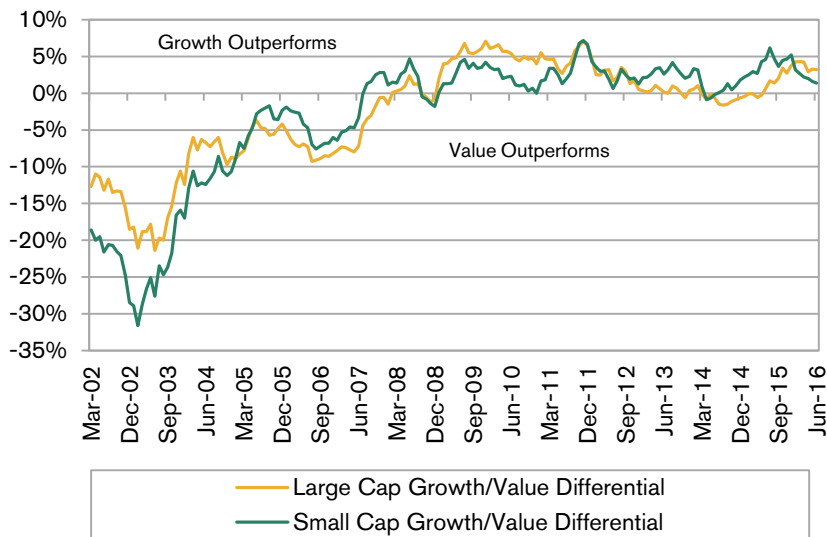
Earnings are perhaps the single most studied metric in a company's financial statements because they show a company's profitability. A company's quarterly and annual earnings are typically compared to analysts' estimates and guidance provided by the company itself. In most situations, when earnings do not meet either of those estimates, a company's stock price will tend to drop. On the other hand, when actual earnings beat estimates by a significant amount, the share price will likely surge. At the aggregate level, these swings tend to be more muted.

### S&P 500® Index: Earnings Per Share and Growth of \$1.00



Source: Standard & Poor's

### Growth Stocks vs. Value Stocks (Rolling 3-Year)



Source: FTSE Russell Investments

### Growth vs. Value

The adjacent graph depicts the growth versus value differential for both large- and small-cap stocks over rolling three-year intervals. The large-cap calculation uses the Russell 1000 Growth versus the Russell 1000 Value and the small-cap differential is composed of the Russell 2000 Growth versus the Russell 2000 Value. When the line is above the zero-percent line, the market has been favoring growth stocks over value, and vice-versa.

An interesting dynamic in recent years has been the fact that growth and value have largely been irrelevant in driving large cap equity returns, as the spread between the growth and value benchmarks has been relatively narrow in comparison to equivalent time periods in the early 2000s. Markets have shown some preference for growth stocks since early 2014, however the dominance of growth stocks in the small cap space has waned in recent quarters.

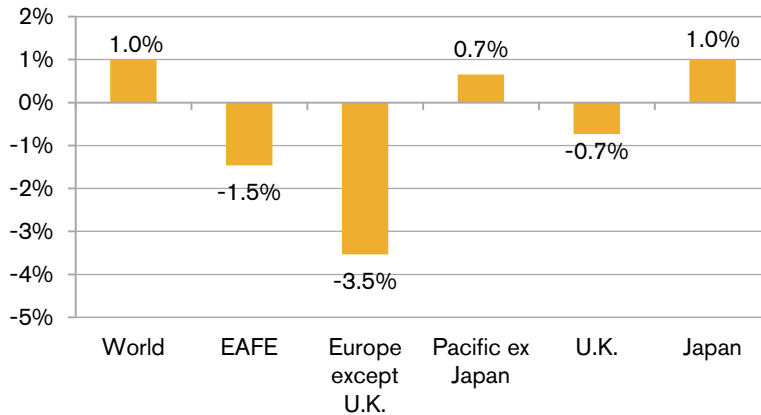


## Investment Performance: Non-U.S. Equities

This section presents data and Rogerscasey's commentary on international equity returns and sector performance for Q2 2016.

### MSCI Non-U.S. Equity Index Returns

The graph below illustrates Q2 2016 rates of return for selected non-U.S. equity indices. The table shows returns for the latest quarter, year-to-date, one-year, three-year, five-year and 10-year annualized timeframes. All data in the table are percentages.



MSCI Indices	QTD	YTD	1 Year	3 Year	5 Year	10 Year
World	1.01	0.66	-2.78	6.95	6.63	4.43
Europe, Australasia and Far East (EAFE)	-1.46	-4.42	-10.16	2.06	1.68	1.58
Europe except U.K.	-3.53	-6.02	-10.80	2.58	0.66	1.56
Pacific except Japan	0.65	2.47	-6.75	1.08	0.86	5.43
United Kingdom	-0.73	-3.05	-12.14	0.67	1.71	1.43
Japan	1.01	-5.58	-8.94	2.71	4.21	0.14

Source: Morgan Stanley Capital International

### MSCI EAFE Sector Performance – Q2 2016

	QTD (%)	YTD (%)
Consumer Discretionary	-9.4	-13.9
Consumer Staples	1.9	4.7
Energy	9.7	13.3
Financials	-8.3	-17.8
Healthcare	4.2	-3.8
Industrials	-2.4	-1.4
Information Technology	-3.5	-7.9
Materials	0.2	2.0
Telecommunications Services	-1.9	-2.0
Utilities	-0.4	-0.4

This table shows quarter-to-date and year-to-date price changes for each sector.  
Source: Bloomberg

### Index and Sector Performance

The EAFE index (-1.5 percent) fell in Q2. The index rose in April (2.9 percent), pulled back slightly in May (-0.9 percent), and fell in June (-3.4 percent), posting its steepest declines during the last few days of the quarter.

While U.K. citizens voted to exit the European Union, investors reacted in a risk-off manner, as economic implications and the timeframe for these changes were unclear. Furthermore, due to this uncertainty, investors moved away from the British pound-sterling (GBP), which is down compared to many major trading currencies including the USD, against which it fell 10 percent year-to-date through June 30. This development helped the U.K. equity market recoup many of its losses, however, as investors anticipated the potential benefits of a weaker GBP. Unsurprisingly the U.K. (-0.7 percent) and Europe ex-U.K. (-3.5 percent) declined during Q2. Pacific ex-Japan (0.7 percent) was the only regional market to post a positive result during the quarter.

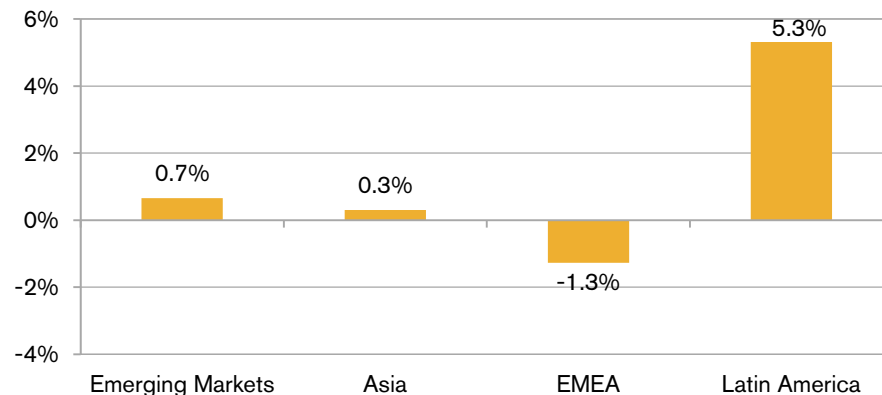
Like the broader market, sector performance was at extremes in Q2, with poor performance for more cyclical businesses and the opposite for more defensive industries. Sectors such as Consumer Discretionary (-9.4 percent) and Financials (-8.3 percent) were the hardest hit as investors fled to more "safe haven" businesses, such as Healthcare (4.2 percent) and Consumer Staples (1.9 percent). In addition, Energy (9.7 percent) delivered the strongest returns as oil prices rose over the period.

## Investment Performance: Emerging Market Equities

This section presents data and commentary on emerging market (EM) equity returns and sector performance for Q2 2016.

### MSCI Emerging Market Equity Index Returns

The graph below illustrates Q2 2016 rates of return for selected emerging market equity indices. The table shows returns for the latest quarter, year-to-date, one-year, three-year, five-year, and 10-year annualized timeframes. All data in the table are percentages.



MSCI EM Indices	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Emerging Markets (All)	0.66	5.71	-12.06	-1.56	-3.78	3.54
Asia	0.30	2.25	-12.21	1.84	-0.61	5.26
Europe, Middle East and Africa (EMEA)	-1.27	11.48	-14.19	-6.10	-7.40	-0.17
Latin America	5.31	25.47	-7.57	-8.28	-10.13	2.31

Source: Morgan Stanley Capital International

### MSCI EM Sector Performance – Q2 2016

	QTD (%)	YTD (%)
Consumer Discretionary	-1.4	1.7
Consumer Staples	4.2	10.7
Energy	1.9	17.0
Financials	0.3	3.7
Healthcare	0.4	-0.1
Industrials	-3.3	-0.3
Information Technology	2.5	7.5
Materials	-0.8	14.4
Telecommunications Services	-0.1	6.5
Utilities	0.5	9.7

This table shows quarter-to-date and year-to-date price changes for each sector.  
Source: Bloomberg

### Index and Sector Performance

The MSCI Emerging Markets (EM) Index (0.7 percent) posted a gain in Q2. EM returns were supported by several country-specific developments, as well as a delay in monetary tightening in the U.S. At the total index level, currency did not have a material impact for U.S. investors, despite several currencies appreciating during the quarter, such as the Brazilian real (up 11.8 percent against the USD) and the Russian ruble (up 4.8 percent versus the USD).

Latin America (5.3 percent) was the best-performing region in Q2. Brazil (13.9 percent) particularly rallied, buoyed by easing political risk and the resulting appreciation of the real. Peru (18.2 percent) also rose sharply, bolstered by a successful presidential election. Asia (0.3 percent) posted positive results as well, backed by gains in the Philippines (5.8 percent) attributable to the election victory of populist Rodrigo Duterte, and India (3.7 percent) where the central bank cut interest rates by 25 bps to 6.5 percent. China (0.1 percent) modestly underperformed the benchmark, as the impact of stimulus measures announced in Q1 appeared to fade. EMEA (-1.3 percent) declined in Q2 with mixed country-specific results. Russia (4.1 percent) posted the best return of the region, lifted by a 25.5 percent rise in the price of Brent crude, the appreciation of the ruble, and the central bank's 50 bps interest rate cut to 10.5 percent as inflation eased. On the other hand, Greece (-14.0 percent) and Poland (-17.5 percent) underperformed amid uncertainty over the impact of Brexit.

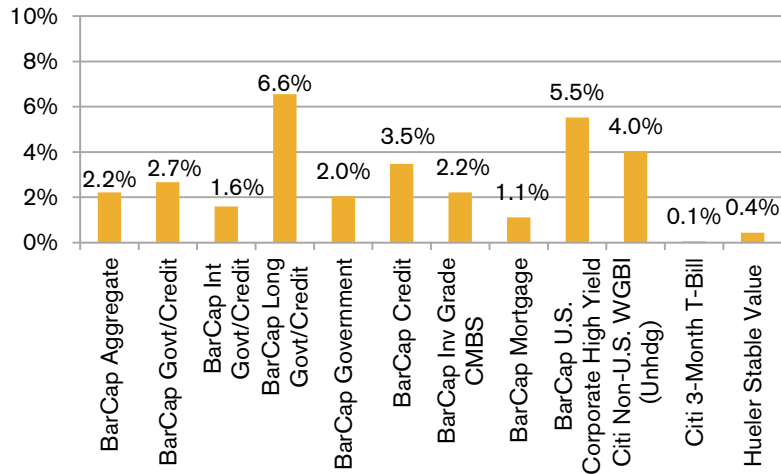
Sector results were mixed in Q2. Consumer Staples (4.2 percent) and Information Technology (2.5 percent) posted the strongest returns, while Industrials (-3.3 percent) and Consumer Discretionary (-1.4 percent) were the weakest performers.

## Investment Performance: U.S. Fixed Income

This section presents select U.S. fixed-income index data along with commentary on option-adjusted spreads (OAS) during Q2 2016.

### U.S. Fixed Income Index Returns

The graph below illustrates Q2 2016 rates of return for selected U.S. fixed-income indices. The table shows returns for the latest quarter, year-to-date, one-year, three-year, five-year and 10-year annualized timeframes. All data in the table are percentages.



Fixed-Income Indices	QTD	YTD	1 Year	3 Year	5 Year	10 Year
BarCap* Aggregate	2.21	5.31	6.00	4.06	3.76	5.13
BarCap* Govt/Credit	2.67	6.23	6.70	4.20	4.11	5.22
BarCap* Int Govt/Credit	1.59	4.07	4.33	2.95	2.90	4.48
BarCap* Long Govt/Credit	6.55	14.33	15.72	9.33	9.18	8.42
BarCap* Government	2.04	5.22	6.04	3.45	3.38	4.73
BarCap* Credit	3.48	7.54	7.55	5.26	5.20	6.11
BarCap* Inv Grade CMBS	2.22	5.86	6.10	4.22	4.65	5.60
BarCap* Mortgage	1.11	3.10	4.34	3.76	3.01	4.96
BarCap* U.S. Corporate High Yield	5.52	9.06	1.62	4.18	5.84	7.56
Citi Non-U.S. WGBI** (Unhdg)	4.04	13.50	13.85	2.36	0.31	3.97
Citi 3-Month T-Bill	0.06	0.12	0.14	0.06	0.06	0.96
Hueler Stable Value	0.44	0.87	1.75	1.73	1.94	2.92

Sources: Barclays Capital, Citigroup and Hueler Analytics

### OAS\* in Bps

	3/31/2016	6/30/2016	Change in OAS	10-Year Average
U.S. Aggregate Index	56	55	-1	66
U.S. Agency (Non-mortgage) Sector	54	54	0	43
<b>Securitized Sectors:</b>				
Mortgage-Backed Securities	22	27	5	51
Asset-Backed Securities	74	61	-13	128
Commercial Mortgage-Backed Securities	109	98	-11	221
<b>Corporate Sectors:</b>				
U.S. Investment Grade	163	156	-7	167
Industrial	168	159	-9	156
Utility	151	142	-9	157
Financial Institutions	155	152	-3	186
U.S. High Yield	656	594	-62	551

\*OAS is the yield spread of bonds versus Treasury yields taking into consideration differing bond options.  
Source: Barclays Capital

### Option-Adjusted Spreads

Spreads primarily contracted across all sectors during Q2, which is a reversal from Q1 when spread movement was mixed across both corporate and securitized sectors. U.S. high yield spreads continued to tighten as much of the volatility experienced in Q1 subsided, resulting in a profound recovery during Q2. Overall, both corporate and securitized sectors benefited from the decline in Treasury yields, while agency-mortgage-backed securities struggled due to the low interest rate environment and heightened prepayment risk.

Q2 can be characterized as less volatile than Q1 despite Brexit-induced yield-spread widening in June. With that said, spread tightening for the quarter can be attributed to the low-yield environment abroad, which resulted in demand for positive-yielding USD-denominated assets. Volatility clearly lessened during the early parts of the quarter, but the lasting impacts of Brexit remain to be seen. It is expected that the U.K.'s decision to leave the European Union will result in additional challenges for global central banks, as well as lowered domestic growth forecasts.

## Investment Performance: U.S. Fixed Income

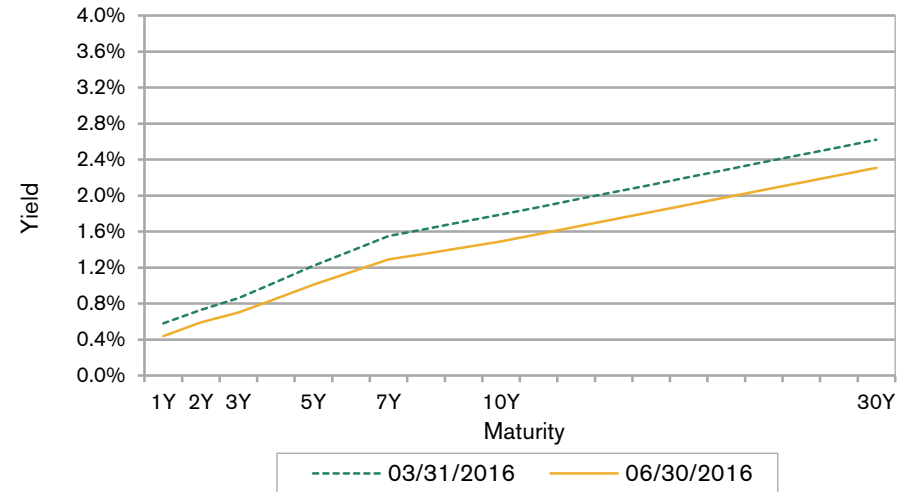
This section presents commentary on the U.S. Treasury yield curve and credit spreads during Q2 2016.

### Yield Curve

The U.S. Treasury yield curve contracted during Q2. The yield gap between 2-year and 10-year Treasuries decreased from 1.06 percent to 0.9 percent. Yields fell across the curve in response to Brexit, causing the Fed to lower its growth forecasts and further delay interest rate increases. This is a major shift from April and May when the Fed indicated a rate hike in the coming months could be warranted.

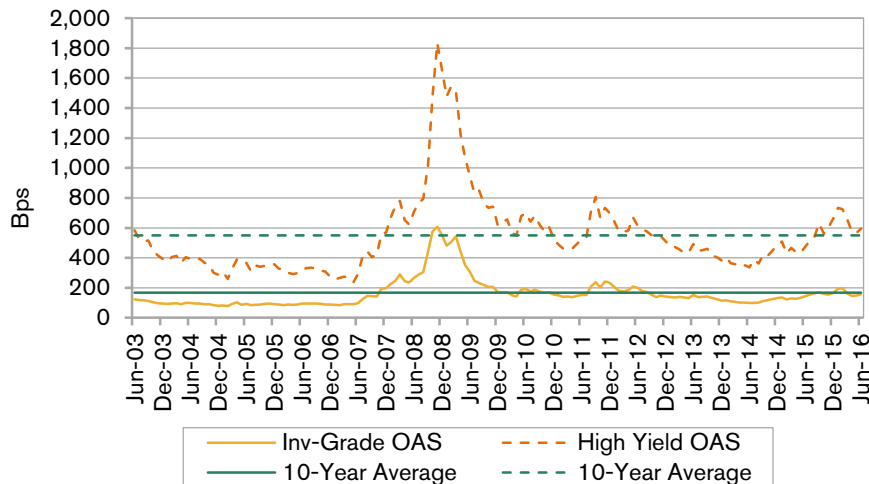
The 10-year U.S. Treasury yield ended Q2 at 1.49 percent, 29 bps below Q1.

### U.S. Treasury Yield Curve



Source: Bloomberg

### Barclays Capital Corporate Bond Spreads



Source: Barclays Capital

### Credit Spreads

Investment grade corporate spreads contracted by 7 bps during Q2, ending the quarter with an option-adjusted spread of 156 bps over Treasuries, as shown in the adjacent graph. From a historical perspective, spreads are now 11 bps below the 10-year average of 167 bps.

High yield bond spreads narrowed by 62 bps during Q2, ending June with an OAS of 5.94 percent, which is 43 bps above the 10-year average of 551 bps.

## Investment Performance: Non-U.S. Fixed Income

This page focuses on international fixed income asset class data and information on EM debt (EMD) for Q2 2016.

### International Fixed Income

In Q2, global sovereign bonds, as measured by the Citigroup World Government Bond Index (WGBI), gained 2.7 percent in local currency terms and 3.4 percent in unhedged terms. The Barclays Capital Global Aggregate Index, which includes spread sectors, returned 2.9 percent, trailing the sovereign-only Citigroup WGBI (unhedged) by roughly 50 bps. Non-U.S. government bonds, as measured by the Citigroup Non-U.S. WGBI, outperformed U.S. government bonds by roughly 80 bps in local currency terms and 190 bps in unhedged terms.

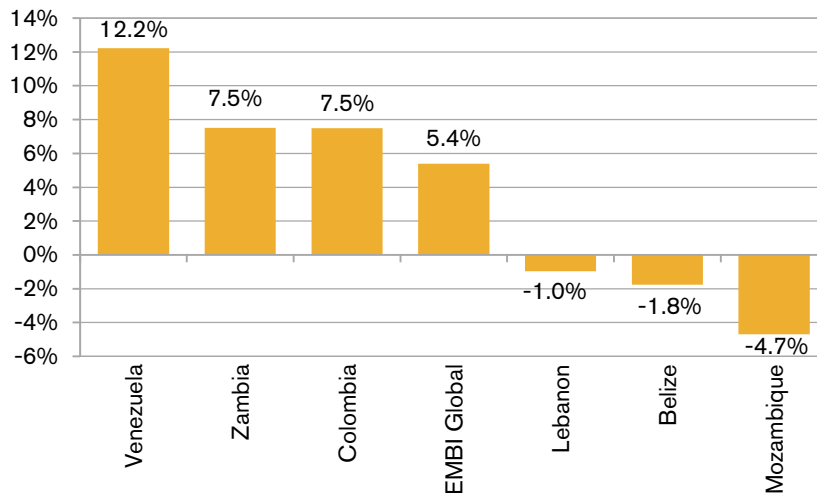
In local currency terms, all of the WGBI components finished Q2 in positive territory, but the U.K. (6.7 percent) outperformed by a large margin. Results were mixed on an unhedged basis, but Japan (12.9 percent) posted a notable gain.

### Citigroup WGBI: Returns of Major Constituents (%)

Country	Local Currency Return (Qtr)	Currency Effect	Unhedged Total Return (Qtr)
United States	2.1	-	2.1
Canada	2.0	0.4	1.6
Australia	3.5	3.3	0.2
Japan	3.1	-9.9	12.9
Austria	2.6	2.6	0.0
Belgium	3.4	2.6	0.8
France	2.9	2.6	0.3
Germany	2.9	2.6	0.3
Italy	0.5	2.5	-2.1
Netherlands	3.0	2.6	0.4
Spain	2.2	2.6	-0.3
United Kingdom	6.7	7.5	-0.7
Non-U.S. Govt. Bond	2.9	-1.1	4.0
World Govt. Bond	2.7	-0.8	3.4

Sources: Citigroup and Barclays Capital

### J.P. Morgan EMBI Global Index Best and Worst-Performing Markets



Source: J.P. Morgan

### Emerging Market Debt

Emerging market debt (EMD) gained in Q2, as measured by the J.P. Morgan Emerging Market Bond Index (5.4 percent). Positive results on a weighted basis can be attributed to solid performance in Mexico (5.7 percent), Indonesia (5.4 percent), Russia (5.0 percent), Turkey (4.0 percent), China (2.4 percent), and Brazil (7.8 percent), which represent six of the 10 largest countries in the index.

The J.P. Morgan CEMBI Broad Diversified Index rose 3.8 percent during Q2. Three of the five largest countries in the index – China (3.0 percent), Brazil (8.3 percent), and Russia (6.2 percent) – were the primary outperformers. Brazil is nearing a deal that will increase the odds of meaningful fiscal reform, while default rates in China remain low.

The local J.P. Morgan GBI-EM Global Diversified Index gained 2.7 percent in USD unhedged terms and 3.2 percent on a local currency basis. From a geographical perspective, all regions posted healthy results in USD unhedged terms except Europe (-0.3 percent). All regions were positive on a local currency basis, with Latin America (5.1 percent) contributing the most to outperformance.

## Investment Performance: Commodities and Currencies

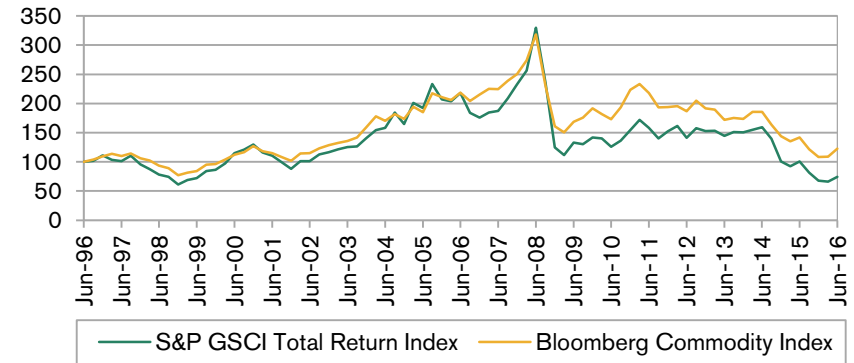
This section presents performance information about commodities and major world currencies as of Q2 2016.

### Commodities

The Bloomberg Commodity Index (“BCOM”) gained 12.8 percent and the S&P GSCI gained 12.7 percent in Q2, marking commodities’ biggest rally in over five years. The Energy sector (20.4 percent BCOM; 19.0 percent GSCI) generated the greatest gains, rebounding from steep declines over the past three quarters. Within the energy complex, natural gas and crude oil were two of the biggest winners, posting their largest quarterly gains since 2005 and 2009, respectively. Precious metals (10.2 percent BCOM, 8.1 percent GSCI) also generated material gains in Q2. Gold and silver both posted positive returns amid concerns about Brexit and slowing global economic growth. Livestock (-1.9 percent BCOM; -3.1 percent GSCI) was the only sector that declined.

Some commodities of note during Q2 were sugar, which was up approximately 30 percent due to deficits in supply, and soybean meal, which gained 44 percent on concerns about supply in Argentina and increased demand.

### Monthly Commodity Returns, Growth of \$100: 20 Years



The graph above shows the major commodity indices, the S&P GSCI\* Index and the Bloomberg Commodity Index\*\*

\* The S&P GSCI Index is calculated primarily on a world production-weighted basis and is composed of the principal physical commodities that are the subject of active, liquid futures markets.

\*\* The Bloomberg Commodity Index is composed of futures contracts on physical commodities, with weighting restrictions on individual commodities and commodity groups to promote diversification.

Source: www.FT.com

### Nominal Broad Dollar Index: USD vs. Basket of Major Trading Partners



Sources: Federal Reserve and Bloomberg

### Currencies

The adjacent graph shows the U.S. dollar (USD) against a basket of 16 major market currencies, including those listed in the table below: the Canadian dollar (CAD), the euro (EUR), the Japanese yen (JPY), the Swiss franc (CHF), and the British pound-sterling (GBP).

In Q2, the U.S. Nominal Broad Dollar Index weakened by 0.3 percent. Increased relative economic growth is expected to be a tailwind for the USD to strengthen going forward.

USD Major Trading Partners	Pairs	Q2 Level	YTD	5-Year Average
Canada	USD/CAD	1.2924	-6.61%	1.1186
Eurozone	USD/EUR	0.9004	-2.24%	0.8014
Japan	USD/JPY	103.2000	-14.16%	99.9928
Switzerland	USD/CHF	0.9760	-2.60%	0.9342
U.K.	USD/GBP	0.7512	10.70%	0.6397

## Investment Performance: Hedge Funds

This section provides an overview of hedge fund results along with an analysis of strategy performance during Q2 2016.

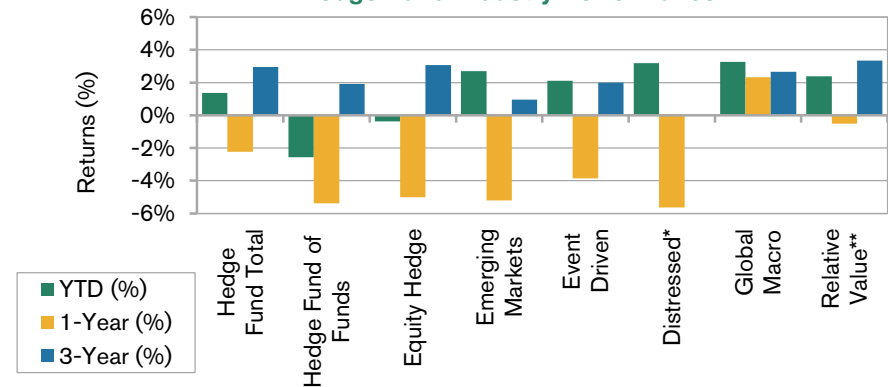
### Hedge Fund Overview

The Hedge Fund Research, Inc. (HFRI) Fund Weighted Composite Index (2.0 percent) increased during Q2, posting gains in April, May and June. Of the five major hedge fund strategies, Emerging Markets (3.0 percent) was the best performer, followed by Relative Value (2.9 percent), Event Driven (2.8 percent) and Global Macro (1.7 percent). Equity Hedge (1.4 percent) gained the least.

Longer-term results were also positive. Hedge funds recorded a gain of 3.0 percent over the three-year period ending June 30, 2016, as measured by the HFRI Fund Weighted Composite Index.

Hedge funds of funds posted muted gains in Q2, as represented by the HFRI Fund of Funds (FOF) Composite Index (0.6 percent). The HFRI FOF: Conservative Index (0.7 percent) and the HFRI FOF: Diversified Index (0.2 percent) also increased.

### Hedge Fund Industry Performance



\* Distressed funds focus on companies that are close to or in bankruptcy.

\*\*Relative-value funds focus on arbitrage opportunities between equity and fixed income securities.

Source: Hedge Fund Research, Inc.

### HFRI Index Returns – Q2 2016 (%)

	Apr	May	Jun	QTD	YTD
Fund of Funds Composite	0.5	0.6	-0.4	0.6	-2.6
FOF: Conservative	0.5	0.5	-0.3	0.7	-1.5
FOF: Diversified	0.4	0.5	-0.6	0.2	-2.4
Fund Weighted Composite	1.0	0.4	0.6	2.0	1.4
Equity Hedge (Total)	1.1	0.7	-0.5	1.4	-0.4
Equity Market Neutral	-1.0	0.5	0.5	0.1	0.6
Short Bias	1.4	-1.5	2.4	2.3	9.5
Event-Driven (Total)	1.9	1.1	-0.2	2.8	2.1
Distressed/Restructuring	2.7	2.1	0.1	4.9	3.2
Merger Arbitrage	-1.0	0.7	-0.3	-0.6	0.2
Relative Value (Total)	1.7	0.8	0.4	2.9	2.4
FI-Convertible Arbitrage	1.6	1.3	-0.4	2.5	2.1
Global Macro (Total)	-0.1	-1.0	2.7	1.7	3.3
Emerging Markets (Total)	1.9	-0.3	1.5	3.0	2.7

Source: Hedge Fund Research, Inc.

### Strategy Analysis

The HFRI Emerging Markets Index (3.0 percent) rose in Q2 and was the best-performing major hedge fund strategy for the quarter. The underlying index with the most notable loss was the MENA (Middle East & North Africa), at -1.7 percent. Once again, Latin America (9.1 percent) posted a significant gain and was up 19.3 percent year-to-date as of June 30. Russia/Eastern Europe (4.3 percent) also had a positive quarter.

The HFRI Relative Value Index (2.9 percent) increased. The underlying Yield Alternatives Index (11.7 percent), comprised of derivatives, real estate and MLPs, was the strongest performer for the period, followed by the Fixed Income Corporate Index (3.4 percent) and the Fixed Income Sovereign Index (2.8 percent).

The HFRI Event-Driven Index (2.8 percent) was positive. Underlying indices that contributed positively were Distressed/Restructuring (4.9 percent), Special Situations (3.7 percent), and Multi-Strategy (1.1 percent). The sub-strategies with negative performance were Merger Arbitrage (-0.5 percent) and Activist (-0.3 percent).

The HFRI Global Macro Index (1.7 percent) posted a gain, led by the Commodity Index (3.8 percent), Active Trading (3.0 percent) and Systematic Diversified (1.2 percent) strategies. They were followed by the Currency and Multi-Strategy indices, which were also positive.

The HFRI Equity Hedge Index (1.4 percent) recorded the smallest gain of all major hedge fund strategies. Energy/Basic Materials (5.9 percent) and Technology/Healthcare (4.4 percent) posted noteworthy gains. Fundamental Growth and Fundamental Value also contributed positively in Q2.

# Investment Performance: Private Equity

This section provides data on private equity industry performance, fundraising, buyout funds, initial public offering (IPO) activity and venture capital. The information in this section reflects the most recent private equity data available.

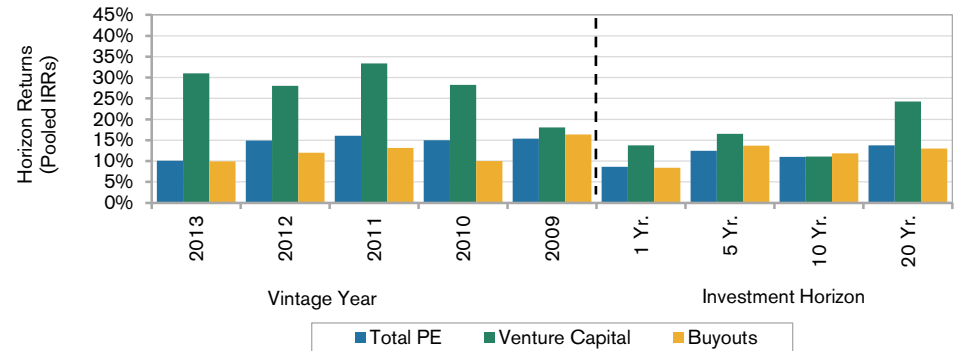
## Private Equity Industry Performance

The adjacent graph shows private equity fund performance for Q4 2015, calculated as pooled internal rates of return (IRR) of funds reporting to Thomson One. Performance for 2009 through 2013 vintage-year\* funds, as well as one-, five-, 10- and 20-year returns, is calculated for funds in the following categories: total private equity, venture capital and buyouts.

The total return for private equity funds, comprising performance across all regions and strategies, was 2.1 percent in Q4 2015 and 8.7 percent over the one-year period. Long-term performance has been strong, with double-digit returns for the three-, five-, 10- and 20-year time periods of 14.1 percent, 12.5 percent, 11.0 percent and 13.8 percent, respectively.

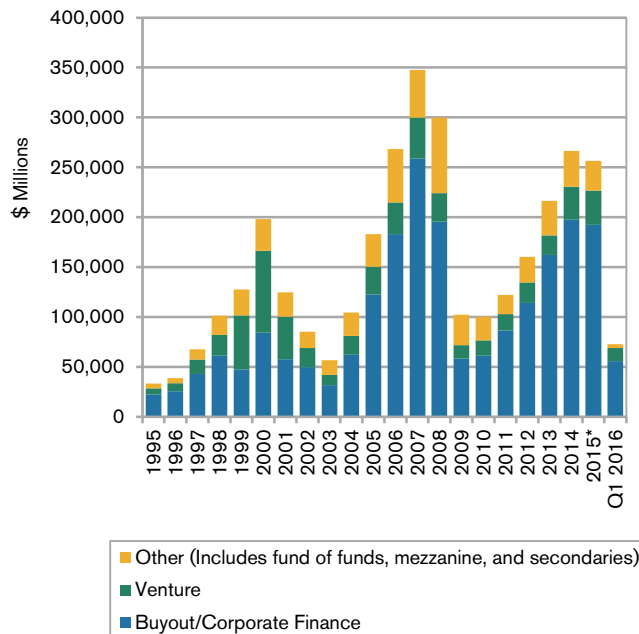
\*"Vintage year" refers to the first year capital was committed in a particular fund. Vintage-year performance is calculated as the median percentile returns of all funds reporting as pooled IRRs.

## Private Equity Performance by Vintage Year and Investment Horizon: All Regions



Source: Thomson Reuters

## Private Equity Commitments: United States



Source: Private Equity Analyst

## Private Equity Overview

According to *Private Equity Analyst*, private equity funds raised approximately \$72.9 billion in Q1 2016, marking its highest Q1 total since 2008. Some factors contributing favorably to the fundraising environment were investors' propensity to reinvest distributions, and pension funds' new or increased allocations to alternative investments. Also, many limited partners have been determining annual asset allocations earlier in the year and are thus ready to invest sooner, and general partners have been expediting fund closings in order to take advantage of those opportunities.

Buyout and corporate finance strategies together raised the most capital among private equity strategies in Q1 at \$55.7 billion, which is approximately 20 percent higher than the same period one year prior. Venture capital raised \$13.3 billion, which was a 51 percent increase from Q1 2015. Mezzanine and credit funds raised just \$351.7 million across two funds, representing about a 94 percent decrease from Q1 2015.

Volatile public markets and investments into later-stage companies by non-traditional investors muted venture-backed IPO activity in Q1, which registered as the slowest quarter since Q3 2011. Six IPOs raised approximately \$575 million, representing a 65 percent decline in volume and a 60 percent drop in dollars raised versus Q1 2015. All six IPOs were life sciences companies, marking the first quarter since Q1 2009 when no venture-backed technology companies went public. Technology comprised 77 percent of the 79 total venture-backed M&A deals in Q1, however, with the remaining 23 percent coming from life sciences. The buyout market did not produce an IPO, with volatility in public markets being a likely deterrent for general partners. In Q1, buyout M&A activity slowed to a 10-quarter low and approximately a 50 percent decline in deal volume from Q4, while number of deals fell by only 8 percent from the previous quarter.

Compared to one year prior, venture capital deal activity was down 11 percent in Q1 in terms of both dollars invested and number of deals. However, at \$12.1 billion, venture investment hit its ninth consecutive quarter of over \$10 billion in financing during a single quarter. In buyouts, disclosed deal value was up 35 percent over Q4, and was the highest recorded since Q3 2008. Five megadeals (transactions that exceed \$5 billion) occurred in Q1 compared to three megadeals in Q4.



## Investment Performance: Real Estate

This page presents data and Rogerscasey's commentary on private and public real estate. The information below reflects the most recent data available.

### Private Real Estate

The National Council of Real Estate Investment Fiduciaries (NCREIF) Property Index (NPI), which tracks private real estate in the U.S., gained 2.0 percent during Q2. The total return is composed of 1.2 percent income and 0.8 percent property-level appreciation. Over the trailing one-year period, the Index gained 10.6 percent, composed of 5.6 percent property-level appreciation and 4.9 percent income\*.

In the regions of the U.S., the West performed the best during Q2 and over the last 12 months, as shown in the adjacent table.

In Q2, strong operating performance continued, driven by modest economic growth and limited new supply for most property types. On average, private real estate values for high quality assets are approximately 20 percent above the peak levels reached in 2007, but the rate of appreciation has slowed and the volume of transactions has declined. There is some concern by investors that asset values have peaked; however, there is now an increased expectation of a lower-for-longer interest rate environment following the Brexit vote which may serve to support valuations.

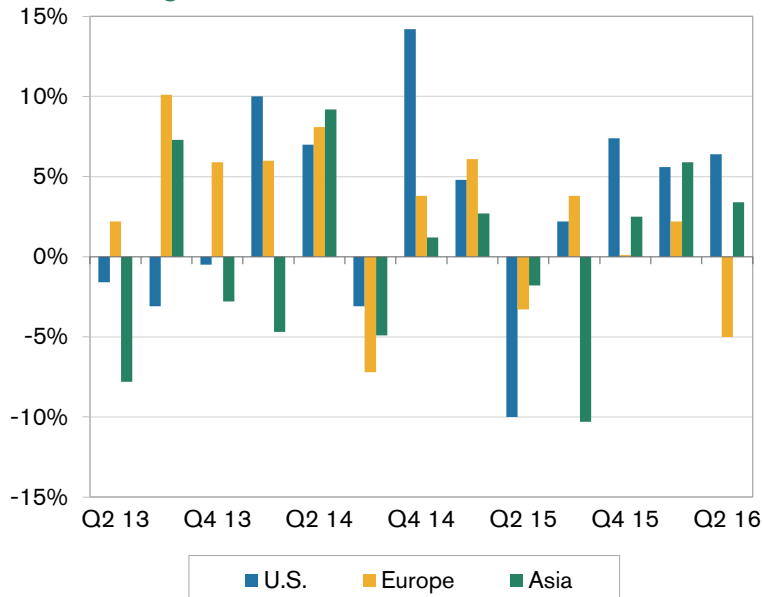
\* Does not add up to total due to rounding.

### National Property Index Sector and Region Performance

	Ending Weight (%)	Returns as of Q2 2016	
		QTD (%)	1 Year (%)
<b>NCREIF NPI Total Return</b>	100.0	2.0	10.6
<b>Sector</b>			
Apartment	24.6	1.9	9.7
Hotel	1.1	1.5	9.5
Industrial	14.2	2.9	13.3
Office	36.9	1.7	9.3
Retail	23.2	2.2	12.2
<b>NCREIF Region</b>			
East	33.4	1.7	8.6
Midwest	9.0	2.0	9.7
South	20.2	1.8	10.4
West	37.4	2.5	13.0

Source: National Council of Real Estate Investment Fiduciaries

### Regional Real Estate Securities Performance



Source: National Association of Real Estate Investment Trusts

### Public Real Estate

The FTSE EPRA/NAREIT Global Developed Real Estate Index total market capitalization remained at \$1.4 trillion in Q2, broken down as follows: North America \$820 billion, Europe \$219 billion, and Asia \$371 billion. Strong operating fundamentals as well as the expectation of a continued low interest rate environment in the U.S. led to a 3.7 percent gain on a global basis in Q2. The U.S. (6.4 percent) outperformed Asia (3.4 percent) and Europe (-5.0 percent) as measured by the FTSE EPRA/NAREIT indices. Sector performance in the U.S. was mostly positive: Data Centers (20.6 percent), Industrial (15.8 percent), Net Lease (13.8 percent), Student Apartments (12.8 percent), Healthcare (12.0 percent), Diversified/Financial (11.6 percent), and Manufactured Home Communities (9.7 percent) outperformed the broader index while Self Storage (-5.8 percent), Lodging (-2.8 percent), Apartments (-2.0 percent), and Regional Malls (4.9 percent) lagged the index.

Property stocks in Europe largely declined following Brexit and a corresponding increase in uncertainty negatively impacted the U.K. markets in particular while strong fundamentals and demand from yield investors for Hong Kong and Singapore REITs boosted Asia. In Europe, Germany (4.1 percent), Norway (4.0 percent), Switzerland (4.0 percent), Belgium (2.4 percent), Sweden (-0.5 percent), and Austria (-1.5 percent) outperformed in Q2, while the U.K. (-13.4 percent), Italy (-12.0 percent), Spain (-8.0 percent), and the Netherlands (-6.9 percent) underperformed. In Asia, New Zealand (8.3 percent), Australia (5.7 percent), and Hong Kong (4.3 percent) outperformed, while Japan (1.8 percent) and Singapore (2.2 percent) lagged the regional index.

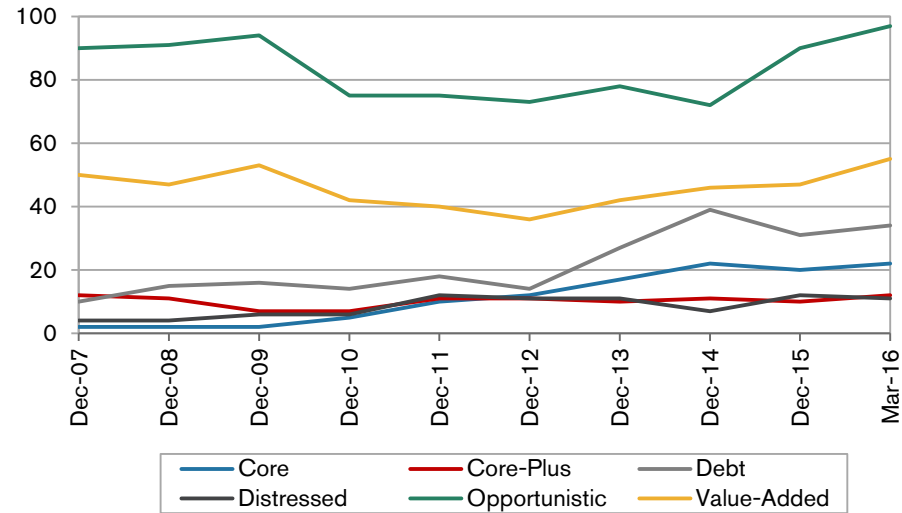
## Investment Performance: Real Estate

This page presents data and Rogerscasey's commentary on value-added and opportunistic real estate. The information in this section reflects the most recent data available.

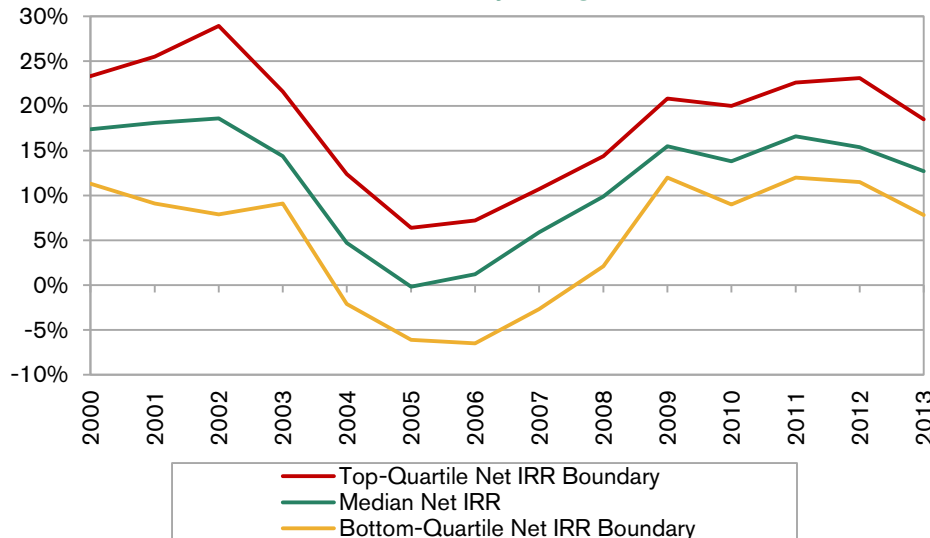
### Value-Added and Opportunistic Real Estate

Closed-end private real estate dry powder continued to increase, reaching \$236 billion at the end of June, up \$26 billion from last December. This growth has been driven by strong fundraising as a result of demand for exposure to real estate from institutional investors, and there has also been more direct investment into the asset class by these investors as well. The amount of capital currently targeting real estate is presenting a challenge to fund managers who are finding it more difficult to identify attractive opportunities. As a result, some have adjusted their strategies to target more complex transactions and smaller deals where competition is often less intense and pricing is more attractive. Managers are also utilizing their industry networks more actively to identify exclusive and limited auction opportunities. As shown in the graph at right, with the exception of distressed real estate, all private real estate strategies saw an increase in dry powder from the end of 2015 to the end of March 2016. The higher risk/higher return value-added and opportunistic strategies have seen the largest increases and, as illustrated in the graph below at right, funds focused on North America hold most of the dry powder. Lastly, as shown in the graph below, 2008 to 2013 vintage year funds continue to perform well but have yet to exceed some of the earlier vintage years.

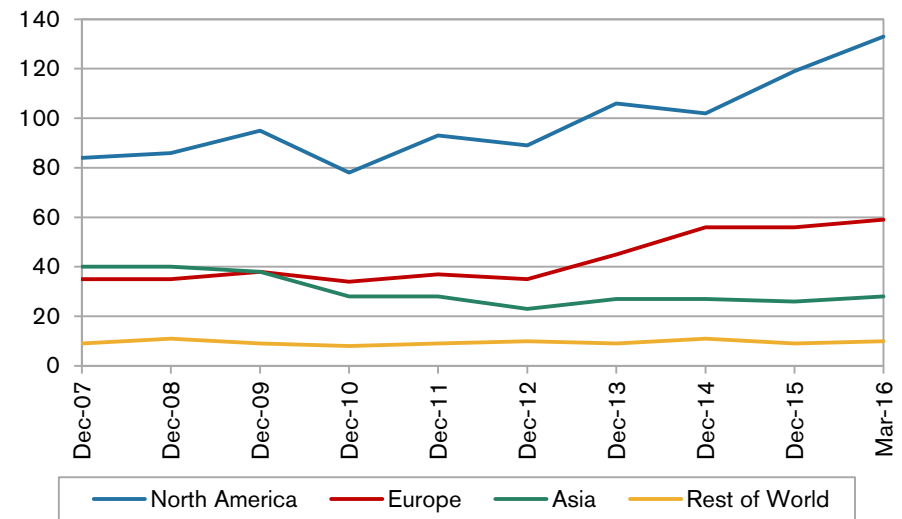
Closed-End Private Real Estate Dry Power by Strategy (\$ billion), December 2007 to March 2016



Closed-End Private Real Estate Median Net IRRs and Quartile Boundaries by Vintage Year



Closed-End Private Real Estate Dry Power by Primary Geographic Focus (\$ billion), December 2007 to March 2016



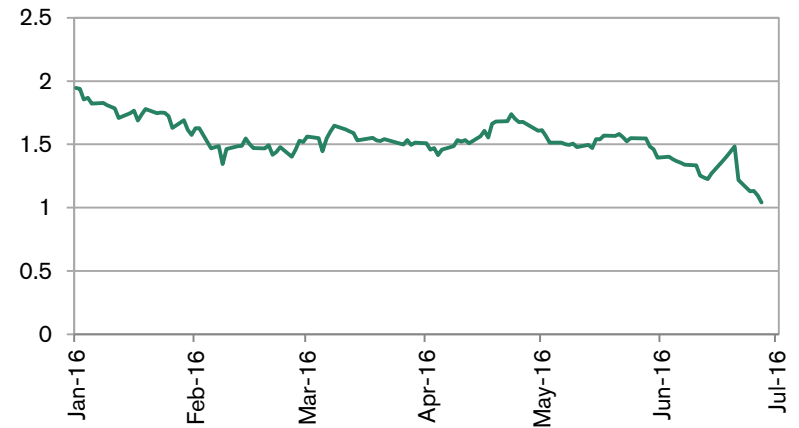
## Noteworthy Developments

Rogerscasey finds the developments discussed in this section to be noteworthy for investors.

### U.K. Government Bond Yields Post-Brexit

The adjacent graph shows the decline in yields that followed several rating agency downgrades of U.K. government bonds after Britain's vote to leave the EU. On Monday, June 27, 2016, S&P downgraded the nation from AAA to AA, while Fitch lowered its rating from AA+ to AA, with both citing uncertainty and potentially negative impacts to GDP growth following the referendum results announced the previous Thursday. The decline in yields (increase in price) may seem counterintuitive, since a deterioration in credit quality is often associated with a sell-off and increase in rates to compensate investors for the perceived increase in risk, but the market's view was that investing in U.K. debt in a flight-to-quality environment was a safer bet in a riskier world. We also witnessed this dynamic when the U.S. was downgraded in 2011 to AA+. The market also believes that the U.K. will need to lower rates to support its economy.

10-Year U.K. Government Bond Yields (%)



Source: Bank of England

Sector	Total Cash Dividends Paid in 2015 (\$millions)	Percentage of Total Dividends Paid in 2015	3-Year Dividend Growth	Free Cash Flow Payout	Dividend Yield
Financials	\$73,542	17.6%	19%	43%	2.1%
Technology	\$60,816	14.6%	17%	15%	1.5%
Consumer Staples	\$53,729	12.9%	10%	60%	2.7%
Energy	\$48,861	11.7%	16%	95%	3.7%
Healthcare	\$43,613	10.5%	9%	26%	1.6%
Industrials	\$43,438	10.4%	15%	73%	2.3%
Consumer Discretionary	\$37,815	9.1%	15%	22%	1.6%
Utilities	\$21,258	5.1%	5%	87%	3.8%
Telecom	\$20,512	4.9%	2%	31%	5.1%
Materials	\$13,583	3.3%	11%	43%	2.3%
<b>Total</b>	<b>\$417,168</b>	<b>100%</b>	<b>Avg 14%</b>	<b>41%</b>	<b>2.2%</b>

Data as of 12/31/15.  
Source: Payden & Rygel

### Dividends from Technology Sector on the Rise

Historically, dividend-paying stocks were largely associated with more mature industries, such as Financials, Utilities, REITs – those that have less need to reinvest in the business and, therefore, have more profits available to allocate to shareholders in the form of dividends. Surprisingly, the Technology sector, which is generally considered a high-growth sector, has emerged as one of the leaders in the dividend space. According to recent data as of the end of 2015, as shown in the adjacent table, Technology ranked second (behind Financials) amongst the 10 Global Industry Classification Standard (GICS®) sectors in terms of both total amount of dividends paid and according to its 3-year dividend growth rate (17 percent compared to the average of 14 percent). Furthermore, its lower payout ratio of 15 percent versus the average of 41 percent would suggest that Technology stocks have the ability to substantially increase their dividends in the future.

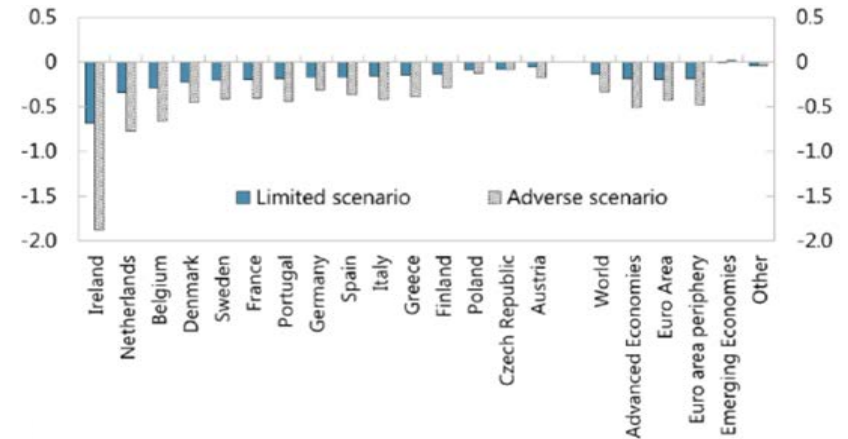
## Noteworthy Developments

Rogerscasey finds the developments discussed in this section to be noteworthy for investors.

### Impact from Brexit on Other Advanced Economies

The International Monetary Fund (IMF) estimates the impact of Brexit upon the global economy to be modest given that the U.K.'s share of global GDP is only 4 percent. The impact does vary by country, but interestingly it is expected to be approximately the same for advanced economies overall as for the eurozone only. The IMF estimates a reduction of about 0.5 percent in GDP for an adverse scenario when compared to current baseline expectations for growth in the eurozone, or as little as 0.2 percent if the impact is more limited. Noting that estimates for the eurozone's total GDP in 2017 are only around 1.6 percent, it does appear that knocking 0.5 percent off that number is not inconsequential, but does not move the eurozone to recession areas. An analysis of the effect on financial assets and banking may demonstrate more significance, however.

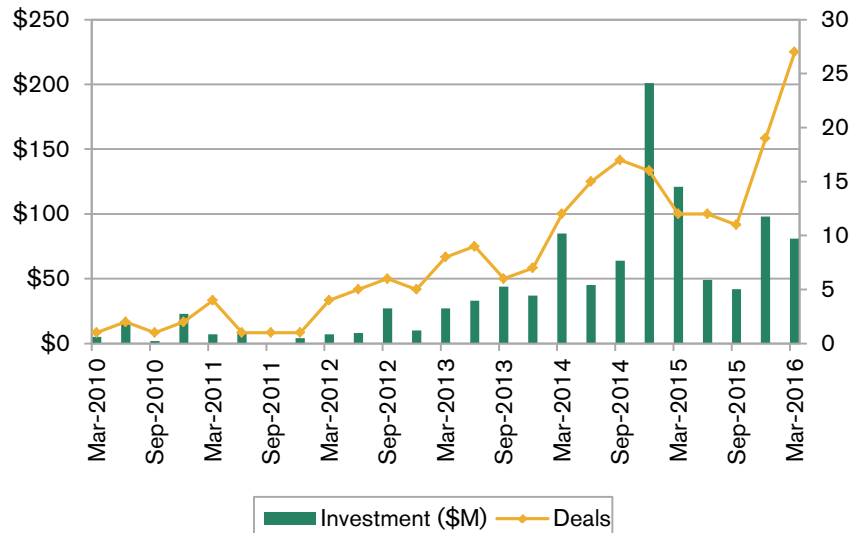
### Spillovers to Larger European Union and Other Countries from Limited and Adverse Scenarios (% of GDP)



Note: The bars show deviations of output from baseline, in percent, at the troughs: 2018 for the limited scenario and 2019 for the adverse scenario.

Source: International Monetary Fund

### Artificial Intelligence Global Quarterly Financing History



Source: CB Insights

### Investments in Artificial Intelligence

Investment interest in artificial intelligence (AI) or the capability of a machine to imitate intelligent human behavior, has experienced fits and starts over the past several decades. Many fear machines can make humans obsolete or redundant, ultimately affecting socioeconomic systems and potentially disrupting one of the largest components of global GDP, personal consumers. A study from 2013 (Carl Benedikt Frey and Michael Osborne of Oxford University\*) indicated that 47 percent of human jobs in America could be replaced with "computer capital." The primary question is – does this substitute "computer capital" destroy jobs, or simply redefine them and redeploy human capital towards more customer-service-oriented tasks machines cannot do? More recently, as the adjacent graph shows, investors are at the very least recognizing the investment potential of AI, as both dollars invested and numbers of deals in AI startups have increased markedly over the past two years. To be fair, the impact of automation will be much broader-based and implemented more quickly than in the past, as computers are used in virtually every industry. The importance of retraining workers quickly will be critical to minimizing the socioeconomic impact going forward, and smoothing yet another global economic transition.

\* [http://www.oxfordmartin.ox.ac.uk/downloads/academic/The\\_Future\\_of\\_Employment.pdf](http://www.oxfordmartin.ox.ac.uk/downloads/academic/The_Future_of_Employment.pdf)