

March 31, 2016



## North Dakota State Investment Board Legacy Fund

Investment Measurement Service  
Quarterly Review

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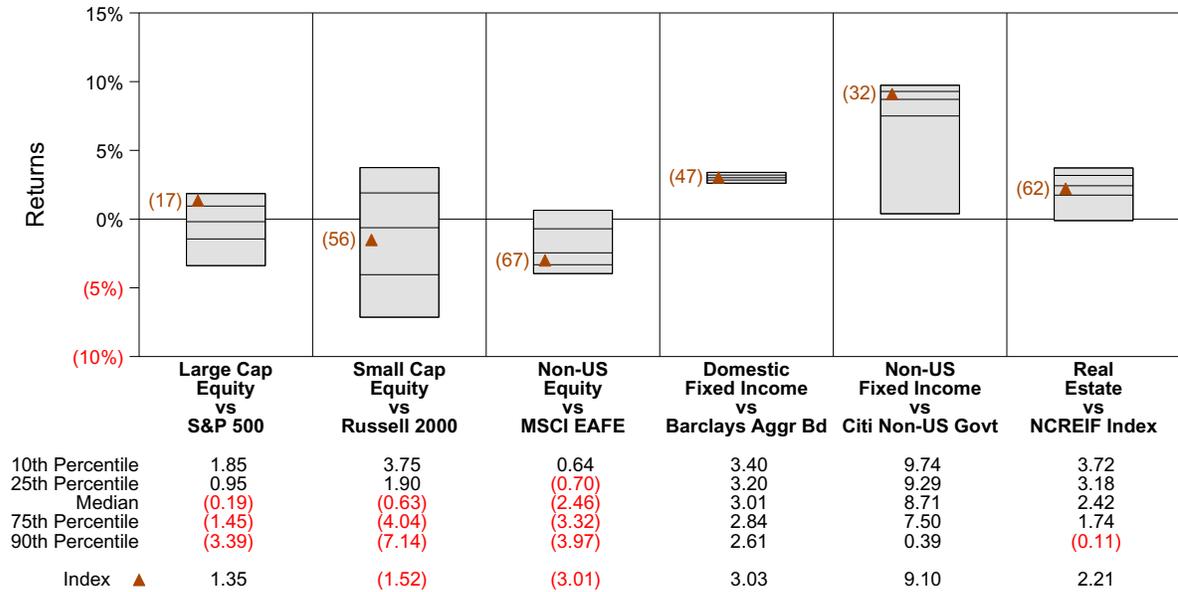
# Market Overview

## Active Management vs Index Returns

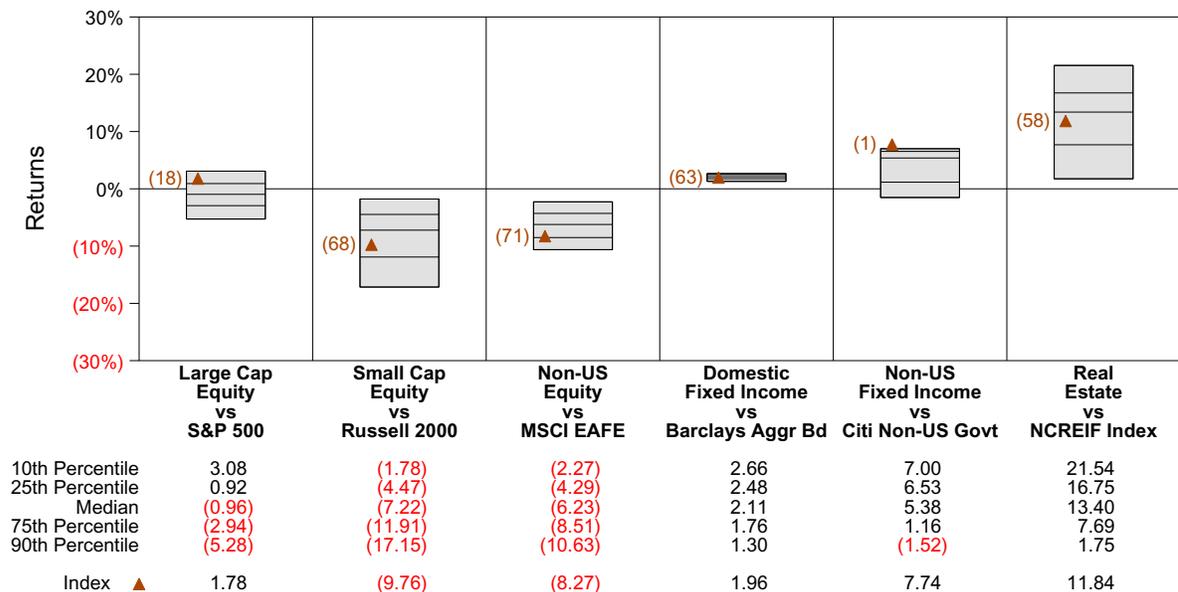
### Market Overview

The charts below illustrate the range of returns across managers in Callan's Separate Account database over the most recent one quarter and one year time periods. The database is broken down by asset class to illustrate the difference in returns across those asset classes. An appropriate index is also shown for each asset class for comparison purposes. As an example, the first bar in the upper chart illustrates the range of returns for domestic equity managers over the last quarter. The triangle represents the S&P 500 return. The number next to the triangle represents the ranking of the S&P 500 in the Large Cap Equity manager database.

### Range of Separate Account Manager Returns by Asset Class One Quarter Ended March 31, 2016



### Range of Separate Account Manager Returns by Asset Class One Year Ended March 31, 2016





## Don't Believe the Hype (or the Markets)

### ECONOMY

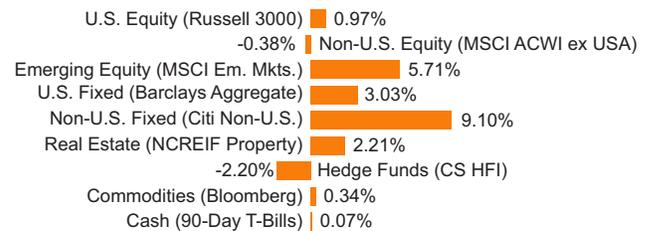
**2** The U.S. economy's expansion is now entering its seventh year. However, you'd hardly know it if you looked at the capital markets' reaction over the past nine months. First quarter GDP growth came in at a weak 0.5%, down from 1.4% the prior quarter.

## Progress Discounted

### FUND SPONSOR

**4** Global financial markets made little progress in the first quarter. Corporate funds beat other fund types, due in part to their high U.S. fixed income exposure. Endowments/foundations trailed due to more exposure to non-U.S. equity and less to U.S. fixed income.

## Broad Market Quarterly Returns



Sources: Barclays, Bloomberg, Citigroup, Credit Suisse Hedge Index, Merrill Lynch, MSCI, NCREIF, Russell Investment Group

## Tale of Two Halves

### U.S. EQUITY

**6** The first quarter of 2016 was a tale of two halves. The **S&P 500 Index** declined in the first half only to reverse course and post a positive quarterly return (+1.35%). Large capitalization companies held their lead over small cap, but in a trend of reversals, value overtook growth across capitalizations.

## Mr. Draghi's Wild Ride

### NON-U.S. EQUITY

**9** Non-U.S. equity markets endured a rocky January and February, but managed to rally in March to finish at a modest loss (**MSCI ACWI ex USA Index**: -0.38%). The **MSCI Emerging Markets Index** (+5.71%) bounced much higher than its developed counterpart (**MSCI World ex USA**: -1.95%).

## More T-Bills, Please

### U.S. FIXED INCOME

**12** Yields plummeted during a volatile first quarter. A dovish Fed fostered uncertainty over global economic growth. The **Barclays Aggregate Index** gained 3.03% and the **Barclays Corporate High Yield Index** was up 3.35%.

## A Dole of Doves

### NON-U.S. FIXED INCOME

**15** Sovereign debt surged in the first quarter, driven by risk-on sentiment and the U.S. dollar's relative weakness. The **Citi Non-U.S. World Government Bond Index** jumped 9.10%. The hard currency **JPM EMBI Global Diversified Index** rose 5.04% while the local currency **JPM GBI-EM Global Diversified** soared 11.02%.

## Slow and Low

### REAL ESTATE

**17** The **NCREIF Property Index** advanced 2.21% and the **NCREIF Open End Diversified Core Equity Index** earned 2.18%, the lowest quarterly return since 2010. Capital flows to core funds continued to decline, as more investors reached their allocation targets.

## Drip, Drip, Drip

### PRIVATE EQUITY

**19** Liquidity in the private equity market declined notably. Fundraising and company investments held relatively steady. Venture capital fundraising was surprisingly strong given the drop-off in IPO activity due to zig-zagging public equity markets.

## Market Tremors Panic Hedge Funds

### HEDGE FUNDS

**20** Investor pessimism over softening global growth slammed stocks and commodities. The **Credit Suisse Hedge Fund Index** sank 2.20% and the median manager in the **Callan Hedge Fund-of-Funds Database** fell 2.99%.

## Strong Quarter Can't Save 2015

### DEFINED CONTRIBUTION

**21** The Callan DC Index™ finished 2015 with a strong 3.50% gain in the fourth quarter. Nonetheless, the DC Index turned out a negative 2015 calendar year return: -0.34%, the weakest annual return since 2011.

# Don't Believe the Hype (or the Markets)

ECONOMY | Jay Kloepfer

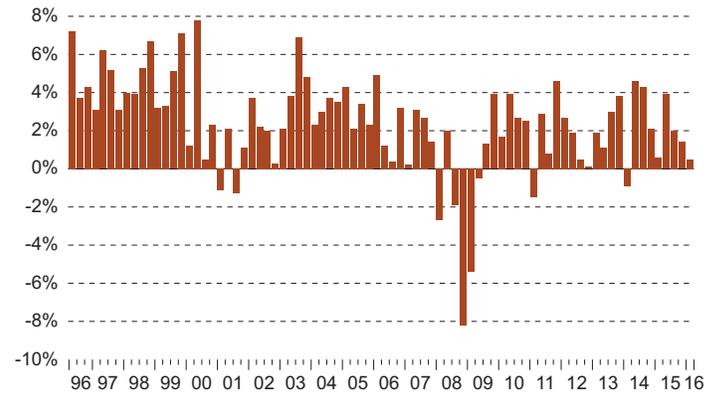
The U.S. economy's expansion—while subpar relative to past expansions in the 1980s and 1990s—has been slowly building strength and is now entering its seventh year. However, you'd hardly know it if you looked at the capital markets' reaction over the past nine months. Concerns about China, a slowing global recovery, political uncertainty in more than a few countries, and an unclear path as to future interest rates have all spurred investors to swing wildly from lows to highs and back again, all while the broad underlying economic data remain solid.

The National Bureau of Economic Research tracks four monthly indicators in order to identify turning points in the economic cycles. Only one of those—industrial production—is declining, and that decline began back in 2014, when the collapse in oil prices hit the mining sector and the U.S. dollar began to rally, hampering U.S. manufacturing and exports. The other three indicators show no signs of a slowdown, let alone a decline: employment, personal incomes, and real business sales. Adding to this incongruity is the first report on GDP growth for the first quarter of 2016. It came in at a weak 0.5%, down from 1.4% in the fourth quarter of 2015. Almost all economic indicators have been more upbeat than GDP over the past year or two, suggesting that the sum has been less than the parts, that we are misrepresenting economic growth with our GDP calculation, or that we are misreading the headwinds to aggregate growth.

Real GDP growth has continued a familiar pattern, showing anemic first-quarter growth in five of the past six years. Such a pattern is a recent development in U.S. economic history, and suggests (to us) that part of this weakness may in fact be a problematic seasonal-adjustment process within the data calculation. Consumer spending grew 1.9% in the quarter, with the bulk of that growth occurring in services (2.7% gain). The brightest spot was a 14.8% jump in housing, which contributed almost 0.5% to total GDP growth. The residential housing market has finally turned the corner after the plunge that began in late 2005, and several markets on the coasts and in a few other

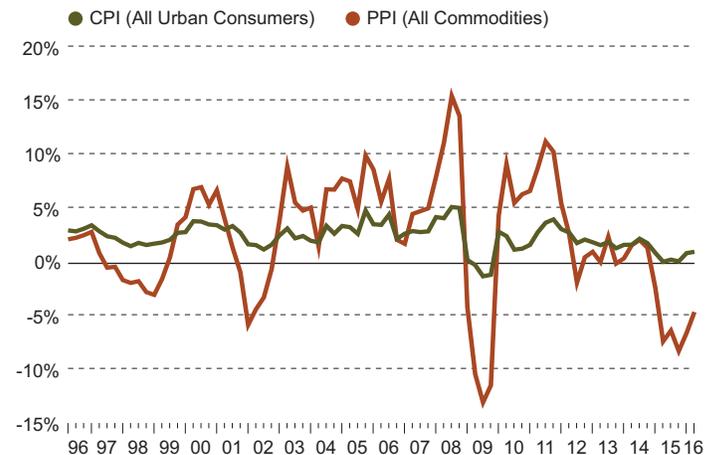
## Quarterly Real GDP Growth

(20 Years)



Source: Bureau of Economic Analysis

## Inflation Year-Over-Year



Source: Bureau of Labor Statistics

large metro areas are seeing substantial gains in existing home prices and sales. However, housing was the only bright spot in private domestic investment as non-residential sectors suffered declines, led by a 10.7% drop in structures.

The plunge in oil prices early in 2016 triggered another sharp decline in energy-sector capital spending, a trend that has hampered the sector since the initial oil price collapse in 2014. The cause of the drop in equipment spending is less

clear, but may be traced to corporate caution following the stock market turmoil that began last summer and reappeared with a vengeance this past January and February.

The continuing drag from inventories was larger than expected in the first quarter, but on the plus side, it appears that the bulk of the inventory adjustment is now behind us. The rebound in energy prices in March may spell the end of the rout in the energy sector. These factors, combined with signs of continuing economic growth, give businesses confidence and are likely to limit the decline in business fixed investment. The forward-looking Institute for Supply Management activity indices, which measure sentiment for business investment in manufacturing and non-manufacturing areas, are both back above 50, the dividing line between expansion and contraction, and are at levels consistent with GDP growth in excess of 2%.

Concerns about China's growth and its role in restraining confidence elsewhere in the global economy have fueled negative investor sentiment and subsequent capital market volatility. China adopted a new Five-Year Plan with a goal of GDP growth averaging at least 6.5% during 2016-2020. History suggests that goal may be ambitious for an economy that has reached China's level of current development. Official figures stated growth averaging 7.8% per year from 2011-2015, but economists from Capital Economics, a research consultancy based in London, and other forecasters estimate that growth has been closer to 6.5%. A more reasonable estimate for China's economy for the next five years may be closer to 5%; however, a figure that far below the official target could spur further stimulus from the Chinese government, increasing the medium-term risks to growth.

**Recent Quarterly Indicators**

Economic Indicators	1Q16	4Q15	3Q15	2Q15	1Q15	4Q14	3Q14	2Q14
Employment Cost–Total Compensation Growth	1.9%	2.0%	2.0%	2.0%	2.6%	2.2%	2.2%	2.0%
Nonfarm Business–Productivity Growth	-0.3%*	-2.2%	2.0%	3.1%	-0.8%	-1.7%	3.1%	2.4%
GDP Growth	0.5%	1.4%	2.0%	3.9%	0.6%	2.1%	4.3%	4.6%
Manufacturing Capacity Utilization	75.4%	75.4%	75.6%	75.5%	75.5%	76.0%	75.7%	75.1%
Consumer Sentiment Index (1966=100)	91.5	91.3	90.8	94.2	95.5	89.8	83.0	82.8

\*Estimate.

Sources: Bureau of Economic Analysis, Bureau of Labor Statistics, Federal Reserve, IHS Economics, Reuters/University of Michigan.

**The Long-Term View**

Index	2016 1st Qtr	Periods ended December 31, 2015			
		Year	5 Yrs	10 Yrs	25 Yrs
<b>U.S. Equity</b>					
Russell 3000	0.97	0.48	12.18	7.35	10.03
S&P 500	1.35	1.38	12.57	7.31	9.82
Russell 2000	-1.52	-4.41	9.19	6.80	10.50
<b>Non-U.S. Equity</b>					
MSCI EAFE	-3.01	-0.81	3.60	3.03	5.40
MSCI Emerging Markets	5.71	-14.92	-4.80	3.61	–
S&P ex-U.S. Small Cap	0.52	5.92	5.51	5.33	6.80
<b>Fixed Income</b>					
Barclays Aggregate	3.03	0.55	3.25	4.51	6.15
90-Day T-Bill	0.07	0.05	0.07	1.24	2.93
Barclays Long G/C	7.30	-3.30	6.98	6.45	8.08
Citi Non-U.S. Govt	9.10	-5.54	-1.30	3.05	5.37
<b>Real Estate</b>					
NCREIF Property	2.21	13.33	12.18	7.76	8.05
FTSE NAREIT Equity	6.00	3.20	11.96	7.41	12.13
<b>Alternatives</b>					
CS Hedge Fund	-2.20	-0.71	3.55	4.97	–
Cambridge PE*	–	8.66	14.70	11.80	15.74
Bloomberg Commodity	0.42	-24.66	-13.47	-6.43	–
Gold Spot Price	16.54	-10.46	-5.70	7.41	4.02
<b>Inflation – CPI-U</b>	0.68	0.73	1.53	1.86	2.30

\*Private equity data are time-weighted returns for periods ended September 30, 2015.

Sources: Barclays, Bloomberg, Citigroup, Credit Suisse, FTSE, MSCI, NCREIF, Russell Investment Group, Standard & Poor's, Thomson/Cambridge, Bureau of Economic Analysis.

The strong dollar has been a significant drag on U.S. exports and manufacturing. It has also certainly lowered the cost of imports, particularly energy. The dollar reached its most recent peak in January, but has since declined sharply. The rebound in commodity prices and a scaling back of expectations for the Fed to raise rates will continue to dictate the dollar's course over the next two years.

# Progress Discounted

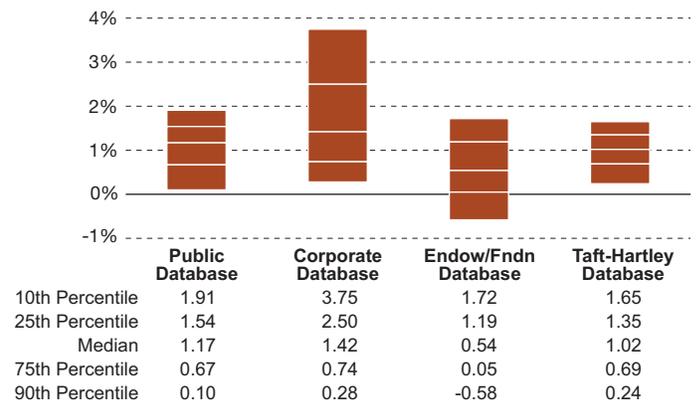
FUND SPONSOR | Rufash Lama

Global financial markets made little progress in the first quarter, as concerns over sluggish economic growth and falling oil prices led to sharp declines through mid-February. However, U.S. equity and fixed income markets staged a strong rally to end the quarter in the black. Non-U.S. equity markets (**MSCI ACWI ex USA Index**: -0.38%) lagged U.S. equity markets (**S&P 500 Index**: +1.35%) amid concerns over economic growth. The Federal Reserve's decision to delay rate hikes supported U.S. bonds (**Barclays Aggregate**: +3.03%), which nonetheless trailed the non-U.S. fixed income markets (**Citi Non-U.S. World Government Bond Index**: +9.10%).

The funded status of corporate plans deteriorated over the quarter as liabilities outgrew assets. The median and average funded status of U.S. corporate defined benefit plans fell to 80.0% and 79.9%, respectively, based on a peer group\* of seven different funded ratio measures. While assets grew for the quarter, liabilities rose faster due to a fall in discount rates.

Looking at the Callan Fund Sponsor Quarterly Returns table, we see corporate funds outperformed other fund types at the median and across percentiles. Performance dispersion was highest in the 10th percentile: corporate funds gained 3.75%,

## Callan Fund Sponsor Returns for the Quarter



Source: Callan

due in part to their high U.S. fixed income exposure, while at the low end of the spectrum Taft-Hartley funds ended the quarter at +1.65%. Endowments/foundations trailed significantly in the 90th percentile at -0.58%. Overall, endowments/foundations performed the worst due to a relatively high exposure to non-U.S. equity and low exposure to U.S. fixed income. Public funds were buoyed by greater exposure to non-U.S. fixed income as accommodative central bank policies helped fixed income markets stage a strong rally. The Barclays Global Aggregate Index gained 5.90% for the quarter.

## Callan Database Median and Index Returns\*\* for Periods ended March 31, 2016

Fund Sponsor	Quarter	Year	3 Years	5 Years	10 Years	15 Years
Public Database	1.17	-1.03	6.02	6.41	5.39	6.09
Corporate Database	1.42	-1.91	5.47	6.41	5.54	6.17
Endowments/Foundations Database	0.54	-2.72	4.79	5.48	5.11	5.85
Taft-Hartley Database	1.02	-0.13	6.56	6.73	5.27	5.76
Diversified Manager	Quarter	Year	3 Years	5 Years	10 Years	15 Years
Asset Allocator Style	0.76	-2.12	6.00	6.41	5.72	6.48
U.S. Balanced Database	1.46	-1.59	5.78	6.33	5.57	6.12
Global Balanced Database	0.45	-4.20	3.11	4.60	5.08	7.30
60% Russell 3000 + 40% Barclays Agg	1.79	0.73	7.73	8.35	6.53	6.27
60% MSCI World + 40% Barclays Gbl Agg	2.15	-0.11	4.51	4.77	4.58	5.38

\* The peer group includes funded ratio measures provided by large, institutional investment and actuarial consultants, as well as investment management firms.

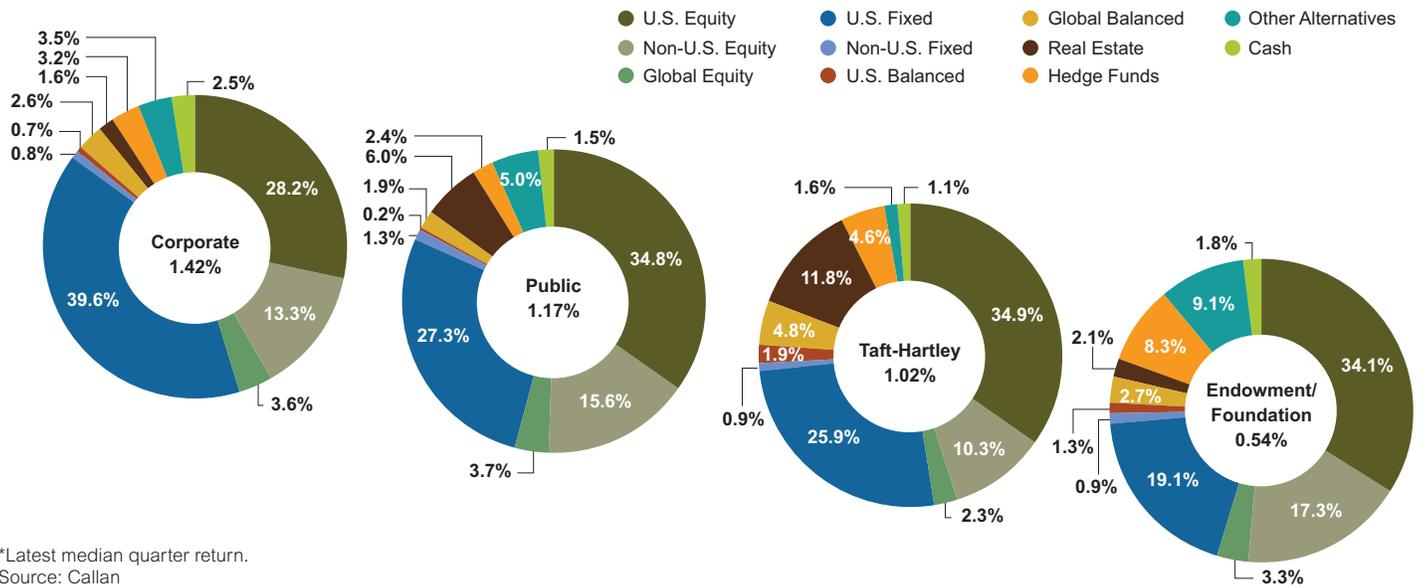
\*\*Returns less than one year are not annualized.

Sources: Callan, Barclays, MSCI, Russell Investment Group.

While one-year returns were consistently in the red, all fund types maintained performance in the +5% – +7% range for longer time periods. Taft-Hartley funds kept their lead over other fund types during three- and five-year periods, and corporate funds boasted the top returns over longer periods (10 and 15 years). Although the blended 60% Russell 3000 + 40% Barclays

Aggregate Index (+1.79%) trailed the 60% MSCI World + 40% Barclays Global Aggregate Index (+2.15%) for the quarter, the U.S.-based benchmark continues to outperform over longer time periods. Callan's U.S. Balanced Database group maintained its edge over the Global Balanced Database group across all but the longest time periods shown in the table.

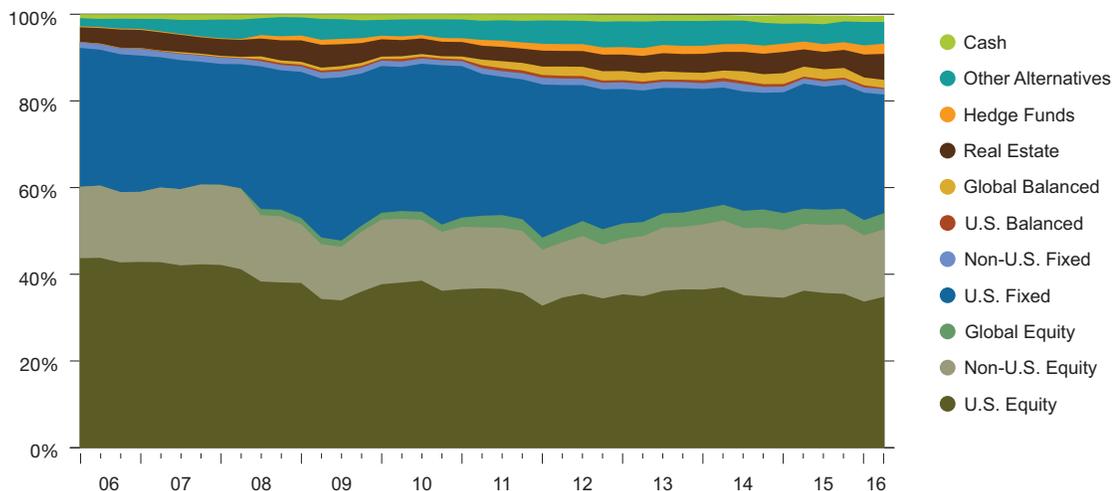
Callan Fund Sponsor Average Asset Allocation



\*Latest median quarter return. Source: Callan

Callan Public Fund Database Average Asset Allocation

(10 Years)



Source: Callan

# Tale of Two Halves

U.S. EQUITY | Lauren Mathias, CFA

The first quarter of 2016 was a tale of two halves: the **S&P 500 Index** declined in the first half only to reverse course and post a positive quarterly return (+1.35%). Large cap companies held their lead over small cap, but in the trend of reversals, value overtook growth in all capitalizations. (**Russell 1000 Index**: +1.17% and **Russell 2000 Index**: -1.52%; **Russell 1000 Value Index**: +1.64% and **Russell 1000 Growth Index**: +0.74%).

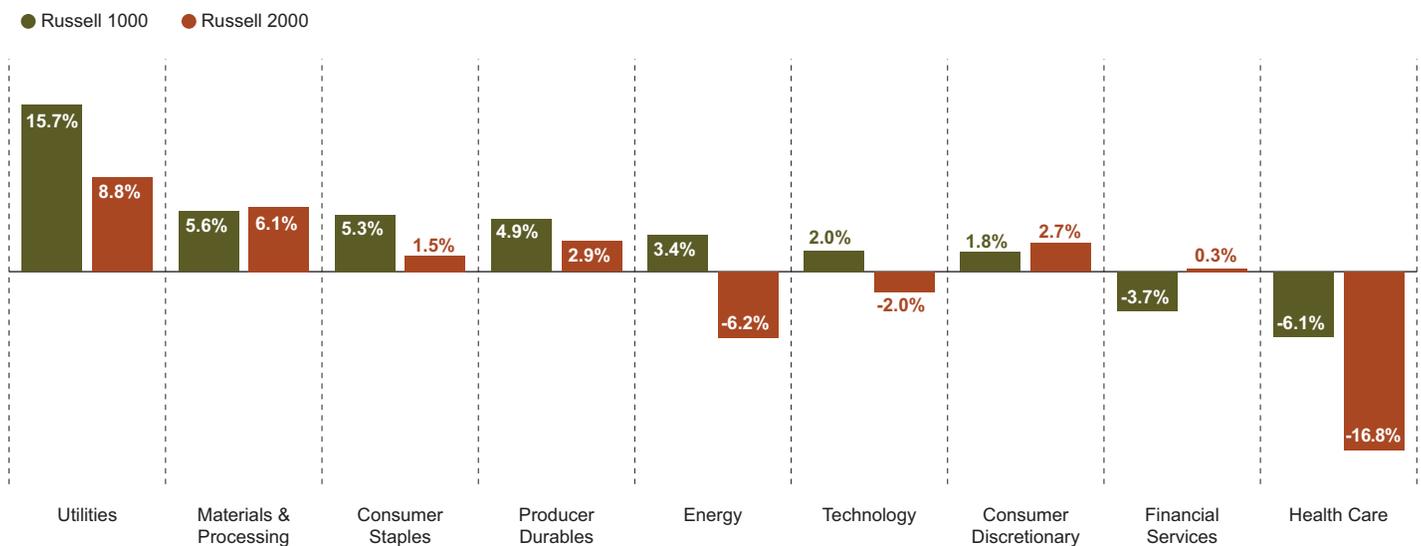
Though the S&P 500 Index ended in positive territory, during the quarter performance dipped 10%. This is the first time since the Great Depression that the S&P fell to this depth only to rebound and end in the black. January was a disappointing month as economic concerns lingered from 2015. But in February and March, U.S. manufacturing activity grew, fourth-quarter 2015 GDP was revised to 1.4% from 1.0%, the labor force participation rate expanded to 63% (from 62.4%), and the U.S. economy added 215,000 jobs in March alone. Global concerns around

the price of oil abated as the crude oil spot price ended the quarter at \$38/barrel after bottoming at \$26/barrel in mid-February. Investor sentiment rose in tandem with these positive developments. Despite some improvement, the U.S. Federal Reserve stated that global economic and financial developments continued to pose risks, and thus maintained the target range for the federal funds rate at 0.25%–0.50%.

Growth lost its lead over value. The difference was most significant within small cap (**Russell 2000 Growth Index**: -4.68% and **Russell 2000 Value Index**: +1.70). Micro and small cap companies declined while mid and large cap advanced (**Russell Microcap Index**: -5.43%, **Russell 2000 Index**: -1.52%, and **Russell Midcap Index**: +2.24%, **Russell 1000 Index**: +1.17%).

Sector performance over the quarter also revealed reversals. Cyclical areas like Energy, Industrials, and Materials added

## Economic Sector Quarterly Performance



Source: Russell Investment Group

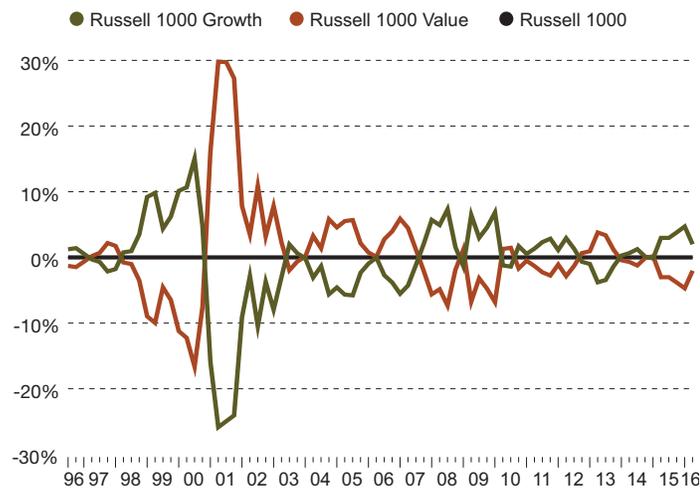
Note: As of the fourth quarter of 2015, the Capital Markets Review reports sector-specific returns using the Russell Global Sectors (RGS) classification system rather than the Global Industry Classification Standard (GICS) system. RGS uses a three-tier classification system containing nine sectors; GICS uses a four-tier system containing ten sectors.

value, and the interest rate-sensitive Utilities sector expanded, but typically defensive Health Care trailed. Not only did sectors turnabout, so did factors—valuation metrics such as price/book and yield outpaced growth metrics such as projected EPS growth and price momentum. Volatility of stocks, as measured by the daily VIX, increased during February’s pullback, ending the quarter near average levels. Correlations remained well above long-term averages and spreads between stock returns

were below average (both based on the S&P 500 universe)—a difficult environment for stock-picking strategies.

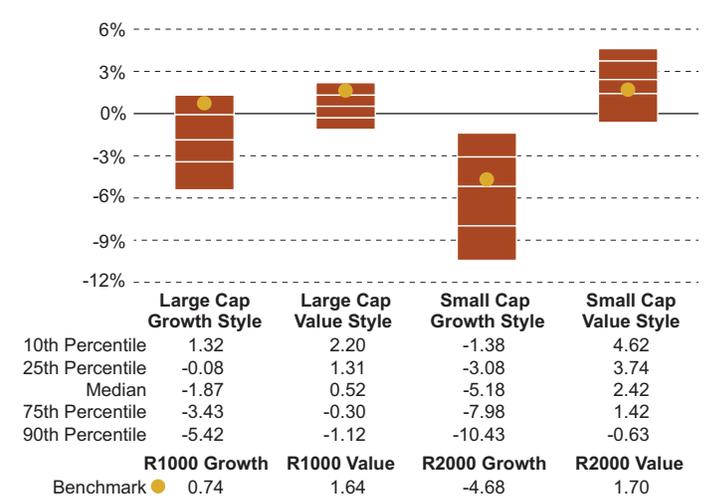
The U.S. equity market had a tumultuous start to the year, but found itself in positive territory by quarter end. This tale of two halves made it challenging for active management, with just 19% of large cap funds outperforming the S&P 500 Index during the quarter.

**Rolling One-Year Relative Returns** (vs. Russell 1000)



Source: Russell Investment Group

**Callan Style Group Quarterly Returns**



Sources: Callan, Russell Investment Group

**U.S. Equity Index Characteristics as of March 31, 2016**

	S&P 500	Rus 3000	Rus 1000	Rus Midcap	Rus 2500	Rus 2000
Cap Range Min (\$mm)	1,401	5	147	147	5	5
Cap Range Max (\$bn)	604.30	627.89	627.89	20.34	5.97	3.77
Number of Issues	504	2,978	1,017	818	2,468	1,957
% of Russell 3000	82%	100%	92%	27%	17%	7%
Wtd Avg Mkt Cap (\$bn)	128.89	107.53	116.14	12.43	4.13	1.90
Price/Book Ratio	2.7	2.6	2.6	2.4	2.1	1.9
Forward P/E Ratio	16.7	17.0	16.8	18.4	18.5	18.8
Dividend Yield	2.2%	2.1%	2.1%	1.8%	1.7%	1.6%
5-Yr Earnings (forecasted)	10.3%	10.7%	10.5%	9.4%	11.5%	13.1%

Sources: Russell Investment Group, Standard & Poor's.

## U.S. EQUITY (Continued)

### Callan Style Median and Index Returns\* for Periods ended March 31, 2016

<b>Large Cap Equity</b>	<b>Quarter</b>	<b>Year</b>	<b>3 Years</b>	<b>5 Years</b>	<b>10 Years</b>	<b>15 Years</b>
<b>Large Cap Core Style</b>	<b>-0.12</b>	<b>-0.84</b>	<b>11.55</b>	<b>11.43</b>	<b>7.32</b>	<b>6.67</b>
<b>Large Cap Growth Style</b>	<b>-1.87</b>	<b>0.44</b>	<b>13.05</b>	<b>11.51</b>	<b>8.10</b>	<b>6.14</b>
<b>Large Cap Value Style</b>	<b>0.52</b>	<b>-2.37</b>	<b>9.67</b>	<b>10.25</b>	<b>6.40</b>	<b>7.20</b>
<b>Aggressive Growth Style</b>	<b>-3.86</b>	<b>-1.09</b>	<b>11.81</b>	<b>9.50</b>	<b>7.24</b>	<b>6.65</b>
<b>Contrarian Style</b>	<b>0.34</b>	<b>-4.94</b>	<b>9.21</b>	<b>9.77</b>	<b>6.14</b>	<b>7.33</b>
<b>Yield-Oriented Style</b>	<b>2.30</b>	<b>-0.92</b>	<b>9.16</b>	<b>9.88</b>	<b>6.97</b>	<b>7.63</b>
Russell 3000	0.97	-0.34	11.15	11.01	6.90	6.38
Russell 1000	1.17	0.50	11.52	11.35	7.06	6.28
Russell 1000 Growth	0.74	2.52	13.61	12.38	8.28	6.03
Russell 1000 Value	1.64	-1.54	9.38	10.25	5.72	6.41
S&P Composite 1500	1.57	1.18	11.53	11.34	7.05	6.37
S&P 500	1.35	1.78	11.82	11.58	7.01	5.99
NYSE	1.33	-3.91	6.67	8.39	5.70	6.31
Dow Jones Industrials	2.20	2.08	9.29	10.27	7.54	6.55
<b>Mid Cap Equity</b>	<b>Quarter</b>	<b>Year</b>	<b>3 Years</b>	<b>5 Years</b>	<b>10 Years</b>	<b>15 Years</b>
<b>Mid Cap Core Style</b>	<b>1.04</b>	<b>-3.68</b>	<b>10.56</b>	<b>10.37</b>	<b>7.71</b>	<b>9.87</b>
<b>Mid Cap Growth Style</b>	<b>-2.14</b>	<b>-7.69</b>	<b>9.55</b>	<b>8.50</b>	<b>7.47</b>	<b>8.31</b>
<b>Mid Cap Value Style</b>	<b>2.03</b>	<b>-4.34</b>	<b>9.72</b>	<b>10.02</b>	<b>7.85</b>	<b>10.16</b>
Russell Midcap	2.24	-4.04	10.45	10.30	7.45	9.11
S&P MidCap 400	3.79	-3.60	9.46	9.52	7.78	9.42
<b>Small Cap Equity</b>	<b>Quarter</b>	<b>Year</b>	<b>3 Years</b>	<b>5 Years</b>	<b>10 Years</b>	<b>15 Years</b>
<b>Small Cap Core Style</b>	<b>-0.20</b>	<b>-6.50</b>	<b>9.29</b>	<b>9.75</b>	<b>7.07</b>	<b>10.28</b>
<b>Small Cap Growth Style</b>	<b>-5.18</b>	<b>-13.12</b>	<b>7.24</b>	<b>7.69</b>	<b>6.31</b>	<b>8.07</b>
<b>Small Cap Value Style</b>	<b>2.42</b>	<b>-4.93</b>	<b>8.92</b>	<b>9.09</b>	<b>6.92</b>	<b>10.77</b>
Russell 2000	-1.52	-9.76	6.84	7.20	5.26	7.65
S&P SmallCap 600	2.66	-3.20	10.39	10.41	6.99	9.60
NASDAQ	-2.43	0.55	15.63	13.28	8.78	7.67
<b>Smid Cap Equity</b>	<b>Quarter</b>	<b>Year</b>	<b>3 Years</b>	<b>5 Years</b>	<b>10 Years</b>	<b>15 Years</b>
<b>Smid Cap Broad Style</b>	<b>0.09</b>	<b>-7.42</b>	<b>8.93</b>	<b>8.73</b>	<b>7.57</b>	<b>9.73</b>
<b>Smid Cap Growth Style</b>	<b>-3.51</b>	<b>-9.97</b>	<b>8.27</b>	<b>8.34</b>	<b>6.78</b>	<b>8.92</b>
<b>Smid Cap Value Style</b>	<b>3.00</b>	<b>-5.56</b>	<b>8.32</b>	<b>8.43</b>	<b>7.42</b>	<b>10.79</b>
Russell 2500	0.39	-7.31	8.16	8.58	6.47	8.76
S&P 1000	3.45	-3.47	9.75	9.80	7.51	9.46
<b>Russell 3000 Sectors</b>	<b>Quarter</b>	<b>Year</b>	<b>3 Years</b>	<b>5 Years</b>	<b>10 Years</b>	<b>15 Years</b>
Consumer Discretionary	1.88	2.43	13.87	15.59	9.79	—
Consumer Staples	5.22	12.19	13.98	15.64	12.35	—
Energy	3.13	-18.92	-6.73	-3.91	2.57	—
Financial Services	-3.30	-2.34	10.03	9.91	0.69	—
Health Care	-7.05	-7.62	15.51	17.25	10.20	—
Materials & Processing	5.70	-4.62	6.38	5.70	5.56	—
Producer Durables	4.76	0.59	11.59	10.27	6.42	—
Technology	1.73	4.51	15.91	11.85	8.91	—
Utilities	15.23	15.78	10.78	11.98	8.16	—

\*Returns less than one year are not annualized.

Sources: Callan, Dow Jones & Company, Russell Investment Group, Standard & Poor's, The NASDAQ Stock Market.

# Mr. Draghi's Wild Ride

NON-U.S. EQUITY | Kevin Nagy

Non-U.S. equity markets endured a rocky January and February but rallied in March to finish at a modest loss (**MSCI ACWI ex USA Index: -0.38%**). Emerging markets (**MSCI Emerging Markets Index: +5.71%**) did better than their developed counterparts (**MSCI World ex USA: -1.95%**).

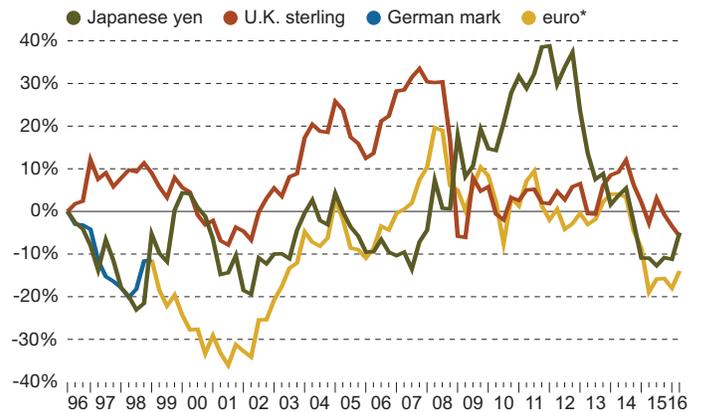
Falling oil prices, concerns about global economic growth, and declining corporate profits prompted a January sell-off, as many investors switched to a "risk-off" footing. Announcements of further European Central Bank (ECB) monetary stimulus and a modest rebound in commodity prices helped kick-start a comeback in February and March, but were not enough to drive the broader non-U.S. indices into the black.

The MSCI Emerging Markets Index (+5.71%) handily surpassed the MSCI World ex USA Index (-1.95%). Small cap stocks rode the rally further than large cap and posted a slight positive return, due to strong performance in the Utilities sector (**MSCI ACWI ex USA Small Cap Index: +0.68%**). Sector results were mixed: Energy (+9.81%) and Materials (+7.20%) were strongest while Health Care and Financials retreated (-7.50% and -4.96%, respectively).

European stocks were unable to complete their rebound despite further rate cuts and bond purchases by the ECB (**MSCI Europe Index: -2.51%**). The banking sector was hurt by slashed interest rates. Health Care also struggled, dropping 7.45% amid renewed political tension over rising drug prices. The Netherlands (+3.35%) was the top performer in Europe due to strong domestic performance from Energy (+15.73%) and Consumer Discretionary (+12.32%). Italy (-11.66%) was the worst performer; its Financial sector lost 25.84% due to Italian banks carrying massive amounts of non-performing loans on their balance sheets.

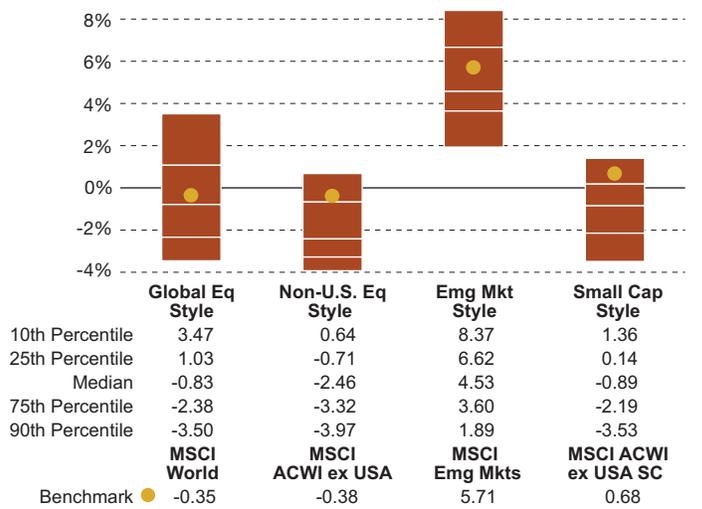
Southeast Asia and the Pacific (**MSCI Pacific Index: -3.79%**) underperformed Europe and other broad benchmarks. Japan

## Major Currencies' Cumulative Returns (vs. U.S. Dollar)



\*euro returns from 1Q99  
Source: MSCI

## Callan Style Group Quarterly Returns



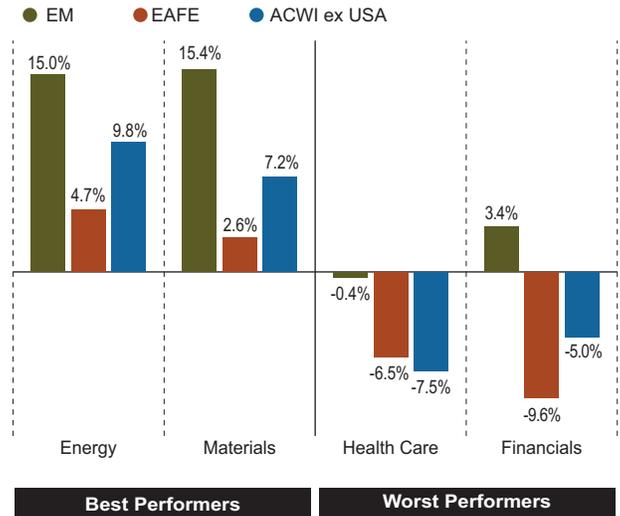
Sources: Callan, MSCI

(-6.52%) battled with tepid economic growth and large losses in the banking sector. The Financial sector was hit especially hard, losing 13.58%. Exporters also struggled due to the strengthening yen. Things were less gloomy in the rest of the region with New Zealand (+11.60%), Singapore (+5.05%), and Australia (+2.10%) benefitting from a commodities rally.

## NON-U.S. EQUITY (Continued)

China (-4.80%) continued to struggle due to concerns over slowing growth and ineffective monetary policy. In an effort to sustain the economy's growth, Chinese authorities implemented selective capital controls to slow asset withdrawals and cut the required reserve ratio. Consumer Discretionary (-10.75%), Financials (-9.68%), and Health Care (-6.65%) were three significant detractors. In keeping with the rest of the world, surging commodity prices buoyed Energy (+6.75%) and Materials (+7.26%). Latin America was the big winner of the first quarter as Brazil, Colombia, Chile, and Peru (+28.58%, +22.49%, +13.25%, and +27.02%) made the **MSCI Latin America Index** the top-performing regional index at +19.23%. The real appreciated 12% against the dollar on the back of the commodities rally and the prospect of political change.

## Quarterly Returns: Strong and Struggling Sectors



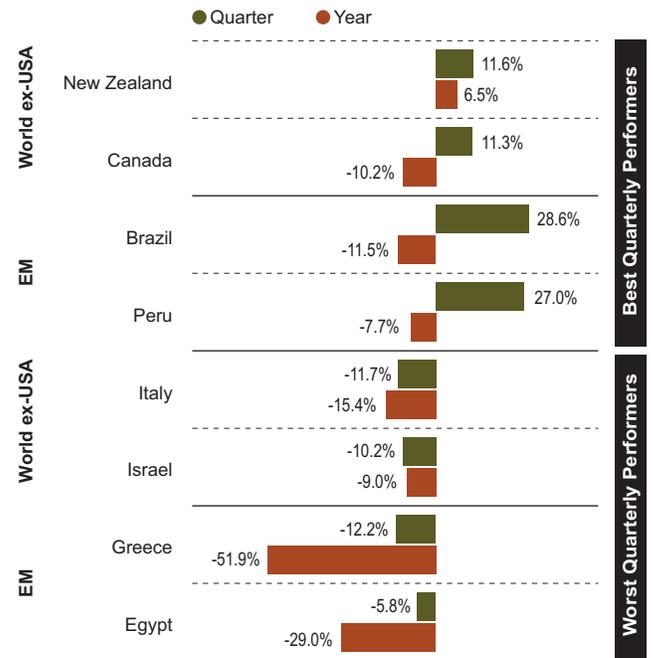
Source: MSCI

## Quarterly and Annual Country Performance Snapshot

### Quarterly Return Attribution for EAFE (U.S. Dollar)

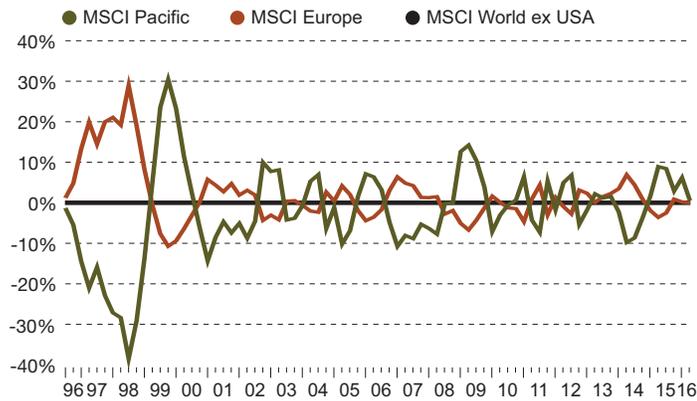
Country	Total	Local	Currency	Wtg
Australia	2.10%	-3.44%	5.73%	7.16%
Austria	-0.52%	-5.17%	4.90%	0.18%
Belgium	-2.43%	-6.99%	4.90%	1.45%
Denmark	-0.96%	-5.75%	5.08%	1.99%
Finland	-5.19%	-9.62%	4.90%	1.01%
France	0.12%	-4.56%	4.90%	9.98%
Germany	-2.50%	-7.06%	4.90%	9.17%
Hong Kong	-0.55%	-0.47%	-0.08%	3.31%
Ireland	-4.15%	-8.63%	4.90%	0.50%
Israel	-10.16%	-12.84%	3.50%	0.71%
Italy	-11.66%	-15.79%	4.90%	2.18%
Japan	-6.52%	-12.66%	7.03%	22.48%
Netherlands	3.35%	-1.30%	4.90%	3.08%
New Zealand	11.60%	10.04%	1.42%	0.18%
Norway	1.72%	-4.94%	7.01%	0.58%
Portugal	3.24%	-1.59%	4.90%	0.17%
Singapore	5.05%	-0.20%	5.35%	1.36%
Spain	-4.09%	-8.57%	4.90%	3.15%
Sweden	-0.22%	-4.05%	4.00%	2.94%
Switzerland	-5.51%	-9.60%	4.53%	9.12%
U.K.	-2.34%	0.15%	-2.48%	19.30%

Sources: MSCI, Russell Investment Group, Standard & Poor's.



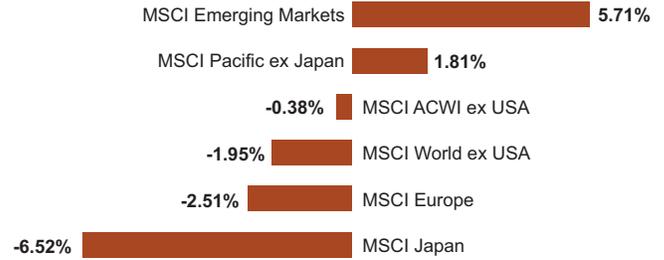
Source: MSCI

Rolling One-year Relative Returns (vs. MSCI World ex USA)



Source: MSCI

Regional Quarterly Performance (U.S. Dollar)



Source: MSCI

Style Median and Index Returns\* for Periods ended March 31, 2016

Non-U.S. Equity	Quarter	Year	3 Years	5 Years	10 Years	15 Years
<b>Non-U.S. Equity Style</b>	<b>-2.46</b>	<b>-6.23</b>	<b>3.54</b>	<b>3.45</b>	<b>3.00</b>	<b>6.32</b>
MSCI EAFE	-3.01	-8.27	2.23	2.29	1.80	4.35
MSCI EAFE (local)	-6.52	-11.17	6.47	6.20	1.72	2.76
MSCI ACWI ex USA	-0.38	-9.19	0.32	0.31	1.94	4.99
MSCI ACWI ex USA Growth	-0.34	-6.08	1.92	1.61	2.72	4.88
MSCI ACWI ex USA Value	-0.42	-12.31	-1.34	-1.03	1.11	5.03
<b>Global Equity</b>	<b>Quarter</b>	<b>Year</b>	<b>3 Years</b>	<b>5 Years</b>	<b>10 Years</b>	<b>15 Years</b>
<b>Global Equity Style</b>	<b>-0.83</b>	<b>-3.45</b>	<b>7.27</b>	<b>7.11</b>	<b>5.15</b>	<b>6.48</b>
MSCI World	-0.35	-3.45	6.82	6.51	4.27	4.97
MSCI World (local)	-1.96	-4.56	8.86	8.38	4.12	4.19
MSCI ACWI	0.24	-4.34	5.53	5.22	4.08	5.10
<b>Regional Equity</b>	<b>Quarter</b>	<b>Year</b>	<b>3 Years</b>	<b>5 Years</b>	<b>10 Years</b>	<b>15 Years</b>
MSCI Europe	-2.51	-8.44	2.71	2.07	2.05	4.46
MSCI Europe (local)	-4.92	-10.63	5.87	5.42	2.56	2.97
MSCI Japan	-6.52	-7.06	3.84	4.03	-0.42	2.27
MSCI Japan (local)	-12.66	-12.90	10.21	10.57	-0.91	1.53
MSCI Pacific ex Japan	1.81	-9.65	-2.95	0.68	5.60	9.18
MSCI Pacific ex Japan (local)	-2.11	-10.23	3.69	4.53	4.67	6.72
<b>Emerging/Frontier Markets</b>	<b>Quarter</b>	<b>Year</b>	<b>3 Years</b>	<b>5 Years</b>	<b>10 Years</b>	<b>15 Years</b>
<b>Emerging Market Style</b>	<b>4.53</b>	<b>-10.27</b>	<b>-3.47</b>	<b>-2.64</b>	<b>4.08</b>	<b>10.96</b>
MSCI Emerging Markets	5.71	-12.03	-4.50	-4.13	3.02	9.35
MSCI Emerging Markets (local)	2.73	-7.70	1.91	1.33	5.33	10.24
MSCI Frontier Markets	-0.94	-12.54	1.75	1.30	-0.78	--
<b>Non-U.S. Small Cap Equity</b>	<b>Quarter</b>	<b>Year</b>	<b>3 Years</b>	<b>5 Years</b>	<b>10 Years</b>	<b>15 Years</b>
<b>Non-U.S. Small Cap Style</b>	<b>-0.89</b>	<b>2.36</b>	<b>7.94</b>	<b>7.23</b>	<b>5.28</b>	<b>10.34</b>
MSCI World ex USA Small Cap	0.60	1.99	5.54	3.84	3.09	8.66
MSCI ACWI ex USA Small Cap	0.68	-0.60	3.67	2.39	3.87	8.91
MSCI Emerging Market Small Cap	0.97	-9.20	-2.69	-2.56	5.07	10.96

\*Returns less than one year are not annualized.  
Sources: Callan, MSCI.

# More T-Bills, Please

U.S. FIXED INCOME | Irina Sushch

Yields plummeted during a volatile first quarter. A dovish Fed fostered uncertainty over global economic growth. **The Barclays Aggregate Index** gained 3.03% and the **Barclays Corporate High Yield Index** was up 3.35%.

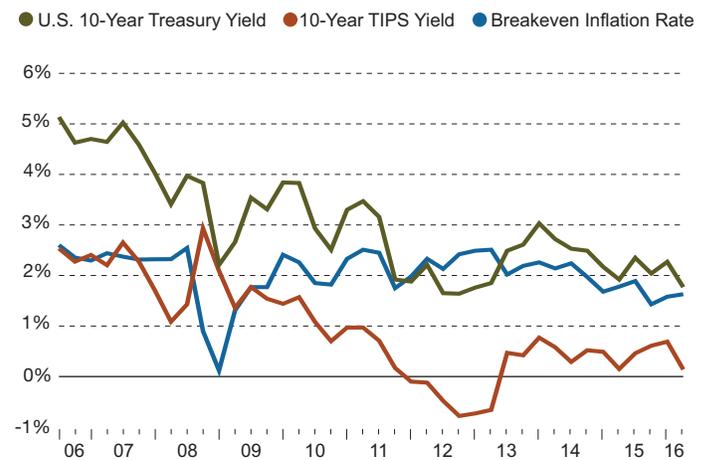
Yields fell nearly 50 bps during a volatile first quarter. The yield curve flattened further in markets abundant with uncertainty over global economic growth. Investment grade credit, mortgage-backed (MBS), commercial mortgage-backed (CMBS), and high yield spreads all tightened, while asset-backed spreads widened.

Following December's federal funds rate hike, the Federal Reserve took on a neutral outlook. The Fed stated that financial and economic conditions are less favorable than they had been in December. The U.S. economy experienced modest growth despite improving employment and housing numbers. Fed chair Janet Yellen stated that the U.S. economy would have to get much worse before the Fed would consider the use of negative interest rates (six other central banks have implemented negative interest rates). The 10-year U.S. Treasury yield tumbled to

1.77%. The breakeven inflation rate (the difference between nominal and real yields) on 10-year Treasuries ticked up 1.63% as TIPS fell 55 bps, in line with their nominal counterparts.

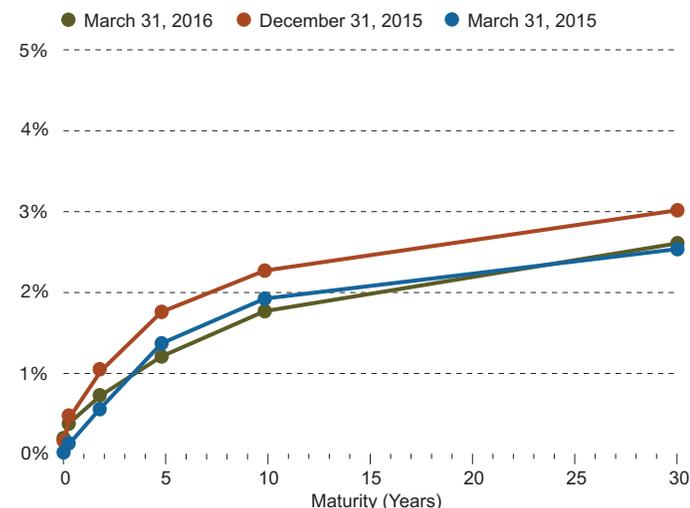
Sectors in the Barclays Aggregate posted positive returns across the board. CMBS outperformed like-duration Treasuries by 0.58% and rose 3.61% for the quarter. Credit was the highest returning sector (+3.92%), but only beat like-duration Treasuries

## Historical 10-Year Yields



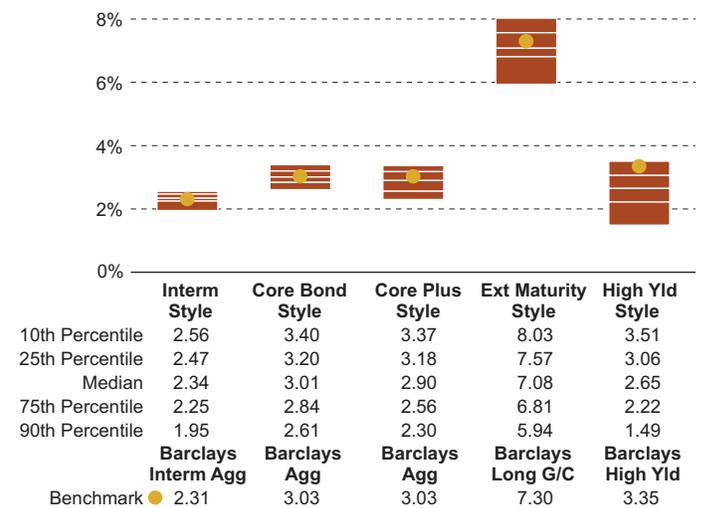
Source: Bloomberg

## U.S. Treasury Yield Curves



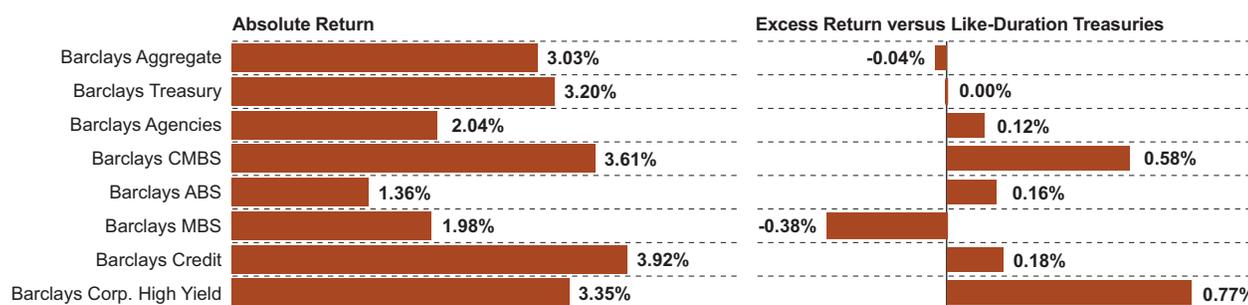
Source: Bloomberg

## Callan Style Group Quarterly Returns



Sources: Barclays, Callan

Fixed Income Index Quarterly Returns

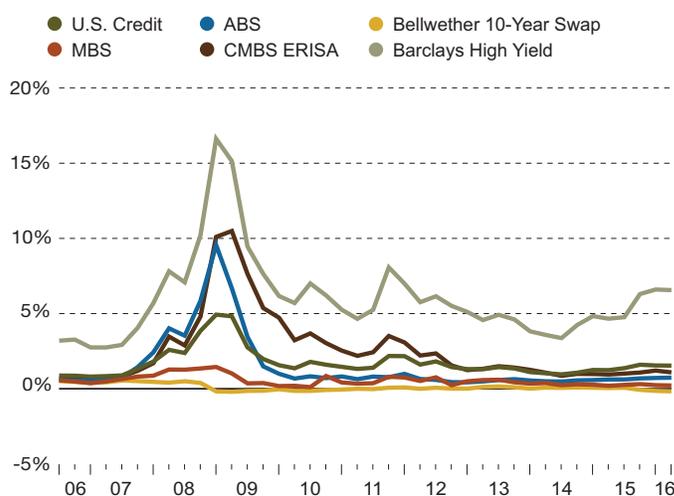


Source: Barclays

by 0.18%. MBS was the only sector to trail like-duration Treasuries (down by 0.38%), yet still rose 1.98%. Investment grade Financials, hurt by worries over persistent low or negative interest rates, underperformed like-duration Treasuries by nearly 100 bps; Industrials, buoyed by a rebound in commodity prices, outperformed by 70 bps.

High yield corporate bonds rebounded from severe underperformance in January and early February (down 5% through February 11) to finish in the black. The Barclays Corporate High Yield Index was up 3.35%, outpacing Treasuries by 77 bps. Including an upsurge in issuance in the last few weeks of the quarter, new high yield issuance was \$35.9 billion—60% lower than one year ago.

Effective Yield Over Treasuries



Source: Barclays

U.S. Fixed Income Index Characteristics as of March 31, 2016

Barclays Indices	Yield to Worst	Mod Adj Duration	Avg Maturity	% of Barclays G/C	% of Barclays Agg
Barclays Aggregate	2.16	5.47	7.79		100.00
Barclays Govt/Credit	2.09	6.48	8.73	100.00	69.44
Intermediate	1.63	4.04	4.39	78.18	54.29
Long-Term	3.74	15.22	24.30	21.82	15.15
Barclays Govt	1.31	5.96	7.29	56.54	39.26
Barclays Credit	3.10	7.15	10.61	43.46	30.18
Barclays MBS	2.35	3.06	5.70		28.21
Barclays ABS	1.57	2.31	2.47		0.50
Barclays CMBS	2.43	5.23	5.87		1.76
Barclays Corp High Yield	8.18	4.22	6.25		

Source: Barclays

## U.S. FIXED INCOME (Continued)

### Callan Style Median and Index Returns\* for Periods ended March 31, 2016

<b>Broad Fixed Income</b>	<b>Quarter</b>	<b>Year</b>	<b>3 Years</b>	<b>5 Years</b>	<b>10 Years</b>	<b>15 Years</b>
<b>Core Bond Style</b>	<b>3.01</b>	<b>2.11</b>	<b>2.76</b>	<b>4.22</b>	<b>5.35</b>	<b>5.41</b>
<b>Core Bond Plus Style</b>	<b>2.90</b>	<b>1.35</b>	<b>2.65</b>	<b>4.47</b>	<b>5.76</b>	<b>5.97</b>
Barclays Aggregate	3.03	1.96	2.50	3.78	4.90	4.97
Barclays Govt/Credit	3.47	1.75	2.42	4.04	4.93	5.03
Barclays Govt	3.12	2.37	2.11	3.42	4.52	4.57
Barclays Credit	3.92	0.93	2.86	5.00	5.70	5.79
Citi Broad Investment Grade	3.04	1.93	2.49	3.78	4.98	5.04
<b>Long-Term</b>	<b>Quarter</b>	<b>Year</b>	<b>3 Years</b>	<b>5 Years</b>	<b>10 Years</b>	<b>15 Years</b>
<b>Extended Maturity Style</b>	<b>7.08</b>	<b>0.36</b>	<b>4.95</b>	<b>8.90</b>	<b>8.14</b>	<b>7.74</b>
Barclays Long Govt/Credit	7.30	0.39	4.81	8.51	7.57	7.38
Barclays Long Govt	8.06	2.80	6.04	9.52	7.88	7.43
Barclays Long Credit	6.82	-1.08	4.10	7.77	7.25	7.40
Citi Pension Discount Curve	9.21	1.02	7.27	11.67	9.36	9.74
<b>Intermediate-Term</b>	<b>Quarter</b>	<b>Year</b>	<b>3 Years</b>	<b>5 Years</b>	<b>10 Years</b>	<b>15 Years</b>
<b>Intermediate Style</b>	<b>2.34</b>	<b>2.11</b>	<b>2.00</b>	<b>3.30</b>	<b>4.82</b>	<b>4.86</b>
Barclays Intermediate Aggregate	2.31	2.20	2.14	3.11	4.53	4.62
Barclays Intermediate Govt/Credit	2.45	2.06	1.83	3.01	4.34	4.46
Barclays Intermediate Govt	2.28	2.21	1.52	2.48	3.97	4.03
Barclays Intermediate Credit	2.70	1.82	2.36	3.98	5.16	5.26
<b>Short-Term</b>	<b>Quarter</b>	<b>Year</b>	<b>3 Years</b>	<b>5 Years</b>	<b>10 Years</b>	<b>15 Years</b>
<b>Defensive Style</b>	<b>1.01</b>	<b>1.26</b>	<b>1.16</b>	<b>1.59</b>	<b>3.13</b>	<b>3.28</b>
<b>Active Duration Style</b>	<b>2.78</b>	<b>2.22</b>	<b>2.23</b>	<b>3.83</b>	<b>4.84</b>	<b>5.05</b>
Money Market Funds (net of fees)	0.01	0.02	0.01	0.01	1.07	1.32
ML Treasury 1–3-Year	0.90	0.92	0.77	0.87	2.48	2.71
90-Day Treasury Bills	0.07	0.12	0.07	0.08	1.15	1.51
<b>High Yield</b>	<b>Quarter</b>	<b>Year</b>	<b>3 Years</b>	<b>5 Years</b>	<b>10 Years</b>	<b>15 Years</b>
<b>High Yield Style</b>	<b>2.65</b>	<b>-2.87</b>	<b>2.37</b>	<b>5.17</b>	<b>6.87</b>	<b>7.59</b>
Barclays Corporate High Yield	3.35	-3.69	1.84	4.93	7.01	7.38
ML High Yield Master	3.23	-3.90	1.76	4.71	6.78	7.20
<b>Mortgage/Asset-Backed</b>	<b>Quarter</b>	<b>Year</b>	<b>3 Years</b>	<b>5 Years</b>	<b>10 Years</b>	<b>15 Years</b>
<b>Mortgage Style</b>	<b>1.91</b>	<b>2.40</b>	<b>2.94</b>	<b>3.77</b>	<b>5.14</b>	<b>5.29</b>
Barclays MBS	1.98	2.43	2.70	3.24	4.85	4.85
Barclays ABS	1.36	1.71	1.39	2.46	3.40	3.87
Barclays CMBS	3.61	2.80	2.84	4.41	5.63	5.82
<b>Municipal</b>	<b>Quarter</b>	<b>Year</b>	<b>3 Years</b>	<b>5 Years</b>	<b>10 Years</b>	<b>15 Years</b>
Barclays Muni	1.67	3.98	3.63	5.59	4.86	4.97
Barclays Muni 1–10-Year	1.24	2.86	2.50	3.68	4.21	4.17
Barclays Muni 3-Year	0.77	1.54	1.31	1.80	3.07	3.11
<b>TIPS</b>	<b>Quarter</b>	<b>Year</b>	<b>3 Years</b>	<b>5 Years</b>	<b>10 Years</b>	<b>15 Years</b>
Barclays TIPS Full Duration	4.46	1.51	-0.71	3.02	4.62	5.49
Barclays TIPS 1-10 Year	3.60	1.84	-0.72	1.88	4.00	4.78

\*Returns for less than one year are not annualized.

Sources: Barclays, Callan, Citigroup, Merrill Lynch.

# A Dole of Doves

NON-U.S. FIXED INCOME | Kyle Fekete

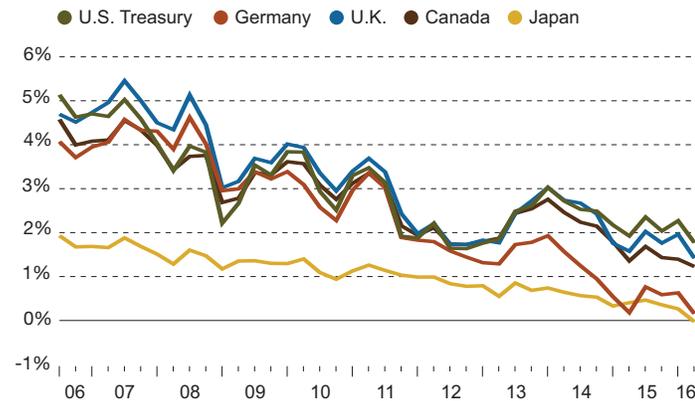
Sovereign debt rallied in the first quarter, driven by risk-on sentiment and the impact of the U.S. dollar's relative weakness. The **Citi Non-U.S. World Government Bond Index** jumped 9.10% (+4.16% on a hedged basis). The hard currency **JPM EMBI Global Diversified Index** rose 5.04% while the local currency **JPM GBI-EM Global Diversified** soared 11.02%.

The U.S. dollar weakened versus most currencies during the quarter, providing a tailwind to unhedged foreign bond returns. The yen gained 7% versus the dollar as investors sought its safe-haven status amid market turbulence in China and concerns over the health of the European banking sector. The euro was also stronger versus the dollar (+5%). In March, the ECB continued its accommodative stance, slashing interest rates and increasing asset purchases. For the first time, the ECB included

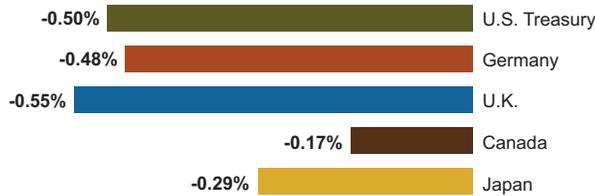
non-bank investment grade corporate bonds in its asset purchase program. Interest rates fell across developed markets, further bolstering returns. The **Barclays Global Aggregate** rose 5.90% (+3.28% hedged).

On an unhedged basis, returns approached 10% for many countries, including Japan, which was up 12% on the back of falling rates combined with yen strength. Yield on the Japanese 10-year bond reached negative territory after a surprise move by the Bank of Japan (BoJ) in January to adopt a negative interest rate policy, indicating bond investors would have to pay-to-own before adjusting for inflation. The BoJ owns approximately one-third of outstanding Japanese bonds as a result of its

## 10-Year Global Government Bond Yields



## Change in 10-Year Yields from 4Q15 to 1Q16



Source: Bloomberg

## Quarterly Return Attribution for Non-U.S. Gov't Indices (U.S. Dollar)

Country	Total	Local	Currency	Wtg
Australia	8.29%	2.42%	5.73%	2.11%
Austria	8.73%	3.64%	4.90%	1.79%
Belgium	9.93%	4.79%	4.90%	2.98%
Canada	8.60%	1.12%	7.39%	2.30%
Denmark	9.88%	4.57%	5.08%	0.79%
Finland	8.12%	3.07%	4.90%	0.76%
France	9.18%	4.08%	4.90%	11.62%
Germany	8.88%	3.79%	4.90%	8.66%
Ireland	7.62%	2.59%	4.90%	0.95%
Italy	7.60%	2.57%	4.90%	11.44%
Japan	12.05%	4.69%	7.03%	33.67%
Malaysia	12.49%	2.22%	10.05%	0.53%
Mexico	3.48%	2.68%	0.78%	1.14%
Netherlands	8.98%	3.88%	4.90%	2.88%
Norway	8.84%	1.71%	7.01%	0.36%
Poland	7.82%	1.62%	6.10%	0.73%
Singapore	10.26%	4.66%	5.35%	0.45%
South Africa	12.34%	6.63%	5.35%	0.50%
Spain	7.64%	2.61%	4.90%	6.45%
Sweden	7.02%	2.90%	4.00%	0.58%
Switzerland	5.75%	1.17%	4.53%	0.34%
U.K.	2.66%	5.28%	-2.48%	8.96%

Source: Citigroup

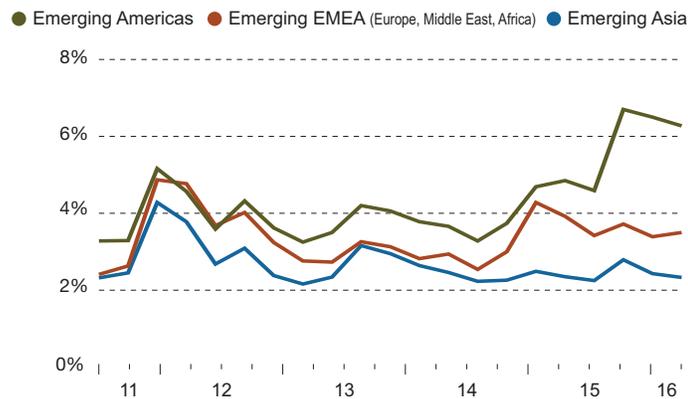
## NON-U.S. FIXED INCOME (Continued)

quantitative easing program. Regulations require the nation's banks, insurers, and pension funds to carry Japanese bonds on their balance sheets.

The unhedged U.K. gilt advanced 2.66%, hampered by the pound's 3% fall. Worries over a potential Brexit put pressure on the currency. Yield on the 10-year U.K. gilt declined more than 50 bps, hitting an all-time low early in the quarter. The Bank of England elected to maintain its relaxed monetary policy for the seventh straight year, citing weak growth and global market turmoil.

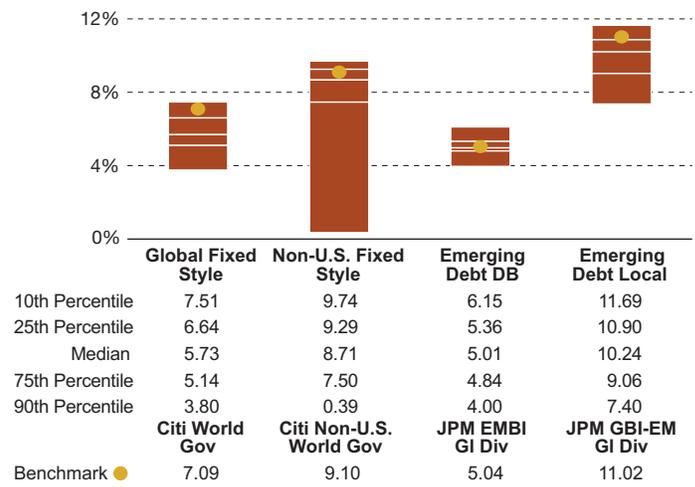
Emerging market bonds rebounded. In late February and March, commodity prices stabilized, risk appetite returned, and confidence in the Chinese renminbi stabilized. The hard currency **JPM EMBI Global Diversified Index** rose 5.04% while the local currency **JPM GBI-EM Global Diversified** soared 11.02%, bolstered by the dollar's relative weakness. Brazil led both indices as investors cheered the prospect of an impeachment of President Dilma Rousseff, hoping a new government could bring better days for the beleaguered country.

### Emerging Spreads Over Developed (By Region)



Source: Barclays

### Callan Style Group Quarterly Returns



Sources: Callan, Citigroup, JPMorgan Chase

### Callan Style Median and Index Returns\* for Periods ended March 31, 2016

Global Fixed Income	Quarter	Year	3 Years	5 Years	10 Years	15 Years
<b>Global Style</b>	<b>5.73</b>	<b>3.39</b>	<b>0.90</b>	<b>2.15</b>	<b>4.98</b>	<b>5.98</b>
Citi World Govt	7.09	5.92	0.49	1.16	4.19	5.28
Citi World Govt (Local)	3.68	2.84	4.20	4.88	4.27	4.19
Barclays Global Aggregate	5.90	4.57	0.87	1.81	4.35	5.25
Non-U.S. Fixed	Quarter	Year	3 Years	5 Years	10 Years	15 Years
<b>Non-U.S. Style</b>	<b>8.71</b>	<b>5.38</b>	<b>0.01</b>	<b>1.22</b>	<b>4.69</b>	<b>6.27</b>
Citi Non-U.S. World Govt	9.10	7.74	-0.16	0.24	3.97	5.39
Citi Non-U.S. World Govt (Local)	3.95	3.10	5.11	5.48	4.29	4.14
European Fixed	Quarter	Year	3 Years	5 Years	10 Years	15 Years
Citi Euro Govt Bond	8.50	6.95	2.45	2.49	4.57	7.15
Citi Euro Govt Bond (Local)	3.43	0.79	5.97	6.71	5.01	5.22
Emerging Markets Fixed	Quarter	Year	3 Years	5 Years	10 Years	15 Years
JPM EMBI Global Diversified	5.04	4.19	3.45	6.22	7.20	9.12
JPM GBI-EM Global Diversified	11.02	-1.65	-6.72	-2.00	4.95	--

\*Returns less than one year are not annualized.

Sources: Callan, Citigroup, JPMorgan Chase.

# Slow and Low

REAL ESTATE | Avery Robinson

The **NCREIF Property Index** advanced 2.21%, recording a 1.17% income return and a 1.04% appreciation return during the quarter. Industrial (+2.96%) and Retail (+2.96%) led property sector performance for the quarter while Hotels (+1.16%) lagged. Regionally, the West bested other areas with a 2.75% return and the East brought up the rear with 1.66%.

During the quarter there were 184 asset trades representing \$7.5 billion of overall transactional volume. This marks a considerable decline from the fourth quarter of 2015's \$11.3 billion, but it is still above the five-year quarterly transaction average of \$6.4 billion. During the first quarter of 2016, appraisal capitalization rates decreased from 4.59% to 4.54%, setting an all-time low.

The **NCREIF Open End Diversified Core Equity Index** earned 2.18%, comprising a 1.11% income return and a 1.07% appreciation return. This marks the lowest quarterly return for the Index since 2010. Capital flows to core funds continued to decline, as a growing number of institutional investors are reaching or surpassing their real estate allocation targets. As a result, entry queues have also declined by more than 40% for the ODCE funds over the past six months.

In the listed real estate market, the **FTSE EPRA/NAREIT Developed REIT Index (USD)** gained 5.43% and U.S. REITs tracked by the **FTSE NAREIT Equity REITs Index** advanced 6.00%.

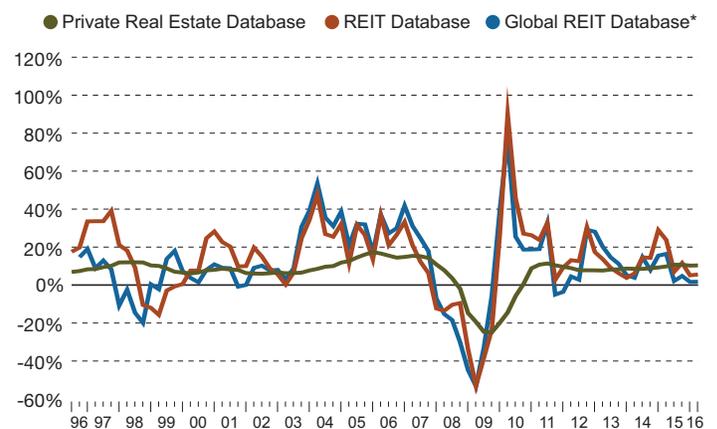
In the U.S., volatility continued as REIT sectors rebounded sharply in March to generate positive returns for the quarter. Sector performance was led once again by Self-Storage (+10.85%), followed by Retail (+8.21%), Residential (+8.38%), and Industrial (+6.49%). The only negative was single family homes (-1.03%). As of March 31, U.S. REITs were trading at a 3% premium to net asset value. This marked the first time REITs have traded at a premium over the past 10 months. U.S.

REITs raised \$15.1 billion, despite no IPO activity for the quarter. There were 24 secondary equity offerings and 14 secondary debt offerings.

In Europe, the momentum in core markets was put on pause during the first quarter as a result of the uncertainty surrounding a potential "Brexit." According to Lambert Smith Hampton, investment volume in central London offices totaled £2.2 billion—31% below the 10-year average and less than half of the £4.6 billion recorded in the previous quarter. Optimism remains strong for the medium and long term, however, as capital raising remains robust and investors continue to see value on the continent. Despite continued concerns about the economic growth outlook for China, Asian real estate funds are still attracting new capital flows, with 2015 totals surpassing 2014.

CMBS issuance reached \$19.3 billion, significantly down from the first quarter of 2015 (\$27.0 billion). This decline was widely credited to the instability in the broader financial market.

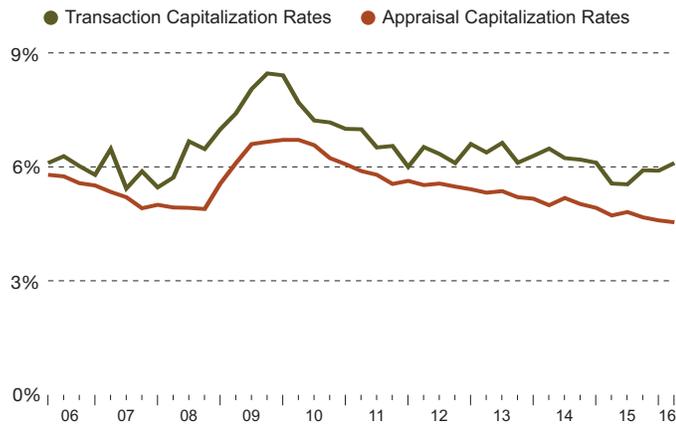
## Rolling One-Year Returns



\*Global REIT returns from 3Q96  
Source: Callan

## REAL ESTATE (Continued)

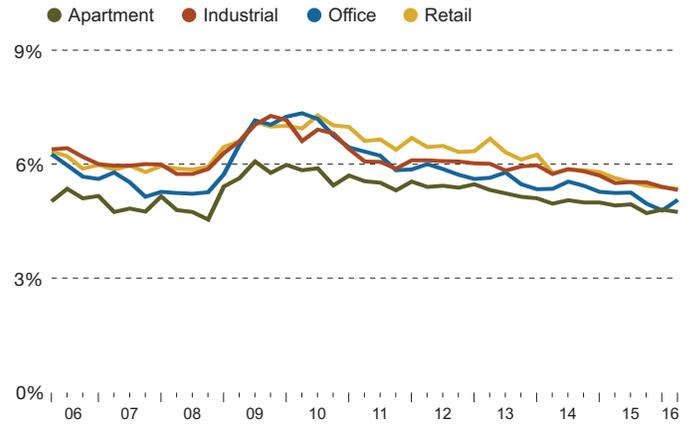
### NCREIF Transaction and Appraisal Capitalization Rates



Source: NCREIF

Note: Transaction capitalization rate is equal-weighted.

### NCREIF Capitalization Rates by Property Type



Source: NCREIF

Note: Capitalization rates are appraisal-based.

### Callan Database Median and Index Returns\* for Periods ended March 31, 2016

	Quarter	Year	3 Years	5 Years	10 Years	15 Years
<b>Private Real Estate</b>						
Real Estate Database (net of fees)	2.42	13.40	13.11	12.66	5.23	7.44
NCREIF Property	2.21	11.84	11.91	11.93	7.61	8.95
NFI-ODCE (value wtd. net)	1.95	12.62	12.59	12.20	5.38	6.93
<b>Public Real Estate</b>						
REIT Database	5.33	4.87	11.57	12.46	7.36	12.70
FTSE NAREIT Equity	6.00	4.43	10.47	11.89	6.56	11.57
<b>Global Real Estate</b>						
Global REIT Database	4.80	1.69	7.32	9.28	5.18	10.60
FTSE EPRA/NAREIT Developed REIT	5.43	1.27	6.31	8.47	4.58	9.97

\*Returns for less than one year are not annualized.

All REIT returns are reported gross in USD.

Sources: Callan, NAREIT, NCREIF, The FTSE Group. NCREIF statistics are the product of direct queries and may fluctuate over time.

# Drip, Drip, Drip

PRIVATE EQUITY | Gary Robertson

In fundraising, *Private Equity Analyst* reports that new first-quarter commitments totaled \$53.1 billion with 177 new partnerships formed. This represents a moderate start to the year. The number of funds raised increased 20% from 147 in the first quarter of 2015, but the dollar volume dropped 5% from \$56.2 billion. According to the National Venture Capital Association (NVCA), venture capital had the strongest fundraising quarter in 10 years.

According to *Buyouts* newsletter, the investment pace by funds into companies totaled 329 transactions, a 32% fall from 484 deals in the first quarter of 2015. The announced aggregate dollar volume was \$57.9 billion, up 56% from \$37.1 billion a year ago. The \$14.2 billion take-private of Keurig Green Mountain helped boost the announced value. Twelve deals with announced values of \$1 billion or more closed in the quarter.

According to the NVCA, new investments in venture capital companies totaled \$12.1 billion in 969 rounds of financing. The dollar volume and number of rounds decreased compared to the first quarter of 2015's \$13.6 billion and 1,063 rounds.

Regarding exits, *Buyouts* reports that steep declines occurred in the first quarter of 2016. There were 107 private M&A exits of buyout-backed companies, with 31 deals disclosing values totaling

## Funds Closed January 1 to March 31, 2016

Strategy	No. of Funds	Amt (\$mm)	Percent
Venture Capital	94	8,881	17%
Buyouts	60	38,237	72%
Subordinated Debt	1	158	0%
Distressed Debt	6	2,265	4%
Secondary and Other	1	94	0%
Fund-of-funds	15	3,513	7%
<b>Totals</b>	<b>177</b>	<b>53,147</b>	<b>100%</b>

Source: Private Equity Analyst

\$14.6 billion. The M&A exits count was down 27% year-over-year from 147, and the announced value declined 53% from \$30.9 billion. There were no buyout-backed IPOs in the first quarter.

Venture-backed M&A exits totaled 79 transactions, with 20 disclosing a total dollar volume of \$4.8 billion. The number of exits declined but the announced dollar volume increased from the first quarter of 2015, which had 97 sales with 18 announcing dollar values totaling \$2.8 billion. There were six VC-backed IPOs in the first quarter with a combined float of \$575 million. For comparison, the first quarter of 2015 had 17 IPOs and total issuance of \$1.4 billion.

Please see our upcoming issue of *Private Markets Trends* for more in-depth coverage.

## Private Equity Performance Database (%)

(Pooled Horizon IRRs through Sept. 30, 2015\*)

Strategy	3 Months	Year	3 Years	5 Years	10 Years	15 Years	20 Years
All Venture	2.1	24.2	15.2	14.9	9.8	9.5	27.4
Growth Equity	1.8	20.1	14.9	15.1	13.5	13.0	15.0
All Buyouts	-0.8	15.1	15.3	15.5	14.0	11.8	13.4
Mezzanine	2.6	12.5	13.1	12.1	11.0	8.3	10.2
Distressed	0.5	13.1	16.0	13.9	11.4	11.7	11.8
<b>All Private Equity</b>	<b>0.2</b>	<b>16.7</b>	<b>15.3</b>	<b>15.1</b>	<b>12.8</b>	<b>11.4</b>	<b>14.6</b>
S&P 500 Index	1.1	19.7	23.0	15.7	8.1	4.9	9.6

Private equity returns are net of fees.

Sources: Standard & Poor's, Thomson/Cambridge.

\*Most recent data available at time of publication.

Note: Transaction count and dollar volume figures across all private equity measures are preliminary figures and are subject to update in subsequent versions of Capital Market Review and other Callan publications.

# Market Tremors Panic Hedge Funds

HEDGE FUNDS | Jim McKee

Investor pessimism over softening global growth slammed stocks and commodities at the opening of 2016. The 10-Year Treasury yield fell 50 bps during the quarter as investors fled to the sidelines. Despite foreign central bankers pushing their funding rates into the negative, the dollar unexpectedly lost ground to the euro (+4.90%) and yen (+7.03%). After oil fell to new cyclical lows in February, talk of production freeze excited oil buyers. Similarly, chatter of China reopening the credit spigot to jumpstart its sagging growth revved markets. After initially falling 10% or more, stocks around the globe—particularly emerging markets—rebounded to finish mostly positive.

Illustrating performance of an unmanaged hedge fund universe, the **Credit Suisse Hedge Fund Index (CS HFI)** sank 2.20%, gross of implementation costs. Representing actual hedge fund portfolios, the median manager in the **Callan Hedge Fund-of-Funds Database** fell 2.99%, net of all fees.

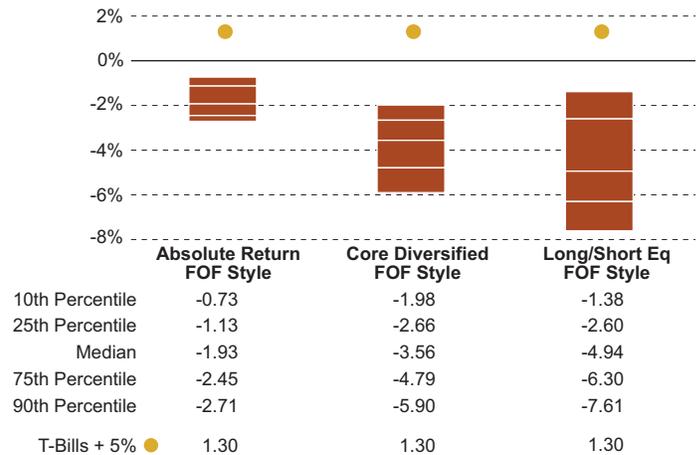
Within the CS HFI, *Managed Futures* (+4.35%) topped other strategies thanks to trend-following factors. Given the highly unusual incidence of crowded trades and related short squeezes in a de-risking market, *Event-Driven Multi-Strategy* (-5.58%) and *Long/Short Equity* (-3.85%) performed worst.

## Callan Database Median and Index Returns\* for Periods ended March 31, 2016

	Quarter	Year	3 Years	5 Years	10 Years	15 Years
<b>Hedge Fund-of-Funds Database</b>	<b>-2.99</b>	<b>-6.38</b>	<b>2.22</b>	<b>2.53</b>	<b>3.27</b>	<b>4.73</b>
CS Hedge Fund Index	-2.20	-5.25	2.33	2.65	4.19	5.80
CS Equity Market Neutral	-0.36	3.88	2.79	2.19	-1.82	1.10
CS Convertible Arbitrage	-0.39	-0.05	0.65	1.79	3.82	4.48
CS Fixed Income Arbitrage	-1.22	-0.49	1.76	4.11	3.51	4.26
CS Multi-Strategy	-0.58	0.24	5.72	5.77	5.53	6.71
CS Distressed	-1.95	-7.39	1.71	2.86	4.16	7.22
CS Risk Arbitrage	2.12	1.85	1.90	1.47	3.44	3.54
CS Event-Driven Multi-Strategy	-5.58	-13.72	-0.63	-0.71	4.00	5.85
CS Long/Short Equity	-3.85	-2.23	5.59	3.94	4.69	6.06
CS Dedicated Short Bias	-0.90	5.97	-7.71	-8.79	-8.43	-7.89
CS Global Macro	-2.23	-6.25	1.03	3.10	5.96	8.37
CS Managed Futures	4.35	-3.67	4.77	2.30	4.23	5.35
CS Emerging Markets	-1.23	-2.77	1.37	1.96	4.15	7.97

\*Returns less than one year are not annualized. Sources: Callan, Credit Suisse.

## Callan Style Group Quarterly Returns



Sources: Callan, Merrill Lynch

Market exposures did not seem to help in the first quarter within Callan's Hedge Fund-of-Funds Database. Despite mildly positive equity tailwinds, the median *Callan Long/Short Equity FOF* (-4.94%) trailed the *Callan Absolute Return FOF* (-1.93%). With diversifying exposures to both non-directional and directional styles, the *Core Diversified FOF* dropped 3.56%.

# Strong Quarter Can't Save 2015

DEFINED CONTRIBUTION | Tom Szkwarla

The Callan DC Index™ finished the year with a strong 3.50% gain in the fourth quarter. The rebound helped offset third-quarter losses, which were among the worst ever in the Index's 10-year history. This strong finish did not keep the DC Index out of negative territory for the year; a 2015 calendar year return of -0.34% is the weakest since 2011. 2016 marks the 10th anniversary of the Callan DC Index. Since inception, the Index's annualized return is 5.18%, compared to the Age 45 Target Date return of 5.25%.

The Age 45 Target Date Fund—the average of target date funds that would be selected by participants age 45 and retiring at age 65—beat the DC Index for the quarter, but underperformed it by 1.03% for the year. Both results were driven by the fact that the Age 45 Target Date Fund has a higher allocation to equities than the average DC plan: 74% for the Age 45 Target Date Fund versus 66% for the average DC plan.

The year was noteworthy for target date funds, which overtook large cap equity as the single-largest holding in the typical DC plan. As usual, target date funds absorbed a majority of cash flows during the quarter, taking in more than 80 cents of every dollar. Stable value funds continued net inflows for the third consecutive quarter. In contrast, many asset classes saw net outflows—U.S. equity (both large and small/mid cap) and company stock in particular.

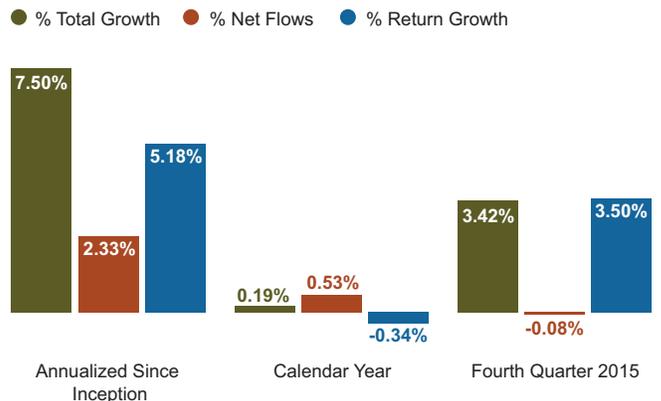
Fourth quarter turnover (i.e., net transfer activity) in the DC Index was 0.46%. Turnover has been steadily increasing since the beginning of the year, but remains below the historical average of 0.65%.

*The Callan DC Index is an equally weighted index tracking the cash flows and performance of nearly 90 plans, representing more than one million DC participants and over \$135 billion in assets. The Index is updated quarterly and is available on Callan's website, as is the quarterly DC Observer newsletter.*

## Investment Performance\*



## Growth Sources\*



## Net Cash Flow Analysis (Fourth Quarter 2015)\* (Top Two and Bottom Two Asset Gatherers)

Asset Class	Flows as % of Total Net Flows
Target Date Funds	81.15%
Stable Value	7.15%
U.S./Global Balanced	-16.88%
U.S. Large Cap	-28.91%
<b>Total Turnover**</b>	<b>0.46%</b>

Source: Callan DC Index  
Data provided here is the most recent available at time of publication.

\* DC Index inception date is January 2006. DB plan performance is gross of fees.

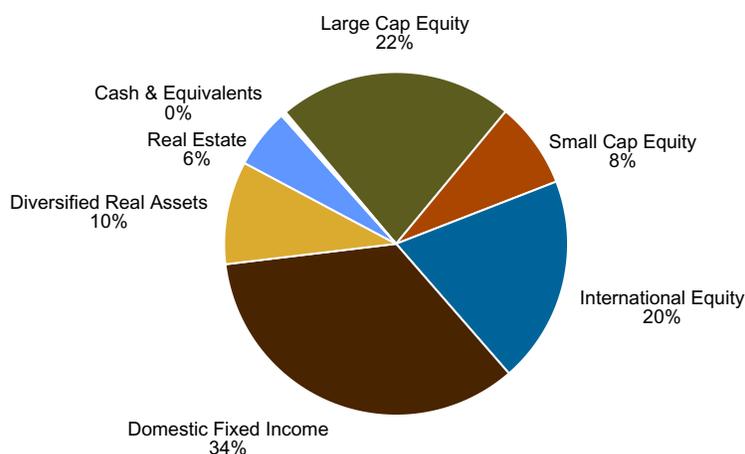
\*\*Total Index "turnover" measures the percentage of total invested assets (transfers only, excluding contributions and withdrawals) that moved between asset classes.



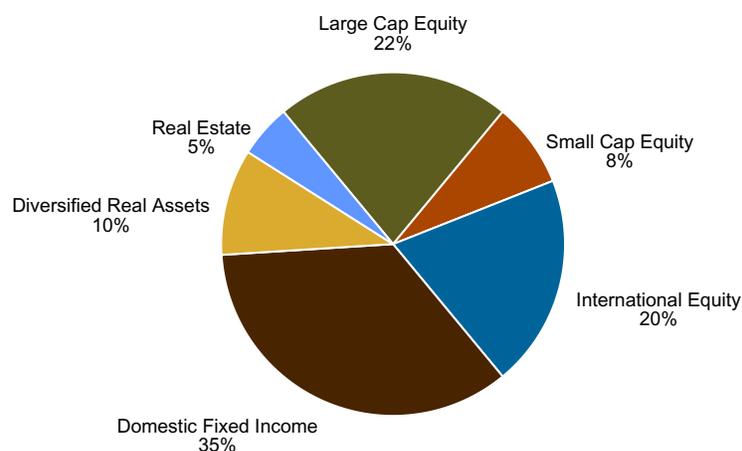
## Actual vs Target Asset Allocation As of March 31, 2016

The first chart below shows the Fund's asset allocation as of March 31, 2016. The second chart shows the Fund's target asset allocation as outlined in the investment policy statement.

### Actual Asset Allocation



### Target Asset Allocation



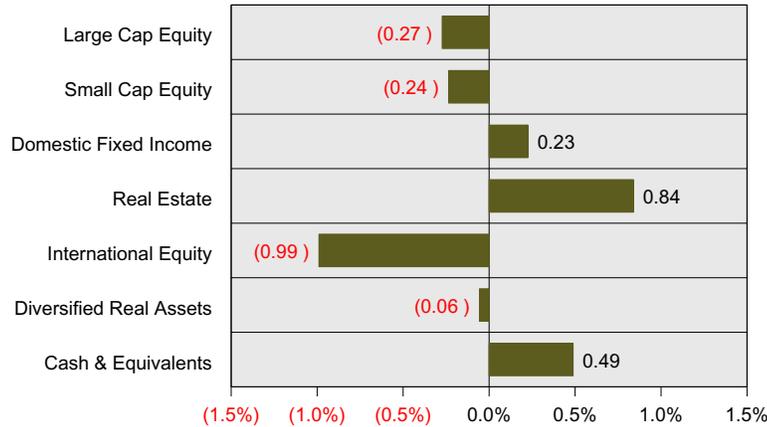
Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
Large Cap Equity	813,339	22.1%	22.0%	0.1%	5,121
Small Cap Equity	298,351	8.1%	8.0%	0.1%	4,454
International Equity	718,092	19.5%	20.0%	(0.5%)	(16,652)
Domestic Fixed Income	1,266,162	34.5%	35.0%	(0.5%)	(19,639)
Diversified Real Assets	355,004	9.7%	10.0%	(0.3%)	(12,368)
Real Estate	207,321	5.6%	5.0%	0.6%	23,635
Cash & Equivalents	15,449	0.4%	0.0%	0.4%	15,449
<b>Total</b>	<b>3,673,717</b>	<b>100.0%</b>	<b>100.0%</b>		

\* Current Quarter Target = 35.0% Barclays Aggregate Index, 22.0% Russell 1000 Index, 20.0% MSCI EAFE, 10.0% NDSIB Legacy DRA Weighted Benchmark, 8.0% Russell 2000 Index and 5.0% NCREIF Total Index.

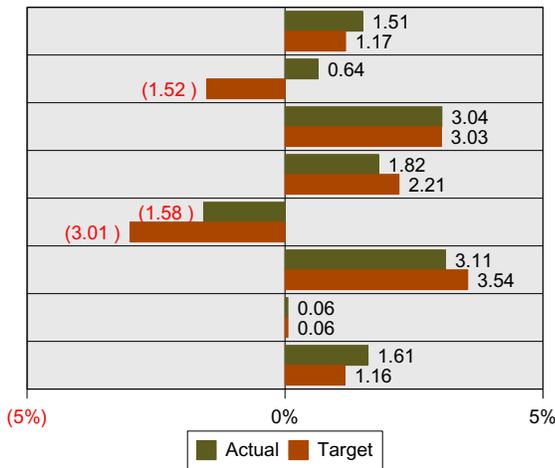
## Quarterly Total Fund Relative Attribution - March 31, 2016

The following analysis approaches Total Fund Attribution from the perspective of relative return. Relative return attribution separates and quantifies the sources of total fund excess return relative to its target. This excess return is separated into two relative attribution effects: Asset Allocation Effect and Manager Selection Effect. The Asset Allocation Effect represents the excess return due to the actual total fund asset allocation differing from the target asset allocation. Manager Selection Effect represents the total fund impact of the individual managers excess returns relative to their benchmarks.

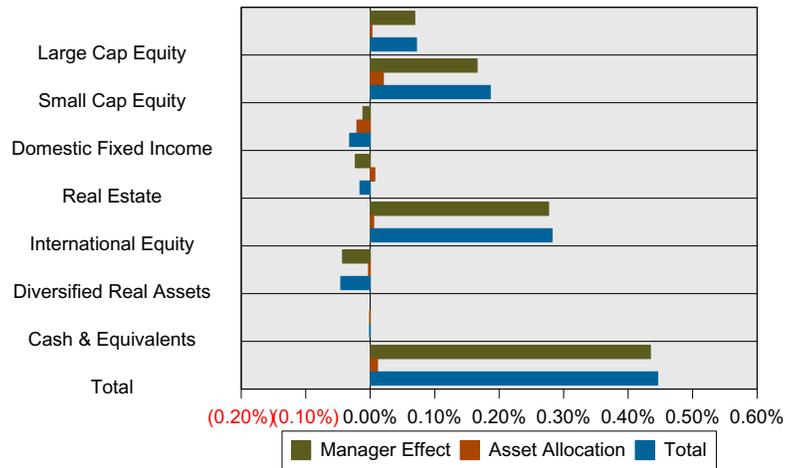
### Asset Class Under or Overweighting



### Actual vs Target Returns



### Relative Attribution by Asset Class



### Relative Attribution Effects for Quarter ended March 31, 2016

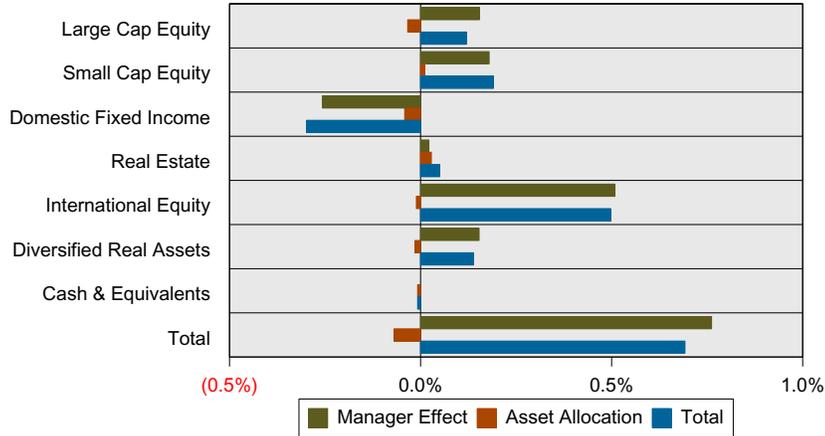
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap Equity	22%	22%	1.51%	1.17%	0.07%	0.00%	0.07%
Small Cap Equity	8%	8%	0.64%	(1.52%)	0.17%	0.02%	0.19%
Domestic Fixed Income	35%	35%	3.04%	3.03%	(0.01%)	(0.02%)	(0.03%)
Real Estate	6%	5%	1.82%	2.21%	(0.02%)	0.01%	(0.02%)
International Equity	19%	20%	(1.58%)	(3.01%)	0.28%	0.01%	0.28%
Diversified Real Assets	10%	10%	3.11%	3.54%	(0.04%)	(0.00%)	(0.05%)
Cash & Equivalents	0%	0%	0.06%	0.06%	0.00%	(0.00%)	(0.00%)
<b>Total</b>			<b>1.61%</b>	<b>1.16%</b>	<b>0.43%</b>	<b>0.01%</b>	<b>0.45%</b>

\* Current Quarter Target = 35.0% Barclays Aggregate Index, 22.0% Russell 1000 Index, 20.0% MSCI EAFE, 10.0% NDSIB Legacy DRA Weighted Benchmark, 8.0% Russell 2000 Index and 5.0% NCREIF Total Index.

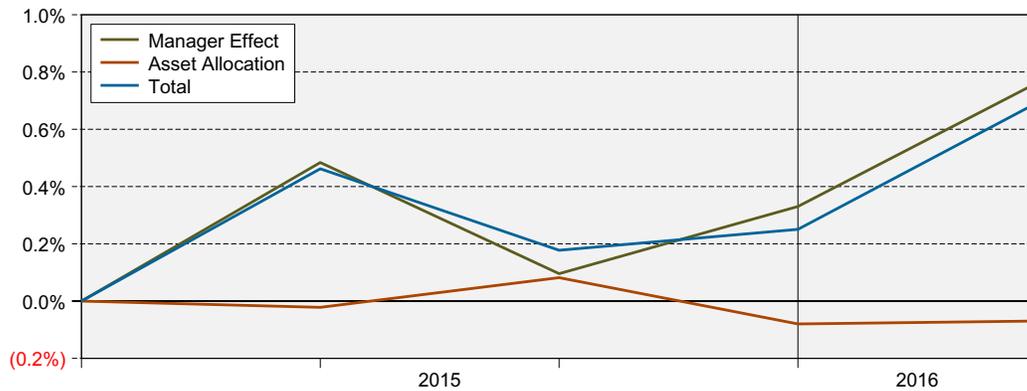
## Cumulative Total Fund Relative Attribution - March 31, 2016

The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

### One Year Relative Attribution Effects



### Cumulative Relative Attribution Effects



### One Year Relative Attribution Effects

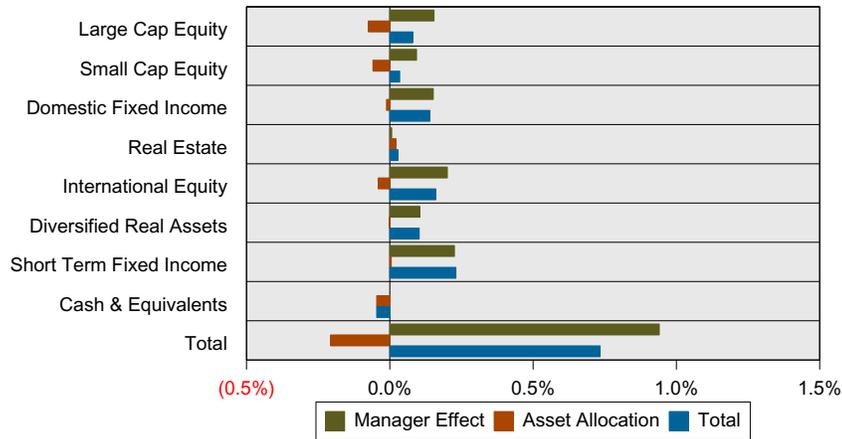
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap Equity	22%	22%	1.24%	0.50%	0.15%	(0.03%)	0.12%
Small Cap Equity	8%	8%	(7.54%)	(9.76%)	0.18%	0.01%	0.19%
Domestic Fixed Income	35%	35%	1.28%	1.96%	(0.26%)	(0.04%)	(0.30%)
Real Estate	5%	5%	12.40%	11.84%	0.02%	0.03%	0.05%
International Equity	20%	20%	(5.80%)	(8.27%)	0.51%	(0.01%)	0.50%
Diversified Real Assets	10%	10%	2.38%	0.79%	0.15%	(0.01%)	0.14%
Cash & Equivalents	0%	0%	0.06%	0.06%	0.00%	(0.01%)	(0.01%)
<b>Total</b>			<b>(0.09%)</b>	<b>(0.79%)</b>	<b>+ 0.76%</b>	<b>+ (0.07%)</b>	<b>0.69%</b>

\* Current Quarter Target = 35.0% Barclays Aggregate Index, 22.0% Russell 1000 Index, 20.0% MSCI EAFE, 10.0% NDSIB Legacy DRA Weighted Benchmark, 8.0% Russell 2000 Index and 5.0% NCREIF Total Index.

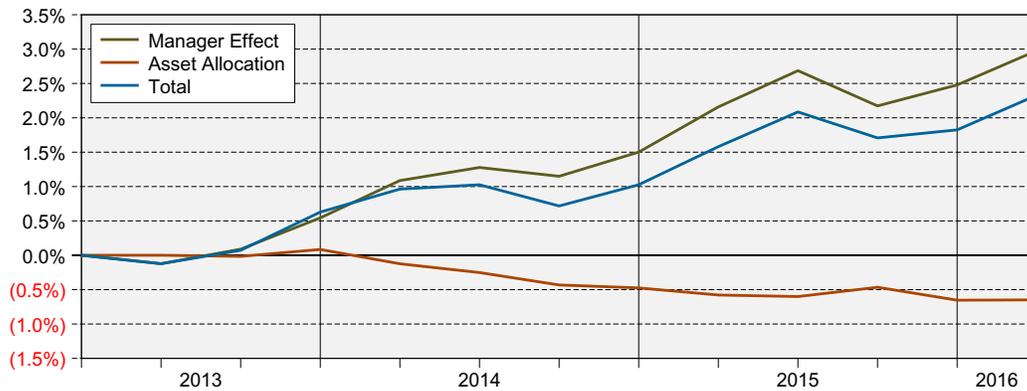
## Cumulative Total Fund Relative Attribution - March 31, 2016

The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

### Three Year Annualized Relative Attribution Effects



### Cumulative Relative Attribution Effects



### Three Year Annualized Relative Attribution Effects

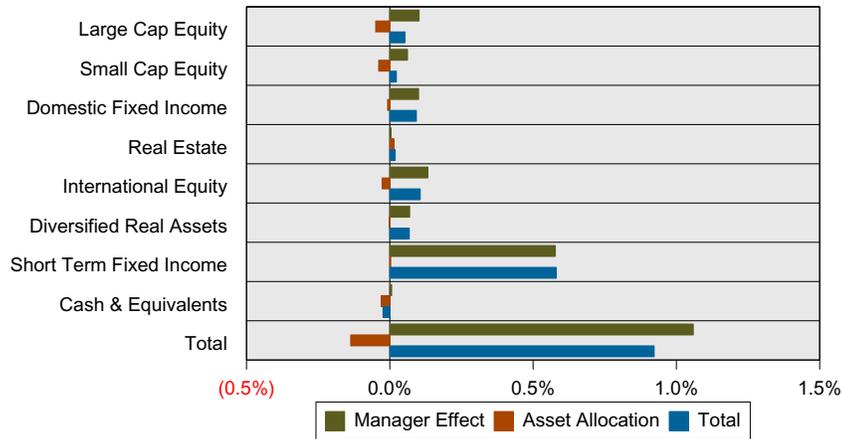
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap Equity	16%	16%	-	-	0.15%	(0.07%)	0.08%
Small Cap Equity	6%	6%	-	-	0.09%	(0.06%)	0.03%
Domestic Fixed Income	24%	24%	-	-	0.15%	(0.01%)	0.14%
Real Estate	4%	4%	-	-	0.01%	0.02%	0.03%
International Equity	14%	14%	-	-	0.20%	(0.04%)	0.16%
Diversified Real Assets	5%	5%	-	-	0.10%	(0.00%)	0.10%
Short Term Fixed Income	31%	32%	-	-	0.23%	0.01%	0.23%
Cash & Equivalents	1%	0%	0.04%	0.04%	0.00%	(0.05%)	(0.05%)
<b>Total</b>			<b>3.21%</b>	<b>2.48%</b>	<b>+ 0.94%</b>	<b>+ (0.21%)</b>	<b>0.73%</b>

\* Current Quarter Target = 35.0% Barclays Aggregate Index, 22.0% Russell 1000 Index, 20.0% MSCI EAFE, 10.0% NDSIB Legacy DRA Weighted Benchmark, 8.0% Russell 2000 Index and 5.0% NCREIF Total Index.

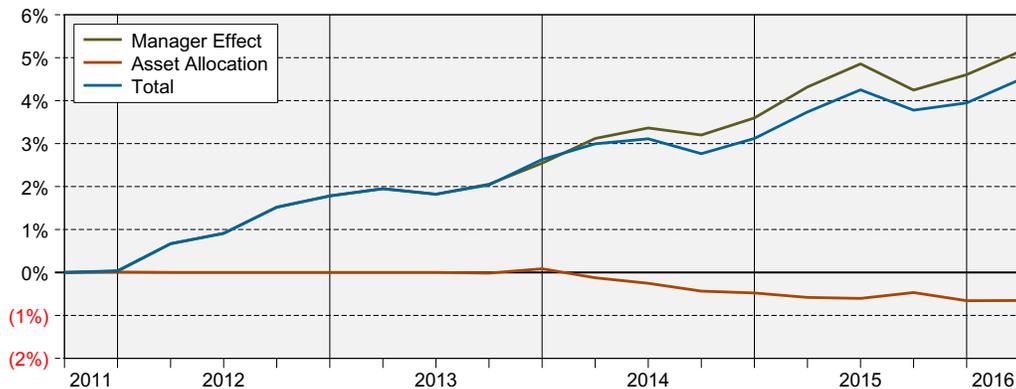
## Cumulative Total Fund Relative Attribution - March 31, 2016

The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

### Four and One-Half Year Annualized Relative Attribution Effects



### Cumulative Relative Attribution Effects



### Four and One-Half Year Annualized Relative Attribution Effects

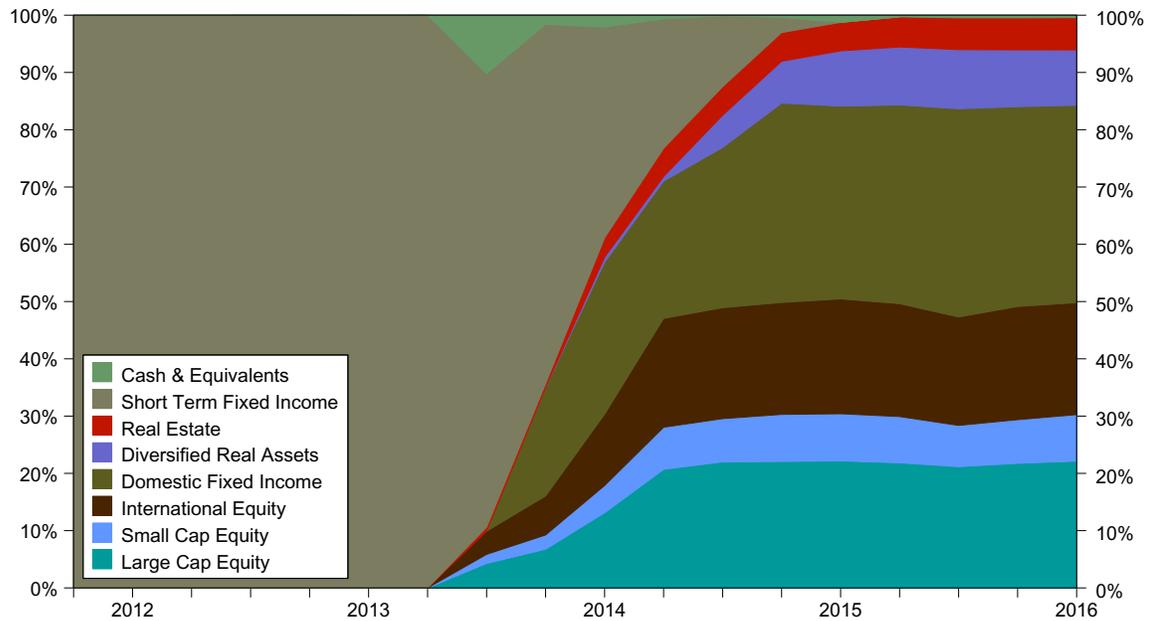
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap Equity	10%	10%	-	-	0.10%	(0.05%)	0.05%
Small Cap Equity	4%	4%	-	-	0.06%	(0.04%)	0.02%
Domestic Fixed Income	16%	16%	-	-	0.10%	(0.01%)	0.09%
Real Estate	3%	2%	-	-	0.00%	0.01%	0.02%
International Equity	9%	10%	-	-	0.13%	(0.03%)	0.11%
Diversified Real Assets	3%	3%	-	-	0.07%	(0.00%)	0.07%
Short Term Fixed Income	50%	51%	-	-	0.58%	0.00%	0.58%
Cash & Equivalents	5%	4%	0.10%	0.09%	0.01%	(0.03%)	(0.02%)
<b>Total</b>					<b>2.72%</b>	<b>= 1.80% + 1.06% + (0.14%)</b>	<b>0.92%</b>

\* Current Quarter Target = 35.0% Barclays Aggregate Index, 22.0% Russell 1000 Index, 20.0% MSCI EAFE, 10.0% NDSIB Legacy DRA Weighted Benchmark, 8.0% Russell 2000 Index and 5.0% NCREIF Total Index.

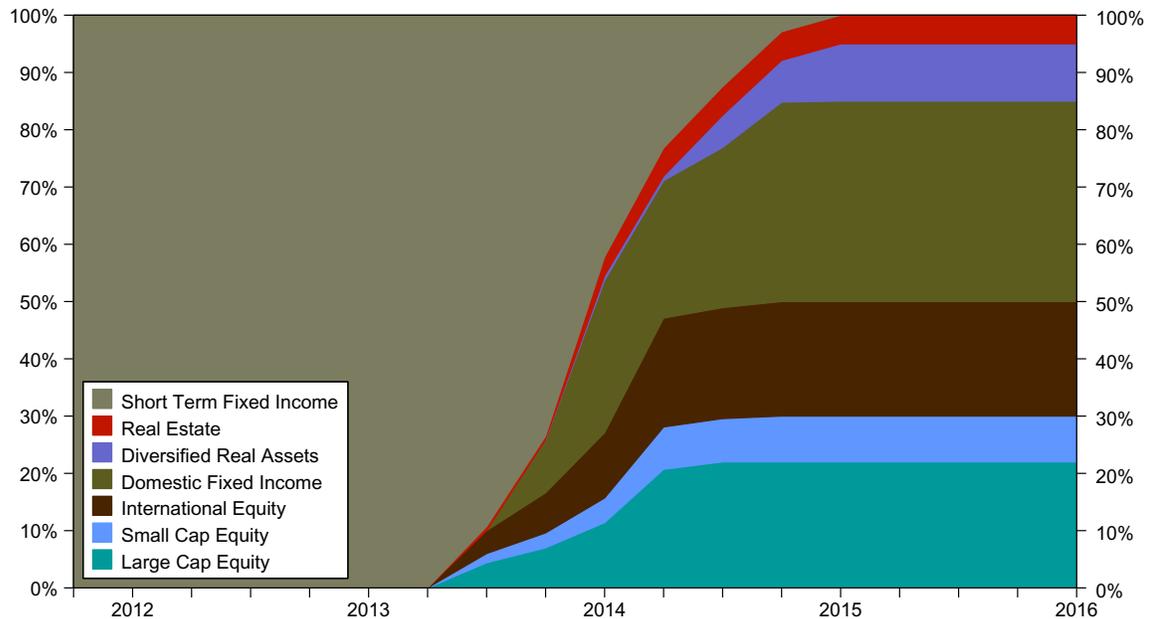
## Actual vs Target Historical Asset Allocation

The Historical asset allocation for a fund is by far the largest factor explaining its performance. The charts below show the fund's historical actual asset allocation, and the fund's historical target asset allocation.

### Actual Historical Asset Allocation



### Target Historical Asset Allocation

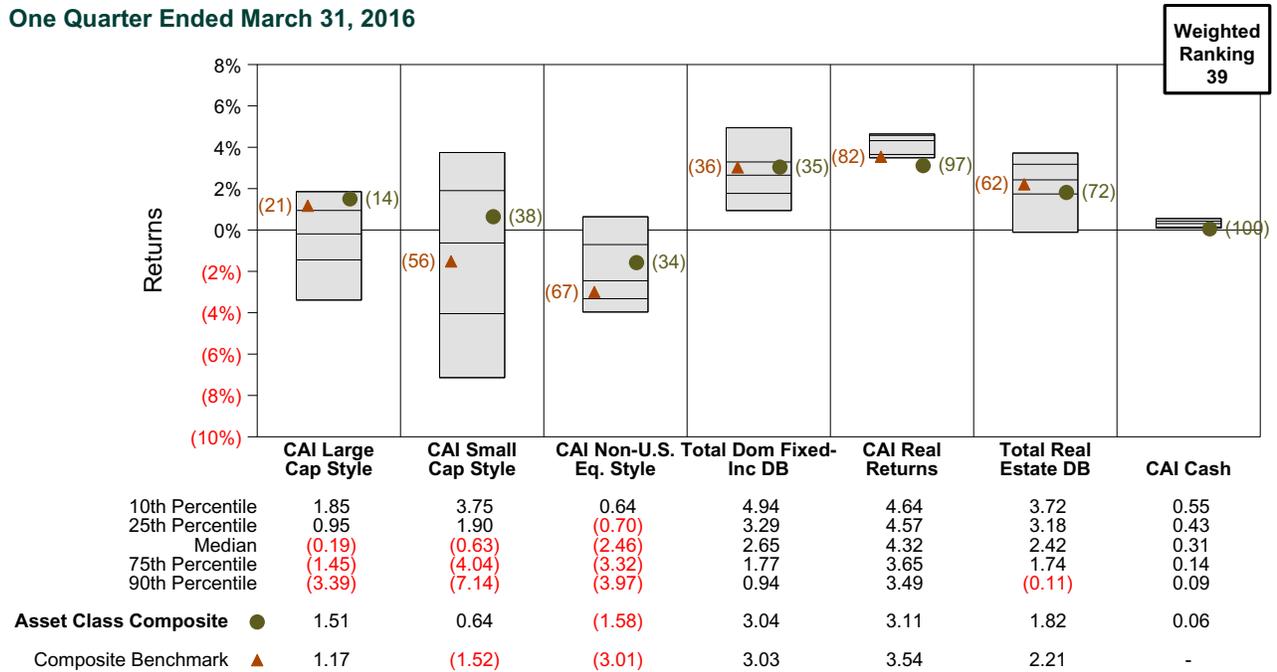


\* Current Quarter Target = 35.0% Barclays Aggregate Index, 22.0% Russell 1000 Index, 20.0% MSCI EAFE, 10.0% NDSIB Legacy DRA Weighted Benchmark, 8.0% Russell 2000 Index and 5.0% NCREIF Total Index.

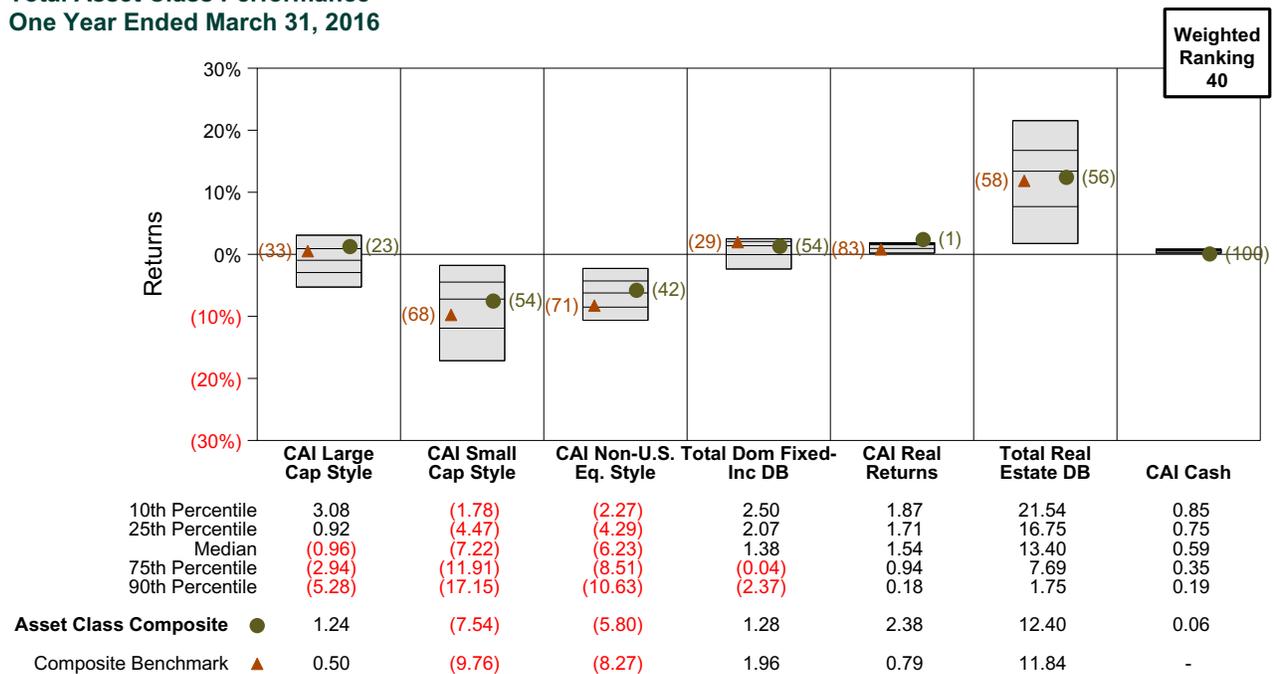
## Asset Class Rankings

The charts below show the rankings of each asset class component of the Total Fund relative to appropriate comparative databases. In the upper right corner of each graph is the weighted average of the rankings across the different asset classes. The weights of the fund's actual asset allocation are used to make this calculation. The weighted average ranking can be viewed as a measure of the fund's overall success in picking managers and structuring asset classes.

### Total Asset Class Performance One Quarter Ended March 31, 2016



### Total Asset Class Performance One Year Ended March 31, 2016



\* Current Quarter Target = 35.0% Barclays Aggregate Index, 22.0% Russell 1000 Index, 20.0% MSCI EAFE, 10.0% NDSIB Legacy DRA Weighted Benchmark, 8.0% Russell 2000 Index and 5.0% NCREIF Total Index.

## Asset Class Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of March 31, 2016, with the distribution as of December 31, 2015. The change in asset distribution is broken down into the dollar change due to Net New Investment and the dollar change due to Investment Return.

### Asset Class Allocation

	March 31, 2016		Net New Inv.	Inv. Return	December 31, 2015	
	Market Value	Weight			Market Value	Weight
<b>Domestic Equity</b>	<b>\$1,111,690,341</b>	<b>30.26%</b>	<b>\$58,583,238</b>	<b>\$18,354,733</b>	<b>\$1,034,752,370</b>	<b>29.38%</b>
<b>Large Cap Equity</b>	<b>\$813,339,179</b>	<b>22.14%</b>	<b>\$33,157,164</b>	<b>\$14,196,181</b>	<b>\$765,985,833</b>	<b>21.75%</b>
L.A. Capital Enhanced	163,074,445	4.44%	6,444,581	3,963,516	152,666,348	4.33%
L.A. Capital Large Cap Growth	246,773,667	6.72%	8,879,542	5,724,257	232,169,867	6.59%
Parametric Clifton Large Cap	162,258,139	4.42%	6,000,000	3,065,022	153,193,117	4.35%
LSV Large Cap Value	241,232,928	6.57%	11,833,041	1,443,385	227,956,501	6.47%
<b>Small Cap Equity</b>	<b>\$298,351,163</b>	<b>8.12%</b>	<b>\$25,426,074</b>	<b>\$4,158,552</b>	<b>\$268,766,536</b>	<b>7.63%</b>
Parametric Clifton SmallCap	160,881,430	4.38%	0	(1,518,349)	162,399,779	4.61%
PIMCO RAE	137,469,733	3.74%	25,426,074	5,676,901	106,366,757	3.02%
<b>International Equity</b>	<b>\$718,091,837</b>	<b>19.55%</b>	<b>\$32,464,962</b>	<b>\$(10,219,698)</b>	<b>\$695,846,572</b>	<b>19.75%</b>
Capital Group	262,835,185	7.15%	(258,612)	(1,913,369)	265,007,166	7.52%
DFA Intl SmallCap Value	70,267,128	1.91%	0	(573,541)	70,840,669	2.01%
LSV Intl Value	314,550,448	8.56%	32,723,574	(6,290,925)	288,117,799	8.18%
Vanguard Intl Explorer Fund	70,439,075	1.92%	0	(1,441,863)	71,880,938	2.04%
<b>Domestic Fixed Income</b>	<b>\$1,266,161,631</b>	<b>34.47%</b>	<b>\$(447,080)</b>	<b>\$37,365,549</b>	<b>\$1,229,243,162</b>	<b>34.90%</b>
Declaration Total Return	101,097,015	2.75%	(36,241)	199,380	100,933,876	2.87%
Prudential	140,972,022	3.84%	(93,190)	4,856,714	136,208,497	3.87%
SSgA US Govt Credit Bd Idx	177,414,470	4.83%	(14,918)	5,946,186	171,483,201	4.87%
Wells Capital	391,563,219	10.66%	(171,237)	14,105,222	377,629,234	10.72%
Western Asset Management	393,153,177	10.70%	(131,495)	11,522,150	381,762,522	10.84%
Pooled Fixed Income(1)	61,961,730	1.69%	0	735,898	61,225,832	1.74%
<b>Diversified Real Assets</b>	<b>\$355,003,627</b>	<b>9.66%</b>	<b>\$(5,145,382)</b>	<b>\$10,798,581</b>	<b>\$349,350,428</b>	<b>9.92%</b>
Western TIPS	261,414,825	7.12%	(86,887)	10,926,155	250,575,556	7.11%
JP Morgan Infrastructure	79,056,295	2.15%	(221,061)	266,874	79,010,482	2.24%
Grosvenor Cust. Infrastructure	14,532,507	0.40%	(4,837,434)	(394,448)	19,764,389	0.56%
<b>Real Estate</b>	<b>\$207,321,154</b>	<b>5.64%</b>	<b>\$6,608,968</b>	<b>\$3,693,613</b>	<b>\$197,018,572</b>	<b>5.59%</b>
Invesco Core Real Estate	113,455,613	3.09%	6,901,101	1,648,507	104,906,004	2.98%
JP Morgan RE Inc & Growth	93,865,541	2.56%	(292,133)	2,045,106	92,112,568	2.61%
<b>Cash &amp; Equivalents</b>	<b>\$15,448,681</b>	<b>0.42%</b>	<b>\$(825,497)</b>	<b>\$9,146</b>	<b>\$16,265,032</b>	<b>0.46%</b>
<b>Securities Lending Income</b>	<b>\$0</b>	<b>0.00%</b>	<b>\$(127,361)</b>	<b>\$127,361</b>	<b>-</b>	<b>-</b>
<b>Total Fund</b>	<b>\$3,673,717,271</b>	<b>100.0%</b>	<b>\$91,111,848</b>	<b>\$60,129,287</b>	<b>\$3,522,476,136</b>	<b>100.0%</b>

(1) Comprised of PIMCO DiSCO II and PIMCO Bravo II.

## Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended March 31, 2016. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

### Returns for Periods Ended March 31, 2016

	Last Quarter	Last Year	Last 3 Years	Last 4-1/2 Years
<b>Domestic Equity</b>				
Gross	1.30%	(1.12%)	-	-
Net	1.26%	(1.37%)	-	-
<b>Large Cap Equity</b>				
Gross	1.51%	1.24%	-	-
Net	1.46%	1.05%	-	-
Russell 1000 Index	1.17%	0.50%	11.52%	16.70%
L.A. Capital Enhanced - Gross	2.28%	2.50%	-	-
L.A. Capital Enhanced - Net	2.24%	2.35%	-	-
Russell 1000 Index	1.17%	0.50%	11.52%	16.70%
L.A. Capital LargeCap Growth - Gross	2.14%	3.62%	-	-
L.A. Capital LargeCap Growth - Net	2.09%	3.40%	-	-
Russell 1000 Growth Index	0.74%	2.52%	13.61%	17.27%
Parametric Clifton Large Cap - Gross	1.74%	2.54%	-	-
Parametric Clifton Large Cap - Net	1.74%	2.47%	-	-
S&P 500 Index	1.35%	1.78%	11.82%	16.73%
LSV Large Cap Value - Gross	0.14%	(2.82%)	-	-
LSV Large Cap Value - Net	0.06%	(3.10%)	-	-
Russell 1000 Value Index	1.64%	(1.54%)	9.38%	16.04%
<b>Small Cap Equity</b>				
Gross	0.64%	(7.54%)	-	-
Net	0.61%	(7.93%)	-	-
Russell 2000 Index	(1.52%)	(9.76%)	6.84%	14.53%
Parametric Clifton Small Cap - Gross	(0.93%)	(8.58%)	-	-
Parametric Clifton Small Cap - Net	(0.93%)	(9.02%)	-	-
Russell 2000 Index	(1.52%)	(9.76%)	6.84%	14.53%
PIMCO RAE - Gross	2.60%	(6.36%)	-	-
PIMCO RAE - Net	2.52%	(6.63%)	-	-
Russell 2000 Index	(1.52%)	(9.76%)	6.84%	14.53%
<b>International Equity</b>				
Gross	(1.58%)	(5.80%)	-	-
Net	(1.66%)	(6.09%)	-	-
MSCI EAFE Index	(3.01%)	(8.27%)	2.23%	7.10%
Capital Group - Gross	(0.71%)	(8.05%)	-	-
Capital Group - Net	(0.82%)	(8.40%)	-	-
MSCI EAFE Index	(3.01%)	(8.27%)	2.23%	7.10%
DFA Intl Small Cap Value	(0.81%)	(1.46%)	-	-
World ex US SC Va	1.18%	(1.39%)	4.36%	8.99%
LSV Intl Value - Gross	(2.32%)	(5.71%)	-	-
LSV Intl Value - Net	(2.42%)	(6.08%)	-	-
MSCI EAFE Index	(3.01%)	(8.27%)	2.23%	7.10%
Vanguard Intl Explorer Fund	(2.01%)	(0.80%)	-	-
BMI, EPAC, <\$2 B	0.08%	3.03%	6.29%	9.66%

## Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended March 31, 2016. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

### Returns for Periods Ended March 31, 2016

	Last Quarter	Last Year	Last 3 Years	Last 4-1/2 Years
<b>Domestic Fixed Income</b>				
Gross	3.04%	1.28%	-	-
Net	3.01%	1.15%	-	-
Barclays Aggregate Index	3.03%	1.96%	2.50%	2.82%
Declaration Total Return - Net	0.20%	0.64%	-	-
Libor-3 Month	0.16%	0.40%	0.30%	0.34%
Prudential - Gross	3.57%	2.02%	-	-
Prudential - Net	3.50%	1.76%	-	-
Barclays Aggregate Index	3.03%	1.96%	2.50%	2.82%
Wells Capital - Gross	3.74%	(0.28%)	-	-
Wells Capital - Net	3.69%	(0.46%)	-	-
Barclays Baa Credit 3% In	4.32%	(0.84%)	2.54%	4.71%
Western Asset - Gross	3.02%	1.86%	-	-
Western Asset - Net	2.98%	1.72%	-	-
Barclays Aggregate Index	3.03%	1.96%	2.50%	2.82%
SSgA US Govt Credit Bd Idx - Gross	3.47%	1.75%	-	-
SSgA US Govt Credit Bd Idx - Net	3.46%	1.72%	-	-
Barclays Govt/Credit Bd	3.47%	1.75%	2.42%	2.90%
Pooled Fixed Income - Net(1)	1.20%	5.71%	-	-
Barclays Aggregate Index	3.03%	1.96%	2.50%	2.82%
<b>Diversified Real Assets</b>				
Gross	3.11%	2.38%	-	-
Net	3.03%	2.12%	-	-
Weighted Benchmark	3.54%	0.79%	-	-
Western Asset TIPS - Gross	4.36%	0.99%	-	-
Western Asset TIPS - Net	4.33%	0.86%	-	-
Barclays Gbl Inftn-Lnked	4.70%	1.04%	0.18%	2.19%
JP Morgan Infrastructure - Gross	0.34%	6.26%	-	-
JP Morgan Infrastructure - Net	0.10%	5.55%	-	-
CPI-W	0.61%	0.50%	0.42%	0.83%
Grosvenor Cust. Infrastructure - Net	(2.25%)	(0.84%)	-	-
CPI-W	0.61%	0.50%	0.42%	0.83%
<b>Real Estate</b>				
Gross	1.82%	12.40%	-	-
Net	1.65%	11.81%	-	-
NCREIF Total Index	2.21%	11.84%	11.91%	11.56%
Invesco Core Real Estate - Gross	1.47%	12.70%	-	-
Invesco Core Real Estate - Net	1.38%	12.33%	-	-
NCREIF Total Index	2.21%	11.84%	11.91%	11.56%
JP Morgan RE Inc & Growth - Gross	2.22%	12.12%	-	-
JP Morgan RE Inc & Growth - Net	1.96%	11.30%	-	-
NCREIF Total Index	2.21%	11.84%	11.91%	11.56%
<b>Cash &amp; Equivalents - Net</b>				
90 Day Treasury Bills	0.06%	0.06%	0.04%	0.10%
	0.07%	0.12%	0.07%	0.08%
<b>Total Fund</b>				
Gross	1.61%	(0.09%)	3.21%	2.72%
Net	1.55%	(0.33%)	3.01%	2.57%
Target*	1.16%	(0.79%)	2.48%	1.80%

\* Current Quarter Target = 35.0% Barclays Aggregate Index, 22.0% Russell 1000 Index, 20.0% MSCI EAFE, 10.0% NDSIB Legacy DRA Weighted Benchmark, 8.0% Russell 2000 Index and 5.0% NCREIF Total Index.  
(1) Comprised of PIMCO DiSCO II and PIMCO Bravo II.



# Parametric Clifton Large Cap Period Ended March 31, 2016

## Investment Philosophy

Parametric Clifton utilizes equity futures to gain benchmark exposure in constructing the portfolio it believes provides the greatest likelihood of outperforming the index. In this construction the underlying cash portfolio is invested in a liquid, high quality short duration fixed income portfolio. Over market cycles excess return generated by the short duration portfolio, when added to the performance of futures is expected to allow the strategy to achieve 0.50% to 1.00% of gross excess annual performance.

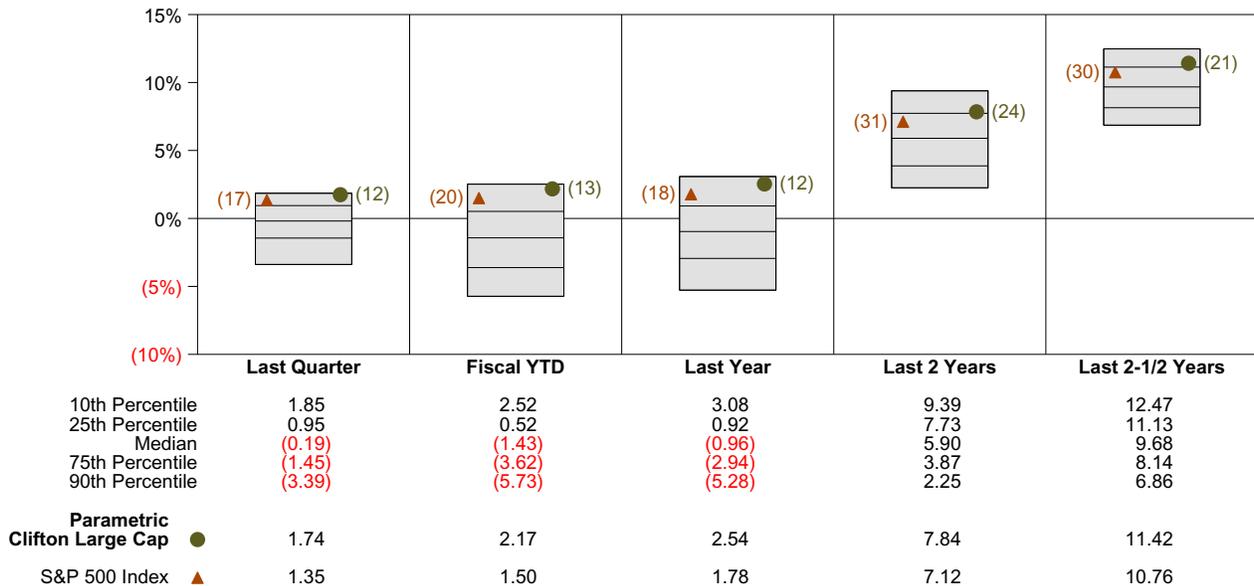
## Quarterly Summary and Highlights

- Parametric Clifton Large Cap's portfolio posted a 1.74% return for the quarter placing it in the 12 percentile of the CAI Large Capitalization Style group for the quarter and in the 12 percentile for the last year.
- Parametric Clifton Large Cap's portfolio outperformed the S&P 500 Index by 0.40% for the quarter and outperformed the S&P 500 Index for the year by 0.75%.

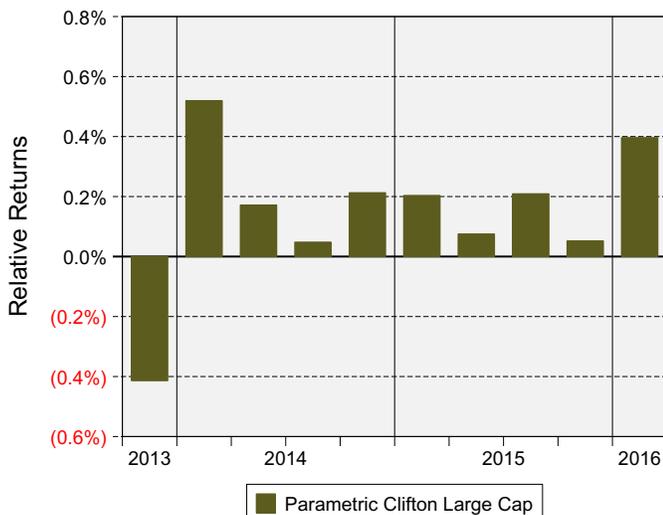
## Quarterly Asset Growth

Beginning Market Value	\$153,193,117
Net New Investment	\$6,000,000
Investment Gains/(Losses)	\$3,065,022
Ending Market Value	\$162,258,139

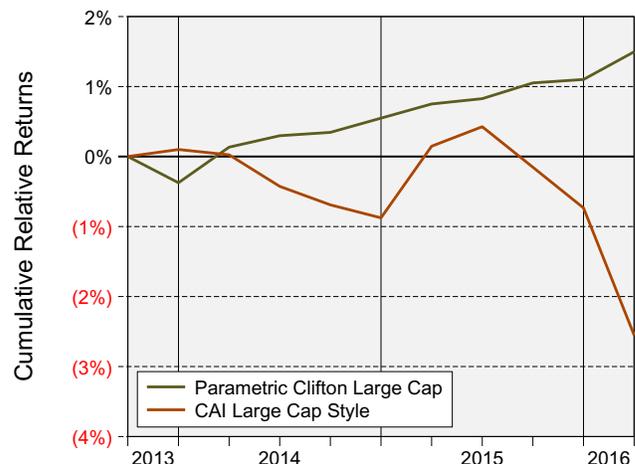
## Performance vs CAI Large Capitalization Style (Gross)



## Relative Return vs S&P 500 Index



## Cumulative Returns vs S&P 500 Index



# L.A. Capital Period Ended March 31, 2016

## Investment Philosophy

The LA Capital Structured portfolio is a large growth portfolio benchmarked to the Russell 1000 Growth Index. It is an active assignment meaning that it targets a 2% alpha and constrains its risk budget (tracking error) to 4% relative to the benchmark. LA Capital believes that investment results are driven by Investor Preferences and thus recognize that when preferences shift a different posture related to that factor is warranted.

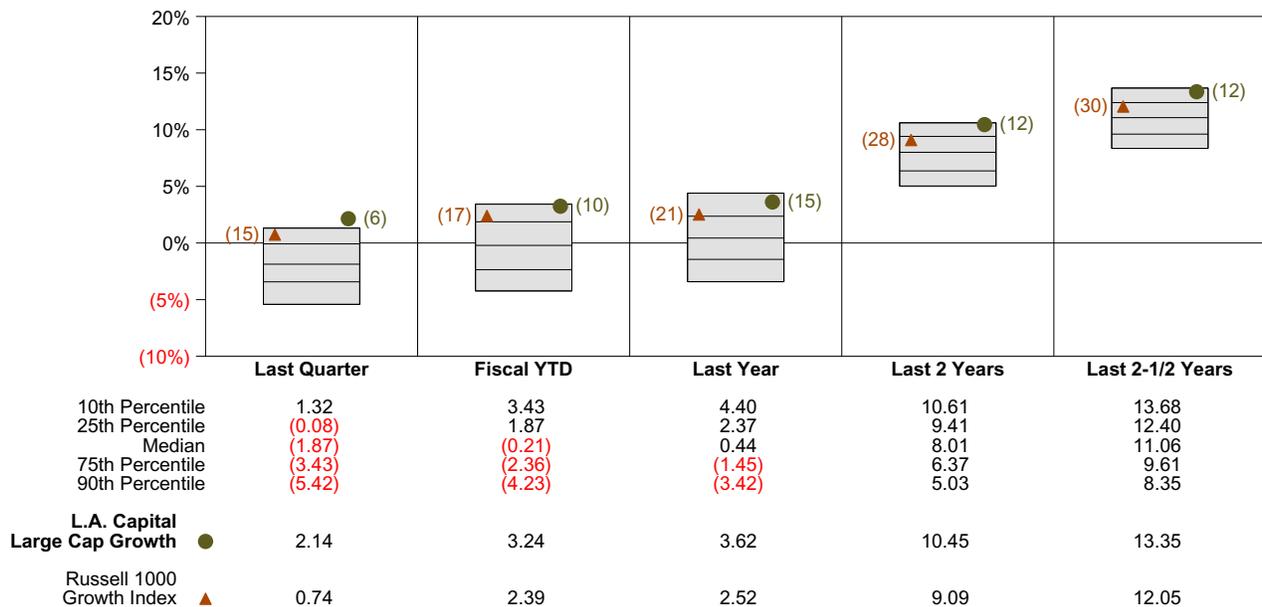
## Quarterly Summary and Highlights

- L.A. Capital Large Cap Growth's portfolio posted a 2.14% return for the quarter placing it in the 6 percentile of the CAI Large Cap Growth Style group for the quarter and in the 15 percentile for the last year.
- L.A. Capital Large Cap Growth's portfolio outperformed the Russell 1000 Growth Index by 1.40% for the quarter and outperformed the Russell 1000 Growth Index for the year by 1.10%.

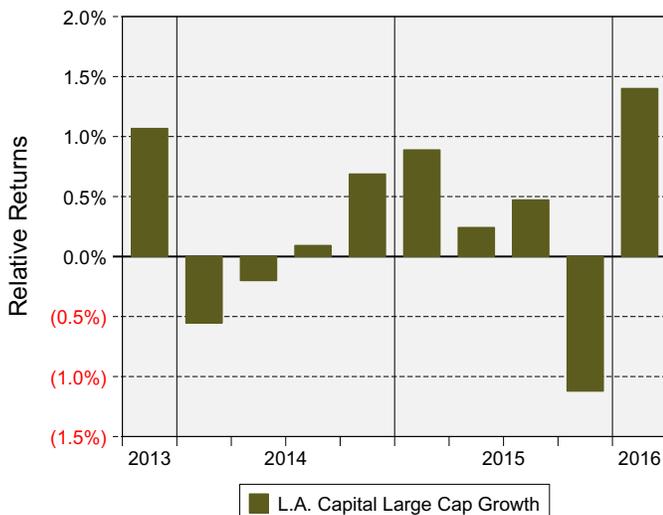
## Quarterly Asset Growth

Beginning Market Value	\$232,169,867
Net New Investment	\$8,879,542
Investment Gains/(Losses)	\$5,724,257
Ending Market Value	\$246,773,667

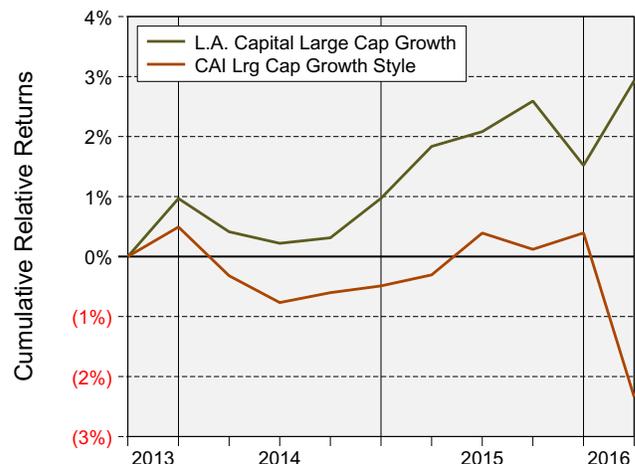
## Performance vs CAI Large Cap Growth Style (Gross)



## Relative Return vs Russell 1000 Growth Index



## Cumulative Returns vs Russell 1000 Growth Index



# L.A. Capital Enhanced Period Ended March 31, 2016

## Investment Philosophy

The LA Capital Enhanced portfolio is a large core portfolio benchmarked to the Russell 1000 Index. Characterized as an enhanced index assignment, its objective is to track the benchmark with lower variability. The pension portfolio began in August of 2000 and the insurance portfolio was initiated in April of 2004. Since October of 2006 a small portion of each of the two core accounts was allocated into the Large Cap Alpha Fund with intent to add incremental alpha to the assignment given that the information ratio was expected to be higher.

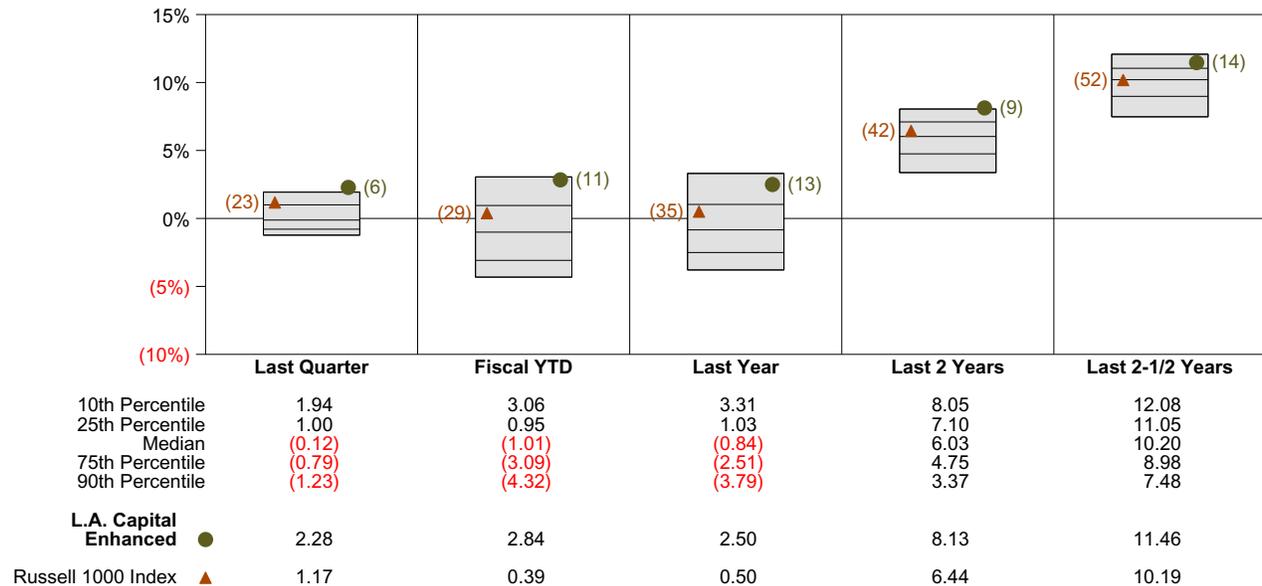
## Quarterly Summary and Highlights

- L.A. Capital Enhanced's portfolio posted a 2.28% return for the quarter placing it in the 6 percentile of the CAI Large Cap Core Style group for the quarter and in the 13 percentile for the last year.
- L.A. Capital Enhanced's portfolio outperformed the Russell 1000 Index by 1.10% for the quarter and outperformed the Russell 1000 Index for the year by 1.99%.

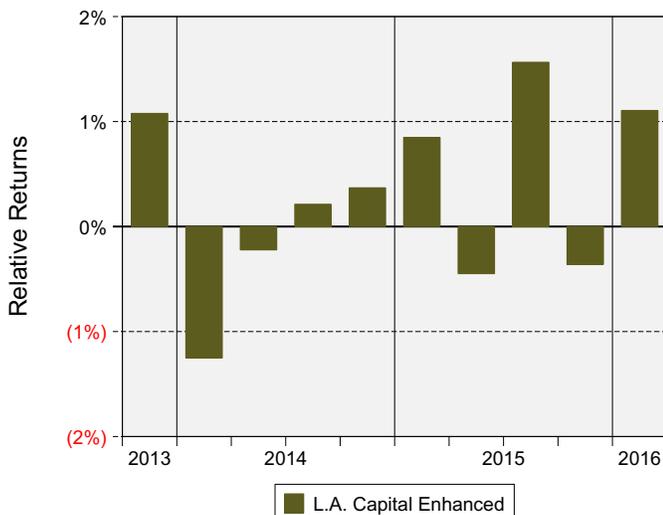
## Quarterly Asset Growth

Beginning Market Value	\$152,666,348
Net New Investment	\$6,444,581
Investment Gains/(Losses)	\$3,963,516
Ending Market Value	\$163,074,445

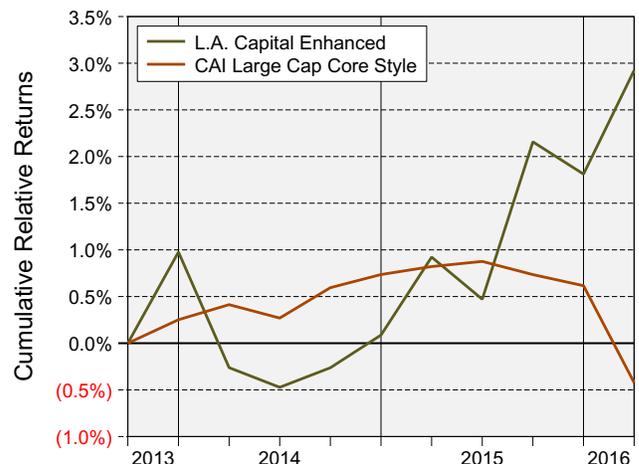
## Performance vs CAI Large Cap Core Style (Gross)



## Relative Return vs Russell 1000 Index



## Cumulative Returns vs Russell 1000 Index



# LSV Asset Management

## Period Ended March 31, 2016

### Investment Philosophy

The objective of LSV Asset Management's Large Cap Value Equity (U.S.) strategy is to outperform the Russell 1000 Value by at least 200 basis points (gross of fees) per annum over a 3-5 year period with a tracking error of approximately 4%. Their stock selection process is a quantitative approach that ranks a broad universe of stocks on a combination of value and momentum factors and seeks to invest approximately 100 stocks in the most attractive securities possible within strict risk parameters to control the portfolio's tracking error relative to the benchmark. The resulting portfolio is broadly diversified across industry groups and fully invested.

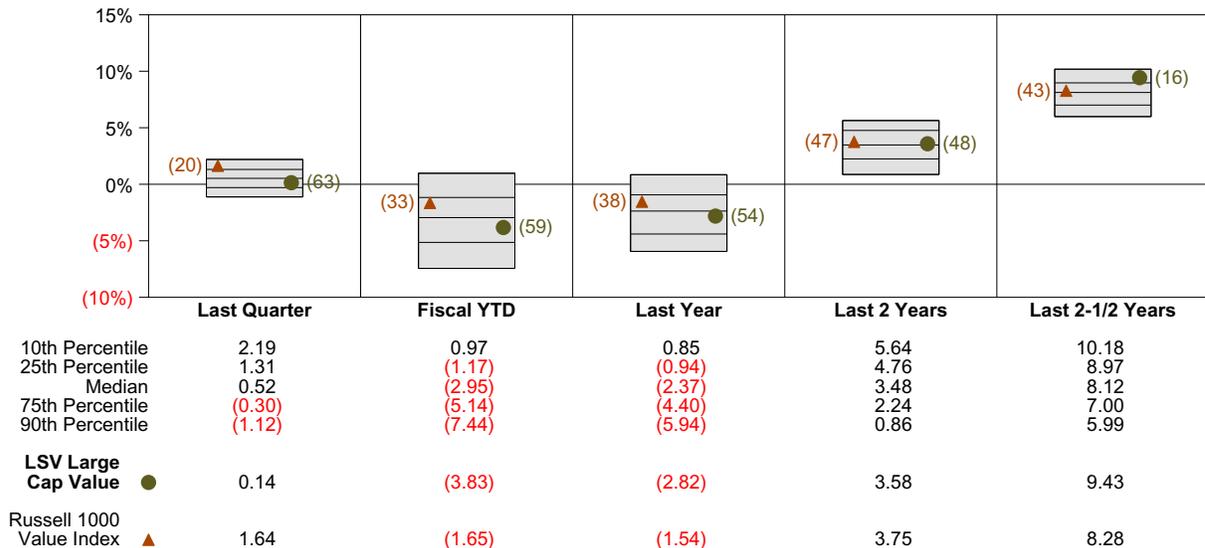
### Quarterly Summary and Highlights

- LSV Large Cap Value's portfolio posted a 0.14% return for the quarter placing it in the 63 percentile of the CAI Large Cap Value Style group for the quarter and in the 54 percentile for the last year.
- LSV Large Cap Value's portfolio underperformed the Russell 1000 Value Index by 1.50% for the quarter and underperformed the Russell 1000 Value Index for the year by 1.28%.

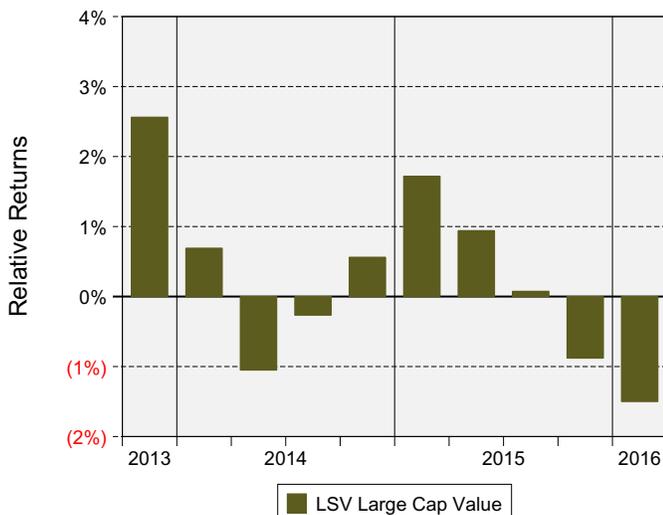
### Quarterly Asset Growth

Beginning Market Value	\$227,956,501
Net New Investment	\$11,833,041
Investment Gains/(Losses)	\$1,443,385
Ending Market Value	\$241,232,928

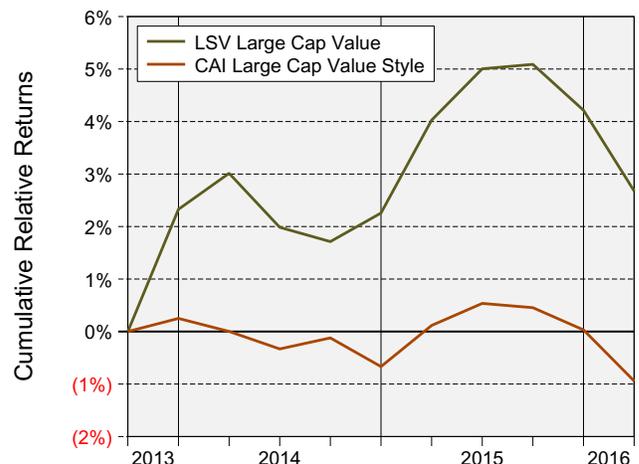
### Performance vs CAI Large Cap Value Style (Gross)



### Relative Return vs Russell 1000 Value Index



### Cumulative Returns vs Russell 1000 Value Index



# Parametric Clifton Small Cap Period Ended March 31, 2016

## Investment Philosophy

Parametric Clifton utilizes equity futures to gain benchmark exposure in constructing the portfolio it believes provides the greatest likelihood of outperforming the index. In this construction the underlying cash portfolio is invested in a liquid, high quality short duration fixed income portfolio. Over market cycles excess return generated by the short duration portfolio, when added to the performance of futures is expected to allow the strategy to achieve 0.50% to 1.00% of gross excess annual performance.

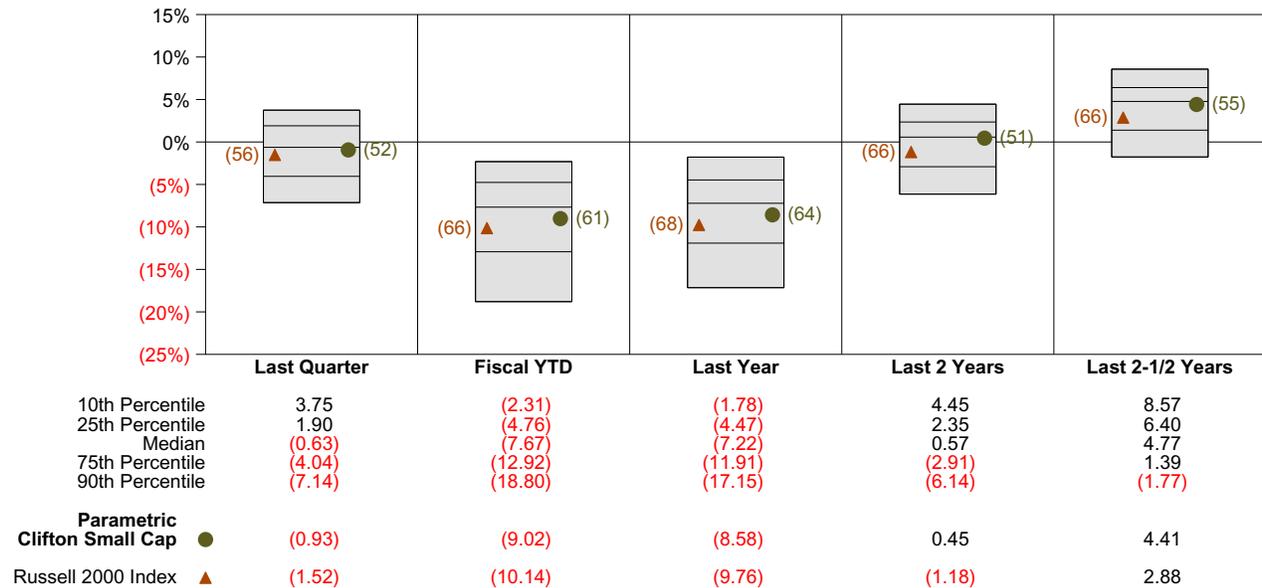
## Quarterly Summary and Highlights

- Parametric Clifton Small Cap's portfolio posted a (0.93)% return for the quarter placing it in the 52 percentile of the CAI Small Capitalization Style group for the quarter and in the 64 percentile for the last year.
- Parametric Clifton Small Cap's portfolio outperformed the Russell 2000 Index by 0.58% for the quarter and outperformed the Russell 2000 Index for the year by 1.18%.

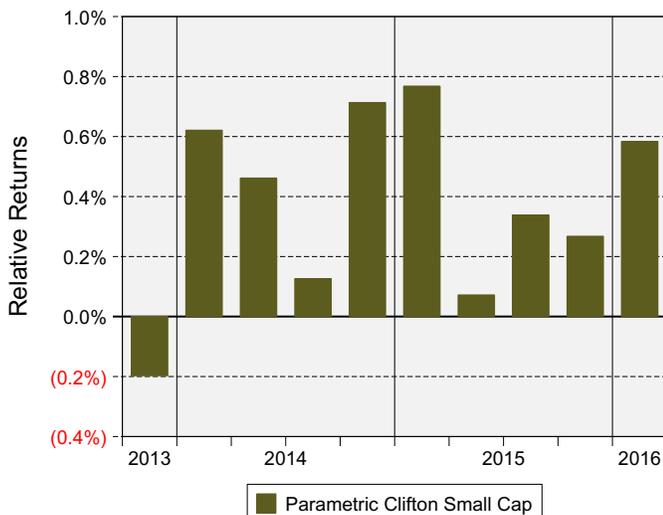
## Quarterly Asset Growth

Beginning Market Value	\$162,399,779
Net New Investment	\$0
Investment Gains/(Losses)	-\$1,518,349
Ending Market Value	\$160,881,430

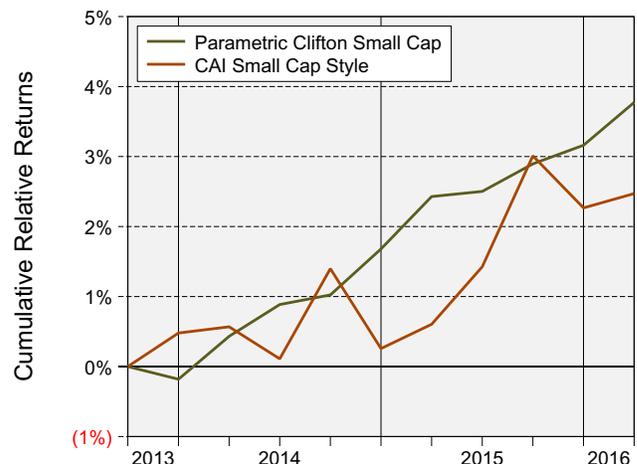
## Performance vs CAI Small Capitalization Style (Gross)



## Relative Return vs Russell 2000 Index



## Cumulative Returns vs Russell 2000 Index



# PIMCO RAE

## Period Ended March 31, 2016

### Investment Philosophy

Small company value equity portfolio utilizing the index strategy and philosophy described as the Enhanced RAFI US Small strategy which relies on portfolio weights derived from firm fundamentals (free cash flow, book equity value, total sales and gross dividend), instead of market capitalization. Additionally, the enhanced portfolio strategy uses a quality of earnings screening and a financial distress screening to augment portfolio returns and reduce portfolio volatility.

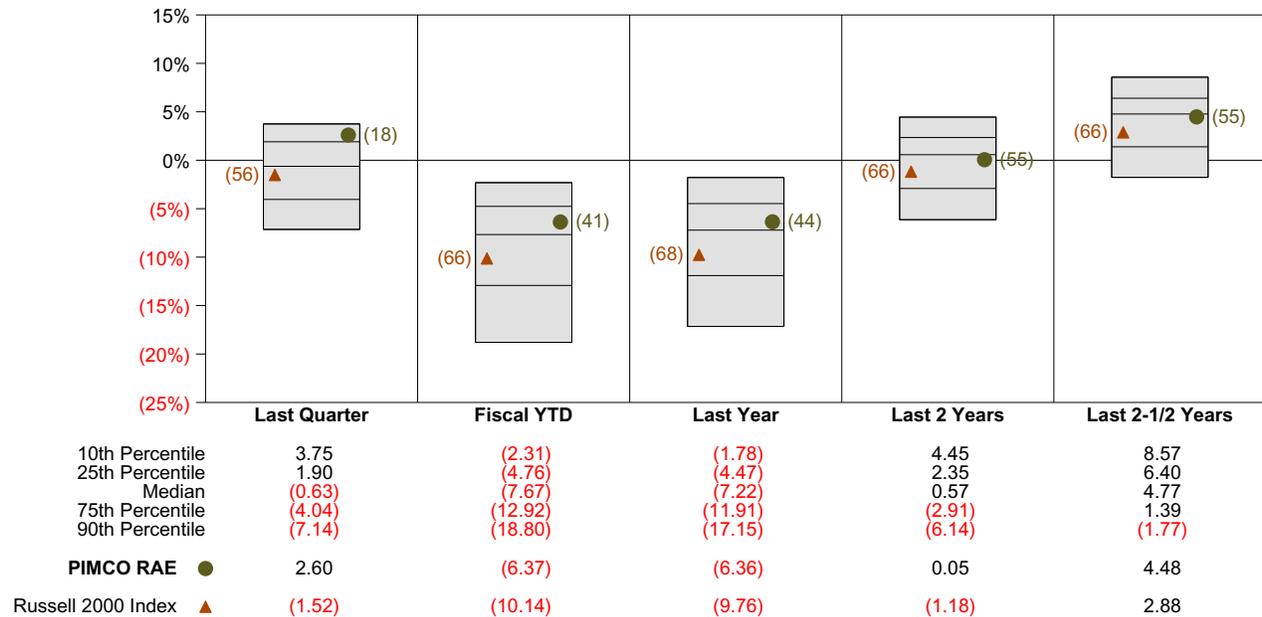
### Quarterly Summary and Highlights

- PIMCO RAE's portfolio posted a 2.60% return for the quarter placing it in the 18 percentile of the CAI Small Capitalization Style group for the quarter and in the 44 percentile for the last year.
- PIMCO RAE's portfolio outperformed the Russell 2000 Index by 4.12% for the quarter and outperformed the Russell 2000 Index for the year by 3.40%.

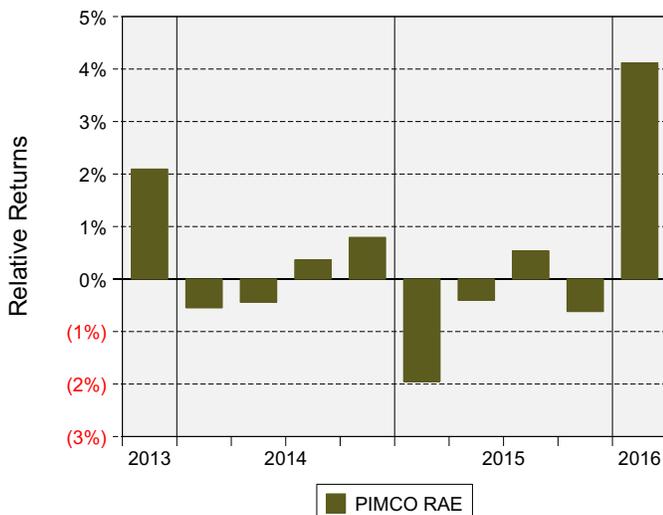
### Quarterly Asset Growth

Beginning Market Value	\$106,366,757
Net New Investment	\$25,426,074
Investment Gains/(Losses)	\$5,676,901
Ending Market Value	\$137,469,733

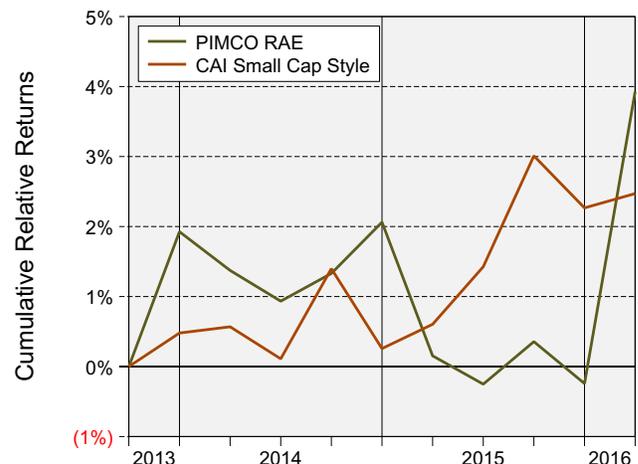
### Performance vs CAI Small Capitalization Style (Gross)



### Relative Return vs Russell 2000 Index



### Cumulative Returns vs Russell 2000 Index





# Capital Group Period Ended March 31, 2016

## Investment Philosophy

The Portfolio will invest primarily in equity or equity type securities of companies in developed countries excluding the U.S. These equity securities will be listed on a stock exchange or traded in another recognized market and include, but are not limited to, common and preferred stocks, securities convertible or exchangeable into common or preferred stock, warrants, rights and depository arrangements.

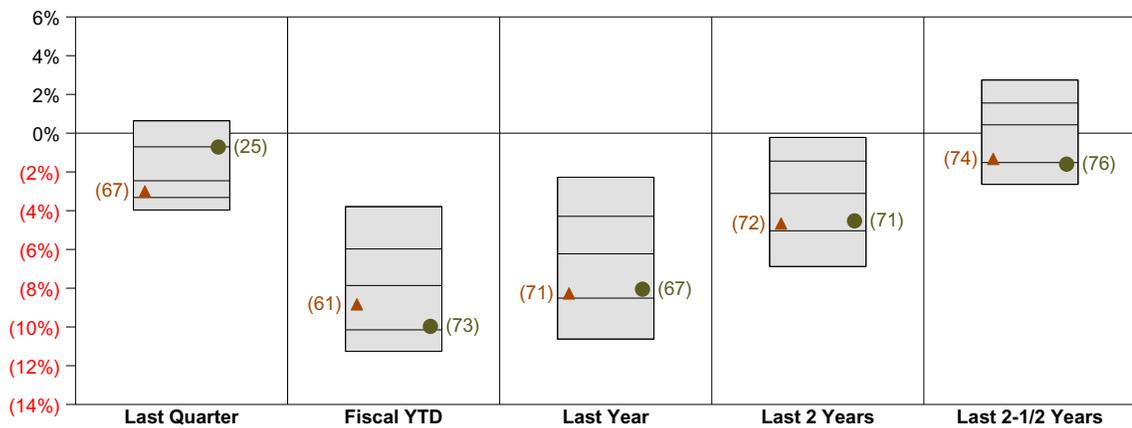
## Quarterly Summary and Highlights

- Capital Group's portfolio posted a (0.71)% return for the quarter placing it in the 25 percentile of the CAI Non-U.S. Equity Style group for the quarter and in the 67 percentile for the last year.
- Capital Group's portfolio outperformed the MSCI EAFE by 2.29% for the quarter and outperformed the MSCI EAFE for the year by 0.22%.

## Quarterly Asset Growth

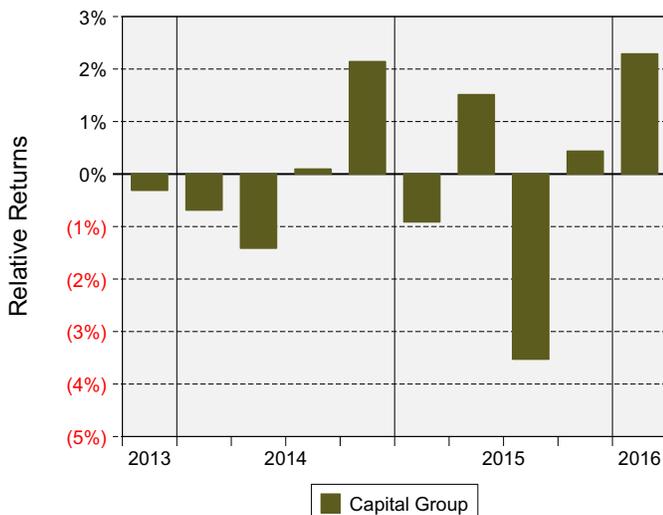
Beginning Market Value	\$265,007,166
Net New Investment	\$-258,612
Investment Gains/(Losses)	\$-1,913,369
Ending Market Value	\$262,835,185

## Performance vs CAI Non-U.S. Equity Style (Gross)

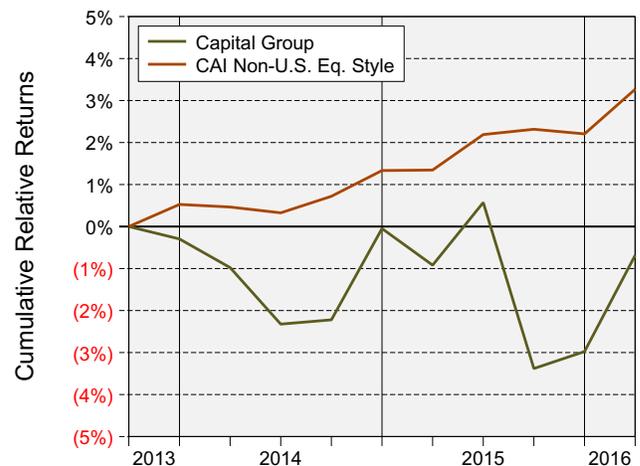


10th Percentile	0.64	(3.79)	(2.27)	(0.22)	2.74
25th Percentile	(0.70)	(5.97)	(4.29)	(1.44)	1.56
Median	(2.46)	(7.86)	(6.23)	(3.11)	0.43
75th Percentile	(3.32)	(10.15)	(8.51)	(5.04)	(1.52)
90th Percentile	(3.97)	(11.26)	(10.63)	(6.88)	(2.64)
<b>Capital Group</b> ●	(0.71)	(9.97)	(8.05)	(4.53)	(1.60)
<b>MSCI EAFE</b> ▲	(3.01)	(8.83)	(8.27)	(4.67)	(1.33)

## Relative Return vs MSCI EAFE



## Cumulative Returns vs MSCI EAFE



# DFA Intl Small Cap Value Period Ended March 31, 2016

## Investment Philosophy

The International Small Cap Value Portfolio invests in the stocks of small, non-US developed markets companies that Dimensional believes to be value stocks at the time of purchase. Specifically, it looks at companies that fall within the smallest 8-10% of each country's market capitalization, and who's shares have a high book value in relation to their market value (BtM). It does not invest in emerging markets.

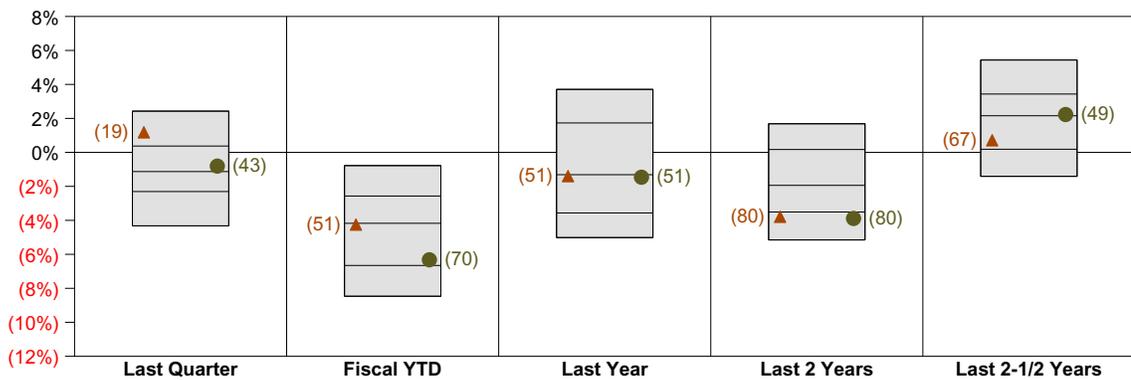
## Quarterly Summary and Highlights

- DFA Intl Small Cap Value's portfolio posted a (0.81)% return for the quarter placing it in the 43 percentile of the Lipper: International Small Cap Obj group for the quarter and in the 51 percentile for the last year.
- DFA Intl Small Cap Value's portfolio underperformed the World ex US SC Value by 1.99% for the quarter and underperformed the World ex US SC Value for the year by 0.07%.

## Quarterly Asset Growth

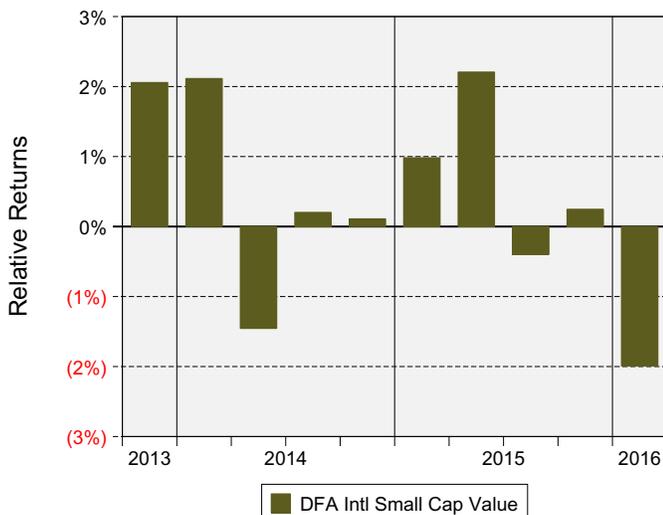
Beginning Market Value	\$70,840,669
Net New Investment	\$0
Investment Gains/(Losses)	\$-573,541
Ending Market Value	\$70,267,128

## Performance vs Lipper: International Small Cap Obj (Net)

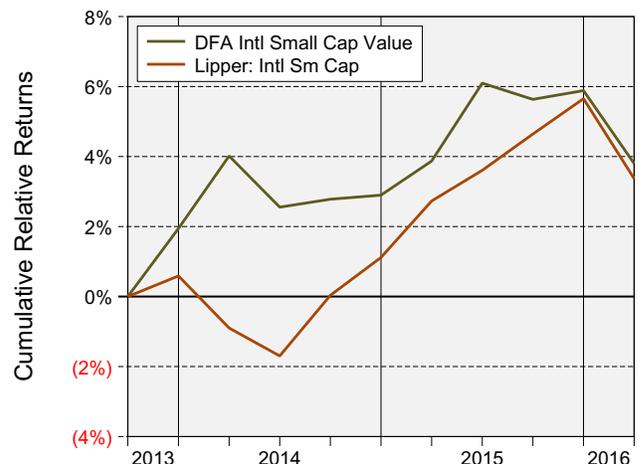


	Last Quarter	Fiscal YTD	Last Year	Last 2 Years	Last 2-1/2 Years
10th Percentile	2.43	(0.78)	3.71	1.68	5.44
25th Percentile	0.37	(2.57)	1.73	0.17	3.43
Median	(1.13)	(4.17)	(1.31)	(1.94)	2.15
75th Percentile	(2.30)	(6.66)	(3.56)	(3.51)	0.19
90th Percentile	(4.32)	(8.47)	(5.01)	(5.15)	(1.41)
<b>DFA Intl Small Cap Value</b> ●	(0.81)	(6.32)	(1.46)	(3.89)	2.23
World ex US SC Value ▲	1.18	(4.25)	(1.39)	(3.79)	0.71

## Relative Return vs World ex US SC Value



## Cumulative Returns vs World ex US SC Value



# LSV Intl Value

## Period Ended March 31, 2016

### Investment Philosophy

The objective of LSV Asset Management's International Large Cap Value strategy is to outperform the MSCI EAFE Index by at least 250 basis points (gross of fees) per annum over an annualized 3-5 year period with a tracking error of approximately 5-6%. Their stock selection process is a quantitative approach that ranks a broad universe of stocks on a combination of value and momentum factors and seeks to invest approximately 150 stocks in the most attractive securities possible within strict risk parameters to control the portfolio's tracking error relative to the benchmark. The resulting portfolio is broadly diversified across industry groups and fully invested. LSV weights countries at a neutral weight relative to the benchmark country weights. 50% of the portfolio is US dollar hedged.

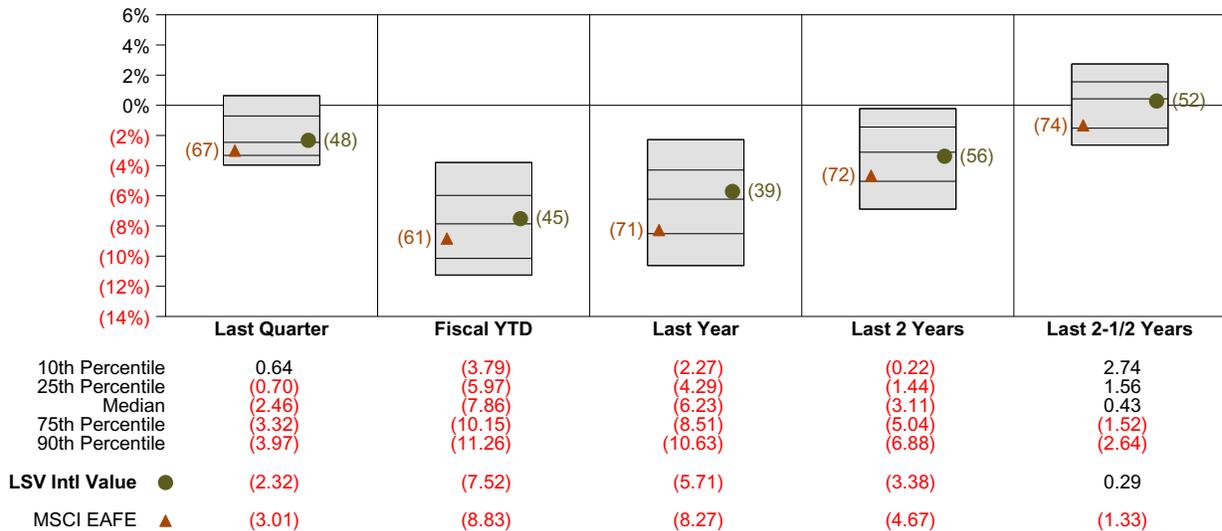
### Quarterly Summary and Highlights

- LSV Intl Value's portfolio posted a (2.32)% return for the quarter placing it in the 48 percentile of the CAI Non-U.S. Equity Style group for the quarter and in the 39 percentile for the last year.
- LSV Intl Value's portfolio outperformed the MSCI EAFE by 0.68% for the quarter and outperformed the MSCI EAFE for the year by 2.56%.

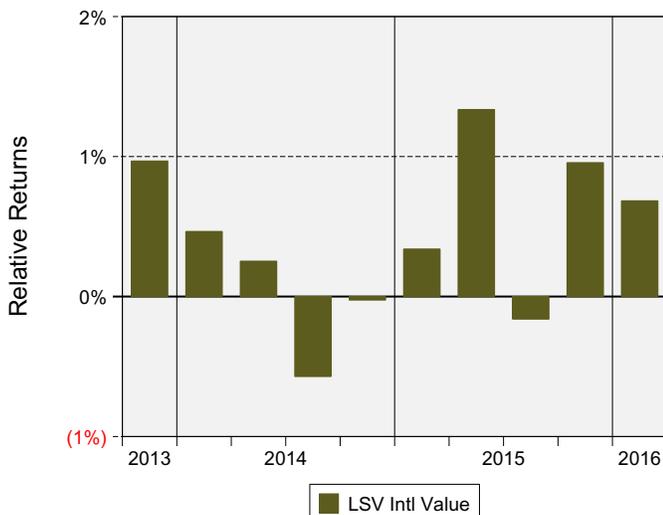
### Quarterly Asset Growth

Beginning Market Value	\$288,117,799
Net New Investment	\$32,723,574
Investment Gains/(Losses)	\$-6,290,925
Ending Market Value	\$314,550,448

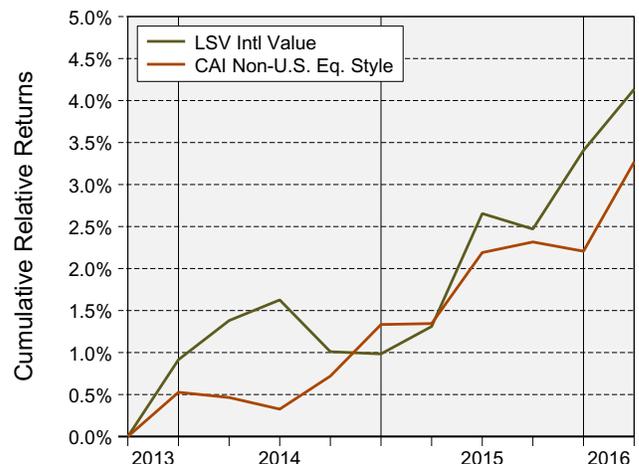
### Performance vs CAI Non-U.S. Equity Style (Gross)



### Relative Return vs MSCI EAFE



### Cumulative Returns vs MSCI EAFE



# Vanguard Intl Explorer Fund Period Ended March 31, 2016

## Investment Philosophy

Vanguard International Explorer Fund invests primarily in the equity securities of small-capitalization companies located outside the United States that the advisor believes offer the potential for long-term capital appreciation. The advisor considers, among other things, whether a company is likely to have above-average earnings growth, whether the company's securities are attractively valued, and whether the company has any proprietary advantages.

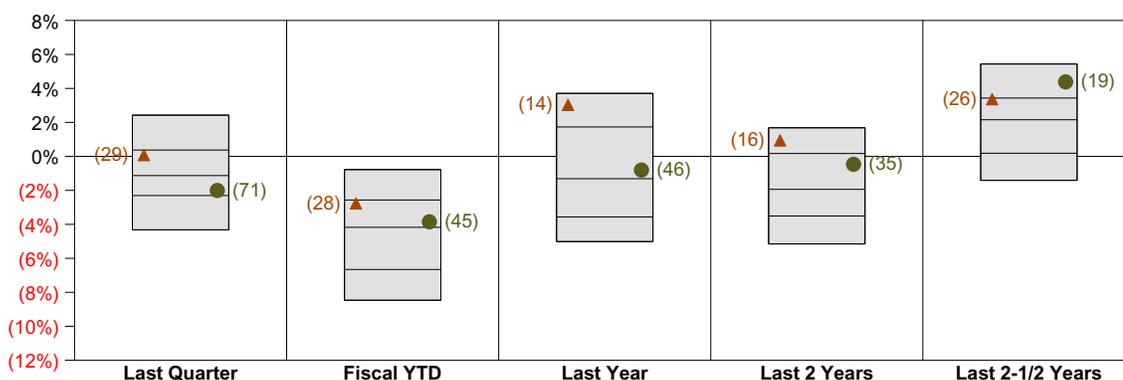
## Quarterly Summary and Highlights

- Vanguard Intl Explorer Fund's portfolio posted a (2.01)% return for the quarter placing it in the 71 percentile of the Lipper: International Small Cap Obj group for the quarter and in the 46 percentile for the last year.
- Vanguard Intl Explorer Fund's portfolio underperformed the S&P BMI EPAC <\$2 B by 2.09% for the quarter and underperformed the S&P BMI EPAC <\$2 B for the year by 3.84%.

## Quarterly Asset Growth

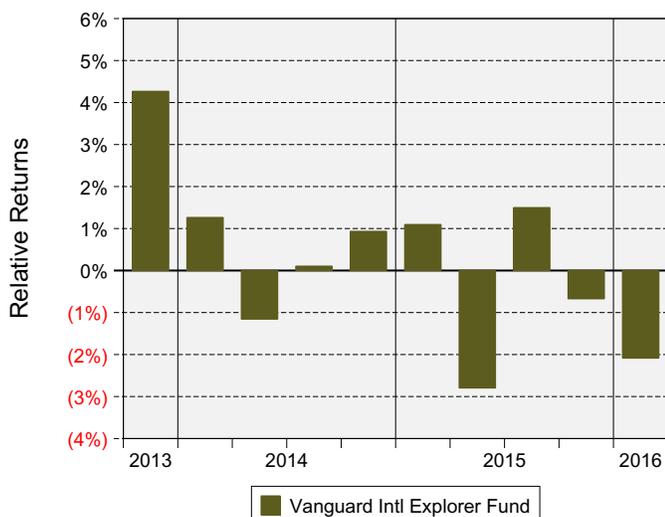
Beginning Market Value	\$71,880,938
Net New Investment	\$0
Investment Gains/(Losses)	\$-1,441,863
Ending Market Value	\$70,439,075

## Performance vs Lipper: International Small Cap Obj (Net)

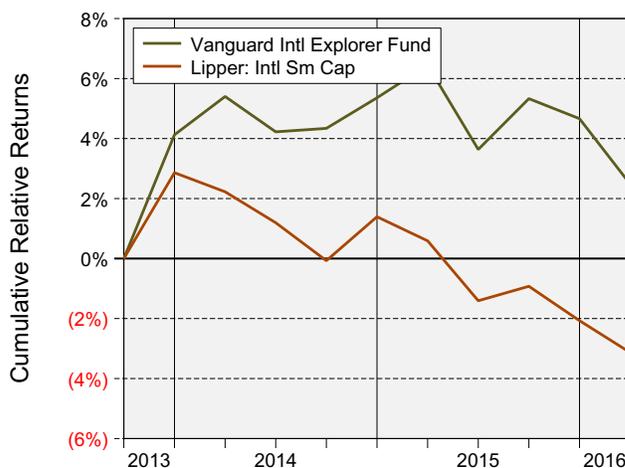


10th Percentile	2.43	(0.78)	3.71	1.68	5.44
25th Percentile	0.37	(2.57)	1.73	0.17	3.43
Median	(1.13)	(4.17)	(1.31)	(1.94)	2.15
75th Percentile	(2.30)	(6.66)	(3.56)	(3.51)	0.19
90th Percentile	(4.32)	(8.47)	(5.01)	(5.15)	(1.41)
<b>Vanguard Intl Explorer Fund</b>	<b>(2.01)</b>	<b>(3.85)</b>	<b>(0.80)</b>	<b>(0.47)</b>	<b>4.38</b>
S&P BMI EPAC <\$2 B	0.08	(2.77)	3.03	0.94	3.36

## Relative Return vs S&P BMI EPAC <\$2 B



## Cumulative Returns vs S&P BMI EPAC <\$2 B





# Declaration Total Return Period Ended March 31, 2016

## Investment Philosophy

The Fund's portfolio holdings consist primarily of RMBS issued by private sector companies (Non-Agency RMBS) and government agencies (Agency MBS) and CMBS issued by private sector companies. Agency MBS includes securities issued by the Federal National Mortgage Association (Fannie Mae), the Federal Home Loan Mortgage Corporation (Freddie Mac) and the Government National Mortgage Association (Ginnie Mae). Portfolio holdings may range from short tenure senior classes to stressed issues or subordinated securities with substantial risk of non-payment and correspondingly higher yields. Smaller portfolio allocations may include consumer asset-backed securities (ABS), or other structured credit securities and corporate bonds. As a diversification strategy and a potential hedge to credit risk, the Fund may invest in securities which tend to benefit from slow mortgage prepayments and economic growth, such as interest only (IO) MBS.

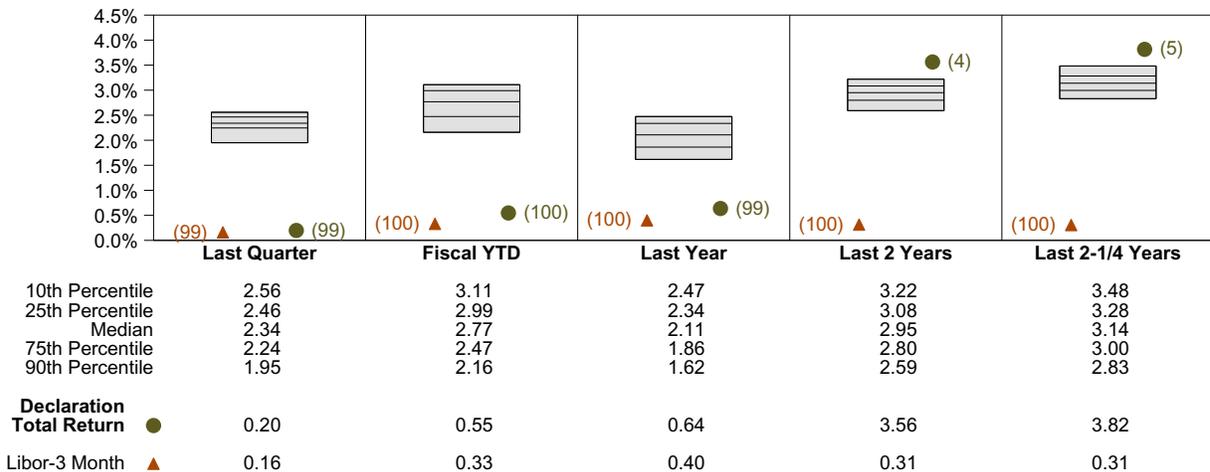
## Quarterly Summary and Highlights

- Declaration Total Return's portfolio posted a 0.20% return for the quarter placing it in the 99 percentile of the CAI Intermediate Fixed-Inc Style group for the quarter and in the 99 percentile for the last year.
- Declaration Total Return's portfolio outperformed the Libor-3 Month by 0.04% for the quarter and outperformed the Libor-3 Month for the year by 0.24%.

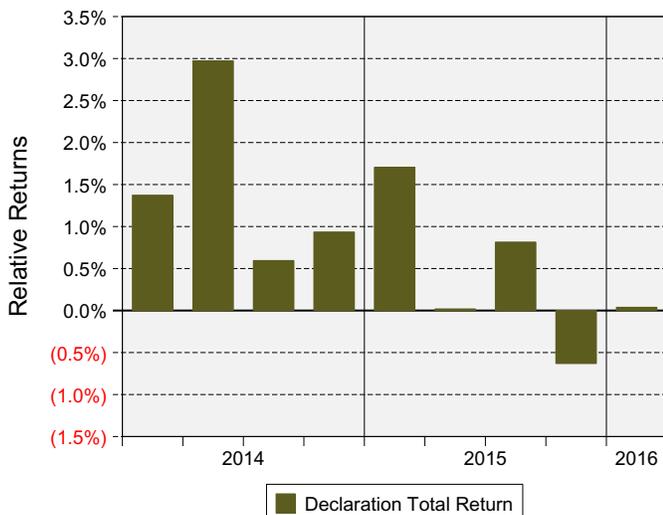
## Quarterly Asset Growth

Beginning Market Value	\$100,933,876
Net New Investment	\$-36,241
Investment Gains/(Losses)	\$199,380
Ending Market Value	\$101,097,015

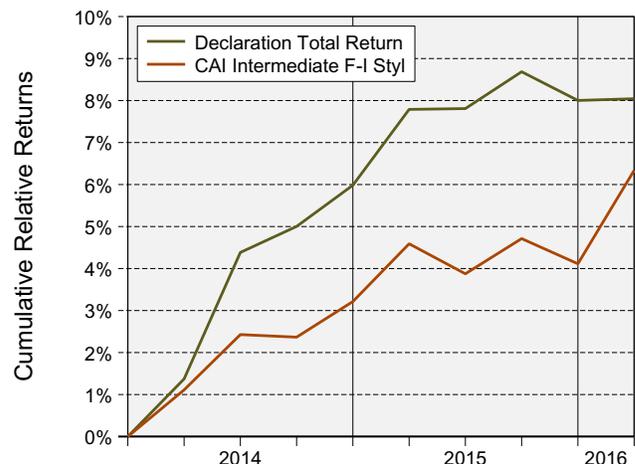
## Performance vs CAI Intermediate Fixed-Inc Style (Gross)



## Relative Return vs Libor-3 Month



## Cumulative Returns vs Libor-3 Month



# Prudential Period Ended March 31, 2016

## Investment Philosophy

The core plus fixed income account is a multi-sector strategy that is diversified across a broad range of fixed income sectors, including Treasuries, agencies, mortgage-backed securities, structured product (asset-backed securities, commercial mortgage-backed securities), investment grade corporate bonds, high yield bonds, bank loans and international debt. The primary sources of excess return are sector allocation and security selection, with duration and yield curve less of a focus.

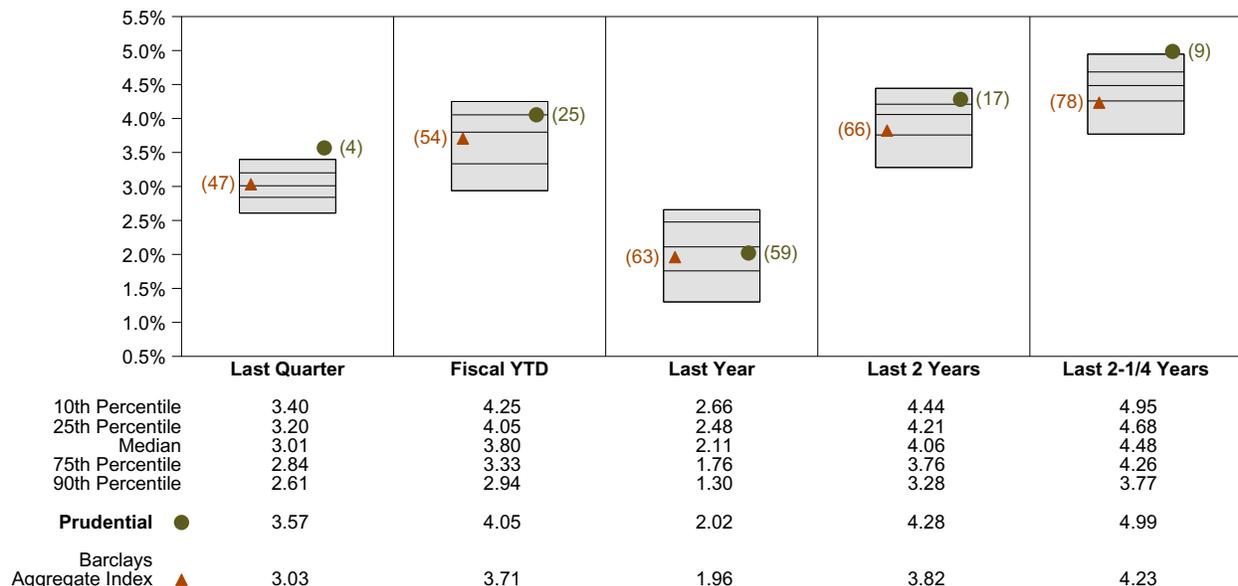
## Quarterly Summary and Highlights

- Prudential's portfolio posted a 3.57% return for the quarter placing it in the 4 percentile of the CAI Core Bond Fixed-Inc Style group for the quarter and in the 59 percentile for the last year.
- Prudential's portfolio outperformed the Barclays Aggregate Index by 0.54% for the quarter and outperformed the Barclays Aggregate Index for the year by 0.06%.

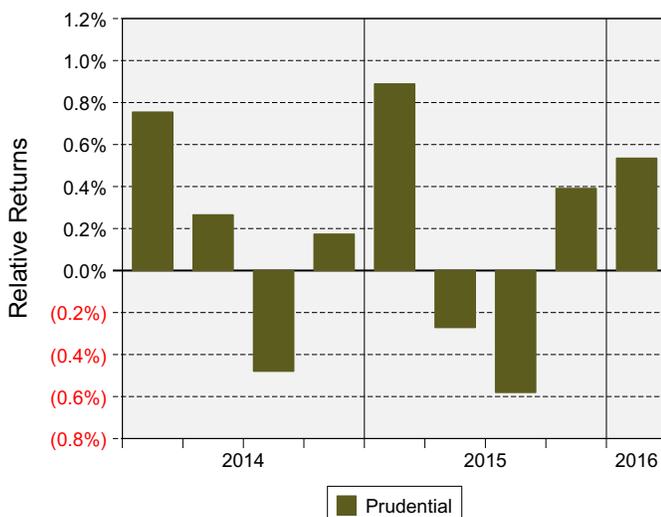
## Quarterly Asset Growth

Beginning Market Value	\$136,208,497
Net New Investment	\$-93,190
Investment Gains/(Losses)	\$4,856,714
Ending Market Value	\$140,972,022

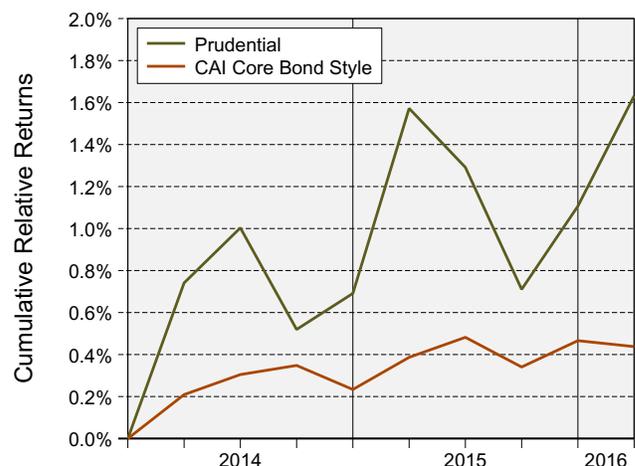
## Performance vs CAI Core Bond Fixed-Inc Style (Gross)



## Relative Return vs Barclays Aggregate Index



## Cumulative Returns vs Barclays Aggregate Index



# SSgA US Govt Credit Bd Idx Period Ended March 31, 2016

## Investment Philosophy

The Fund seeks an investment return that approximates as closely as practicable, before expenses, the performance of the Barclays Capital U.S. Government/Credit Bond Index over the long term.

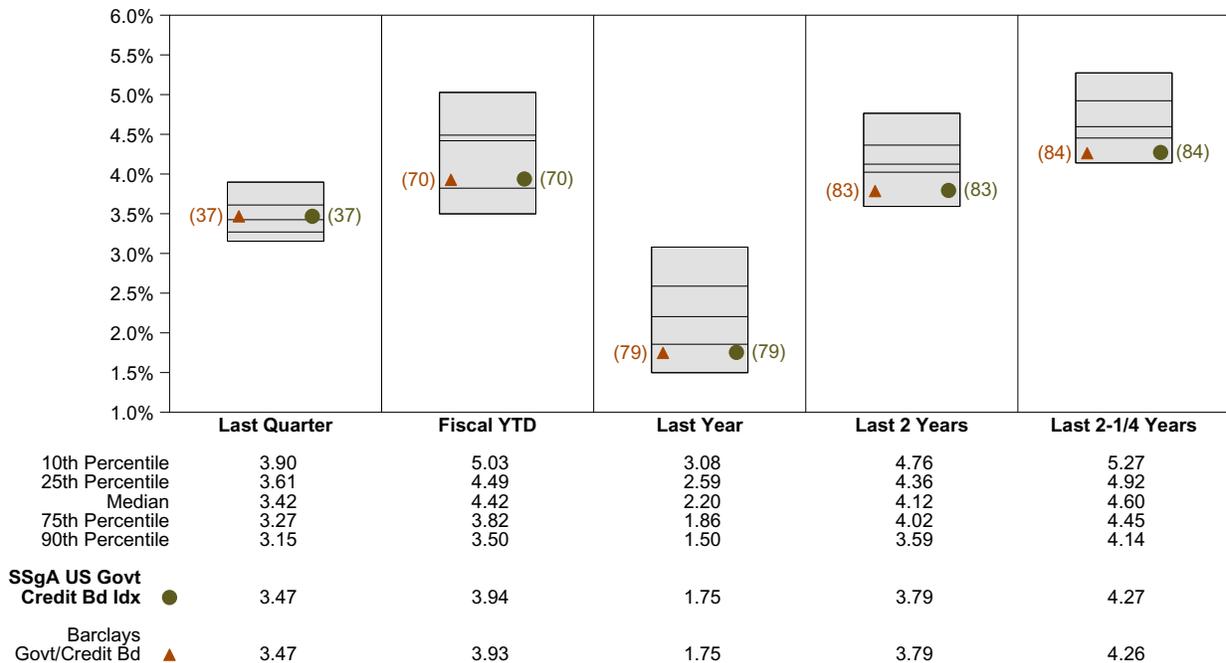
## Quarterly Summary and Highlights

- SSgA US Govt Credit Bd Idx's portfolio posted a 3.47% return for the quarter placing it in the 37 percentile of the CAI Govt/Credit Fixed-Income Style group for the quarter and in the 79 percentile for the last year.
- SSgA US Govt Credit Bd Idx's portfolio underperformed the Barclays Govt/Credit Bd by 0.00% for the quarter and outperformed the Barclays Govt/Credit Bd for the year by 0.01%.

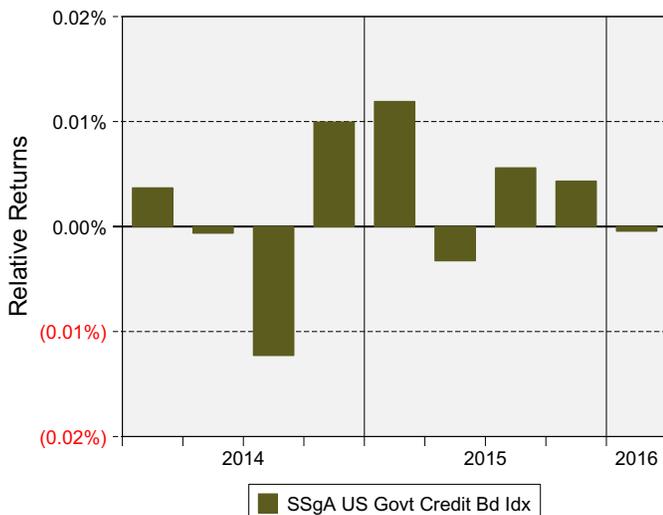
## Quarterly Asset Growth

Beginning Market Value	\$171,483,201
Net New Investment	\$-14,918
Investment Gains/(Losses)	\$5,946,186
Ending Market Value	\$177,414,470

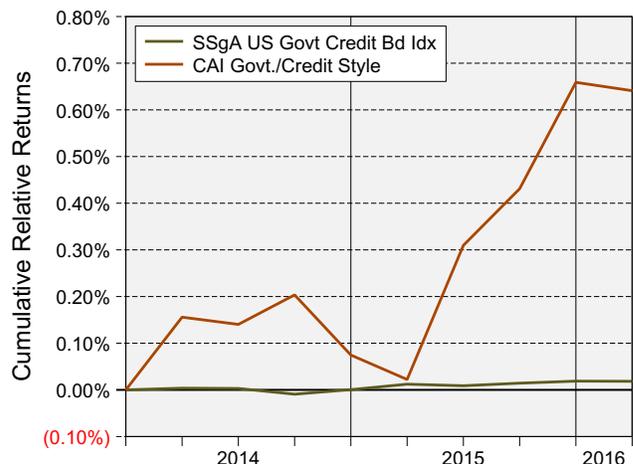
## Performance vs CAI Govt/Credit Fixed-Income Style (Gross)



## Relative Return vs Barclays Govt/Credit Bd



## Cumulative Returns vs Barclays Govt/Credit Bd



# Wells Capital Period Ended March 31, 2016

## Investment Philosophy

The Medium Quality Credit fixed income strategy is designed to maximize total return from the high-grade corporate bond market while maintaining a strategic allocation to the BBB portion of the high yield market. The investment process for this fund starts with a "top-down" strategy. Security selection is determined by in-depth credit research, holding that in-depth knowledge of industries, companies, and their management teams can help identify credit trends that can lead to investment opportunities. Furthermore, a disciplined relative value framework is applied to help determine the optimal position to invest within an industry and within an individual issuer's capital structure.

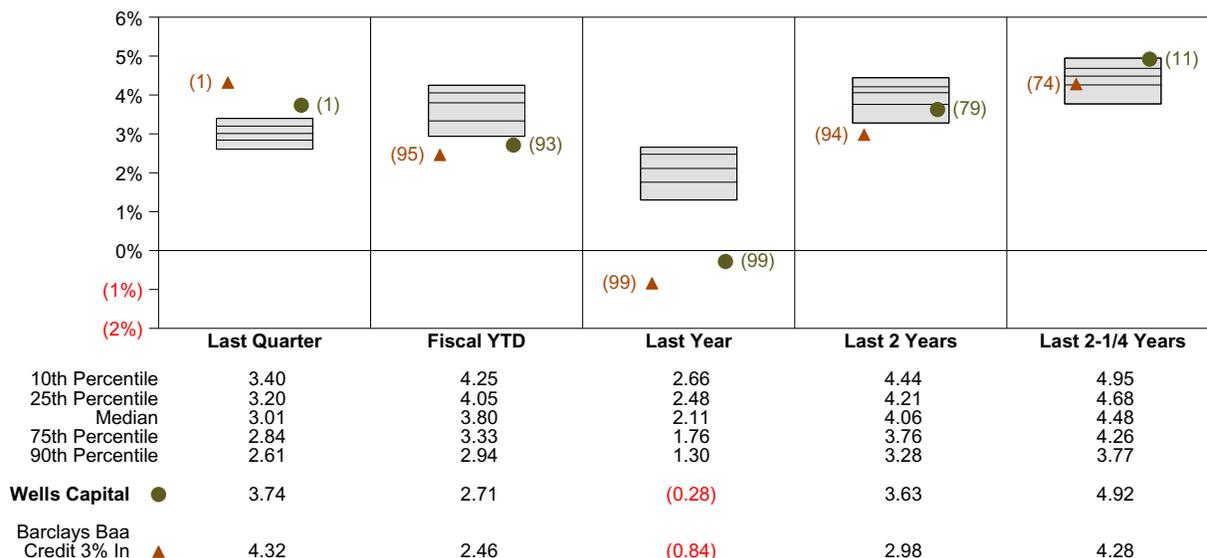
## Quarterly Summary and Highlights

- Wells Capital's portfolio posted a 3.74% return for the quarter placing it in the 1 percentile of the CAI Core Bond Fixed-Inc Style group for the quarter and in the 99 percentile for the last year.
- Wells Capital's portfolio underperformed the Barclays Baa Credit 3% In by 0.58% for the quarter and outperformed the Barclays Baa Credit 3% In for the year by 0.56%.

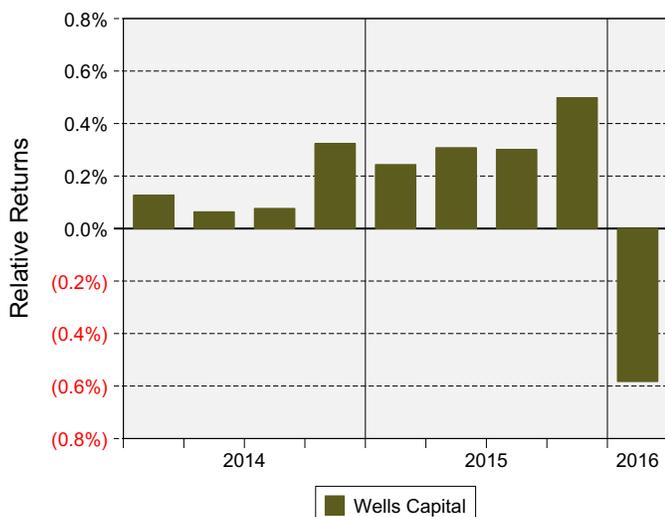
## Quarterly Asset Growth

Beginning Market Value	\$377,629,234
Net New Investment	\$-171,237
Investment Gains/(Losses)	\$14,105,222
Ending Market Value	\$391,563,219

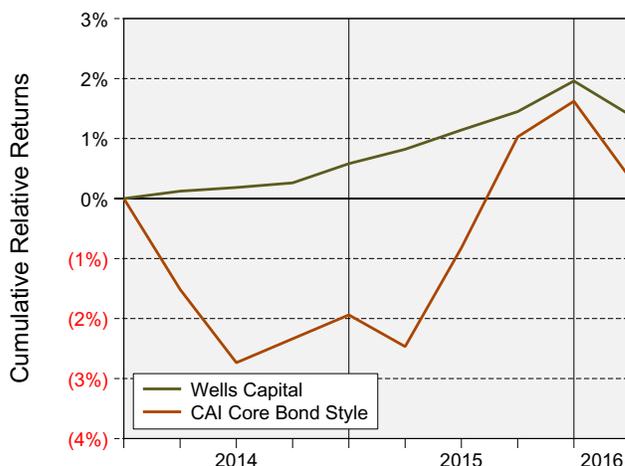
## Performance vs CAI Core Bond Fixed-Inc Style (Gross)



## Relative Return vs Barclays Baa Credit 3% In



## Cumulative Returns vs Barclays Baa Credit 3% In



# Western Asset Management Company

## Period Ended March 31, 2016

### Investment Philosophy

Western Asset designs this portfolio using all major fixed-income sectors with a bias towards non-Treasuries, especially corporate, mortgage-backed and asset-backed securities. Value can be added through sector rotation, issue selection, duration and term structure weighting.

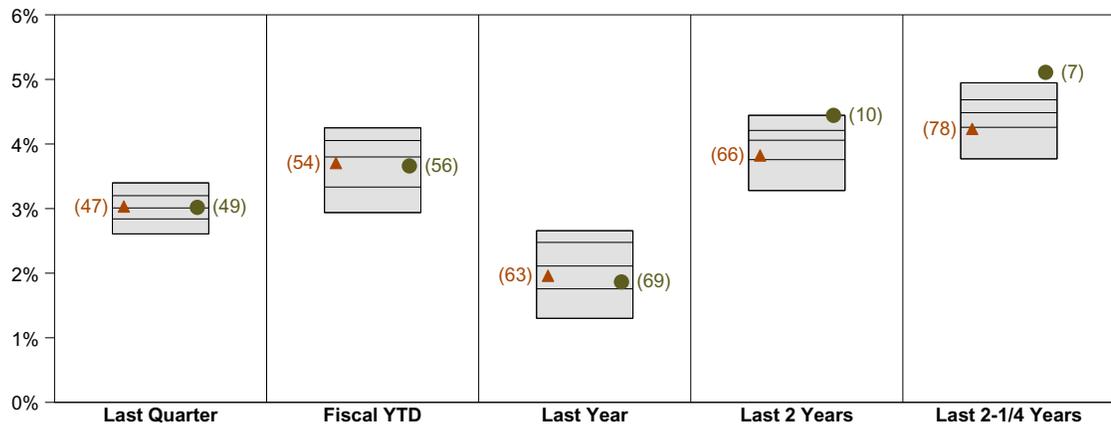
### Quarterly Summary and Highlights

- Western Asset's portfolio posted a 3.02% return for the quarter placing it in the 49 percentile of the CAI Core Bond Fixed-Inc Style group for the quarter and in the 69 percentile for the last year.
- Western Asset's portfolio underperformed the Barclays Aggregate Index by 0.01% for the quarter and underperformed the Barclays Aggregate Index for the year by 0.10%.

### Quarterly Asset Growth

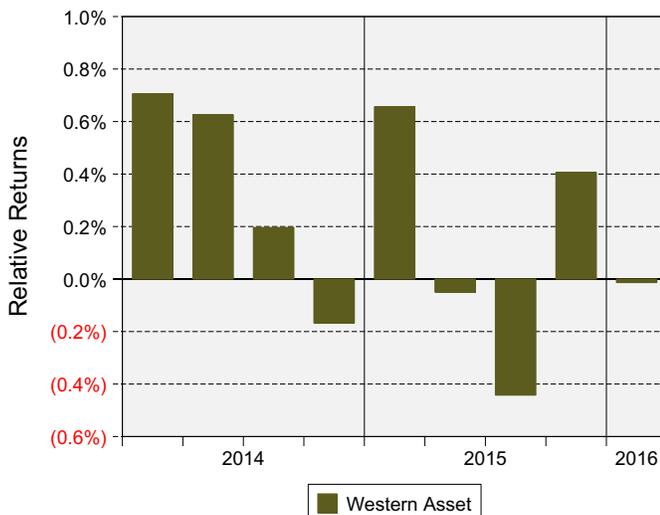
Beginning Market Value	\$381,762,522
Net New Investment	\$-131,495
Investment Gains/(Losses)	\$11,522,150
Ending Market Value	\$393,153,177

### Performance vs CAI Core Bond Fixed-Inc Style (Gross)

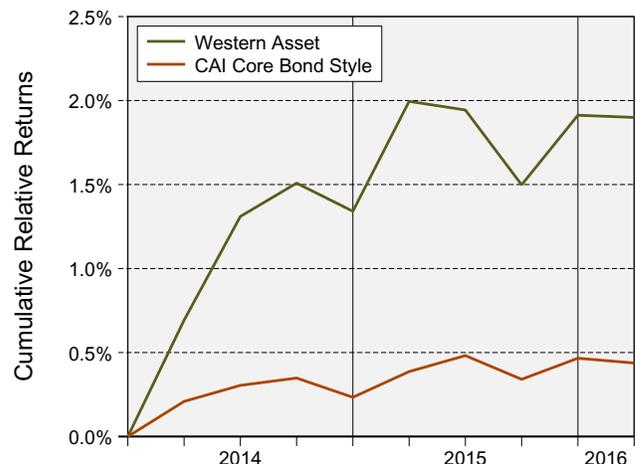


10th Percentile	3.40	4.25	2.66	4.44	4.95
25th Percentile	3.20	4.05	2.48	4.21	4.68
Median	3.01	3.80	2.11	4.06	4.48
75th Percentile	2.84	3.33	1.76	3.76	4.26
90th Percentile	2.61	2.94	1.30	3.28	3.77
<b>Western Asset</b> ●	3.02	3.66	1.86	4.44	5.11
Barclays Aggregate Index ▲	3.03	3.71	1.96	3.82	4.23

### Relative Return vs Barclays Aggregate Index



### Cumulative Returns vs Barclays Aggregate Index





## Western Asset TIPS Period Ended March 31, 2016

### Investment Philosophy

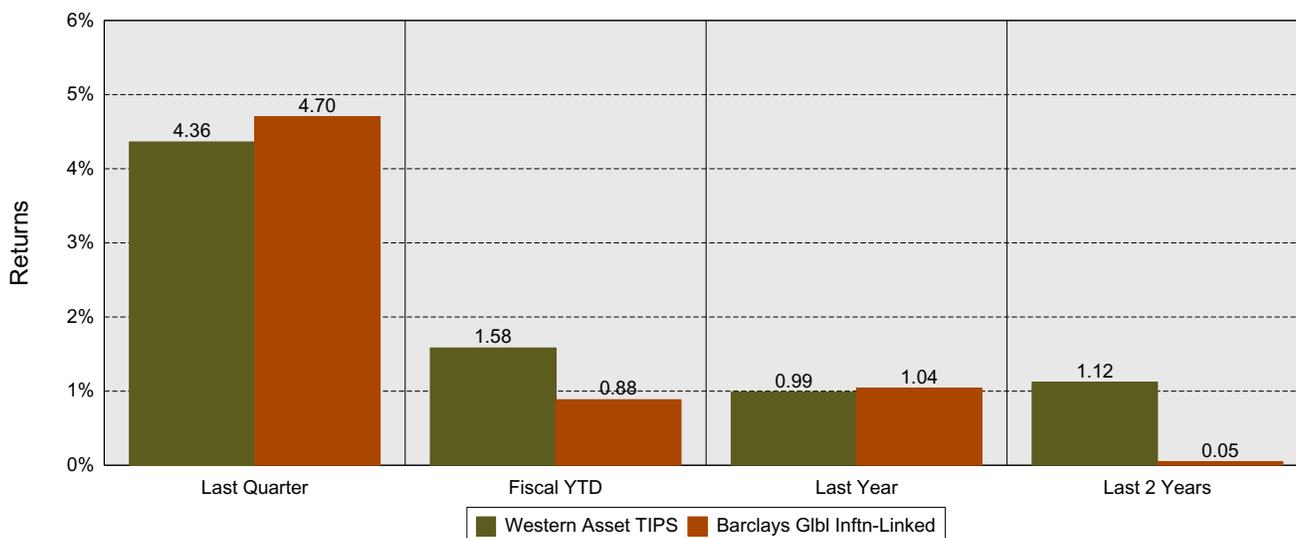
Western Asset's Global Inflation-Linked composite includes portfolios that employ an active, team-managed investment approach around a long-term, value-oriented investment philosophy. Constructed primarily of inflation-indexed securities, these portfolios use diversified strategies in seeking to add value while minimizing risk. Value can be added through country selection, term structure, issue selection, duration management and currency management.

### Quarterly Summary and Highlights

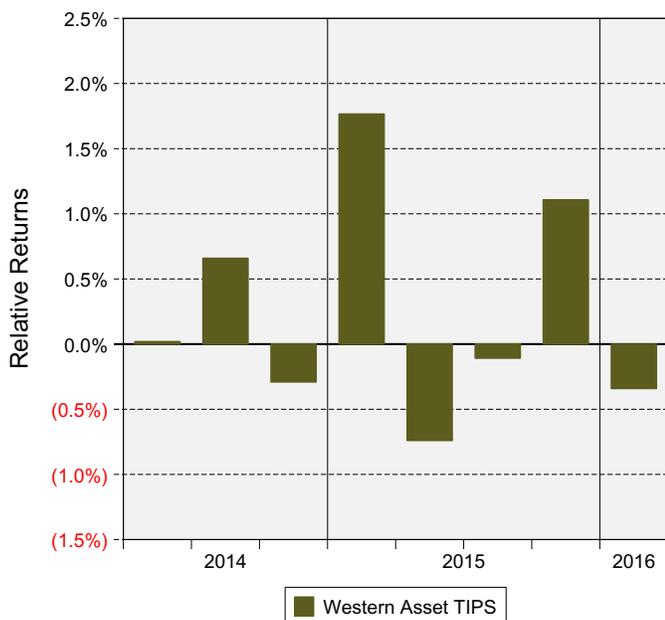
- Western Asset TIPS's portfolio underperformed the Barclays Gbl Inftn-Linked by 0.34% for the quarter and underperformed the Barclays Gbl Inftn-Linked for the year by 0.05%.

### Quarterly Asset Growth

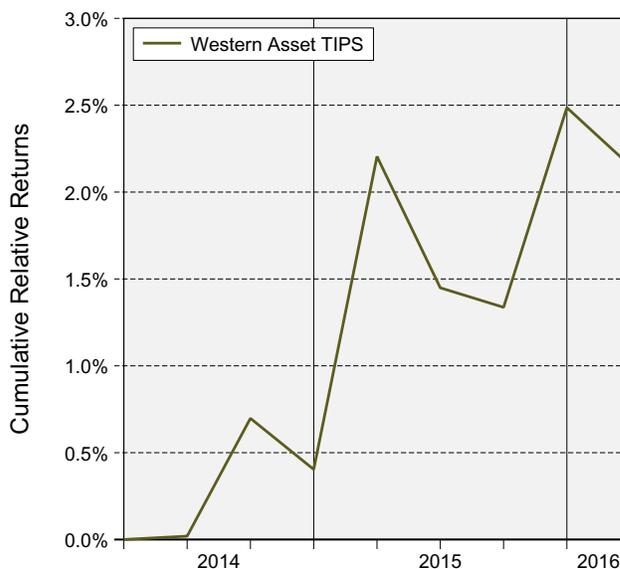
Beginning Market Value	\$250,575,556
Net New Investment	\$-86,887
Investment Gains/(Losses)	\$10,926,155
Ending Market Value	\$261,414,825



Relative Return vs Barclays Gbl Inftn-Linked



Cumulative Returns vs  
Barclays Gbl Inftn-Linked



# JP Morgan Infrastructure Period Ended March 31, 2016

## Investment Philosophy

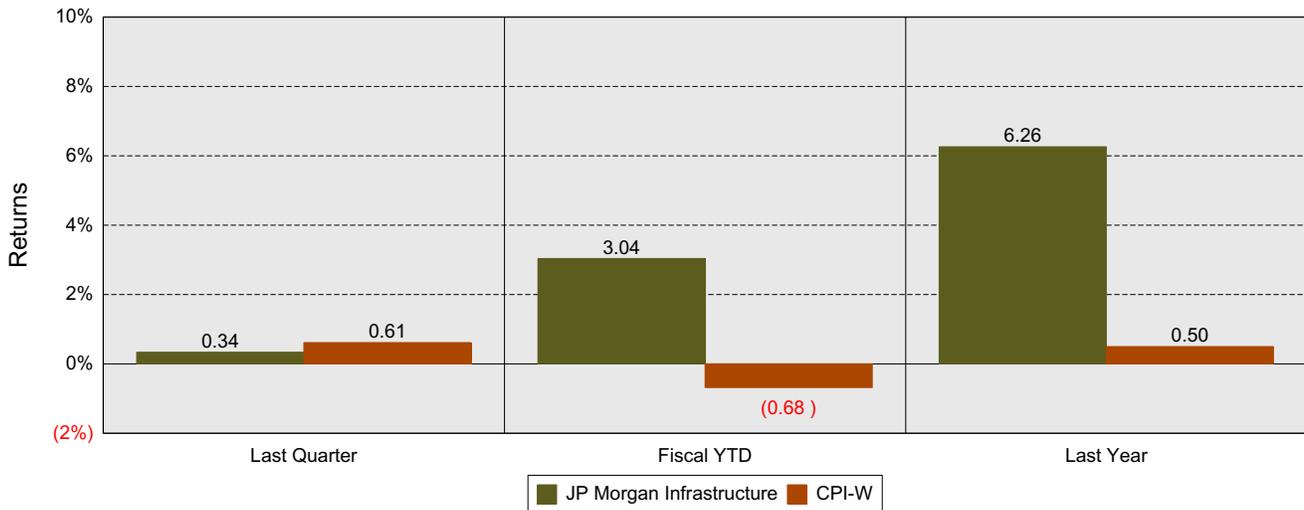
The only open-ended private commingled infrastructure fund in the U.S, the JPMorgan Infrastructure Investments Fund invests in stabilized assets in OECD countries with selected value-added opportunities, across infrastructure industry sub-sectors, including: toll roads, bridges and tunnels; oil and gas pipelines; electricity transmission and distribution facilities; contracted power generation assets; water distribution; waste-water collection and processing; railway lines and rapid rail links; and seaports and airports.

## Quarterly Summary and Highlights

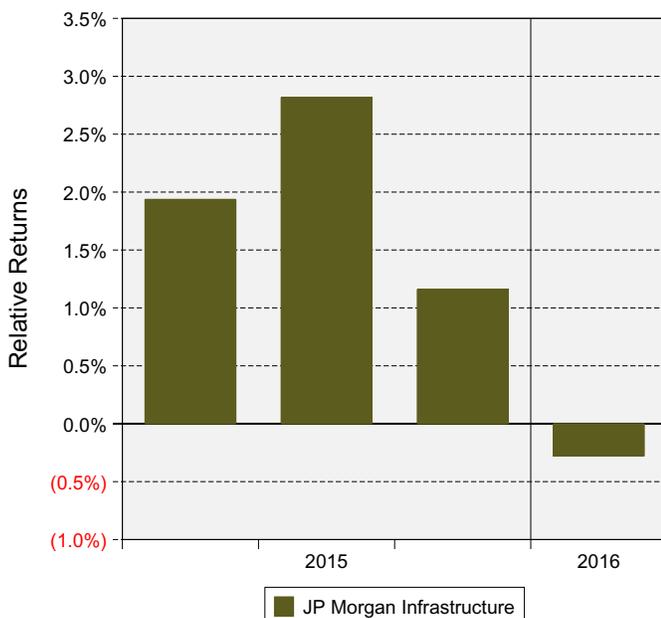
- JP Morgan Infrastructure's portfolio underperformed the CPI-W by 0.28% for the quarter and outperformed the CPI-W for the year by 5.76%.

## Quarterly Asset Growth

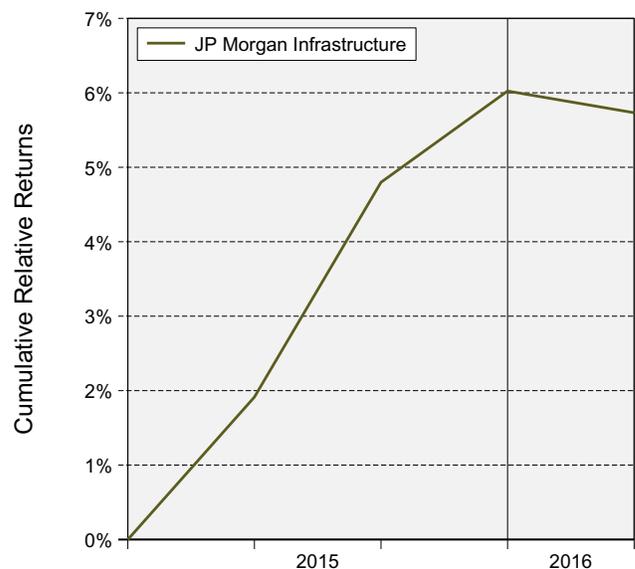
Beginning Market Value	\$79,010,482
Net New Investment	\$-221,061
Investment Gains/(Losses)	\$266,874
Ending Market Value	\$79,056,295



## Relative Return vs CPI-W



## Cumulative Returns vs CPI-W



# Grosvenor Cust. Infrastructure Period Ended March 31, 2016

## Investment Philosophy

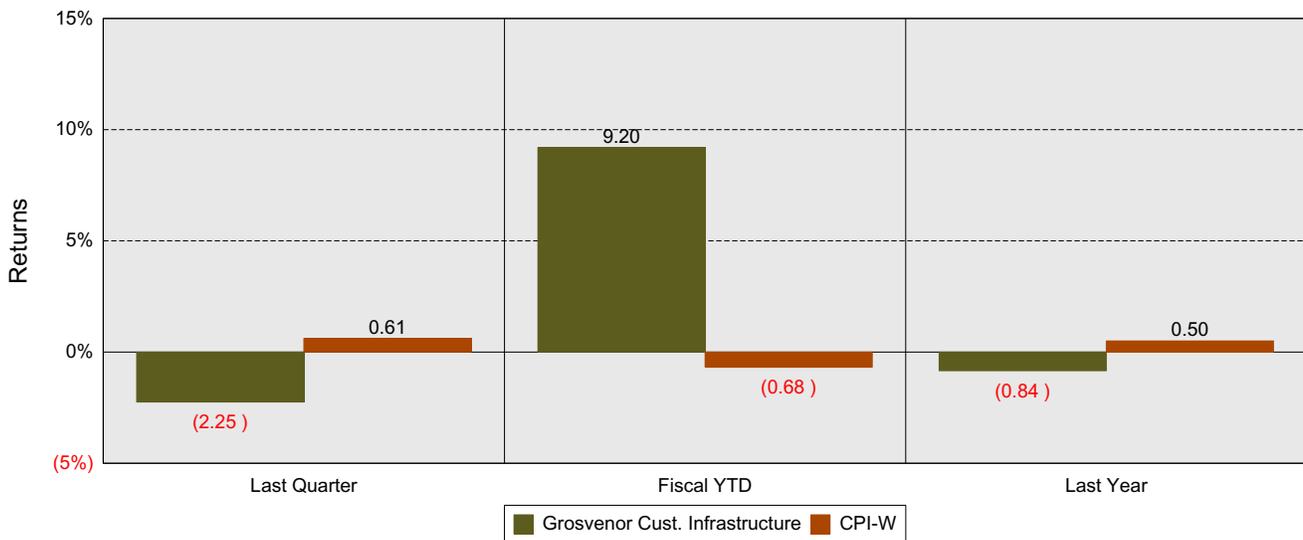
The Customized Infrastructure Strategies LP is a commingled fund focused on providing a comprehensive, diversified solution for investors looking to access the infrastructure asset class. The Fund seeks to generate stable, long-term yield and attractive risk-adjusted returns by investing in a diversified portfolio of primary core and core plus infrastructure funds (30%), co-investments (40%) and opportunistic secondary fund purchases (30%).

## Quarterly Summary and Highlights

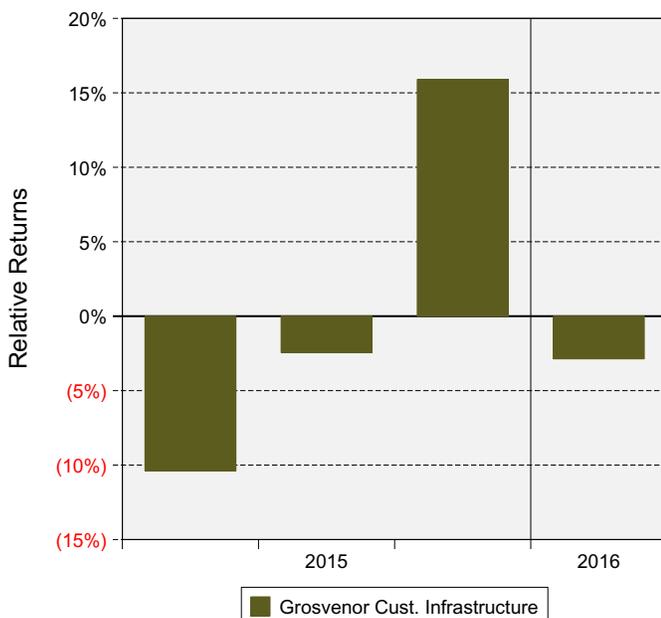
- Grosvenor Cust. Infrastructure's portfolio underperformed the CPI-W by 2.86% for the quarter and underperformed the CPI-W for the year by 1.34%.

## Quarterly Asset Growth

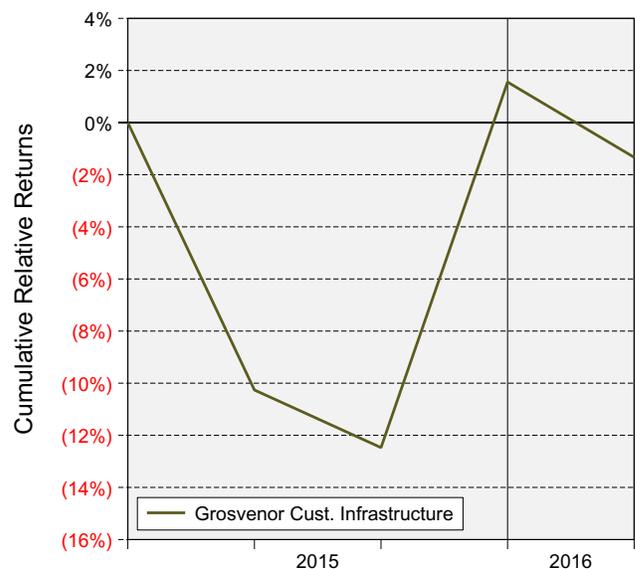
Beginning Market Value	\$19,764,389
Net New Investment	\$-4,837,434
Investment Gains/(Losses)	\$-394,448
Ending Market Value	\$14,532,507



## Relative Return vs CPI-W



## Cumulative Returns vs CPI-W





# Invesco Core Real Estate Period Ended March 31, 2016

## Investment Philosophy

IRE's investment philosophy is comprised of two fundamental principles: (1) maximize the predictability and consistency of investment returns and (2) minimize the risk of capital loss. This philosophy forms the cornerstone of the company's real estate investment philosophy.

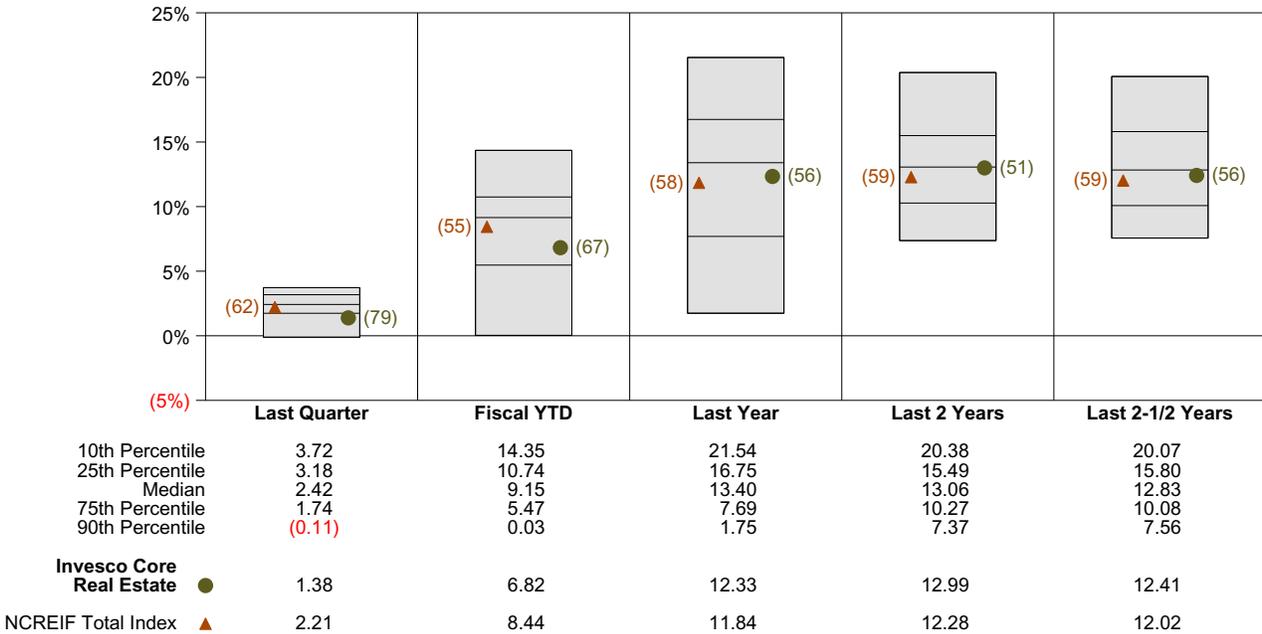
## Quarterly Summary and Highlights

- Invesco Core Real Estate's portfolio posted a 1.38% return for the quarter placing it in the 79 percentile of the Total Real Estate DB group for the quarter and in the 56 percentile for the last year.
- Invesco Core Real Estate's portfolio underperformed the NCREIF Total Index by 0.83% for the quarter and outperformed the NCREIF Total Index for the year by 0.49%.

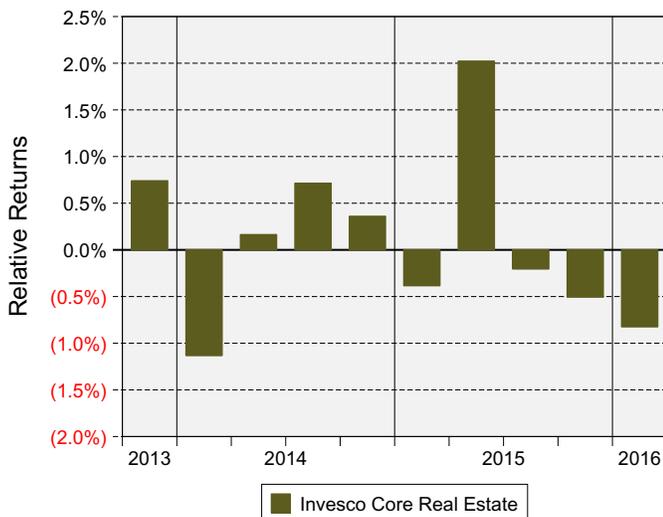
## Quarterly Asset Growth

Beginning Market Value	\$104,906,004
Net New Investment	\$7,000,000
Investment Gains/(Losses)	\$1,549,609
Ending Market Value	\$113,455,613

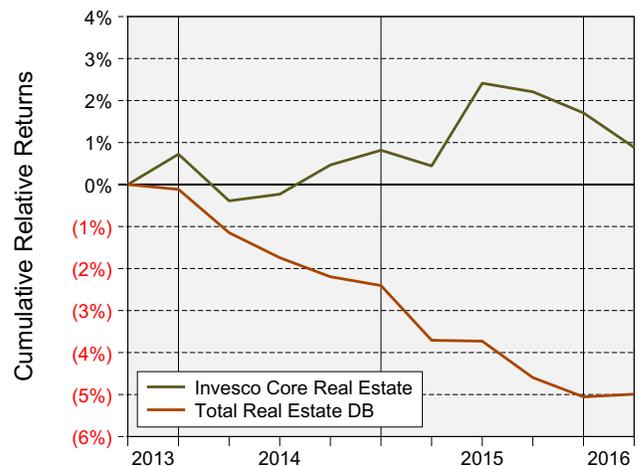
## Performance vs Total Real Estate DB (Net)



## Relative Return vs NCREIF Total Index



## Cumulative Returns vs NCREIF Total Index



# JP Morgan RE Inc & Growth Period Ended March 31, 2016

## Investment Philosophy

The J.P. Morgan U.S. Real Estate Income and Growth Fund seeks to construct and opportunistically manage a portfolio of core direct real estate investments, complemented by other real estate and real estate-related assets. The Fund pursues a broadly diversified absolute-return strategy and pursues all property investments on an opportunistic basis. The majority of the Fund's investments will be in direct core properties in the office, industrial, retail and residential sectors.

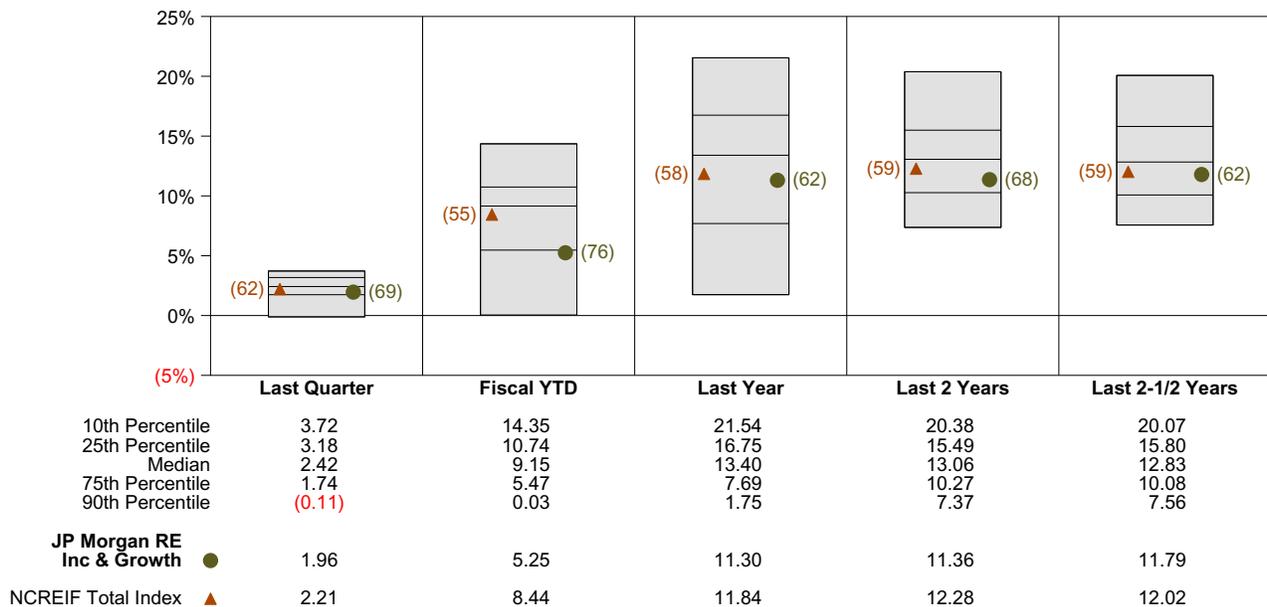
## Quarterly Summary and Highlights

- JP Morgan RE Inc & Growth's portfolio posted a 1.96% return for the quarter placing it in the 69 percentile of the Total Real Estate DB group for the quarter and in the 62 percentile for the last year.
- JP Morgan RE Inc & Growth's portfolio underperformed the NCREIF Total Index by 0.25% for the quarter and underperformed the NCREIF Total Index for the year by 0.54%.

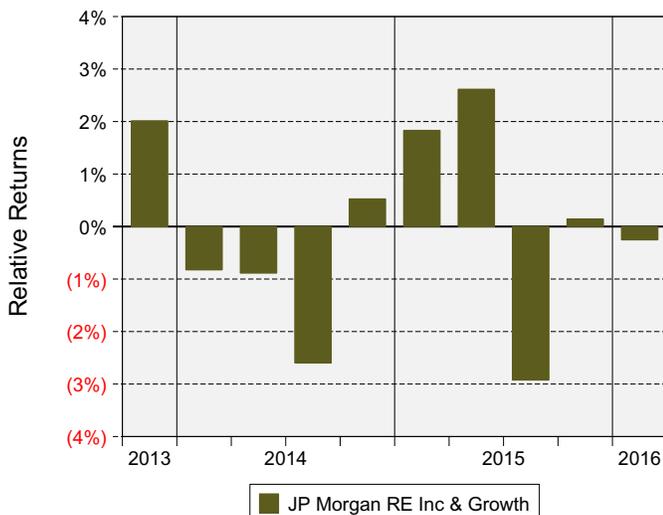
## Quarterly Asset Growth

Beginning Market Value	\$92,112,568
Net New Investment	\$-49,824
Investment Gains/(Losses)	\$1,802,797
Ending Market Value	\$93,865,541

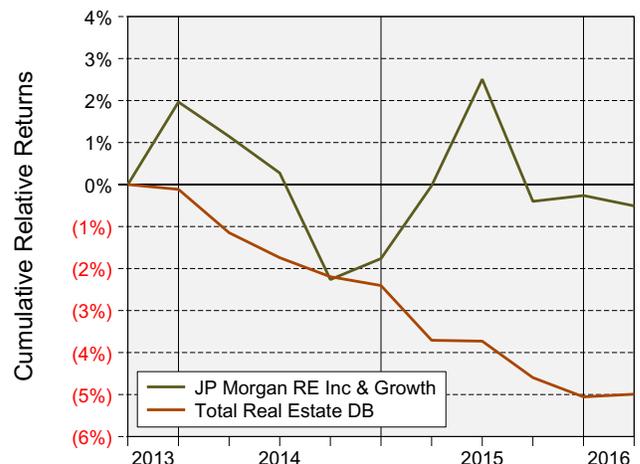
## Performance vs Total Real Estate DB (Net)



## Relative Return vs NCREIF Total Index



## Cumulative Returns vs NCREIF Total Index

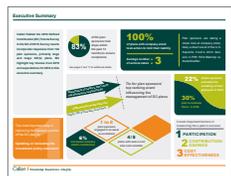




## Research and Educational Programs

The Callan Investments Institute provides research that updates clients on the latest industry trends while helping them learn through carefully structured educational programs. Visit [www.callan.com/research](http://www.callan.com/research) to see all of our publications, or for more information contact Anna West at 415.974.5060 / [institute@callan.com](mailto:institute@callan.com).

### Recent Research



**2016 DC Survey & Key Findings** Callan's 2016 DC Trends Survey highlights plan sponsors' key themes from 2015 and expectations for 2016; the Key Findings summarize the Survey.

**Periodic Table & Periodic Table Collection** Depicts annual investment returns for 10 major asset classes, ranked from best to worst. The Collection includes 10 additional variations.

**Spotlight: Six Key Themes** Callan reflects on some of the ongoing trends within institutional investing and considers how they may develop in the coming year.

**Inside Callan's Database, 4th Quarter 2015** This report graphs performance and risk data from Callan's proprietary database alongside relevant market indices.

**Capital Market Review, 4th Quarter 2015** Insights on the economy and recent performance in equities, fixed income, alternatives, real estate, and more.

**Market Pulse Flipbook, 4th Quarter 2015** A quarterly reference guide covering investment and fund sponsor trends in the U.S. economy, the capital markets, and defined contribution.

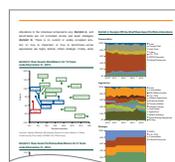
**October Regional Workshop Summary** We reviewed real assets and the implementation implications of building out a robust real assets allocation in portfolios.

**Capital Market Projections** This charticle summarizes key figures from Callan's 2016 capital market projections.

**Global Equity Benchmark Review** This annual report examines FTSE, MSCI, Russell, and S&P indices alongside Callan Active Manager Style Groups.

**Hedge Fund Monitor, 4th Quarter 2015** Our cover story, "David versus Goliath: Sizing Up the Odds," compares the respective advantages and challenges of smaller and larger hedge funds.

**The Renaissance of Stable Value** In this paper, we seek to answer questions about stable value funds, and how they have evolved since the financial crisis.



**Real Assets Reporter, Winter/Spring 2016** In this issue, we look at implementing diversified real asset portfolios, focusing on a process that helps evaluate financial and operational risks.

**U.S. Equity Benchmark Review** This annual report compares CRSP, Russell, and S&P index metrics alongside Callan Active Manager Style Groups.

**DC Observer, 4th Quarter 2015** Cover story: In-Plan Annuities: The Stuff That Dreams Are Made Of?

**The Costs of Closing: Nuclear Decommissioning Trusts** In this video, Julia Moriarty discusses hedging costs, the impact of license extension, and more.

**Private Markets Trends, Winter 2016** Gary Robertson summarizes the market environment, recent events, performance, and other issues involving private equity.

## Events

Miss out on a Callan conference or workshop? Event summaries and speakers' presentations are available on our website: <https://www.callan.com/education/CII/>

Our next **Regional Workshop**, June 28 in Atlanta and June 29 in San Francisco, will consist of two separate one-hour presentations given by our specialists. This year, we look at the impact the Pension Protection Act has had on defined benefit and defined contribution retirement plans a decade after its enactment, and look ahead to the next 10 years.

Save the date for our fall **Regional Workshop**, October 25 in New York and October 26 in Chicago, and our **National Conference**, January 23–25, 2017, at the Palace Hotel in San Francisco.

For more information about events, please contact Barb Geraty: 415.974.5060 / [institute@callan.com](mailto:institute@callan.com)

## The Center for Investment Training Educational Sessions

The Center for Investment Training, better known as the “Callan College,” provides a foundation of knowledge for industry professionals who are involved in the investment decision-making process. It was founded in 1994 to provide clients and non-clients alike with basic- to intermediate-level instruction. Our next session is:

### Introduction to Investments

*San Francisco, CA, July 19–20, 2016*

*Chicago, IL, October 18–19, 2016*

This session familiarizes fund sponsor trustees, staff, and asset management advisors with basic investment theory, terminology, and practices. It lasts one-and-a-half days and is designed for individuals who have less than two years of experience with asset-management oversight and/or support responsibilities. Tuition for the Introductory “Callan College” session is \$2,350 per person. Tuition includes instruction, all materials, breakfast and lunch on each day, and dinner on the first evening with the instructors.

### Customized Sessions

The “Callan College” is equipped to customize a curriculum to meet the training and educational needs of a specific organization. These tailored sessions range from basic to advanced and can take place anywhere—even at your office.

Learn more at <https://www.callan.com/education/college/> or contact Kathleen Cunnie: 415.274.3029 / [cunnie@callan.com](mailto:cunnie@callan.com)

## Education: By the Numbers

500

Attendees (on average) of the Institute's annual National Conference

50+

Unique pieces of research the Institute generates each year

3,300

Total attendees of the “Callan College” since 1994

1980

Year the Callan Investments Institute was founded



“We think the best way to learn something is to teach it. Entrusting client education to our consultants and specialists ensures that they have a total command of their subject matter. This is one reason why education and research have been cornerstones of our firm for more than 40 years.”

Ron Peyton, Chairman and CEO



## List of Callan's Investment Manager Clients

Confidential – For Callan Client Use Only

Callan takes its fiduciary and disclosure responsibilities to clients very seriously. We recognize that there are numerous potential conflicts of interest encountered in the investment consulting industry and that it is our responsibility to manage those conflicts effectively and in the best interest of our clients. At Callan, we employ a robust process to identify, manage, monitor and disclose potential conflicts on an on-going basis.

The list below is an important component of our conflicts management and disclosure process. It identifies those investment managers that pay Callan fees for educational, consulting, software, database or reporting products and services. We update the list quarterly because we believe that our fund sponsor clients should know the investment managers that do business with Callan, particularly those investment manager clients that the fund sponsor clients may be using or considering using. Please refer to Callan's ADV Part 2A for a more detailed description of the services and products that Callan makes available to investment manager clients through our Institutional Consulting Group, Independent Adviser Group and Fund Sponsor Consulting Group. Due to the complex corporate and organizational ownership structures of many investment management firms, parent and affiliate firm relationships are not indicated on our list.

Fund sponsor clients may request a copy of the most currently available list at any time. Fund sponsor clients may also request specific information regarding the fees paid to Callan by particular fund manager clients. Per company policy, information requests regarding fees are handled exclusively by Callan's Compliance Department.

Manager Name
13D Management
1607 Capital Partners, LLC
Aberdeen Asset Management PLC
Acadian Asset Management LLC
AEGON USA Investment Management
Affiliated Managers Group, Inc.
AllianceBernstein
Allianz Global Investors
Allianz Life Insurance Company of North America
AlphaOne Investment Services
American Century Investment Management
Amundi Smith Breeden LLC
Analytic Investors
Angelo, Gordon & Co.
Apollo Global Management
AQR Capital Management
Ares Management LLC
Ariel Investments, LLC
Aristotle Capital Management, LLC
Artisan Holdings
Atlanta Capital Management Co., LLC
Aviva Investors Americas
AXA Investment Managers
Babson Capital Management
Baillie Gifford Overseas Limited
Baird Advisors
Bank of America
Baring Asset Management
Baron Capital Management, Inc.
Barrow, Hanley, Mewhinney & Strauss, LLC
BlackRock
BMO Asset Management, Corp.
BNP Paribas Investment Partners
BNY Mellon Asset Management
Boston Partners
Brandes Investment Partners, L.P.
Brandywine Global Investment Management, LLC

Manager Name
Brown Brothers Harriman & Company
Cambiar Investors, LLC
Capital Group
CastleArk Management, LLC
Causeway Capital Management
Charles Schwab Investment Management
Chartwell Investment Partners
ClearBridge Investments, LLC
Cohen & Steers Capital Management, Inc.
Columbia Management Investment Advisers, LLC
Columbus Circle Investors
Corbin Capital Partners, L.P.
Cornerstone Capital Management
Cramer Rosenthal McGlynn, LLC
Crawford Investment Counsel, Inc.
Credit Suisse Asset Management
Crestline Investors, Inc.
DE Shaw Investment Management, LLC
Delaware Investments
DePrince, Race & Zollo, Inc.
Deutsche Asset Management
Diamond Hill Investments
Duff & Phelps Investment Mgmt. Co.
Eagle Asset Management, Inc.
EARNEST Partners, LLC
Eaton Vance Management
Epoch Investment Partners, Inc.
Fayez Sarofim & Company
Federated Investors
Fidelity Institutional Asset Management
Fiera Capital Global Asset Management
First Eagle Investment Management, LLC
First Hawaiian Bank
Fisher Investments
Fort Washington Investment Advisors, Inc.
Franklin Templeton Institutional
Fred Alger Management, Inc.

Manager Name
Fuller & Thaler Asset Management, Inc.
GAM (USA) Inc.
GE Asset Management
GMO
Goldman Sachs Asset Management
Grand-Jean Capital Management
Guggenheim Investments
Guggenheim Real Estate LLC
GW&K Investment Management
Harbor Capital Group Trust
Hartford Funds
Hartford Investment Management Co.
Henderson Global Investors
Hotchkis & Wiley Capital Management, LLC
HSBC Global Asset Management
Income Research + Management, Inc.
Insight Investment Management Limited
Institutional Capital LLC
INTECH Investment Management, LLC
Invesco
Investec Asset Management
Janus Capital Management, LLC
Jensen Investment Management
J.P. Morgan Asset Management
KeyCorp
Lazard Asset Management
Legal & General Investment Management America
Lincoln National Corporation
LMCG Investments, LLC
Longview Partners
Loomis, Sayles & Company, L.P.
Lord Abbett & Company
Los Angeles Capital Management
LSV Asset Management
MacKay Shields LLC
Man Investments Inc.
Manulife Asset Management
Martin Currie Inc.
Mellon Capital Management
MFS Investment Management
MidFirst Bank
Mondrian Investment Partners Limited
Montag & Caldwell, LLC
Morgan Stanley Investment Management
Mountain Lake Investment Management LLC
MUFG Union Bank, N.A.
Neuberger Berman
Newton Capital Management
Nicholas Investment Partners
Nikko Asset Management Co., Ltd.
Northern Trust Asset Management
Nuveen Investments, Inc.
OFI Global Asset Management
Old Mutual Asset Management

Manager Name
Opus Capital Management Inc.
Pacific Investment Management Company
Parametric Portfolio Associates
Peregrine Capital Management, Inc.
PGIM
PineBridge Investments
Pinnacle Asset Management L.P.
Pioneer Investments
PNC Capital Advisors, LLC
Polen Capital Management
Principal Global Investors
Private Advisors, LLC
Putnam Investments, LLC
QMA (Quantitative Management Associates)
RBC Global Asset Management
Regions Financial Corporation
RidgeWorth Capital Management, Inc.
Rockefeller & Co., Inc.
Rothschild Asset Management, Inc.
Russell Investments
Santander Global Facilities
Schroder Investment Management North America Inc.
Scout Investments
SEI Investments
Seminole Advisory Services, LLC
Smith, Graham & Co. Investment Advisors, L.P.
Smith Group Asset Management
Standard Life Investments Limited
Standish
State Street Global Advisors
Stone Harbor Investment Partners, L.P.
Systematic Financial Management
T. Rowe Price Associates, Inc.
Taplin, Canida & Habacht
The Boston Company Asset Management, LLC
The Hartford
The London Company
The TCW Group, Inc.
Tri-Star Trust Bank
UBS Asset Management
Van Eck Global
Versus Capital Group
Victory Capital Management Inc.
Vontobel Asset Management, Inc.
Voya Investment Management (fka ING)
Waddell & Reed Asset Management Group
WCM Investment Management
WEDGE Capital Management
Wellington Management Company, LLP
Wells Capital Management
Western Asset Management Company
William Blair & Company