



**PERSPECTIVES  
THAT DRIVE  
ENTERPRISE  
SUCCESS**



PERIOD ENDING: SEPTEMBER 30, 2016

Investment Performance Review for

**San Mateo County Employees' Retirement Association**

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# 3<sup>rd</sup> quarter summary

## THE ECONOMIC CLIMATE

- The U.S. labor market continues to improve but at a slower pace. Real wage growth has risen but not as quickly as other periods of similar labor market tightness. Consumer expenditures remain the primary positive contributor to GDP growth.
- U.S. inflation has risen steadily with Core CPI at 2.3% YoY as of August. Energy and gasoline prices continue to weigh on the Headline CPI figure of 1.1% YoY.
- The presidential election approaches. There has historically been a weak relationship between election outcomes and market performance. This election appears to have unique characteristics and may cause more unpredictable effects.

## MARKET PORTFOLIO IMPACTS

- Central bank discussions indicate we may be nearing fiscal expansion as a next form of policy accommodation. As fiscal policies are typically less analyzed and less understood by investors, markets may be more prone to surprise in this environment.

## THE INVESTMENT CLIMATE

- U.S. corporate earnings are expected to decline by -2.1%, which would be the sixth consecutive quarter of YoY decline. Almost all of this decline is attributable to energy sector weakness.
- Low inflation and low bond yields may help to explain higher than usual equity valuations. However, this does not negate the fact that higher equity valuations historically have materially reduced subsequent returns.

## ASSET ALLOCATION ISSUES

- We continue to remain underweight risk and believe that downside market potential outweighs upside market potential.
- Emerging market earnings per share growth turned positive in 2016, reversing a 5-year downward trend. Valuations remain below average on a relative basis and upside potential seems attractive. Investors may consider moving to an overweight in emerging market equities, though risks should be carefully considered.

We remain underweight to risk

Investors should be watchful of corporate earnings, and U.S. inflation trends

# U.S. economics summary

- U.S. real GDP grew 1.4% YoY in Q2, up from 0.8% in Q1. This positive growth reflects contributions from greater consumer expenditures, exports, and non-residential fixed investments. These were partially offset by a decrease in private inventory investment.
- Headline inflation (CPI) rose 1.1% as of August YoY while core CPI rose 2.3%. Lower energy prices, and gasoline in particular (-17.8%), have weighed heavily on the headline inflation figure. Medical care services (+4.9%) and shelter (+3.4%) contributed to higher prices.
- If the U.S. economy continues to move closer to full employment and higher inflation, the market has expected the Fed to want to push harder for rate

“normalization”. However, the fear of disrupting financial markets and raising rates too early, too quickly, remains.

- Over the last few quarters we have continued to see the slow and steady return to the workforce of discouraged workers. This may help explain why productivity growth and wage inflation are lower than might be expected at this level of unemployment.
- Additions to nonfarm payrolls averaged slightly under 200,000 in the third quarter as the overall labor market continued to show strength. The unemployment rate increased slightly to 5.0% as more people entered the labor force.

	Most Recent	12 Months Prior
GDP ( <i>annual YoY</i> )	1.4% 6/30/16	3.9% 6/30/15
Inflation ( <i>CPI YoY, Headline</i> )	1.1% 8/31/16	0.2% 8/31/15
Expected Inflation ( <i>5yr-5yr forward</i> )	1.8% 9/30/16	1.8% 9/30/15
Fed Funds Rate	0.25% 9/30/16	0.12% 9/30/15
10 Year Rate	1.6% 9/30/16	2.0% 9/30/15
U-3 Unemployment	5.0% 9/30/16	5.1% 9/30/15
U-6 Unemployment	9.7% 9/30/16	10.0% 9/30/15

# International economics summary

- Developed economies continued to experience slow growth and low inflation. While inflation ticked up slightly in the Eurozone to 0.4%, it remains materially under the ECB’s target of “below, but close to, 2%”.
- The ECB left monetary policy unchanged at its September meeting, and cut economic growth expectations for the next three years.
- The BOJ shook up its monetary policy after completing a “comprehensive assessment of its current easing programs”. The central bank stated it will intentionally overshoot its inflation target of 2% and introduced a 0% target for the 10-year yield.
- Britain elected new prime minister Theresa May, who will be responsible for implementing Brexit. Increased uncertainty surrounding the timing and nature of the political change will continue. The potential impact of this uncertainty led to the first rate cut by the BOE since 2009.
- The IMF once again downgraded global growth forecasts for 2016 and 2017, this time to just above 3%. It now warns against economic stagnation and states that countries have found themselves in the position of relying on monetary and fiscal policy to lift growth prospects, and that this may be unsustainable.

Area	GDP (Real, YoY)	Inflation (CPI, YoY)	Unemployment
United States	1.4% <i>6/30/16</i>	1.1% <i>8/31/16</i>	5.0% <i>9/30/16</i>
Western Europe	1.8% <i>6/30/16</i>	0.4% <i>9/30/16</i>	8.5% <i>6/30/16</i>
Japan	0.8% <i>6/30/16</i>	(0.5%) <i>8/31/16</i>	3.2% <i>6/30/16</i>
BRIC Nations	5.1% <i>6/30/16</i>	3.8% <i>6/30/16</i>	5.5% <i>6/30/16</i>
Brazil	(3.8%) <i>6/30/16</i>	9.0% <i>8/31/16</i>	11.7% <i>9/30/16</i>
Russia	(0.6%) <i>6/30/16</i>	6.9% <i>8/31/16</i>	5.6% <i>6/30/16</i>
India	7.1% <i>6/30/16</i>	5.1% <i>8/31/16</i>	7.1% <i>12/31/15</i>
China	6.7% <i>6/30/16</i>	1.3% <i>8/31/16</i>	4.1% <i>6/30/16</i>

# Equity environment

- Equity market risks continue to appear asymmetrical to the downside - the U.S. equity market in particular.
- U.S. equities rallied to start the quarter as central banks communicated to the markets that further monetary easing would be available if necessary, in response to the Brexit vote. In the final two months of the quarter, the U.S. equity markets stayed relatively flat and volatility was below average.
- A sixth consecutive quarter of year-over-year earnings decline is expected for the S&P. FactSet has forecast a -2.1% earnings decline for Q3.
- Information technology (12.9%) was the best performing sector in the S&P 500 by a large margin on the back of higher earnings expectations. Utilities (-5.9%) and telecom services (-5.6%) were the worst performing sectors in the index.
- The FTSE 100 (hedged) returned 7.1% over the third quarter after concerns over the impact of Brexit somewhat subsided.
- The U.S. dollar fell 0.7% in Q3 on a trade-weighted basis. Recent dollar stabilization may be disrupted if the Fed goes ahead with further rate hikes. As most developed economies remain in easing mode, further U.S. hikes would likely add to dollar strength.

	QTD TOTAL RETURN		YTD TOTAL RETURN		1 YEAR TOTAL RETURN	
	(unhedged)	(hedged)	(unhedged)	(hedged)	(unhedged)	(hedged)
US Large Cap (Russell 1000)	4.0%		7.9%		14.9%	
US Small Cap (Russell 2000)	9.0%		11.5%		15.5%	
US Large Value (Russell 1000 Value)	3.5%		10.0%		16.2%	
US Large Growth (Russell 1000 Growth)	4.6%		6.0%		13.8%	
International Large (MSCI EAFE)	6.4%	6.3%	1.7%	(1.0%)	6.5%	5.3%
Eurozone (Euro Stoxx 50)	6.3%	4.8%	(2.4%)	(4.1%)	0.4%	0.5%
U.K. (FTSE 100)	4.0%	7.1%	0.6%	14.1%	1.5%	18.4%
Japan (NIKKEI 225)	8.2%	5.9%	4.4%	(14.3%)	13.6%	(6.2%)
Emerging Markets (MSCI Emerging Markets)	9.0%	6.3%	16.0%	9.7%	16.8%	10.7%

Source: Russell Investments, MSCI, STOXX, FTSE, Nikkei, as of 9/30/16

# Domestic equity

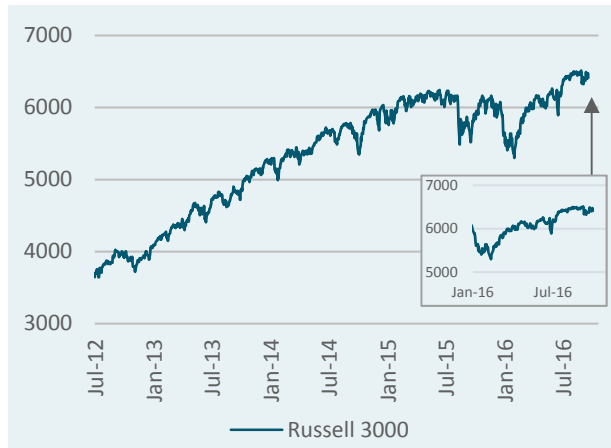
After minimal reaction to Brexit, domestic equities continued higher in July, then delivered two quiet months to finish the quarter. The S&P 500 returned 3.9% in Q3. The market appears to be taking a wait-and-see approach with important oncoming events such as elections and Federal Reserve meetings.

With higher equity prices and lower overall earnings, valuations have expanded. The forward earnings multiple for the S&P 500 was 18.5 at quarter end,

relative to its 25-year average of 16.6 (in the 81<sup>st</sup> percentile). Year-over-year earnings growth is expected to be negative for the sixth consecutive quarter, heavily influenced by the energy sector and lower oil prices. As the effects of monetary stimulus on U.S. financial markets wanes, earnings will play an important role for future equity returns.

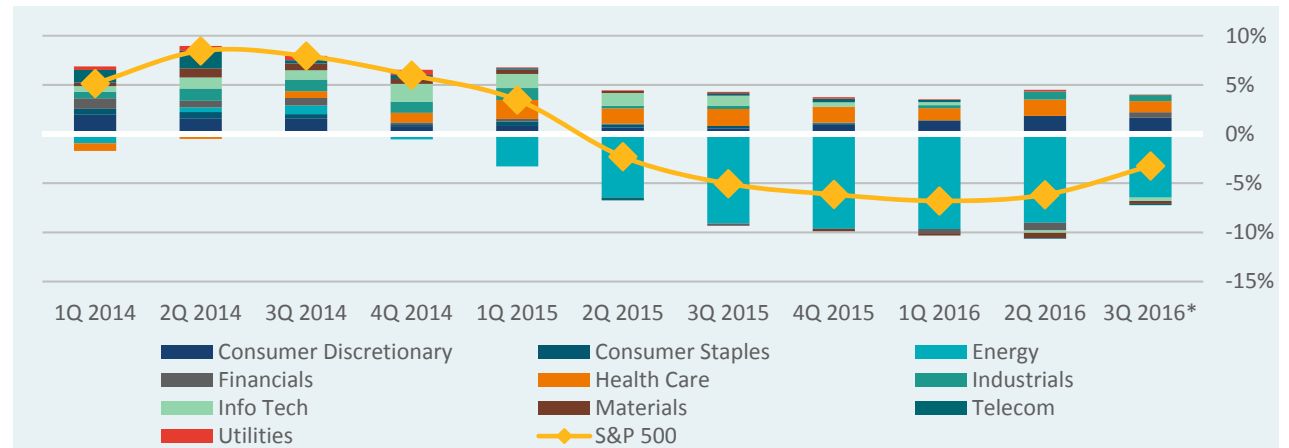
U.S. earnings results will likely dictate the path of equities

## U.S. EQUITIES



Source: Russell Investments, as of 9/26/16

## SECTOR IMPACT ON S&P 500 EARNINGS GROWTH



Source: Bloomberg, as of 9/30/16

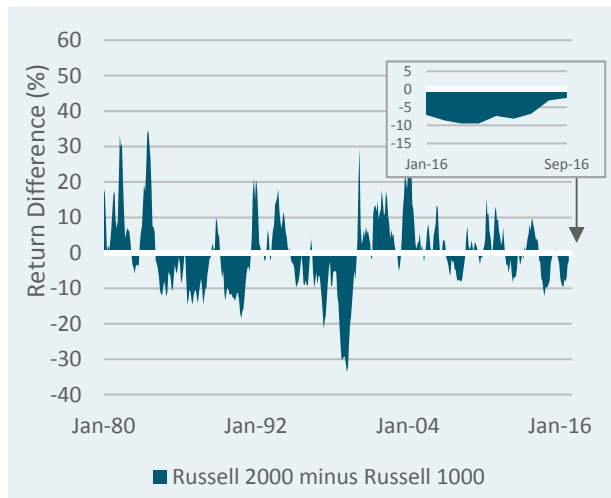
# Domestic equity size and style

Growth stocks outperformed value during the third quarter as the Russell 1000 Growth Index and Russell 1000 Value Index returned 4.6% and 3.5%, respectively. However, value has outperformed growth by 4.0% year-to-date.

3.5% year-to-date, reversing a recent trend of large cap outperformance. The relative P/E ratio of small to large cap equities at the end of September was 2.07 - well above its long-term average of 1.39 - suggesting that small cap stocks may be relatively overvalued.

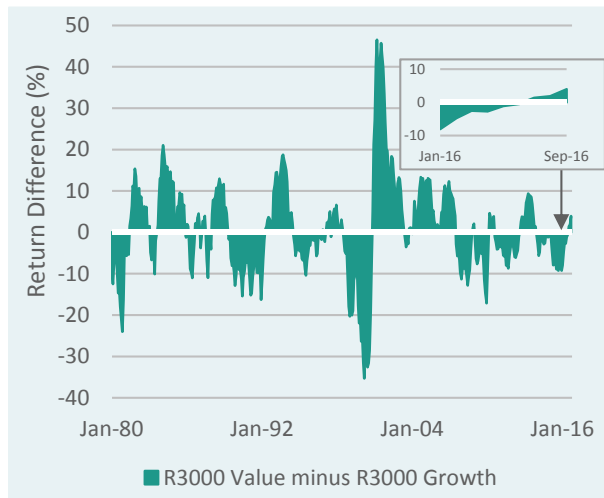
In the third quarter, the Russell 2000 Index returned 9.0% and the Russell 1000 Index returned 4.0%. Small cap equities have also beaten large cap equities by

**SMALL CAP VS LARGE CAP (YOY)**



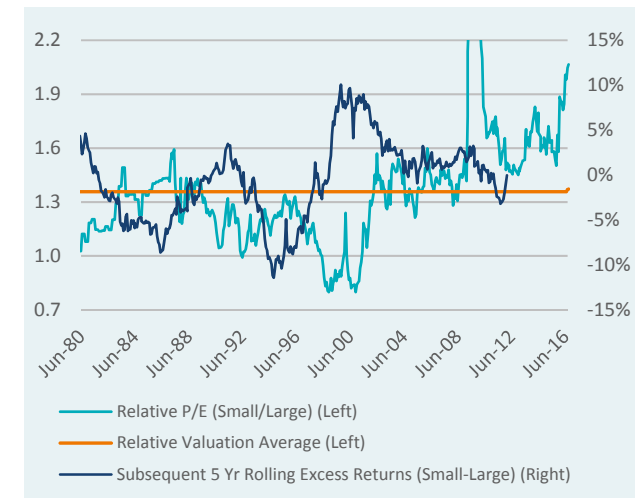
Source: Russell Investments, as of 9/30/16

**VALUE VS GROWTH (YOY)**



Source: Russell Investments, as of 9/30/16

**RELATIVE P/E RATIO (SMALL VS LARGE)**



Source: Russell, Bloomberg, as of 9/30/16



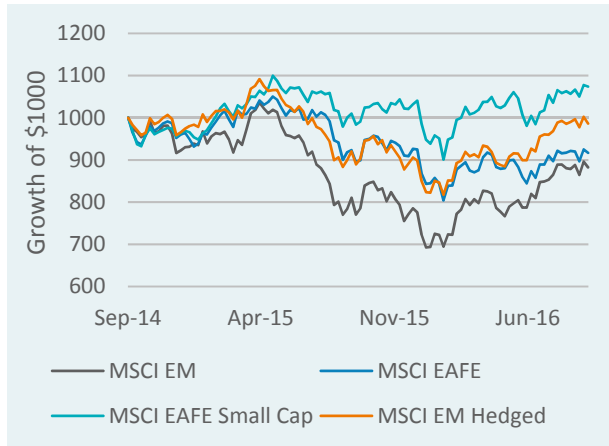
# International equity

Central banks remained accommodative in Q3, helping to generate a rally in international equities. Low and negative yields in Japan and the Eurozone helped maintain the relative attractiveness of equities in these markets.

On a hedged basis, international developed equities outperformed domestic equities with the MSCI EAFE returning 6.3%, and the S&P 500 returning only 3.9% during the quarter.

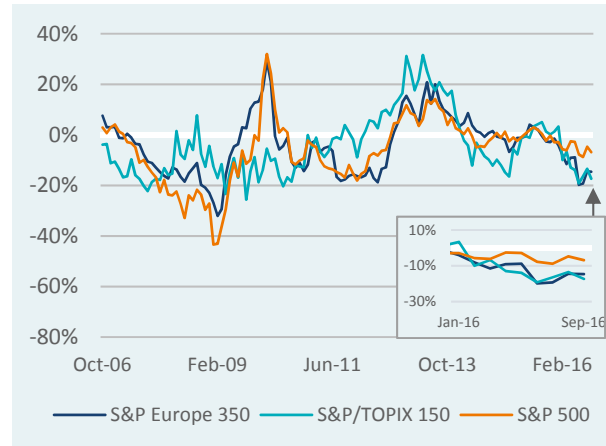
Financial stocks continue to lag, though the third quarter saw more healthy returns. Banks in Japan and the Eurozone were given a boost when the BOJ and ECB chose not to increase stimulus measures. Significant headwinds remain, however, as negative interest rates continue to hurt bank profitability.

**GLOBAL EQUITY PERFORMANCE**



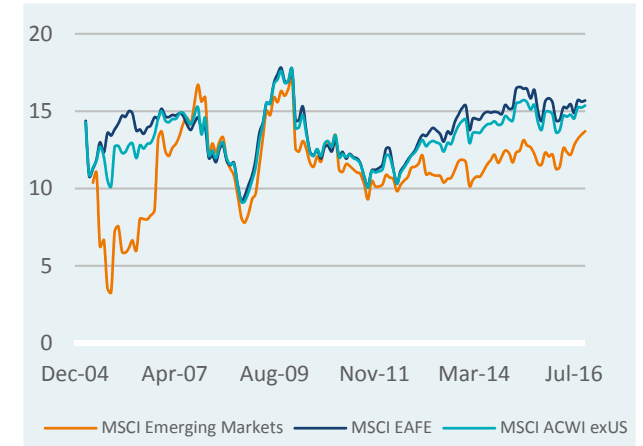
Source: Bloomberg, as of 9/30/16

**12-MONTH ROLLING RELATIVE FINANCIAL SECTOR RETURNS**



Source: MPI, as of 9/30/16, in local currency terms

**INTERNATIONAL FORWARD P/E RATIOS**



Source: MSCI, as of 9/30/16

# Emerging market equity

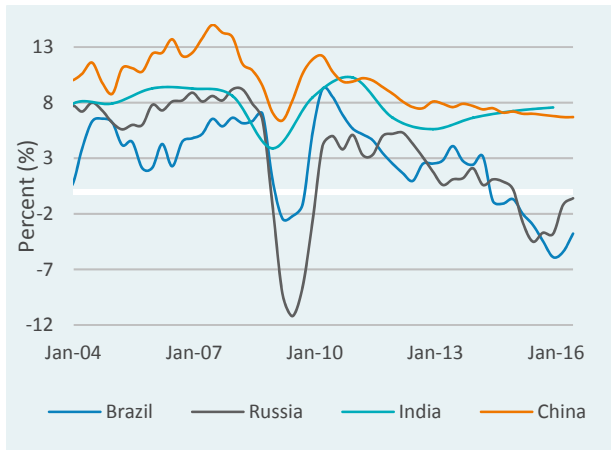
Emerging market equities experienced a rebound during Q3, returning 6.3% on a hedged basis and 9% unhedged. Emerging market earnings per share growth turned positive in 2016, reversing a 5-year downward trend. Valuations remain below average and materially more attractive than those of developed markets.

Moderating commodity prices, continued developed central bank accommodation, less U.S. dollar strengthening, and stability in China, have helped to bolster investor risk appetites and the emerging market

outlook, fueling fund flows into these markets.

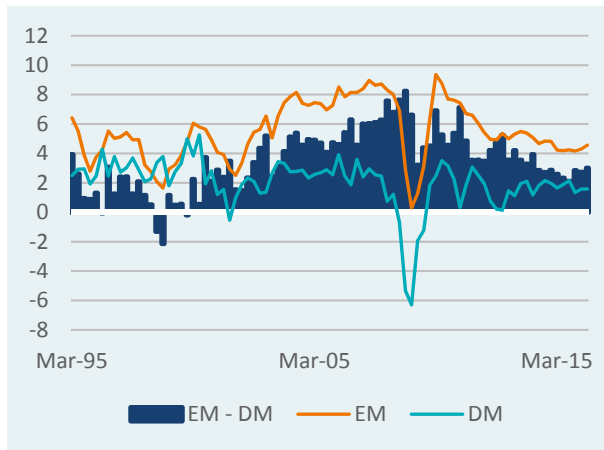
Many emerging market economies experienced a rough readjustment period following the commodity supercycle reversal and saw severe currency depreciation. However, many economies such as Russia have allowed currency devaluation to work as an effective economic shock absorber to mitigate current account problems which these economies often experience during commodity (export) price choppiness.

**ECONOMIC GROWTH (REAL GDP YOY)**



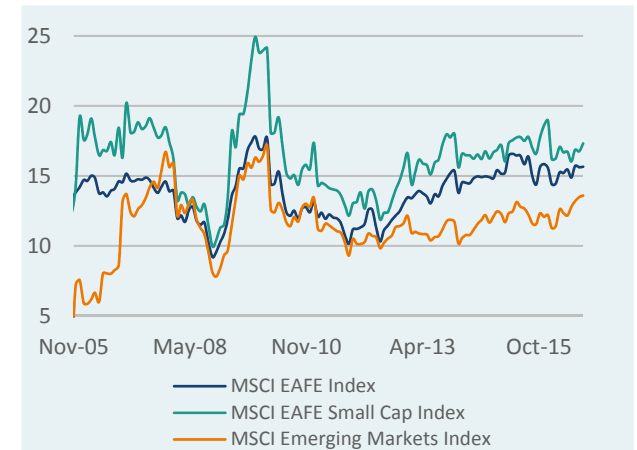
Source: Bloomberg, as of 6/30/16

**EM VS. DM REAL GDP GROWTH**



Source: Bloomberg, as of 6/30/16

**FORWARD P/E**



Source: MSCI, as of 9/30/16

# Interest rate environment

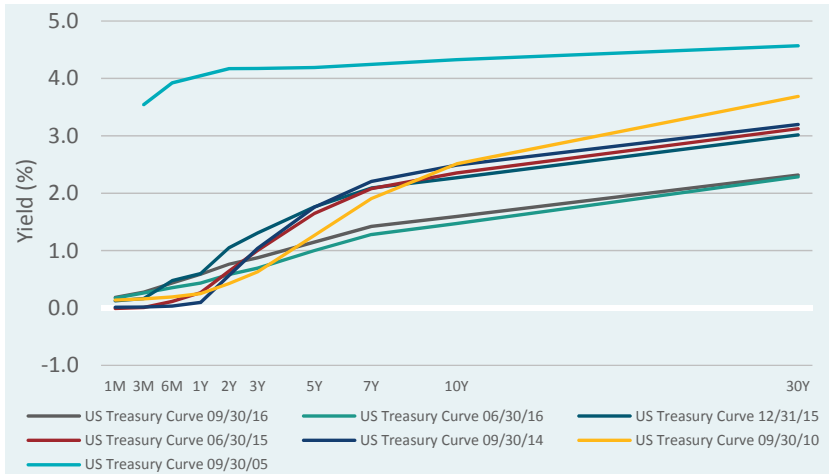
- The U.S. Treasury curve continued to flatten, influenced by increased expectations of an interest rate hike by the end of the year.
- Global interest rates remain near all time lows, although volatility picked up. Continued easing by central banks in addition to low inflation and expectations for slowing growth contribute to an environment of secularly low yields.
- When thinking about bond yields today, it may be useful not only to consider nominal yields, which are at historic lows, but also *real* yields, which paint a much more reasonable picture. Current levels of inflation and future expectations may help put things into context. Furthermore, investors may see markets drive yields higher if inflation expectations were to rise.
- Negative yielding sovereign and corporate debt was \$11.6 trillion at quarter end, mostly from Japan and the Eurozone. We remain concerned about Japanese and European rates as negative yields and low liquidity detract from the attractiveness of these assets.
- Yields on Japanese Treasuries increased sharply in late July after the BOJ chose to keep stimulus measures on hold. The 10-year JGB yield briefly traded around 0% before falling back into negative territory at the end of September.
- European sovereign bonds sold off during the beginning of September over concerns that central banks may begin cutting back on monetary easing measures.

Area	Short Term (3M)	10 Year
United States	0.27%	1.59%
Germany	(0.76%)	(0.12%)
France	(0.67%)	0.19%
Spain	(0.60%)	0.88%
Italy	(0.39%)	1.19%
Greece	3.34%	8.28%
U.K.	0.32%	0.75%
Japan	(0.33%)	(0.09%)
Australia	1.75%	1.91%
China	2.23%	2.74%
Brazil	13.73%	11.60%
Russia	9.80%	8.17%

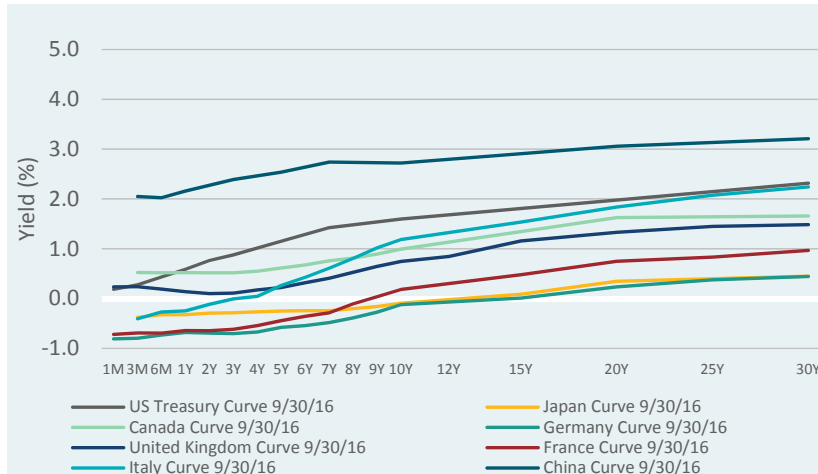
Source: Bloomberg, as of 9/30/16

# Yield environment

**U.S. YIELD CURVE**

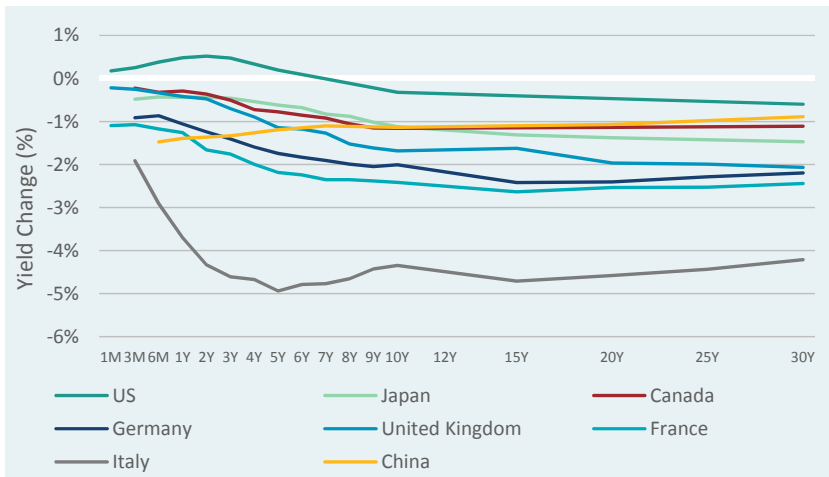


**GLOBAL GOVERNMENT YIELD CURVES**

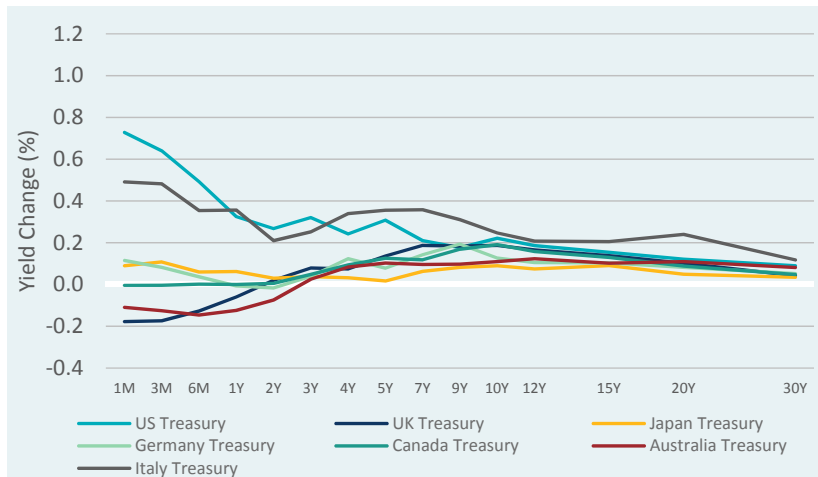


Global investors continue to prefer U.S. Treasuries due to higher relative yields

**YIELD CURVE CHANGES OVER LAST FIVE YEARS**



**IMPLIED CHANGES OVER NEXT YEAR**



Source: Bloomberg, as of 9/30/16

# Currency

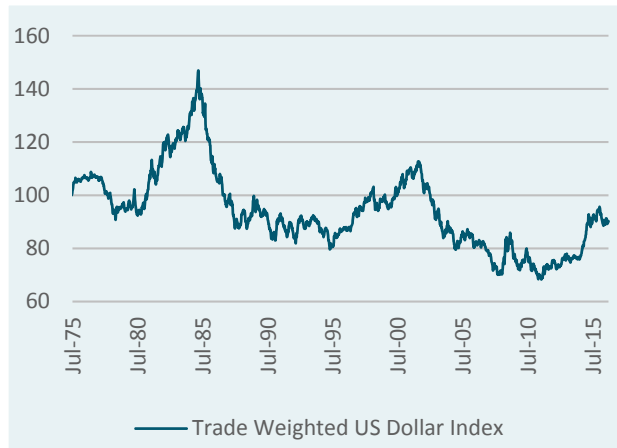
The U.S. dollar, weighted by major trading partners, fell 0.7% in the third quarter, benefitting investors with unhedged equity exposure. The pound sterling has had the opposite effect for U.S. investors, as new multi-decade lows were reached during the quarter, following a significant market flash crash (but recovery).

After a recent period of appreciation, the dollar has stabilized so far this year. Moderation of the USD would have a positive impact on earnings of U.S. companies with significant international exposure.

However, with the Fed expected to continue increasing interest rates while other central banks are still in easing mode, there may be upward pressure on the dollar as interest rate differentials increase.

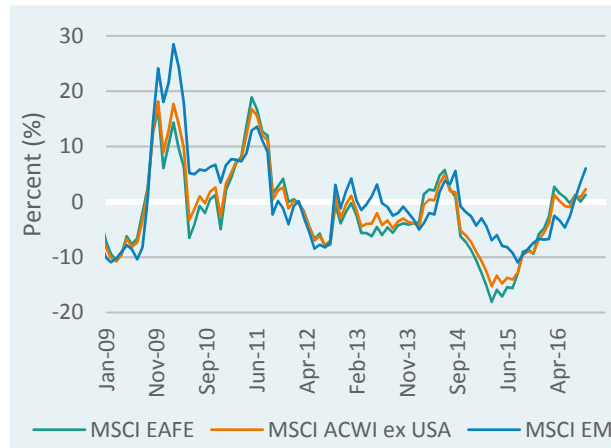
The pound sterling fell to a 31-year low against the U.S. dollar, influenced by uncertainty surrounding the details of the U.K.'s exit from the European Union. Theresa May announced that she would invoke Article 50 by March 2017.

**LONG-TERM TRADE WEIGHTED USD**



Source: FRED, as of 9/30/16

**EFFECT OF CURRENCY (1YR ROLLING)**



Source: MSCI, as of 9/30/16

**GBP/USD**



Source: FRED, as of 10/19/16

- The Total Fund, net of manager fees, returned 3.7% in the third quarter of 2016 and ranked 54<sup>th</sup> among other public plans greater than \$1 billion (median of 3.8%). It lagged the policy index return of 3.8%. The Total Fund w/o Overlay was 3.9% for the quarter. The Total Fund one year return of 10.3% was behind its policy index return of 11.1% and ranked in 17<sup>th</sup> percentile of its peer universe. The three-year return of 6.5% (14<sup>th</sup> percentile) was above median among large public plans (5.5%).
  
- Third quarter results were enhanced by the following factors:
  1. Brigade Capital lead the Barclays Intermediate High Yield by 3.1% gaining 7.1% for the quarter. Leverage loans rallied and high yield spreads tightened by 52bps in July leading to an outperformance for July. In September high yield was the main driver of performance.
  2. Western TRU gained 2.6% beating the Barclays Aggregate (2.6% vs 0.5%) and ranked 2<sup>nd</sup> percentile among its peers. Investment-grade credit exposure was a significant contributor to relative performance as spreads tightened by 17 bps while generating 155bps of excess return.
  2. Baillie Gifford was up 8.4% while the MSCI ACWI ex US returned 7.0%. Third quarter performance was enhanced by Tsingtao due to market stabilization in China and improvements in margins. Zalando was the top contributor posting strong earnings for 2016.
  3. Barrow Hanley returned 4.8% beating its benchmark by 1.3%, and ranked in the top third of large cap value managers. Stock selection within Financials was the main driver of performance for the quarter.
  4. For a second quarter in a row, DE Shaw led its benchmark, the Russell 1000 Index (5.1% vs. 4.0%). The outperformance was a result of an overweight exposure to small cap stocks and underweight exposure to momentum positions.
  5. The FIAM Bond portfolio ranked in the top decile of US Core Fixed Income managers with a 1.2% return (vs 0.5 for the Barclays Aggregate). The portfolio tilt towards financials and corporate outperformed treasuries this quarter which contributed to relative performance. Within the securitized allocation an overweight to CMBS was also beneficial during the quarter.

— Third quarter results were hindered by the following factors:

1. Mondrian rose 3.9% while the MSCI ACWI ex US gained 7.9%. Most US Large Value managers underperformed the index. Overweight positions in Singapore and Switzerland, stock selection in the UK and Sweden, and an overweight position in the British pound were the main reasons for underperforming.
2. Parametric Core Emerging lagged the MSCI Emerging Markets (5.3% vs 9.2%) ranking in the bottom decile of its peers. An underweight to China and Taiwan and an overweight to the Philippines were detractors from performance. Chinese stocks rose on signs of continued economic growth. Taiwan experienced a rally from Taiwan-based iPhone 7 component suppliers.
1. FIAM Equity gained 6.8% compared to the 8.0% return for the MSCI ACWI ex US Small Cap Index. The portfolio Holdings in Hong Kong and Australia Lagged. Positions within Consumer Discretionary and IT also detracted from relative performance.

# Total Fund Performance Summary (Net of Fees)

Period Ending: September 30, 2016

	3 Mo (%)	Rank	YTD (%)	Rank*	1 Yr (%)	Rank	2 Yrs (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
<b>Total Fund**</b>	<b>3.7</b>	<b>54</b>	<b>7.3</b>	<b>26</b>	<b>10.3</b>	<b>17</b>	<b>4.9</b>	<b>17</b>	<b>6.5</b>	<b>14</b>	<b>10.0</b>	<b>21</b>	<b>4.9</b>	<b>79</b>
<i>Policy Index</i> <sup>1</sup>	3.8	51	7.7	11	11.1	1	4.6	22	6.4	22	10.2	12	5.9	17
<i>Allocation Index</i>	3.5	69	7.5	21	10.9	2	4.5	25	6.3	26	--	--	--	--
<i>InvestorForce Public DB &gt; \$1B Net Median</i>	3.8		6.8		9.3		3.8		5.5		8.8		5.4	
<b>Total Fund ex Overlay</b>	<b>3.9</b>	<b>36</b>	<b>7.1</b>	<b>38</b>	<b>9.9</b>	<b>28</b>	<b>4.7</b>	<b>21</b>	<b>6.4</b>	<b>22</b>	<b>9.9</b>	<b>22</b>	<b>4.9</b>	<b>80</b>
<i>Policy Index</i> <sup>1</sup>	3.8	51	7.7	11	11.1	1	4.6	22	6.4	22	10.2	12	5.9	17
<i>Allocation Index</i>	3.5	69	7.5	21	10.9	2	4.5	25	6.3	26	--	--	--	--
<i>InvestorForce Public DB &gt; \$1B Net Median</i>	3.8		6.8		9.3		3.8		5.5		8.8		5.4	
<b>Public Equity</b>	<b>5.0</b>	<b>68</b>	<b>6.9</b>	<b>55</b>	<b>12.8</b>	<b>39</b>	<b>4.2</b>	<b>38</b>	<b>6.5</b>	<b>46</b>	<b>12.7</b>	<b>47</b>	<b>4.6</b>	<b>76</b>
<i>Blended Public Equity Index</i> <sup>2</sup>	5.7	38	7.6	38	13.0	34	3.8	47	6.4	47	12.8	46	5.6	40
<i>InvestorForce All DB Total Eq Net Median</i>	5.4		7.1		12.5		3.7		6.3		12.4		5.3	
<b>US Equity</b>	<b>4.3</b>	<b>71</b>	<b>6.8</b>	<b>72</b>	<b>13.5</b>	<b>58</b>	<b>6.5</b>	<b>52</b>	<b>9.1</b>	<b>59</b>	<b>15.7</b>	<b>49</b>	<b>6.1</b>	<b>90</b>
<i>Blended US Equity Index</i> <sup>2</sup>	4.7	50	8.4	31	14.8	33	7.0	29	9.9	32	16.3	24	7.4	30
<i>Russell 3000</i>	4.4	65	8.2	37	15.0	29	7.0	33	10.4	16	16.4	19	7.4	29
<i>InvestorForce All DB US Eq Net Median</i>	4.6		7.8		14.0		6.6		9.4		15.7		7.0	
<b>Large Cap Equity</b>	<b>4.1</b>	<b>--</b>	<b>7.0</b>	<b>--</b>	<b>14.2</b>	<b>--</b>	<b>7.2</b>	<b>--</b>	<b>10.4</b>	<b>--</b>	<b>16.1</b>	<b>--</b>	<b>6.3</b>	<b>--</b>
<i>Russell 1000</i>	4.0	--	7.9	--	14.9	--	6.9	--	10.8	--	16.4	--	7.4	--
<i>Barrow Hanley</i>	4.8	33	4.7	75	10.3	72	4.5	40	7.7	68	15.6	35	--	--
<i>Russell 1000 Value</i>	3.5	61	10.0	23	16.2	22	5.4	25	9.7	20	16.2	25	5.9	66
<i>eA US Large Cap Value Equity Net Median</i>	4.0		7.7		12.8		4.0		8.5		14.6		6.3	
<i>BlackRock S&amp;P 500 Index</i>	3.9	47	7.9	18	15.4	12	7.2	25	11.2	16	--	--	--	--
<i>S&amp;P 500</i>	3.9	47	7.8	18	15.4	12	7.1	25	11.2	19	16.4	20	7.2	47
<i>eA US Large Cap Core Equity Net Median</i>	3.7		5.6		11.7		5.7		9.7		15.0		7.1	

\* Total Fund and asset class aggregates are ranked in InvestorForce universes. Managers are ranked in eVest (eA) manager universes.

\*\* Includes Parametric Minneapolis manager funded in August 2013.

1. Effective 9/1/16, Policy Index is 28% Russell 3000/20% MSCI ACWI ex US IMI/ 10% Barclays Aggregate/ 2% Barclays TIPS

5% Barclays BA Intermediate HY / 3% Barclays Multi-verse/ 7% NCREIF NFI ODCE/ 7% Russell 3000 + 3%

8% (60% Russell 3000/40% Barclays Aggregate)/ 5% Libor +4%/ 3% Bloomberg Commodity/ 2% CPI +5%

2. See Appendix for Benchmark History.



Total Fund  
Performance Summary (Net of Fees)

Period Ending: September 30, 2016

	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	2 Yrs (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Brown Advisory	3.6	78	2.0	68	9.7	60	6.9	47	8.0	84	--	--	--	--
<i>Russell 1000 Growth</i>	4.6	57	6.0	21	13.8	17	8.3	20	11.8	14	16.6	22	8.8	26
<i>eA US Large Cap Growth Equity Net Median</i>	5.0		3.3		10.4		6.6		10.0		15.1		8.1	
DE Shaw	5.1	20	10.0	7	16.5	8	8.8	7	11.7	7	17.9	2	--	--
<i>Russell 1000</i>	4.0	42	7.9	18	14.9	17	6.9	29	10.8	26	16.4	19	7.4	38
<i>eA US Large Cap Core Equity Net Median</i>	3.7		5.6		11.7		5.7		9.7		15.0		7.1	
<b>Small Cap Equity</b>	<b>5.7</b>	<b>80</b>	<b>5.9</b>	<b>81</b>	<b>10.2</b>	<b>74</b>	<b>3.3</b>	<b>86</b>	<b>3.5</b>	<b>85</b>	<b>14.1</b>	<b>73</b>	<b>4.7</b>	<b>98</b>
<i>Russell 2000</i>	9.0	27	11.5	39	15.5	38	8.1	41	6.7	50	15.8	50	7.1	64
<i>eA US Small Cap Equity Net Median</i>	7.5		10.1		13.7		7.5		6.7		15.8		7.6	
QMA US Small Cap*	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<i>Russell 2000</i>	9.0	23	11.5	36	15.5	32	8.1	49	6.7	56	15.8	56	7.1	67
<i>eA US Small Cap Core Equity Net Median</i>	7.0		9.8		13.8		8.1		7.1		16.0		7.7	
<b>International Equity</b>	<b>6.2</b>	<b>79</b>	<b>7.0</b>	<b>29</b>	<b>11.6</b>	<b>17</b>	<b>0.2</b>	<b>25</b>	<b>2.0</b>	<b>21</b>	<b>6.9</b>	<b>60</b>	<b>1.7</b>	<b>67</b>
<i>MSCI ACWI ex US IMI<sup>2</sup></i>	7.1	45	6.5	39	10.3	35	-0.9	47	1.1	45	6.8	63	2.8	33
<i>MSCI EAFE Gross</i>	6.5	71	2.2	92	7.1	81	-0.9	46	0.9	50	7.9	36	2.3	47
<i>InvestorForce All DB ex-US Eq Net Median</i>	7.0		5.8		9.4		-1.0		0.9		7.3		2.2	
<b>Developed Markets</b>	<b>6.3</b>	<b>57</b>	<b>6.1</b>	<b>26</b>	<b>11.2</b>	<b>23</b>	<b>0.9</b>	<b>26</b>	<b>2.4</b>	<b>24</b>	<b>7.5</b>	<b>50</b>	<b>2.0</b>	<b>61</b>
<i>MSCI ACWI ex USA Gross</i>	7.0	41	6.3	25	9.8	33	-1.6	66	0.6	62	6.5	77	2.6	37
<i>InvestorForce All DB Dev Mkt ex-US Eq Net Median</i>	6.6		3.9		7.2		-0.7		1.1		7.4		2.3	
Baillie Gifford	8.4	16	8.4	14	16.4	13	4.3	37	3.9	36	--	--	--	--
<i>MSCI ACWI ex US<sup>2</sup></i>	7.0	43	6.3	36	9.8	51	-1.6	97	0.9	89	--	--	--	--
<i>MSCI ACWI ex US Growth<sup>2</sup></i>	6.1	68	6.5	32	11.9	38	1.6	73	2.8	61	--	--	--	--
<i>eA ACWI ex-US Growth Equity Net Median</i>	6.7		4.0		9.9		3.5		3.4		9.2		4.9	

\* Funded August 2016.

2. See Appendix for Benchmark History.

Total Fund  
Performance Summary (Net of Fees)

Period Ending: September 30, 2016

	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	2 Yrs (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
BlackRock EAFE Index	6.5	50	2.1	47	6.9	45	-1.1	79	--	--	--	--	--	--
<i>MSCI EAFE</i>	6.4	52	1.7	52	6.5	56	-1.4	82	0.5	76	7.4	74	1.8	76
<i>MSCI EAFE Gross</i>	6.5	49	2.2	46	7.1	44	-0.9	76	0.9	64	7.9	68	2.3	58
<i>eA EAFE Core Equity Net Median</i>	6.5		1.8		6.7		0.3		1.7		9.0		2.5	
FIAM Equity	6.8	60	7.3	31	13.0	39	4.1	58	3.7	64	--	--	--	--
<i>MSCI ACWI ex US Small Cap Gross</i>	8.0	31	8.0	22	13.8	34	3.4	63	3.9	55	9.0	83	5.0	79
<i>eA ACWI ex-US Small Cap Equity Net Median</i>	7.2		5.5		11.8		4.6		4.0		10.9		6.5	
Mondrian	3.9	81	6.0	37	8.4	48	-2.1	70	1.3	61	5.9	88	2.3	47
<i>MSCI ACWI ex USA Value Gross</i>	7.9	29	6.0	37	7.6	64	-4.8	91	-1.4	87	5.2	92	1.7	87
<i>MSCI ACWI ex USA Gross</i>	7.0	46	6.3	36	9.8	35	-1.6	68	0.6	72	6.5	74	2.6	41
<i>eA ACWI ex-US Value Equity Net Median</i>	6.5		5.1		8.1		0.1		1.5		7.7		2.3	
<b>Emerging Markets</b>	<b>5.3</b>	<b>92</b>	<b>16.1</b>	<b>50</b>	<b>14.9</b>	<b>81</b>	<b>-5.4</b>	<b>93</b>	<b>-1.3</b>	<b>75</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<i>MSCI Emerging Markets Gross</i>	9.2	26	16.4	47	17.2	50	-2.6	42	-0.2	47	3.4	46	4.3	30
<i>InvestorForce All DB Emg Mkt Eq Net Median</i>	8.2		16.0		17.1		-2.8		-0.3		3.2		3.7	
Parametric Core	5.3	91	16.1	37	15.0	60	--	--	--	--	--	--	--	--
<i>MSCI Emerging Markets Gross</i>	9.2	36	16.4	34	17.2	44	-2.6	58	-0.2	62	3.4	69	4.3	63
<i>eA Emg Mkts Equity Net Median</i>	8.5		14.5		16.1		-2.1		0.3		4.2		4.7	
<b>Fixed Income</b>	<b>2.4</b>	<b>12</b>	<b>7.2</b>	<b>42</b>	<b>6.7</b>	<b>42</b>	<b>3.0</b>	<b>64</b>	<b>3.9</b>	<b>44</b>	<b>5.0</b>	<b>28</b>	<b>5.2</b>	<b>57</b>
<i>Blended Fixed Income Index<sup>2</sup></i>	1.5	40	8.1	34	7.6	34	4.2	29	3.9	42	3.2	79	4.9	68
<i>InvestorForce All DB Total Fix Inc Net Median</i>	1.3		6.8		6.2		3.5		3.7		4.0		5.4	
<b>US Fixed Income</b>	<b>2.9</b>	<b>5</b>	<b>8.4</b>	<b>31</b>	<b>7.4</b>	<b>33</b>	<b>4.1</b>	<b>40</b>	<b>4.5</b>	<b>41</b>	<b>5.0</b>	<b>34</b>	<b>5.3</b>	<b>49</b>
<i>Blended US Fixed Index<sup>2</sup></i>	1.6	34	7.7	35	7.3	34	4.4	33	4.2	48	3.4	70	5.1	56
<i>InvestorForce All DB US Fix Inc Net Median</i>	1.2		6.6		6.0		3.8		4.1		4.2		5.2	

2. See Appendix for Benchmark History.

Total Fund  
Performance Summary (Net of Fees)

Period Ending: September 30, 2016

	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	2 Yrs (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
<b>Core Fixed</b>	<b>1.6</b>	<b>--</b>	<b>6.5</b>	<b>--</b>	<b>6.4</b>	<b>--</b>	<b>4.0</b>	<b>--</b>	<b>4.4</b>	<b>--</b>	<b>4.1</b>	<b>--</b>	<b>4.9</b>	<b>--</b>
Barclays Aggregate	0.5	--	5.8	--	5.2	--	4.1	--	4.0	--	3.1	--	4.8	--
FIAM Bond	1.2	10	7.4	6	6.9	8	4.5	20	4.6	21	4.0	26	5.2	40
Western TRU	2.6	2	4.5	92	5.1	68	--	--	--	--	--	--	--	--
3-Month Libor Total Return USD	0.2	90	0.5	99	0.6	99	0.4	99	0.4	99	0.4	99	1.3	99
Barclays Aggregate	0.5	72	5.8	64	5.2	68	4.1	50	4.0	61	3.1	79	4.8	78
eA US Core Fixed Inc Net Median	0.7		6.1		5.5		4.1		4.1		3.5		5.1	
<b>Opportunistic Credit</b>	<b>5.8</b>	<b>--</b>	<b>12.2</b>	<b>--</b>	<b>8.8</b>	<b>--</b>	<b>4.4</b>	<b>--</b>	<b>6.1</b>	<b>--</b>	<b>10.6</b>	<b>--</b>	<b>--</b>	<b>--</b>
Barclays BA Intermediate HY	4.0	--	11.1	--	11.2	--	5.5	--	5.3	--	5.2	--	--	--
Angelo Gordon Opportunistic*	5.1	--	5.0	--	4.4	--	2.7	--	--	--	--	--	--	--
Angelo Gordon STAR*	4.7	--	4.6	--	3.6	--	5.9	--	9.5	--	--	--	--	--
Barclays Aggregate	0.5	--	5.8	--	5.2	--	4.1	--	4.0	--	3.1	--	4.8	--
Beach Point Select	5.2	32	12.1	50	10.3	47	--	--	--	--	--	--	--	--
Barclays BA Intermediate HY <sup>2</sup>	4.0	80	11.1	64	11.2	22	5.5	6	5.3	27	5.2	94	--	--
eA US High Yield Fixed Inc Net Median	4.8		11.9		10.1		3.4		4.6		7.6		7.0	
Brigade Capital	7.1	1	19.8	1	12.0	11	2.0	84	3.1	86	6.6	78	--	--
Barclays BA Intermediate HY <sup>2</sup>	4.0	80	11.1	64	11.2	22	5.5	6	5.3	27	5.2	94	--	--
50% Barclays HY/ 50% Bank Loan	4.3	75	11.2	63	9.0	67	3.8	44	4.5	54	6.9	76	--	--
eA US High Yield Fixed Inc Net Median	4.8		11.9		10.1		3.4		4.6		7.6		7.0	
TCP Direct Lending VIII**	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Barclays BA Intermediate HY	4.0	80	11.1	64	11.2	22	5.5	6	5.3	27	5.2	94	--	--
eA US High Yield Fixed Inc Net Median	4.8		11.9		10.1		3.4		4.6		7.6		7.0	
<b>Global Fixed Income</b>	<b>-0.1</b>	<b>95</b>	<b>1.1</b>	<b>95</b>	<b>3.4</b>	<b>95</b>	<b>-2.5</b>	<b>95</b>	<b>0.2</b>	<b>86</b>	<b>4.4</b>	<b>43</b>	<b>--</b>	<b>--</b>
Barclays Multi-verse	1.0	72	10.2	42	9.2	44	2.6	41	2.2	60	2.0	89	4.4	78
InvestorForce All DB Gbl Fix Inc Net Median	1.9		9.4		8.6		1.8		3.1		4.2		5.8	

\* Preliminary return as of 9/30/2016.

\*\* Funded September 2016.

2. See Appendix for Benchmark History.

Total Fund  
Performance Summary (Net of Fees)

Period Ending: September 30, 2016

	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	2 Yrs (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Franklin Templeton	-0.1	98	1.1	97	3.4	93	-2.5	97	0.2	92	4.4	48	--	--
Barclays Multi-verse	1.0	79	10.2	34	9.2	39	2.6	44	2.2	66	2.0	77	4.4	73
eA All Global Fixed Inc Net Median	2.3		9.0		8.1		2.4		3.0		4.2		5.0	
<b>Risk Parity</b>	<b>2.2</b>	<b>--</b>	<b>16.5</b>	<b>--</b>	<b>14.6</b>	<b>--</b>	<b>4.9</b>	<b>--</b>	<b>7.3</b>	<b>--</b>	<b>7.4</b>	<b>--</b>	<b>--</b>	<b>--</b>
60/40 Russell 3000/Barclays Aggregate	2.8	--	7.4	--	11.2	--	6.0	--	8.0	--	11.1	--	6.7	--
AQR GRP, 10% Volatility	2.2	--	13.2	--	10.0	--	0.4	--	4.0	--	5.4	--	--	--
PanAgora	2.2	--	19.5	--	18.9	--	9.3	--	--	--	--	--	--	--
60/40 Russell 3000/Barclays Aggregate	2.8	--	7.4	--	11.2	--	6.0	--	8.0	--	11.1	--	6.7	--
60/40 MSCI World/Barclays Global Aggregate	3.1	--	6.1	--	9.6	--	3.8	--	5.7	--	8.8	--	--	--
<b>Alternatives</b>	<b>6.2</b>	<b>--</b>	<b>5.3</b>	<b>--</b>	<b>4.5</b>	<b>--</b>	<b>6.6</b>	<b>--</b>	<b>7.0</b>	<b>--</b>	<b>6.6</b>	<b>--</b>	<b>--</b>	<b>--</b>
Alternatives Allocation Index <sup>2</sup>	3.5	--	7.0	--	8.9	--	2.2	--	4.1	--	6.4	--	--	--
Blended Alternatives Index	3.7	--	7.2	--	8.7	--	2.9	--	5.4	--	9.4	--	--	--
<b>Private Equity <sup>**</sup></b>	<b>10.5</b>	<b>1</b>	<b>9.2</b>	<b>8</b>	<b>9.8</b>	<b>12</b>	<b>18.1</b>	<b>1</b>	<b>19.0</b>	<b>1</b>	<b>13.2</b>	<b>8</b>	<b>--</b>	<b>--</b>
Russell 3000 +3%	5.5	4	10.3	4	18.0	1	10.0	23	13.4	16	19.4	1	10.4	20
InvestorForce All DB Private Eq Net Median	1.5		3.9		4.2		6.4		9.5		8.9		8.1	
<b>Hedge Fund/Absolute Return</b>	<b>1.5</b>	<b>86</b>	<b>-1.3</b>	<b>83</b>	<b>0.7</b>	<b>40</b>	<b>7.3</b>	<b>1</b>	<b>7.7</b>	<b>1</b>	<b>6.4</b>	<b>8</b>	<b>--</b>	<b>--</b>
Libor 1 month +4%	1.1	89	3.3	13	4.4	12	4.3	5	4.2	12	4.2	55	--	--
InvestorForce All DB Hedge Funds Net Median	2.5		0.3		0.3		0.1		2.3		4.5		3.2	
AQR DELTA XN	1.7	59	-0.8	78	1.7	68	7.9	24	8.1	31	6.7	44	--	--
Libor 1 month +4%	1.1	68	3.3	55	4.4	53	4.3	44	4.2	56	4.2	62	--	--
eV Alt All Multi-Strategy Median	2.2		4.9		4.8		3.0		4.9		5.7		6.3	
<b>Standard Life GARS <sup>*</sup></b>	<b>0.4</b>	<b>77</b>	<b>-3.7</b>	<b>90</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
Libor 1 month +4%	1.1	68	3.3	55	4.4	53	4.3	44	4.2	56	4.2	62	--	--
eV Alt All Multi-Strategy Median	2.2		4.9		4.8		3.0		4.9		5.7		6.3	

\* Funded October 2015.

\*\* Returns are one-quarter lag.

2. See Appendix for Benchmark History.

Total Fund  
Performance Summary (Net of Fees)

Period Ending: September 30, 2016

	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	2 Yrs (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
<b>Inflation Pool</b>	1.3	--	--	--	--	--	--	--	--	--	--	--	--	--
<i>Blended Inflation Pool Index<sup>2</sup></i>	0.6	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>Real Estate</b>	1.7	47	6.6	30	9.7	40	12.5	18	12.3	15	11.7	35	5.5	27
<i>NCREIF ODCE</i>	2.1	12	6.5	32	10.1	34	12.5	18	12.4	15	12.4	17	6.5	6
<i>InvestorForce All DB Real Estate Pub Net Median</i>	1.6	--	5.7	--	9.4	--	11.2	--	11.4	--	11.4	--	4.8	--
<i>Invesco</i>	1.6	--	6.7	--	9.3	--	12.3	--	12.2	--	11.6	--	5.4	--
<i>NCREIF ODCE</i>	2.1	--	6.5	--	10.1	--	12.5	--	12.4	--	12.4	--	6.5	--
<i>Invesco US Val IV *</i>	3.5	--	5.4	--	--	--	--	--	--	--	--	--	--	--
<i>NCREIF ODCE</i>	2.1	--	6.5	--	10.1	--	12.5	--	12.4	--	12.4	--	6.5	--
<i>NCREIF CEVA 1Q Lag - NET</i>	2.2	--	10.3	--	13.6	--	15.5	--	--	--	--	--	--	--
<b>TIPS</b>	1.2	--	5.5	--	5.3	--	1.7	--	1.2	--	1.3	--	--	--
<i>Barclays US TIPS</i>	1.0	--	7.3	--	6.6	--	2.8	--	2.4	--	1.9	--	4.5	--
<b>Brown Brothers Harriman</b>	1.2	48	5.5	84	5.3	67	1.7	71	1.2	83	1.3	85	--	--
<i>Barclays US TIPS</i>	1.0	63	7.3	41	6.6	38	2.8	20	2.4	26	1.9	34	4.5	69
<i>eA TIPS / Infl Indexed Fixed Inc Net Median</i>	1.1	--	7.0	--	6.3	--	2.3	--	2.0	--	1.7	--	4.6	--
<b>Private Real Asset **</b>	0.0	--	44.6	--	36.9	--	18.1	--	--	--	--	--	--	--
<i>CPI +5%</i>	1.4	--	5.4	--	6.8	--	5.4	--	--	--	--	--	--	--
<b>Cash</b>	0.2	--	0.6	--	1.4	--	1.0	--	0.8	--	0.7	--	1.0	--
<i>91 Day T-Bills</i>	0.1	--	0.2	--	0.2	--	0.1	--	0.1	--	0.1	--	0.8	--
<b>General Account</b>	0.2	--	0.8	--	2.1	--	1.5	--	1.1	--	0.7	--	1.4	--
<b>Treasury &amp; LAIF</b>	0.1	--	1.1	--	0.9	--	1.1	--	1.0	--	0.9	--	1.0	--
<i>91 Day T-Bills</i>	0.1	--	0.2	--	0.2	--	0.1	--	0.1	--	0.1	--	0.8	--

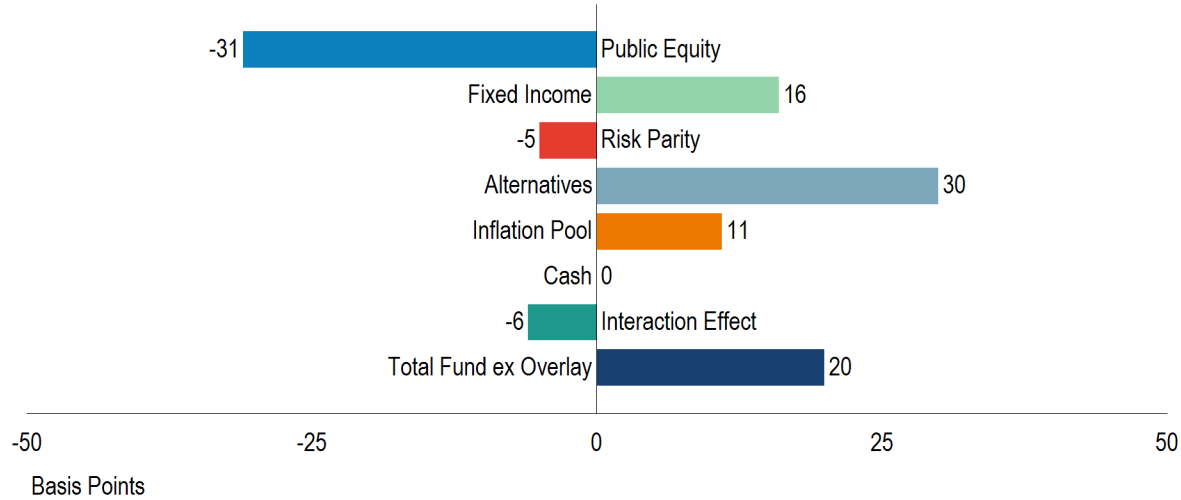
\* Funded December 2015.

\*\* Returns are one-quarter lag.

2. See Appendix for Benchmark History.

Total Fund ex Overlay  
Performance Attribution

Period Ending: September 30, 2016

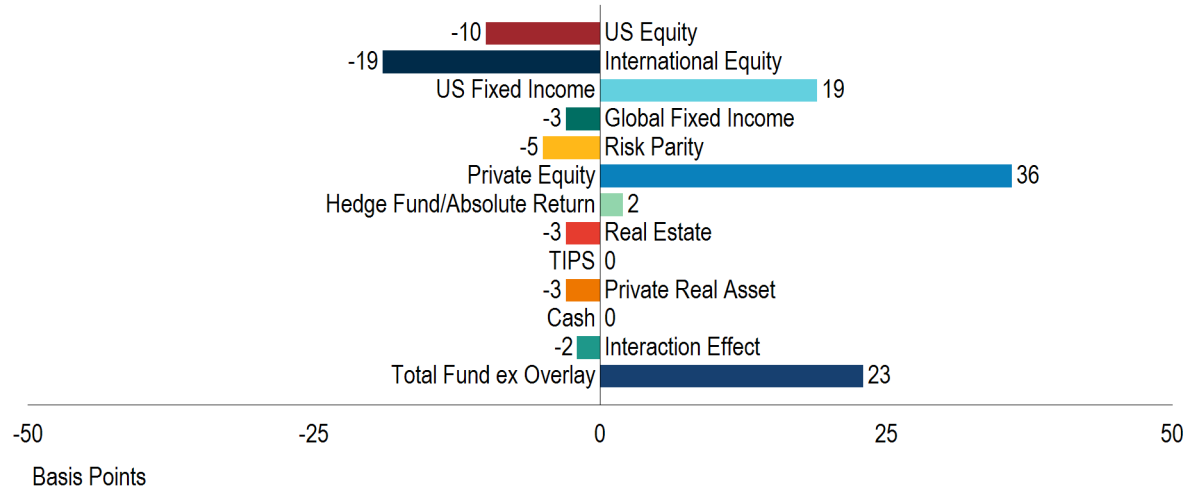


	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
Public Equity	5.04%	5.69%	-0.65%	-0.31%	0.04%	-0.01%	-0.28%
Fixed Income	2.40%	1.54%	0.86%	0.16%	0.01%	-0.01%	0.16%
Risk Parity	2.21%	2.82%	-0.60%	-0.05%	0.00%	0.00%	-0.05%
Alternatives	6.19%	3.66%	2.53%	0.30%	0.00%	-0.01%	0.30%
Inflation Pool	1.34%	0.55%	0.79%	0.11%	0.14%	-0.03%	0.21%
Cash	0.18%	0.07%	0.11%	0.00%	-0.14%	0.01%	-0.14%
<b>Total</b>	<b>3.96%</b>	<b>3.75%</b>	<b>0.20%</b>	<b>0.21%</b>	<b>0.05%</b>	<b>-0.06%</b>	<b>0.20%</b>

Attribution does not include the impact of the Parametric Minneapolis strategy.  
\* Interaction Effects include Residual Effects.

Total Fund ex Overlay  
Performance Attribution

Period Ending: September 30, 2016



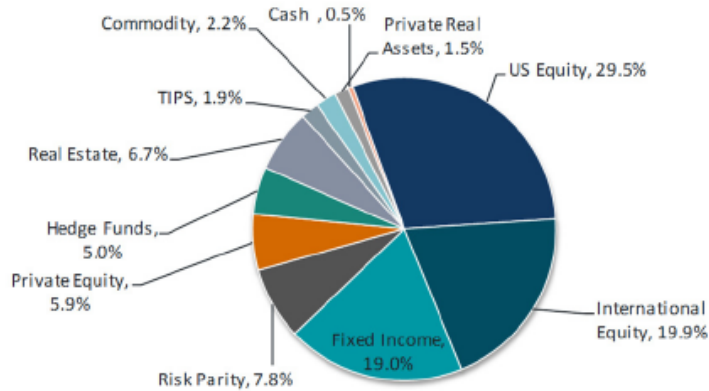
	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
US Equity	4.30%	4.66%	-0.36%	-0.10%	0.03%	-0.01%	-0.08%
International Equity	6.18%	7.14%	-0.96%	-0.19%	-0.02%	0.01%	-0.21%
US Fixed Income	2.90%	1.64%	1.25%	0.19%	0.01%	-0.01%	0.19%
Global Fixed Income	-0.13%	1.05%	-1.18%	-0.03%	0.00%	0.00%	-0.03%
Risk Parity	2.21%	2.82%	-0.60%	-0.05%	0.00%	0.00%	-0.05%
Private Equity	10.51%	5.46%	5.04%	0.36%	-0.01%	-0.03%	0.32%
Hedge Fund/Absolute Return	1.46%	1.14%	0.32%	0.02%	-0.01%	0.00%	0.01%
Real Estate	1.67%	2.07%	-0.40%	-0.03%	0.00%	0.00%	-0.03%
TIPS	1.20%	0.97%	0.24%	0.00%	0.00%	0.00%	0.01%
Commodity	--	--	--	--	0.23%	--	--
Private Real Asset	0.00%	1.40%	-1.40%	-0.03%	0.03%	0.01%	0.01%
Cash	0.18%	0.07%	0.11%	0.00%	-0.14%	0.01%	-0.14%
<b>Total</b>	<b>3.99%</b>	<b>3.75%</b>	<b>0.23%</b>	<b>0.14%</b>	<b>0.12%</b>	<b>-0.02%</b>	<b>0.23%</b>

Attribution does not include the impact of the Parametric Minneapolis strategy.  
\* Interaction Effects include Residual Effects.

Total Fund  
Asset Allocation Analysis

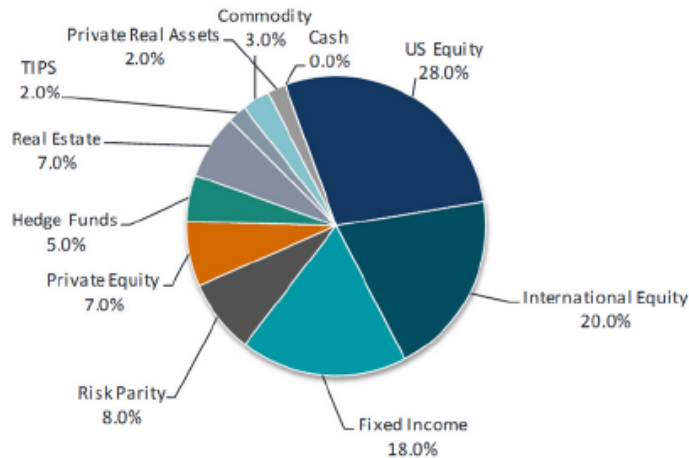
Period Ending: September 30, 2016

Current w/Overlay



ASSET ALLOCATION	MARKET VALUE W/OVERLAY	W/OVERLAY	W/O OVERLAY
US Equity	1,061,505,879	29.5%	28.7%
International Equity	714,868,234	19.9%	19.3%
Fixed Income	619,044,493	19.0%	16.7%
Risk Parity	286,545,641	7.8%	7.8%
Private Equity	219,858,478	5.9%	5.9%
Hedge Funds	186,577,425	5.0%	5.0%
Real Estate	248,251,221	6.7%	6.7%
TIPS	70,921,074	1.9%	1.9%
Commodity	0	2.2%	0.0%
Private Real Assets	54,691,244	1.5%	1.5%
Cash	234,541,860	0.5%	6.3%
<b>TOTAL</b>	<b>3,696,805,549</b>	<b>100.0%</b>	<b>100.0%</b>

Target

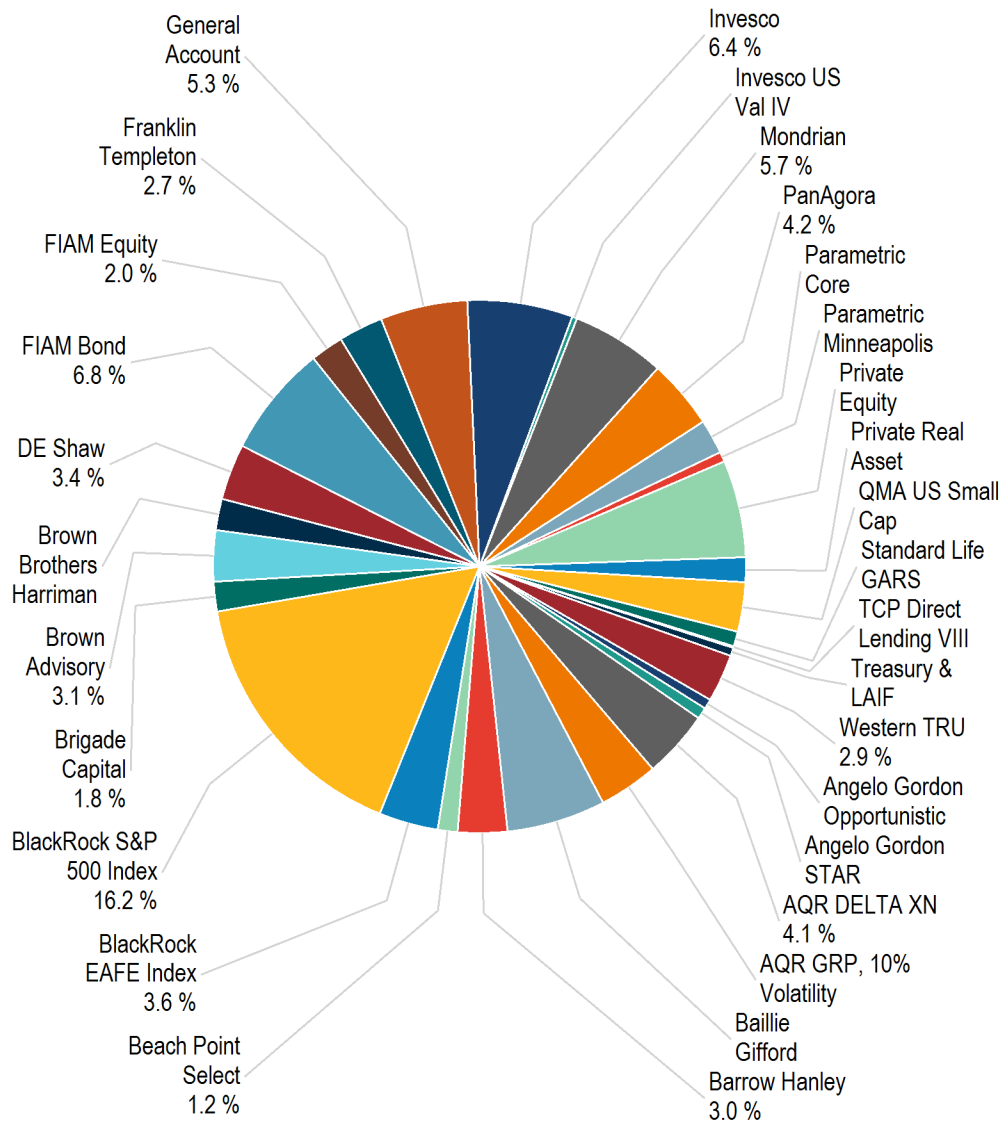


ASSET ALLOCATION	W/OVERLAY	TARGET	DIFF
US Equity	29.5%	28.0%	1.5%
International Equity	19.9%	20.0%	-0.1%
Fixed Income	19.0%	18.0%	1.0%
Risk Parity	7.8%	8.0%	-0.2%
Private Equity	5.9%	7.0%	-1.1%
Hedge Funds	5.0%	5.0%	0.0%
Real Estate	6.7%	7.0%	-0.3%
TIPS	1.9%	2.0%	-0.1%
Commodity	2.2%	3.0%	-0.8%
Private Real Assets	1.5%	2.0%	-0.5%
Cash	0.5%	0.0%	0.5%
<b>TOTAL</b>	<b>100.0%</b>	<b>100.0%</b>	<b>-0.0%</b>



# Total Fund Manager Allocation Analysis

Period Ending: September 30, 2016



	Actual (\$)	Actual %
Angelo Gordon Opportunistic	\$21,332,000	1%
Angelo Gordon STAR	\$27,375,000	1%
AQR DELTA XN	\$153,000,131	4%
AQR GRP, 10% Volatility	\$131,507,185	4%
Baillie Gifford	\$220,570,533	6%
Barrow Hanley	\$111,806,209	3%
Beach Point Select	\$43,087,939	1%
BlackRock EAFE Index	\$132,458,109	4%
BlackRock S&P 500 Index	\$597,948,728	16%
Brigade Capital	\$68,344,302	2%
Brown Advisory	\$113,885,228	3%
Brown Brothers Harriman	\$70,921,074	2%
DE Shaw	\$124,933,739	3%
FIAM Bond	\$250,365,014	7%
FIAM Equity	\$73,945,419	2%
Franklin Templeton	\$99,875,590	3%
General Account	\$194,219,670	5%
Invesco	\$238,253,364	6%
Invesco US Val IV	\$9,997,857	0%
Mondrian	\$211,274,136	6%
PanAgora	\$155,038,456	4%
Parametric Core	\$76,620,037	2%
Parametric Minneapolis Overlay	\$22,225,727	1%
Private Equity	\$219,858,478	6%
Private Real Asset	\$54,691,244	1%
QMA US Small Cap	\$112,380,830	3%
Standard Life GARS	\$33,577,294	1%
TCP Direct Lending VIII	\$2,136,150	0%
Transition Account	\$551,146	0%
Treasury & LAIF	\$18,096,463	0%
Western TRU	\$106,528,498	3%
<b>Total</b>	<b>\$3,696,805,549</b>	<b>100%</b>

**Statistics Summary**

**3 Years**

	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Sharpe Ratio	Sharpe Ratio Rank	Information Ratio	Information Ratio Rank	Tracking Error	Tracking Error Rank
Total Fund	6.5%	14	6.8%	71	1.0	31	0.2	28	1.0%	28
Policy Index	6.4%	22	7.2%	85	0.9	44	--	--	0.0%	1
InvestorForce Public DB > \$1B Net Median	5.5%	--	6.3%	--	0.9	--	-0.2	--	1.1%	--

**Statistics Summary**

**5 Years**

	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Sharpe Ratio	Sharpe Ratio Rank	Information Ratio	Information Ratio Rank	Tracking Error	Tracking Error Rank
Total Fund	10.0%	21	7.4%	76	1.3	38	-0.2	73	1.0%	30
Policy Index	10.2%	12	7.9%	88	1.3	45	--	--	0.0%	1
InvestorForce Public DB > \$1B Net Median	8.8%	--	6.8%	--	1.3	--	0.0	--	1.1%	--

**Statistics Summary**

**3 Years**

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Cash	0.8%	0.4%	1.8	1.9	0.4%
91 Day T-Bills	0.1%	0.0%	0.0	--	0.0%
General Account	1.1%	0.6%	1.7	1.7	0.6%
91 Day T-Bills	0.1%	0.0%	0.0	--	0.0%
Treasury & LAIF	1.0%	0.5%	1.7	1.7	0.5%
91 Day T-Bills	0.1%	0.0%	0.0	--	0.0%

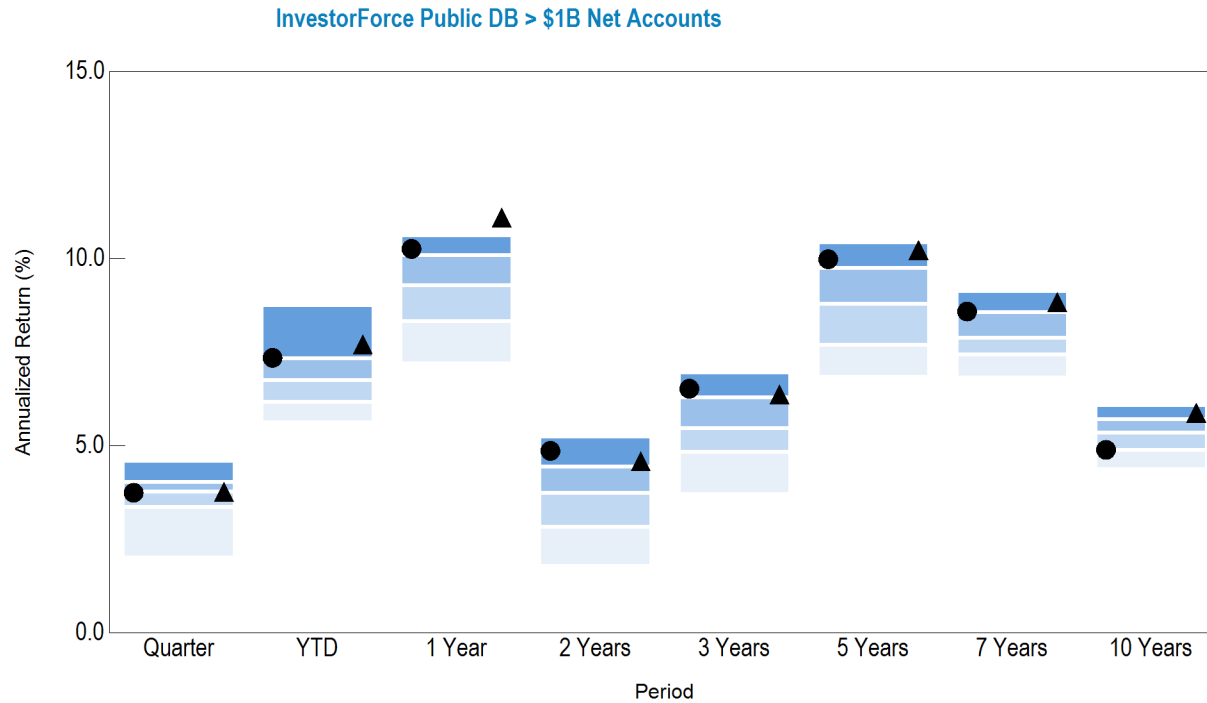
**Statistics Summary**

**5 Years**

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Cash	0.7%	0.3%	2.1	2.1	0.3%
91 Day T-Bills	0.1%	0.0%	0.0	--	0.0%
General Account	0.7%	0.5%	1.3	1.3	0.5%
91 Day T-Bills	0.1%	0.0%	0.0	--	0.0%
Treasury & LAIF	0.9%	0.4%	2.0	2.0	0.4%
91 Day T-Bills	0.1%	0.0%	0.0	--	0.0%

Total Fund  
Peer Universe Comparison

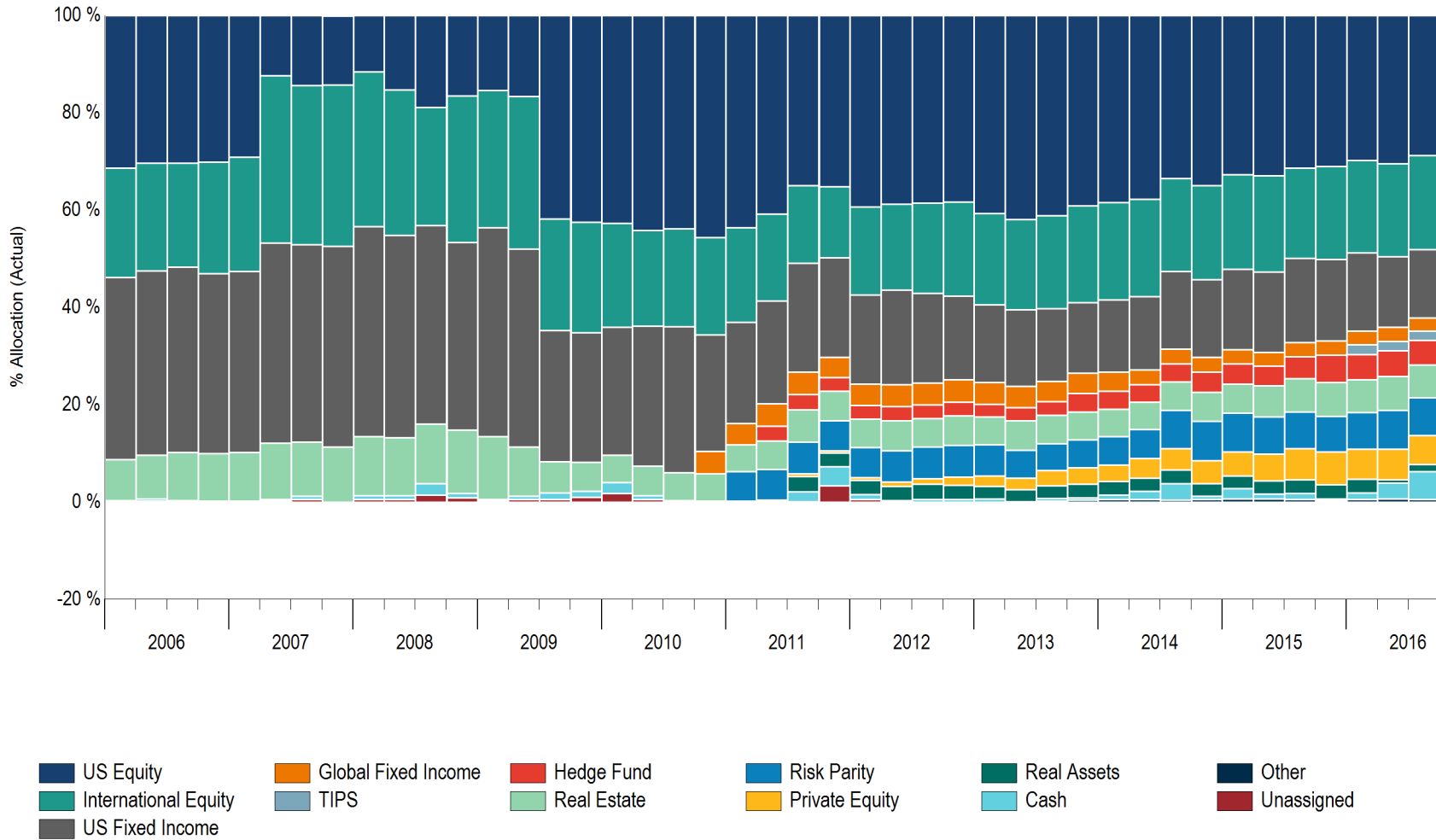
Period Ending: September 30, 2016

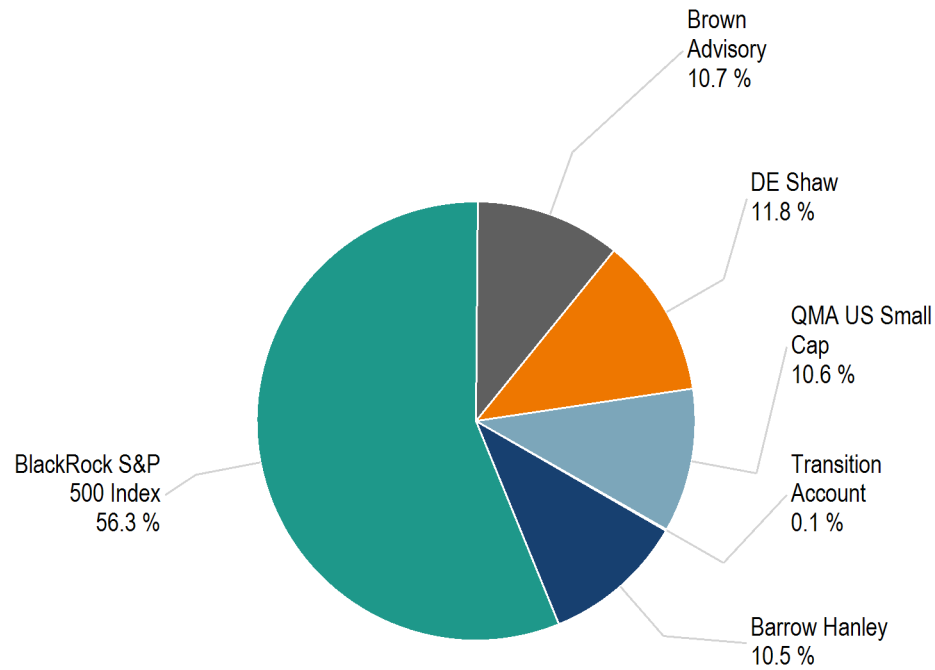


	Quarter	YTD	1 Year	2 Years	3 Years	5 Years	7 Years	10 Years
<b>Return (Rank)</b>								
5th Percentile	4.6	8.7	10.6	5.2	7.0	10.4	9.1	6.1
25th Percentile	4.0	7.4	10.1	4.5	6.3	9.8	8.6	5.7
Median	3.8	6.8	9.3	3.8	5.5	8.8	7.9	5.4
75th Percentile	3.4	6.2	8.3	2.8	4.8	7.7	7.5	4.9
95th Percentile	2.0	5.6	7.2	1.8	3.7	6.9	6.8	4.4
# of Portfolios	57	57	57	56	54	54	52	47
● Total Fund	3.7 (54)	7.3 (26)	10.3 (17)	4.9 (17)	6.5 (14)	10.0 (21)	8.6 (26)	4.9 (79)
▲ Policy Index	3.8 (51)	7.7 (11)	11.1 (1)	4.6 (22)	6.4 (22)	10.2 (12)	8.8 (12)	5.9 (17)

Total Fund  
Asset Allocation History

Period Ending: September 30, 2016





	Actual \$	Actual %	Manager Contribution to Excess Return %
Barrow Hanley	\$111,806,209	10.5%	0.2%
BlackRock S&P 500 Index	\$597,948,728	56.3%	0.0%
Brown Advisory	\$113,885,228	10.7%	-0.1%
DE Shaw	\$124,933,739	11.8%	0.1%
QMA US Small Cap	\$112,380,830	10.6%	0.0%
Transition Account	\$551,146	0.1%	0.0%
Actual vs. Policy Weight Difference			-0.6%
<b>Total</b>	<b>\$1,061,505,879</b>	<b>100.0%</b>	<b>-0.4%</b>

**Statistics Summary**

**3 Years**

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
US Equity	9.1%	11.0%	0.8	-1.1	0.8%
Blended US Equity Index	9.9%	11.2%	0.9	--	0.0%
Russell 3000	10.4%	11.0%	0.9	0.5	1.0%

Statistics Summary

3 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Large Cap Equity	10.4%	10.8%	1.0	-0.5	0.8%
Russell 1000	10.8%	10.9%	1.0	--	0.0%
Barrow Hanley	7.7%	11.3%	0.7	-0.7	3.1%
Russell 1000 Value	9.7%	10.7%	0.9	--	0.0%
BlackRock S&P 500 Index	11.2%	10.8%	1.0	0.8	0.0%
S&P 500	11.2%	10.8%	1.0	--	0.0%
Brown Advisory	8.0%	11.3%	0.7	-1.1	3.4%
Russell 1000 Growth	11.8%	11.4%	1.0	--	0.0%
DE Shaw	11.7%	11.3%	1.0	0.4	2.3%
Russell 1000	10.8%	10.9%	1.0	--	0.0%
Small Cap Equity	3.5%	13.7%	0.3	-1.2	2.8%
Russell 2000	6.7%	14.6%	0.5	--	0.0%



**Statistics Summary**

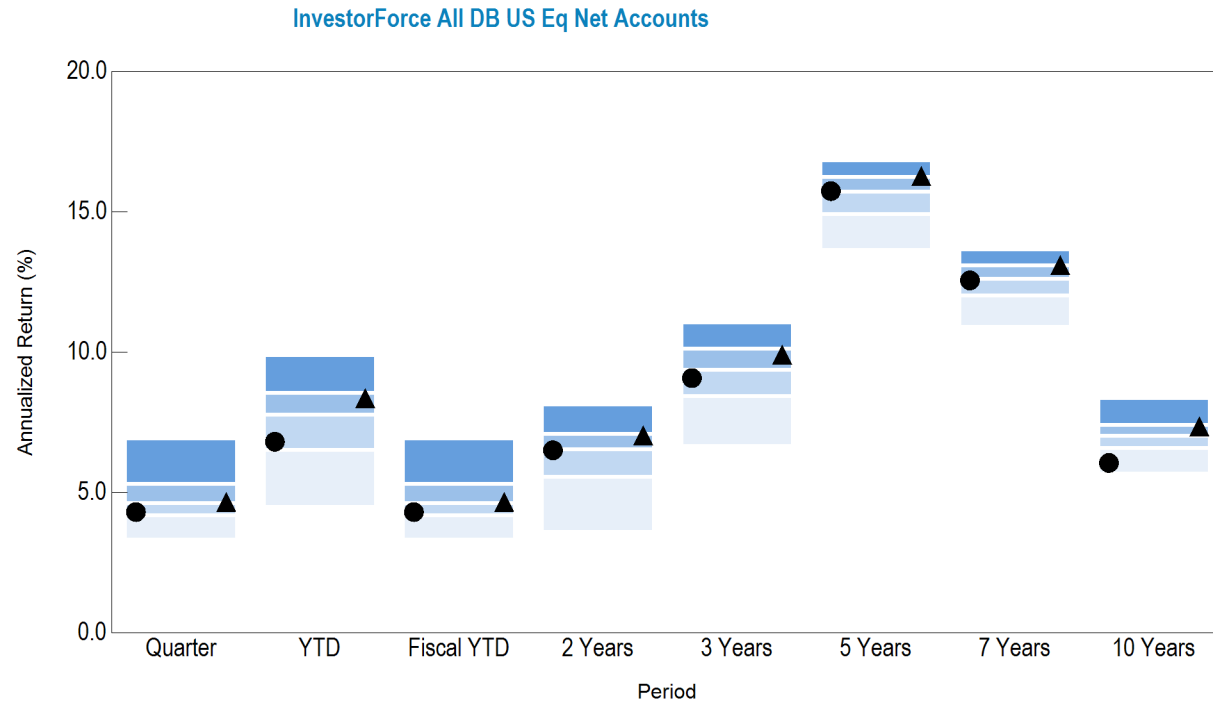
**5 Years**

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
US Equity	15.7%	11.8%	1.3	-0.5	1.0%
Blended US Equity Index	16.3%	11.7%	1.4	--	0.0%
Russell 3000	16.4%	11.4%	1.4	0.1	0.9%

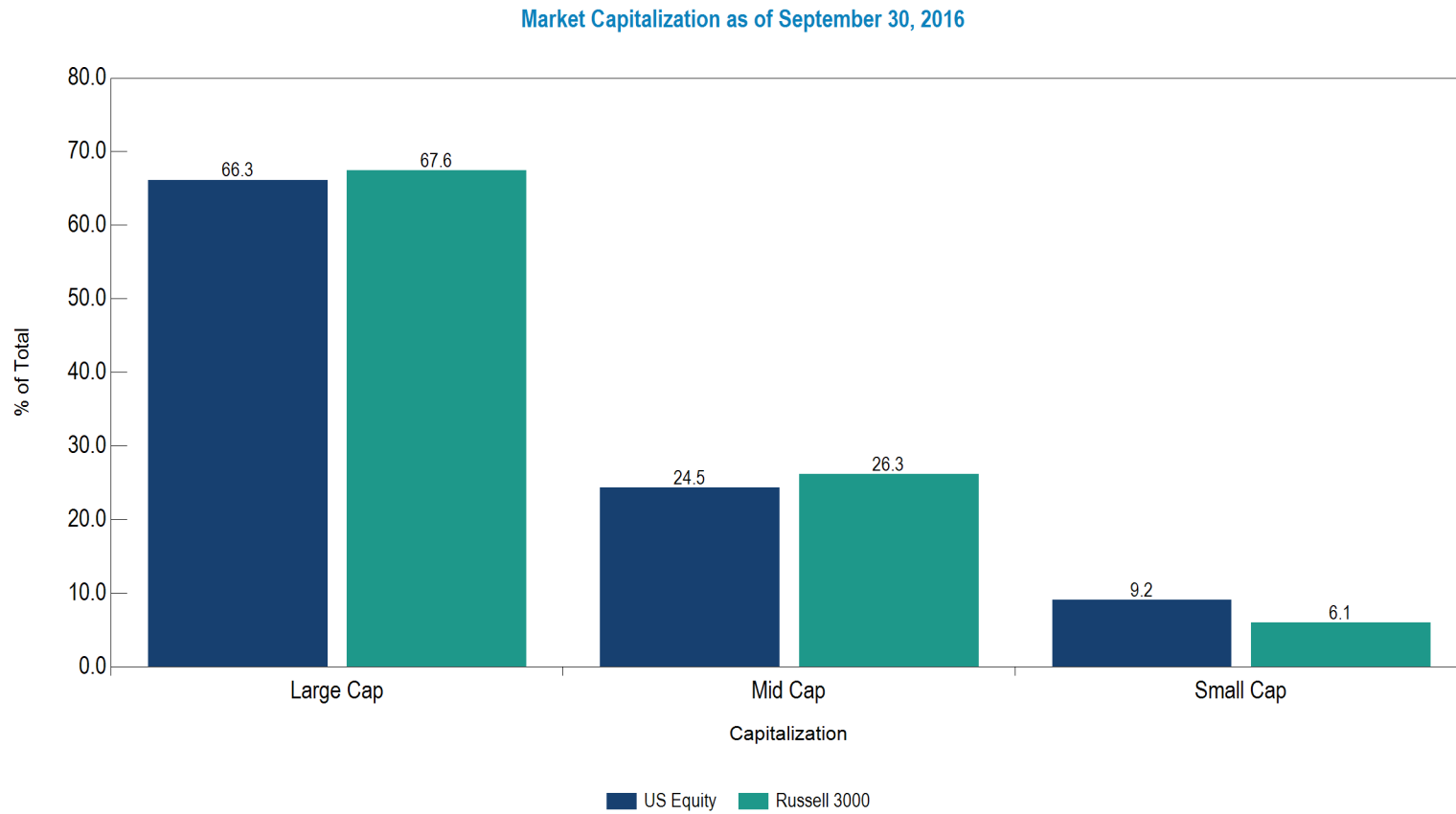
**Statistics Summary**

**5 Years**

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Large Cap Equity	16.1%	11.4%	1.4	-0.4	0.9%
Russell 1000	16.4%	11.3%	1.5	--	0.0%
Barrow Hanley	15.6%	11.8%	1.3	-0.2	2.9%
Russell 1000 Value	16.2%	11.3%	1.4	--	0.0%
DE Shaw	17.9%	11.7%	1.5	0.8	2.0%
Russell 1000	16.4%	11.3%	1.5	--	0.0%
Small Cap Equity	14.1%	14.7%	1.0	-0.5	3.1%
Russell 2000	15.8%	15.0%	1.0	--	0.0%



	Return (Rank)							
	Quarter	YTD	Fiscal YTD	2 Years	3 Years	5 Years	7 Years	10 Years
5th Percentile	6.9	9.9	6.9	8.1	11.1	16.8	13.6	8.4
25th Percentile	5.3	8.6	5.3	7.1	10.1	16.3	13.1	7.4
Median	4.6	7.8	4.6	6.6	9.4	15.7	12.6	7.0
75th Percentile	4.2	6.5	4.2	5.6	8.4	14.9	12.0	6.6
95th Percentile	3.3	4.5	3.3	3.6	6.7	13.7	10.9	5.7
# of Portfolios	687	686	687	671	620	528	449	353
● US Equity	4.3 (71)	6.8 (72)	4.3 (71)	6.5 (52)	9.1 (59)	15.7 (49)	12.6 (56)	6.1 (90)
▲ Blended US Equity Index	4.7 (50)	8.4 (31)	4.7 (50)	7.0 (29)	9.9 (32)	16.3 (24)	13.1 (25)	7.4 (30)



See appendix for the market capitalization breakpoints.

Characteristics

	Portfolio	Russell 3000
Number of Holdings	2,484	2,955
Weighted Avg. Market Cap. (\$B)	104.7	112.3
Median Market Cap. (\$B)	2.1	1.4
Price To Earnings	23.4	22.9
Price To Book	4.4	3.8
Price To Sales	3.6	3.1
Return on Equity (%)	17.8	16.7
Yield (%)	1.8	2.0
Beta (holdings; domestic)	1.0	1.0

Top Holdings

APPLE	2.2%
AMAZON.COM	2.1%
FACEBOOK CLASS A	1.6%
MICROSOFT	1.5%
VISA 'A'	1.4%
JOHNSON & JOHNSON	1.2%
EXXON MOBIL	1.1%
ALPHABET 'C'	1.0%
ALPHABET 'A'	1.0%
BERKSHIRE HATHAWAY 'B'	1.0%

Best Performers

	Return %
CLOUD PEAK ENERGY (CLD)	164.1%
CLOVIS ONCOLOGY (CLVS)	162.8%
HEALTHWAYS	129.1%
LANTHEUS HOLDINGS (LNTH)	125.6%
PUMA BIOTECHNOLOGY	125.1%
EVERI HOLDINGS (EVRI)	114.8%
OCWEN FINANCIAL	114.6%
AERIE PHARMACEUTICALS	114.4%
TRONOX CLASS A	113.6%
HARMONIC (HLIT)	108.1%

Worst Performers

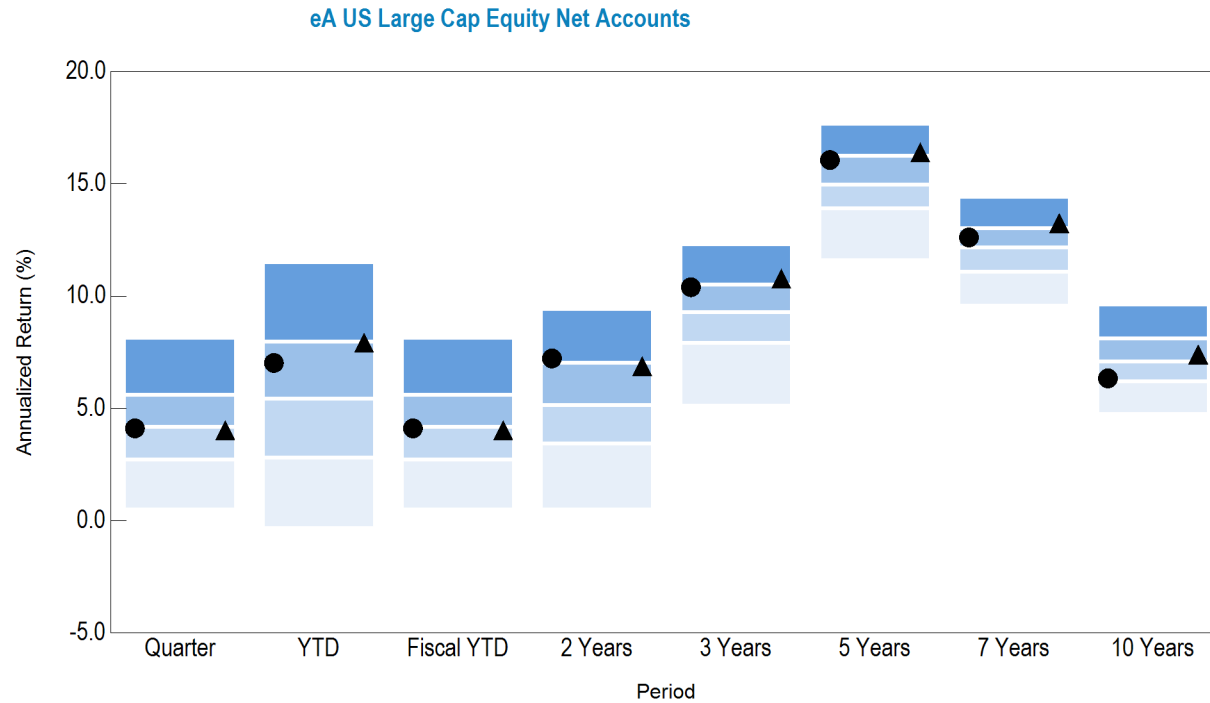
	Return %
KEY ENERGY SVS. (KEGXQ)	-82.1%
TOKAI PHARMACEUTICALS	-72.2%
NOVAVAX	-71.4%
INTRA CELLULAR THERAPIES	-60.7%
SERES THERAPEUTICS	-57.7%
PAIN THERAPEUTICS	-54.3%
MANNKIND	-46.6%
VECTRUS	-46.5%
ZAFGEN (ZFGN)	-44.7%
FIRST NBC BANK HOLDING	-43.8%

US Equity Performance Attribution vs. Russell 3000

	Attribution Effects				Returns		Sector Weights				
	Total Effects	Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark			
Energy	0.1%	0.1%	0.0%	0.0%	4.0%	2.9%	6.3%	6.9%			
Materials	0.0%	0.0%	0.0%	0.0%	4.9%	4.9%	3.4%	3.4%			
Industrials	0.0%	0.0%	0.0%	0.0%	4.6%	4.6%	11.4%	10.6%			
Consumer Discretionary	0.1%	0.1%	0.0%	0.0%	4.3%	3.5%	13.1%	13.0%			
Consumer Staples	-0.1%	-0.1%	0.0%	0.0%	-3.5%	-2.5%	9.0%	9.5%			
Health Care	-0.3%	-0.3%	0.0%	0.0%	0.2%	2.4%	14.2%	14.4%			
Financials	0.4%	0.4%	0.0%	0.0%	7.3%	4.9%	15.9%	17.6%			
Information Technology	0.1%	-0.1%	0.2%	0.0%	12.4%	12.8%	20.7%	18.3%			
Telecommunication Services	0.0%	0.0%	0.0%	0.0%	-4.5%	-4.7%	2.2%	2.7%			
Utilities	0.1%	0.0%	0.1%	0.0%	-6.2%	-5.7%	2.6%	3.7%			
Real Estate	0.0%	--	--	--	--	--	0.0%	0.0%			
Cash	0.0%	0.0%	0.0%	0.0%	0.1%	--	1.1%	0.0%			
Unclassified	0.0%	0.0%	0.0%	0.0%	3.8%	--	0.1%	0.0%			
<b>Portfolio</b>	<b>0.4%</b>	<b>=</b>	<b>0.1%</b>	<b>+</b>	<b>0.3%</b>	<b>+</b>	<b>0.0%</b>	<b>4.7%</b>	<b>4.3%</b>	<b>100.0%</b>	<b>100.0%</b>

U.S. Effective Style Map





	Quarter	YTD	Fiscal YTD	2 Years	3 Years	5 Years	7 Years	10 Years
<b>Return (Rank)</b>								
5th Percentile	8.1	11.5	8.1	9.4	12.3	17.7	14.4	9.6
25th Percentile	5.6	8.0	5.6	7.1	10.5	16.3	13.1	8.1
Median	4.2	5.5	4.2	5.1	9.3	15.0	12.2	7.1
75th Percentile	2.7	2.8	2.7	3.5	7.9	13.9	11.1	6.2
95th Percentile	0.5	-0.3	0.5	0.5	5.1	11.6	9.6	4.8
# of Portfolios	538	535	538	516	504	449	423	356
● Large Cap Equity	4.1 (53)	7.0 (35)	4.1 (53)	7.2 (24)	10.4 (28)	16.1 (29)	12.6 (38)	6.3 (72)
▲ Russell 1000	4.0 (55)	7.9 (26)	4.0 (55)	6.9 (28)	10.8 (22)	16.4 (22)	13.2 (22)	7.4 (42)



Characteristics

	Portfolio	Russell 1000
Number of Holdings	2,406	994
Weighted Avg. Market Cap. (\$B)	117.2	121.4
Median Market Cap. (\$B)	2.4	8.1
Price To Earnings	23.5	22.9
Price To Book	4.5	4.4
Price To Sales	3.8	3.2
Return on Equity (%)	18.1	18.0
Yield (%)	1.9	2.0
Beta (holdings; domestic)	1.0	1.0

Top Holdings

APPLE	2.5%
AMAZON.COM	2.3%
FACEBOOK CLASS A	1.8%
MICROSOFT	1.7%
VISA 'A'	1.5%
JOHNSON & JOHNSON	1.3%
EXXON MOBIL	1.2%
ALPHABET 'C'	1.1%
ALPHABET 'A'	1.1%
BERKSHIRE HATHAWAY 'B'	1.1%

Best Performers

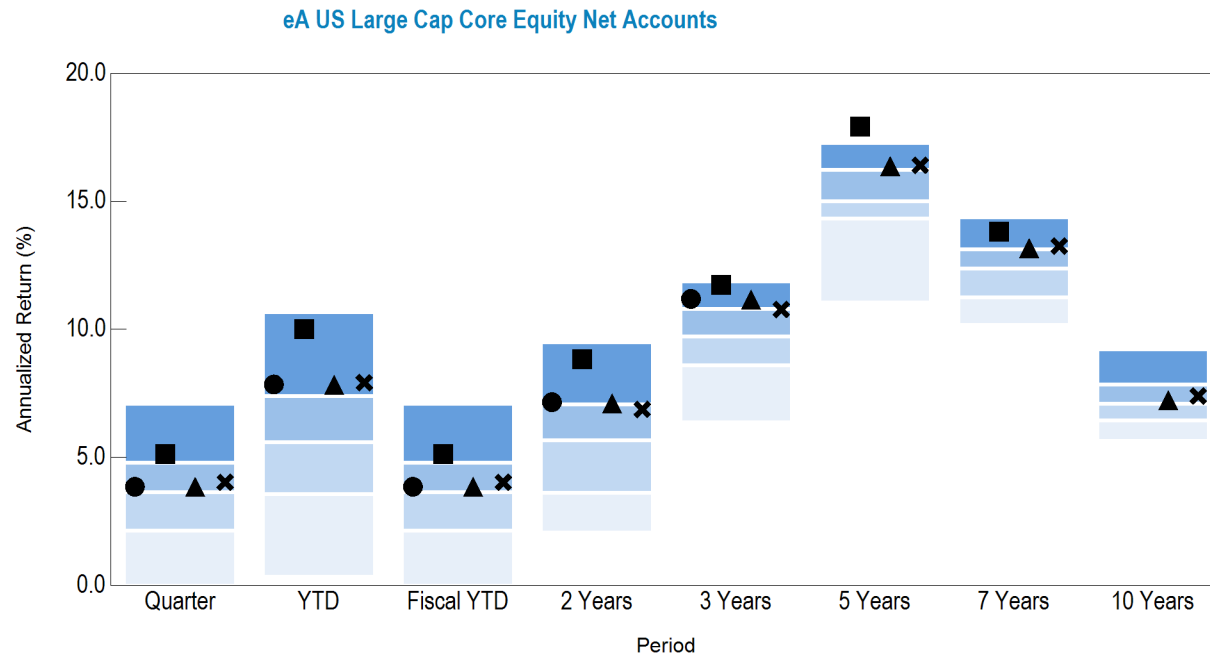
	Return %
CLOUD PEAK ENERGY	164.1%
CLOVIS ONCOLOGY (CLVS)	162.8%
HEALTHWAYS	129.1%
LANTHEUS HOLDINGS (LNTH)	125.6%
PUMA BIOTECHNOLOGY	125.1%
EVERI HOLDINGS	114.8%
OCWEN FINANCIAL	114.6%
AERIE PHARMACEUTICALS (AERI)	114.4%
TRONOX CLASS A	113.6%
HARMONIC	108.1%

Worst Performers

	Return %
KEY ENERGY SVS. (KEGXQ)	-82.1%
TOKAI PHARMACEUTICALS	-72.2%
NOVAVAX	-71.4%
INTRA CELLULAR THERAPIES	-60.7%
SERES THERAPEUTICS	-57.7%
PAIN THERAPEUTICS	-54.3%
MANNKIND	-46.6%
VECTRUS	-46.5%
ZAFGEN (ZFGN)	-44.7%
FIRST NBC BANK HOLDING	-43.8%

Large Cap Equity Performance Attribution vs. Russell 1000

	Total Effects	Attribution Effects			Returns		Sector Weights				
		Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark			
Energy	0.1%	0.1%	0.0%	0.0%	3.5%	2.7%	6.6%	7.2%			
Materials	0.0%	0.0%	0.0%	0.0%	4.4%	4.0%	3.7%	3.3%			
Industrials	0.1%	0.1%	0.0%	0.0%	4.6%	4.1%	10.6%	10.3%			
Consumer Discretionary	0.0%	0.0%	0.0%	0.0%	3.5%	3.4%	12.5%	12.9%			
Consumer Staples	-0.1%	-0.1%	0.0%	0.0%	-3.4%	-2.6%	10.2%	10.0%			
Health Care	-0.3%	-0.2%	0.0%	0.0%	-0.2%	1.6%	15.0%	14.4%			
Financials	0.3%	0.3%	0.0%	0.0%	6.6%	4.6%	14.8%	17.0%			
Information Technology	0.2%	0.0%	0.2%	0.0%	12.4%	12.5%	20.5%	18.4%			
Telecommunication Services	0.0%	0.0%	0.0%	0.0%	-4.5%	-4.7%	2.6%	2.8%			
Utilities	0.1%	0.0%	0.1%	0.0%	-6.1%	-5.7%	2.5%	3.7%			
Real Estate	0.0%	--	--	--	--	--	0.0%	0.0%			
Cash	0.0%	0.0%	0.0%	0.0%	0.1%	--	0.9%	0.0%			
Unclassified	0.0%	0.0%	0.0%	0.0%	3.8%	--	0.1%	0.0%			
<b>Portfolio</b>	<b>0.3%</b>	<b>=</b>	<b>0.1%</b>	<b>+</b>	<b>0.2%</b>	<b>+</b>	<b>-0.1%</b>	<b>4.2%</b>	<b>3.9%</b>	<b>100.0%</b>	<b>100.0%</b>



	Quarter		YTD		Fiscal YTD		2 Years		3 Years		5 Years		7 Years		10 Years	
<b>Return (Rank)</b>																
5th Percentile	7.1	10.7	7.1	9.5	11.9	17.3	14.4	9.2	4.8	7.4	4.8	7.1	10.8	16.2	13.1	7.9
25th Percentile	4.8	7.4	4.8	7.1	10.8	16.2	13.1	7.9	3.7	5.6	3.7	5.7	9.7	15.0	12.4	7.1
Median	3.7	5.6	3.7	5.7	9.7	15.0	12.4	7.1	2.2	3.6	2.2	3.6	8.6	14.3	11.2	6.4
75th Percentile	2.2	3.6	2.2	3.6	8.6	14.3	11.2	6.4	0.0	0.3	0.0	2.1	6.4	11.1	10.2	5.7
95th Percentile	0.0	0.3	0.0	2.1	6.4	11.1	10.2	5.7	147	146	147	140	135	119	108	95
# of Portfolios	147	146	147	140	135	119	108	95	3.9 (47)	7.9 (18)	3.9 (47)	7.2 (25)	11.2 (16)	-- (--)	-- (--)	-- (--)
● BlackRock S&P 500 Index	3.9 (47)	7.9 (18)	3.9 (47)	7.2 (25)	11.2 (16)	-- (--)	-- (--)	-- (--)	5.1 (20)	10.0 (7)	5.1 (20)	8.8 (7)	11.7 (7)	17.9 (2)	13.8 (10)	-- (--)
■ DE Shaw	5.1 (20)	10.0 (7)	5.1 (20)	8.8 (7)	11.7 (7)	17.9 (2)	13.8 (10)	-- (--)	3.9 (47)	7.8 (18)	3.9 (47)	7.1 (25)	11.2 (19)	16.4 (20)	13.2 (24)	7.2 (47)
▲ S&P 500	3.9 (47)	7.8 (18)	3.9 (47)	7.1 (25)	11.2 (19)	16.4 (20)	13.2 (24)	7.2 (47)	4.0 (42)	7.9 (18)	4.0 (42)	6.9 (29)	10.8 (26)	16.4 (19)	13.2 (23)	7.4 (38)
✕ Russell 1000	4.0 (42)	7.9 (18)	4.0 (42)	6.9 (29)	10.8 (26)	16.4 (19)	13.2 (23)	7.4 (38)								

Characteristics

	Portfolio	S&P 500
Number of Holdings	511	505
Weighted Avg. Market Cap. (\$B)	135.2	134.7
Median Market Cap. (\$B)	18.5	18.9
Price To Earnings	23.1	22.7
Price To Book	4.8	4.5
Price To Sales	3.6	3.1
Return on Equity (%)	18.9	18.8
Yield (%)	2.1	2.1
Beta (holdings; domestic)	1.0	1.0

Top Holdings

APPLE	3.3%
MICROSOFT	2.4%
EXXON MOBIL	1.9%
AMAZON.COM	1.8%
JOHNSON & JOHNSON	1.7%
FACEBOOK CLASS A	1.6%
BERKSHIRE HATHAWAY 'B'	1.5%
GENERAL ELECTRIC	1.4%
AT&T	1.3%
JP MORGAN CHASE & CO.	1.3%

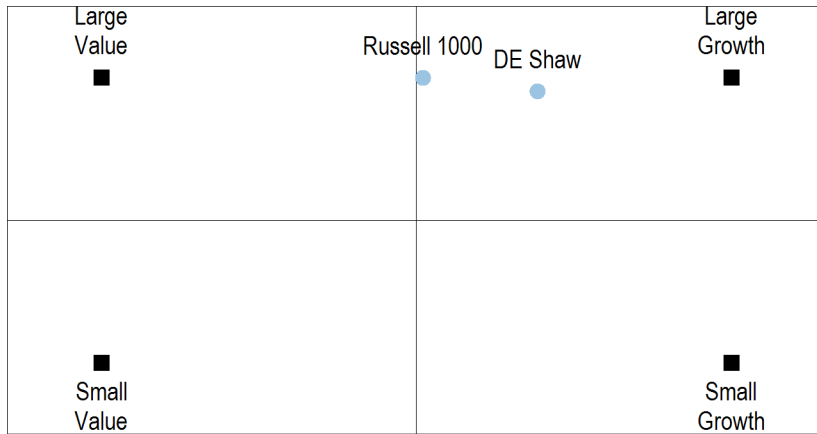
Best Performers

	Return %
SEAGATE TECH.	61.0%
NETAPP	46.8%
CHESAPEAKE ENERGY (CHK)	46.5%
NVIDIA (NVDA)	46.0%
WILLIAMS	43.0%
EBAY	40.5%
NORDSTROM	37.3%
INGEVITY ORD SHS (NGVT)	35.4%
AUTODESK	33.6%
STATE STREET	29.9%

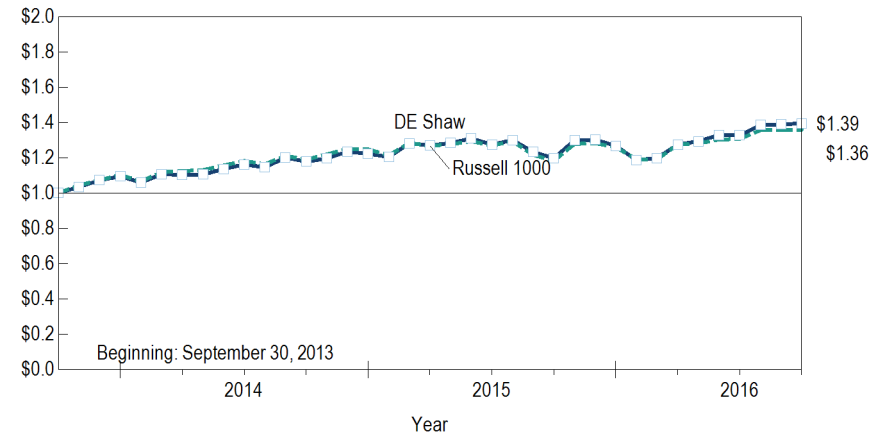
Worst Performers

	Return %
DIAMOND OFFS.DRL. (DO)	-27.6%
BRISTOL MYERS SQUIBB	-26.7%
TRACTOR SUPPLY (TSCO)	-25.9%
DOLLAR GENERAL	-25.3%
NRG ENERGY	-25.1%
STERICYCLE	-23.0%
KROGER (KR)	-19.0%
FIRST SOLAR	-18.5%
CAMPBELL SOUP	-17.4%
COGNIZANT TECH.SLTN.'A' (CTSH)	-16.6%

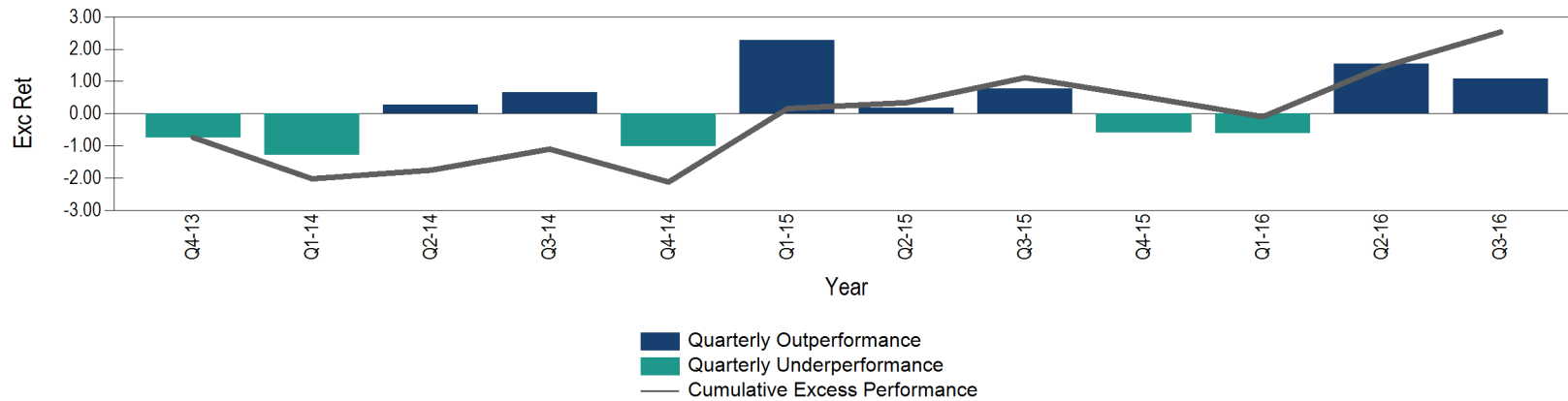
U.S. Effective Style Map

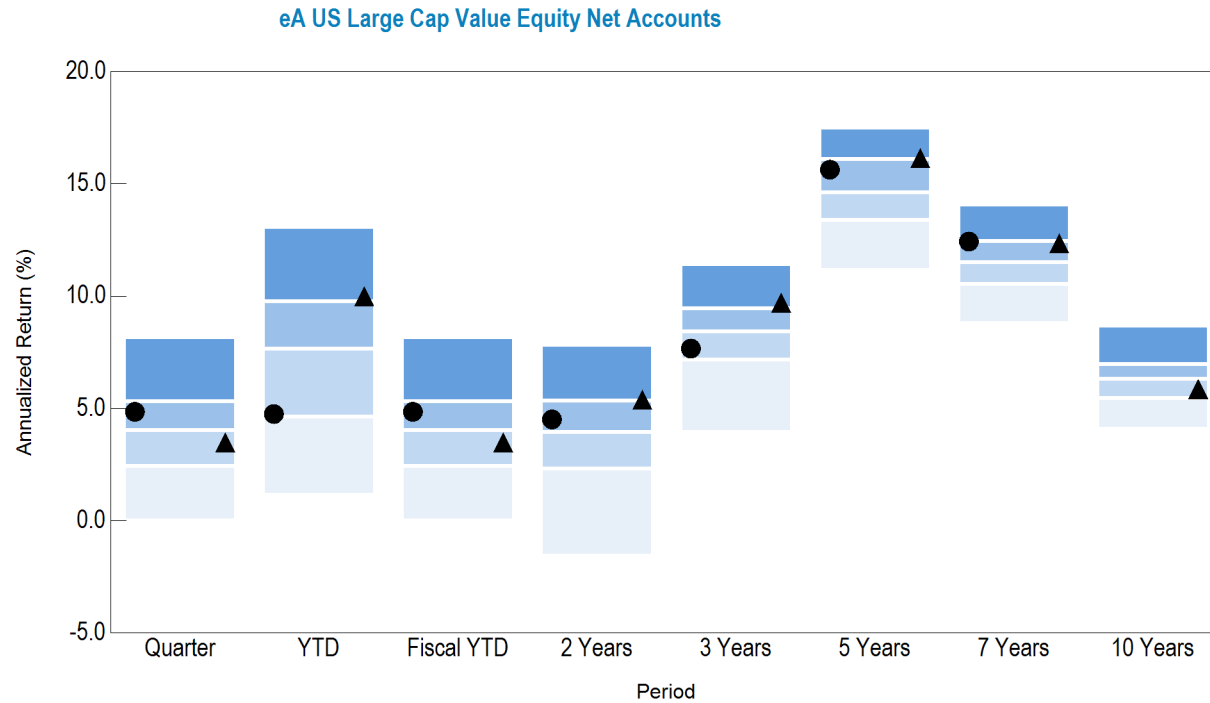


Growth of a Dollar



Quarterly and Cumulative Excess Performance





	Return (Rank)							
	Quarter	YTD	Fiscal YTD	2 Years	3 Years	5 Years	7 Years	10 Years
<b>5th Percentile</b>	8.2	13.1	8.2	7.8	11.4	17.5	14.1	8.7
<b>25th Percentile</b>	5.3	9.8	5.3	5.4	9.5	16.1	12.5	7.0
<b>Median</b>	4.0	7.7	4.0	4.0	8.5	14.6	11.5	6.3
<b>75th Percentile</b>	2.4	4.6	2.4	2.3	7.2	13.4	10.5	5.5
<b>95th Percentile</b>	0.0	1.2	0.0	-1.5	4.0	11.2	8.8	4.1
<b># of Portfolios</b>	213	213	213	206	201	178	169	142
<b>● Barrow Hanley</b>	4.8 (33)	4.7 (75)	4.8 (33)	4.5 (40)	7.7 (68)	15.6 (35)	12.4 (27)	-- (--)
<b>▲ Russell 1000 Value</b>	3.5 (61)	10.0 (23)	3.5 (61)	5.4 (25)	9.7 (20)	16.2 (25)	12.3 (28)	5.9 (66)

Characteristics

	Portfolio	Russell 1000 Value
Number of Holdings	75	687
Weighted Avg. Market Cap. (\$B)	81.9	107.0
Median Market Cap. (\$B)	33.5	7.5
Price To Earnings	16.9	19.3
Price To Book	2.9	2.4
Price To Sales	2.3	2.6
Return on Equity (%)	15.7	12.0
Yield (%)	2.5	2.6
Beta (holdings; domestic)	1.1	1.0

Top Holdings

CAPITAL ONE FINL.	2.3%
CITIGROUP	2.2%
JP MORGAN CHASE & CO.	2.0%
CRH ADR 1:1	2.0%
MEDTRONIC	1.9%
STANLEY BLACK & DECKER	1.8%
ALTRIA GROUP	1.7%
BANK OF AMERICA	1.7%
UNITEDHEALTH GROUP	1.7%
AIR PRDS.& CHEMS.	1.7%

Best Performers

	Return %
STATE STREET (STT)	29.9%
QUALCOMM (QCOM)	28.9%
E*TRADE FINANCIAL (ETFC)	24.0%
MICROCHIP TECH. (MCHP)	23.1%
NAVIENT (NAVI)	22.4%
SLM (SLM)	20.9%
APPLE (AAPL)	18.9%
BANK OF AMERICA (BAC)	18.5%
FIFTH THIRD BANCORP (FITB)	17.1%
INTEL (INTC)	16.0%

Worst Performers

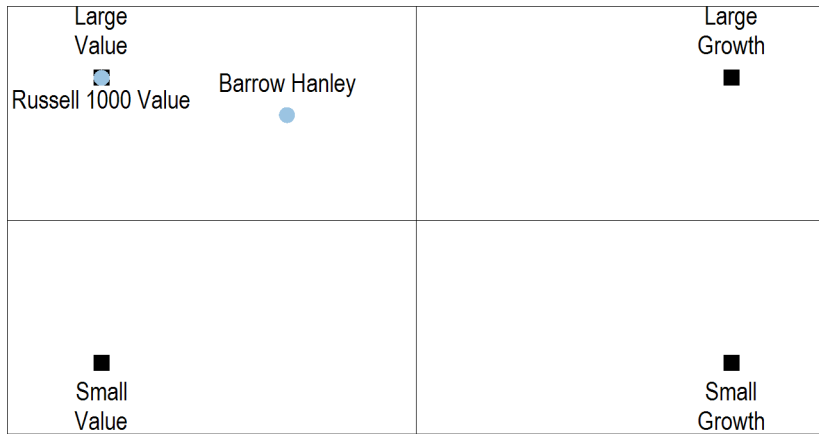
	Return %
REYNOLDS AMERICAN (RAI)	-11.8%
HESS	-10.3%
SANOFI ADR 2:1 (SNY)	-8.7%
NVR (NVR)	-7.9%
TEVA PHARM.INDS.ADR 1:1 (TEVA)	-7.8%
ALTRIA GROUP (MO)	-7.4%
EXPRESS SCRIPTS HOLDING (ESRX)	-7.0%
CVS HEALTH	-6.6%
VERIZON COMMUNICATIONS (VZ)	-6.0%
WELLS FARGO & CO (WFC)	-5.7%

**Barrow Hanley Performance Attribution vs. Russell 1000 Value**

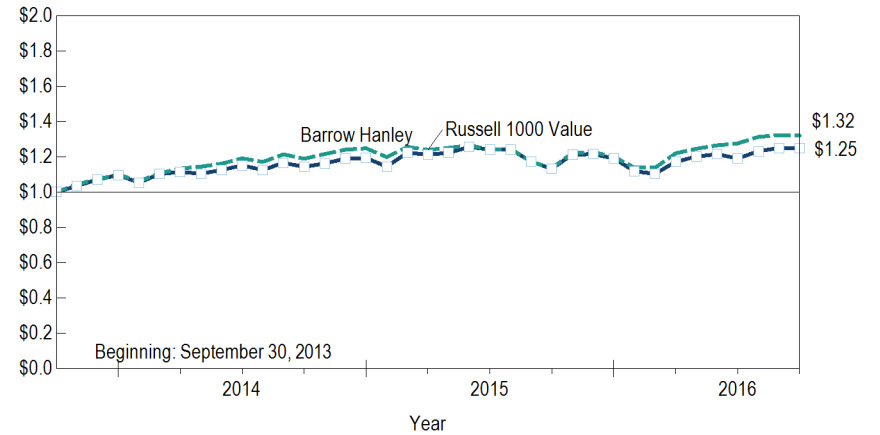
	Total Effects	Attribution Effects			Returns		Sector Weights				
		Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark			
Energy	0.0%	-0.1%	0.1%	0.0%	1.5%	2.3%	9.1%	13.6%			
Materials	0.3%	0.1%	0.0%	0.1%	8.4%	4.6%	6.2%	2.8%			
Industrials	0.0%	-0.1%	0.1%	0.0%	5.4%	6.1%	13.9%	9.6%			
Consumer Discretionary	-0.3%	-0.2%	0.1%	-0.2%	2.0%	5.9%	10.7%	4.9%			
Consumer Staples	-0.2%	-0.5%	0.1%	0.2%	-5.3%	0.1%	5.2%	9.1%			
Health Care	-0.6%	-0.4%	-0.1%	-0.1%	-2.0%	1.1%	16.2%	11.3%			
Financials	1.3%	1.3%	0.0%	0.0%	10.2%	5.3%	26.8%	27.7%			
Information Technology	0.0%	0.2%	-0.1%	0.0%	14.7%	13.0%	8.2%	9.5%			
Telecommunication Services	0.2%	-0.1%	0.2%	0.0%	-6.0%	-4.9%	2.4%	4.2%			
Utilities	0.7%	--	0.7%	--	--	-5.7%	0.0%	7.3%			
Real Estate	0.0%	--	--	--	--	--	0.0%	0.0%			
Cash	0.0%	0.0%	0.0%	0.0%	0.1%	--	1.4%	0.0%			
<b>Portfolio</b>	<b>1.3%</b>	<b>=</b>	<b>0.3%</b>	<b>+</b>	<b>1.1%</b>	<b>+</b>	<b>-0.1%</b>	<b>4.8%</b>	<b>3.5%</b>	<b>100.0%</b>	<b>100.0%</b>



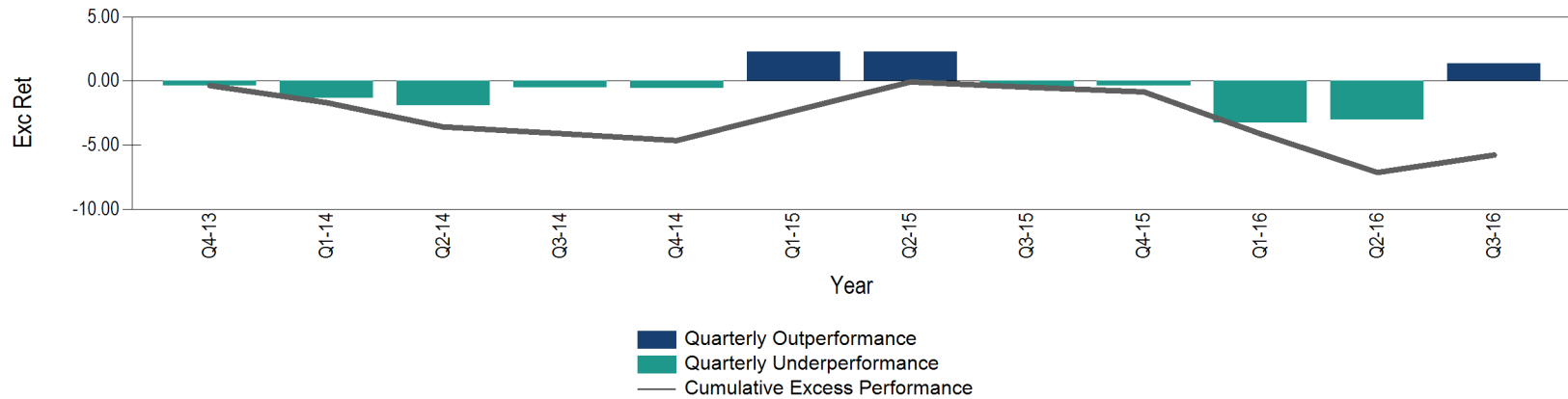
U.S. Effective Style Map

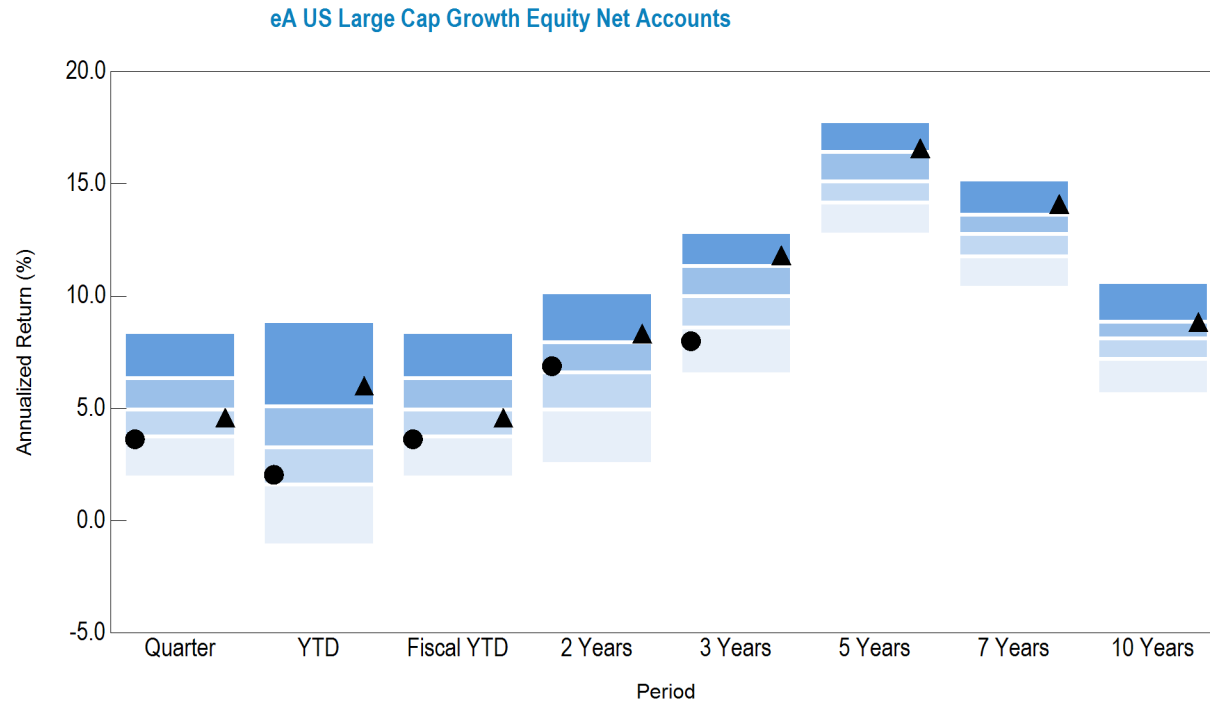


Growth of a Dollar



Quarterly and Cumulative Excess Performance





	Quarter	YTD	Fiscal YTD	2 Years	3 Years	5 Years	7 Years	10 Years
<b>Return (Rank)</b>								
5th Percentile	8.4	8.9	8.4	10.2	12.8	17.8	15.2	10.6
25th Percentile	6.4	5.1	6.4	8.0	11.4	16.4	13.7	8.9
Median	5.0	3.3	5.0	6.6	10.0	15.1	12.8	8.1
75th Percentile	3.8	1.6	3.8	5.0	8.6	14.2	11.8	7.2
95th Percentile	1.9	-1.1	1.9	2.5	6.5	12.8	10.4	5.6
# of Portfolios	178	176	178	170	168	152	146	119
● Brown Advisory	3.6 (78)	2.0 (68)	3.6 (78)	6.9 (47)	8.0 (84)	-- (--)	-- (--)	-- (--)
▲ Russell 1000 Growth	4.6 (57)	6.0 (21)	4.6 (57)	8.3 (20)	11.8 (14)	16.6 (22)	14.1 (17)	8.8 (26)

Characteristics

	Portfolio	Russell 1000 Growth
Number of Holdings	35	599
Weighted Avg. Market Cap. (\$B)	78.8	135.7
Median Market Cap. (\$B)	21.0	8.9
Price To Earnings	34.5	26.3
Price To Book	5.6	6.8
Price To Sales	6.7	4.0
Return on Equity (%)	17.2	24.5
Yield (%)	0.4	1.5
Beta (holdings; domestic)	1.1	1.0

Top Holdings

AMAZON.COM	5.2%
VISA 'A'	4.9%
FACEBOOK CLASS A	4.9%
STARBUCKS	4.1%
DANAHER	3.9%
INTUITIVE SURGICAL	3.8%
COSTCO WHOLESALE	3.7%
ESTEE LAUDER COS.'A'	3.7%
AMPHENOL 'A'	3.6%
ECOLAB	3.6%

Best Performers

	Return %
NETSUITE (N)	52.0%
NXP SEMICONDUCTORS (NXPI)	30.2%
CHARLES SCHWAB (SCHW)	25.0%
FLEETCOR TECHNOLOGIES (FLT)	21.4%
AMAZON.COM (AMZN)	17.0%
WABTEC (WAB)	16.4%
ALPHABET 'A' (GOOGL)	14.3%
AMPHENOL 'A' (APH)	13.5%
ADOBE SYSTEMS (ADBE)	13.3%
ALPHABET 'C' (GOOG)	12.3%

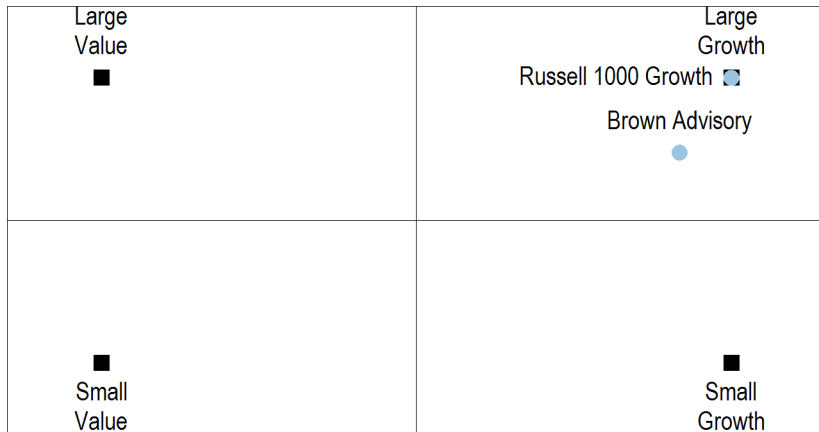
Worst Performers

	Return %
BRISTOL MYERS SQUIBB (BMY)	-26.7%
COGNIZANT TECH.SLTN.'A' (CTSH)	-16.6%
DAVITA HEALTHCARE PTNS. (DVA)	-14.5%
MEAD JOHNSON NUTRITION (MJN)	-12.5%
GENPACT (G)	-10.8%
SALESFORCE.COM (CRM)	-10.2%
UNDER ARMOUR CL C ORD (UA.C)	-7.0%
EXPRESS SCRIPTS HOLDING (ESRX)	-7.0%
AKAMAI TECHS. (AKAM)	-5.3%
FASTENAL (FAST)	-5.2%

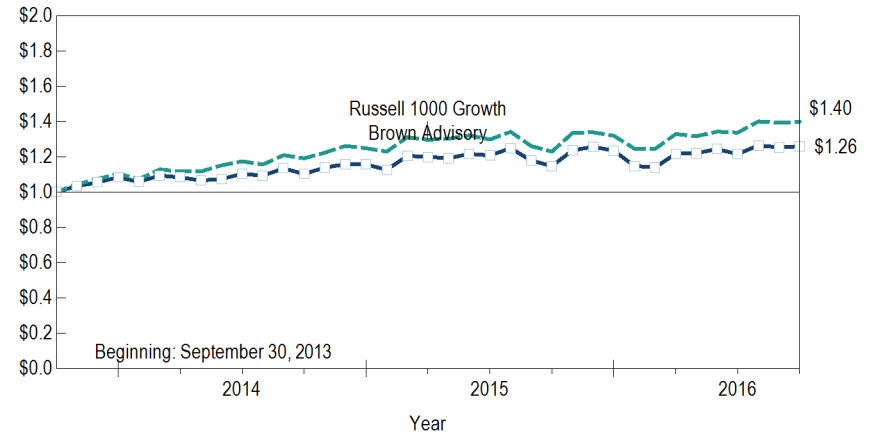
**Brown Advisory Performance Attribution vs. Russell 1000 Growth**

	Total Effects	Attribution Effects				Returns		Sector Weights			
		Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark			
Energy	0.0%	--	0.0%	--	--	12.2%	0.0%	0.6%			
Materials	0.0%	0.0%	0.0%	0.0%	2.9%	3.6%	3.4%	3.6%			
Industrials	0.3%	0.4%	0.0%	-0.1%	7.1%	3.1%	8.2%	10.7%			
Consumer Discretionary	0.1%	0.0%	0.1%	0.0%	2.8%	2.8%	14.4%	20.9%			
Consumer Staples	-0.1%	0.0%	0.0%	0.0%	-5.6%	-4.9%	10.5%	10.6%			
Health Care	-1.2%	-1.4%	0.1%	0.2%	-5.8%	2.1%	14.8%	17.1%			
Financials	0.3%	0.6%	0.2%	-0.5%	12.3%	1.3%	1.0%	5.7%			
Information Technology	0.2%	-0.4%	0.7%	-0.2%	9.9%	11.3%	39.4%	29.3%			
Telecommunication Services	0.1%	0.1%	-0.1%	0.1%	3.9%	-4.1%	2.4%	1.3%			
Utilities	0.0%	--	0.0%	--	--	-1.8%	0.0%	0.1%			
Real Estate	0.0%	--	--	--	--	--	0.0%	0.0%			
Cash	-0.3%	0.0%	-0.3%	0.0%	0.1%	--	5.8%	0.0%			
<b>Portfolio</b>	<b>-0.6%</b>	<b>=</b>	<b>-0.7%</b>	<b>+</b>	<b>0.7%</b>	<b>+</b>	<b>-0.5%</b>	<b>3.7%</b>	<b>4.3%</b>	<b>100.0%</b>	<b>100.0%</b>

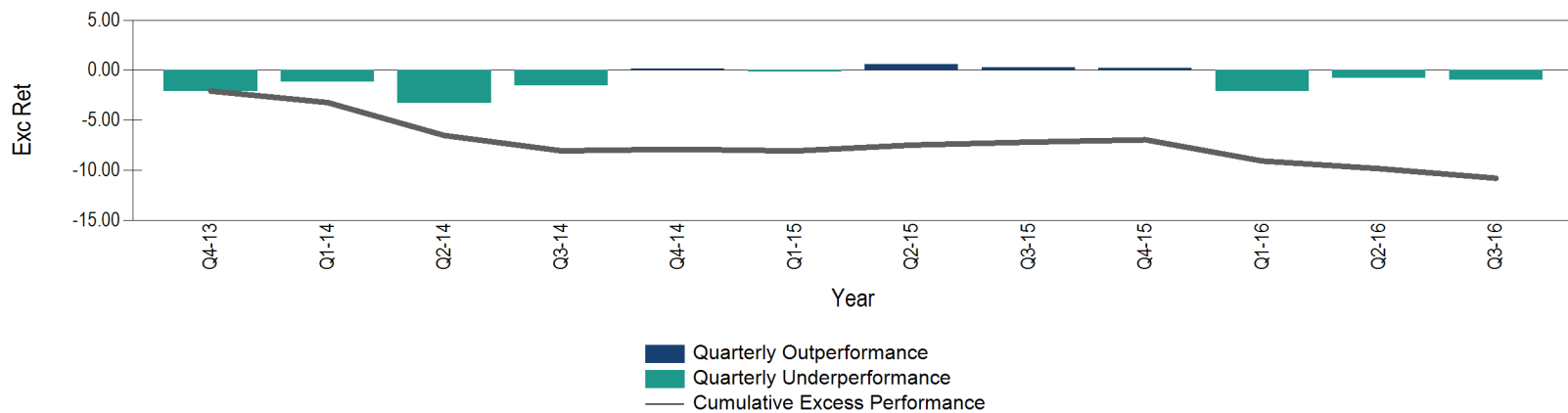
U.S. Effective Style Map

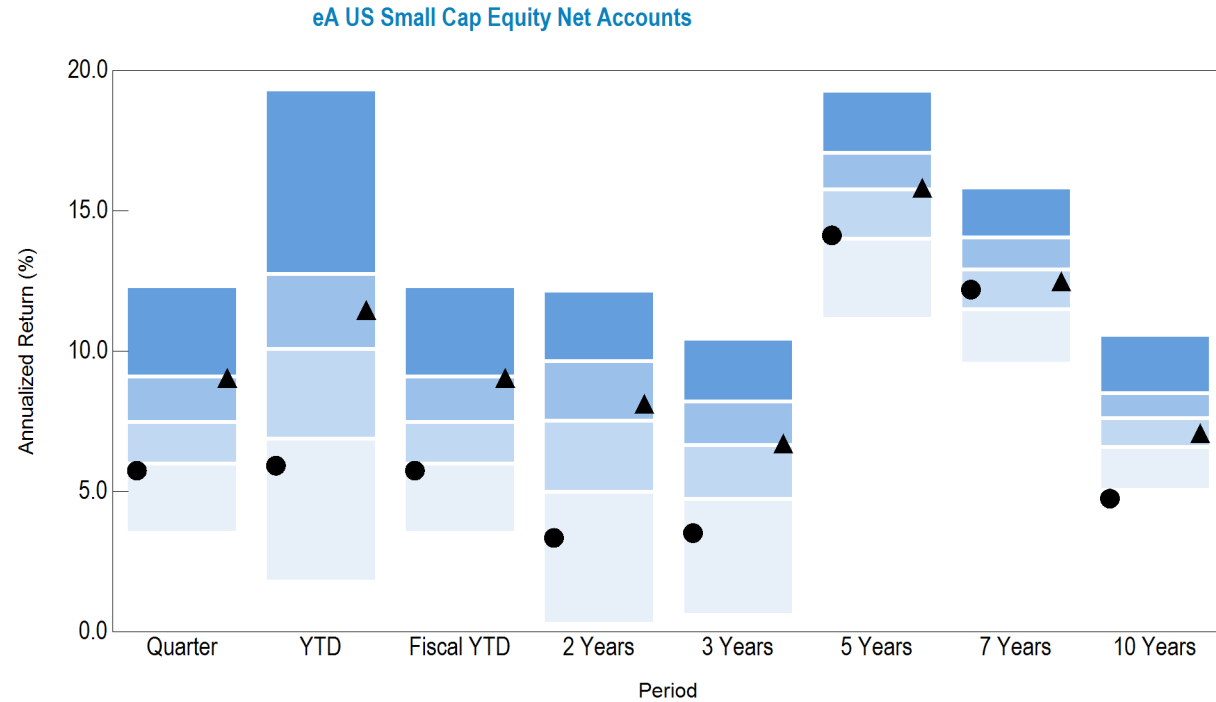


Growth of a Dollar



Quarterly and Cumulative Excess Performance





	Quarter	YTD	Fiscal YTD	2 Years	3 Years	5 Years	7 Years	10 Years
<b>Return (Rank)</b>								
5th Percentile	12.3	19.3	12.3	12.2	10.4	19.3	15.8	10.6
25th Percentile	9.1	12.8	9.1	9.7	8.2	17.1	14.1	8.5
Median	7.5	10.1	7.5	7.5	6.7	15.8	12.9	7.6
75th Percentile	6.0	6.9	6.0	5.0	4.7	14.0	11.5	6.6
95th Percentile	3.5	1.8	3.5	0.3	0.6	11.2	9.6	5.1
# of Portfolios	348	347	348	333	322	294	280	225
● Small Cap Equity	5.7 (80)	5.9 (81)	5.7 (80)	3.3 (86)	3.5 (85)	14.1 (73)	12.2 (66)	4.7 (98)
▲ Russell 2000	9.0 (27)	11.5 (39)	9.0 (27)	8.1 (41)	6.7 (50)	15.8 (50)	12.5 (60)	7.1 (64)

Characteristics

	Portfolio	Russell 2000
Number of Holdings	325	1,961
Weighted Avg. Market Cap. (\$B)	1.8	1.8
Median Market Cap. (\$B)	1.0	0.7
Price To Earnings	22.5	22.2
Price To Book	3.3	2.8
Price To Sales	2.4	2.7
Return on Equity (%)	15.2	10.2
Yield (%)	1.4	1.3
Beta (holdings; domestic)	1.2	1.2

Top Holdings

SYNNEX	0.7%
EMCOR GROUP	0.7%
CANTEL MED.	0.7%
TENNECO	0.7%
VANDA PHARMACEUTICALS	0.7%
NETGEAR	0.7%
GREIF 'A'	0.7%
WORTHINGTON INDS.	0.7%
AVON PRODUCTS	0.7%
ADVANCED ENERGY INDS.	0.7%

Best Performers

	Return %
EVERI HOLDINGS (EVRI)	114.8%
CEPHEID	71.3%
FINISAR (FNSR)	70.2%
AMKOR TECH.	69.0%
A10 NETWORKS	65.2%
EXELIXIS	63.8%
TILLY'S CLASS A	62.2%
STEMLINE THERAPEUTICS	60.0%
COTIVITI HOLDINGS ORD SHS	58.7%
ALPHA AND OMEGA SEMICON.	55.9%

Worst Performers

	Return %
VECTRUS	-46.5%
FIRST NBC BANK HOLDING	-43.8%
MYRIAD GENETICS	-32.7%
APPLIED GENETIC TECHS.	-30.8%
GEO GROUP	-29.1%
SPECTRUM PHARMS.	-28.9%
AMN HLTHCR.SVS. (AMN)	-20.3%
EXPRESS (EXPR)	-18.7%
MAGELLAN HEALTH	-18.3%
HSN	-18.0%

**Small Cap Equity Performance Attribution vs. Russell 2000**

	Total Effects	Attribution Effects			Returns		Sector Weights				
		Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark			
Energy	-0.2%	0.0%	-0.2%	0.0%	4.0%	10.4%	4.9%	3.1%			
Materials	-0.1%	0.0%	-0.1%	0.0%	10.0%	12.2%	1.6%	4.6%			
Industrials	-0.7%	-0.8%	0.2%	-0.1%	4.0%	9.3%	15.9%	13.8%			
Consumer Discretionary	0.6%	0.3%	0.3%	0.1%	7.6%	4.1%	16.8%	13.7%			
Consumer Staples	0.1%	0.1%	0.1%	-0.1%	5.0%	2.3%	1.9%	3.1%			
Health Care	-1.1%	-0.7%	-0.6%	0.2%	2.9%	13.6%	9.6%	13.6%			
Financials	1.0%	0.8%	0.6%	-0.3%	10.3%	7.3%	22.1%	25.8%			
Information Technology	-0.8%	-0.5%	-0.2%	-0.1%	9.5%	16.0%	22.0%	17.1%			
Telecommunication Services	0.1%	0.1%	0.1%	-0.1%	-3.5%	-5.0%	0.0%	1.0%			
Utilities	0.1%	-0.1%	0.2%	0.0%	-7.3%	-5.2%	3.1%	4.3%			
Real Estate	0.0%	--	--	--	--	--	0.0%	0.0%			
Cash	-1.3%	0.0%	-1.3%	0.0%	0.1%	--	2.2%	0.0%			
<b>Portfolio</b>	<b>-2.1%</b>	<b>=</b>	<b>-0.7%</b>	<b>+</b>	<b>-0.9%</b>	<b>+</b>	<b>-0.5%</b>	<b>6.9%</b>	<b>9.0%</b>	<b>100.0%</b>	<b>100.0%</b>

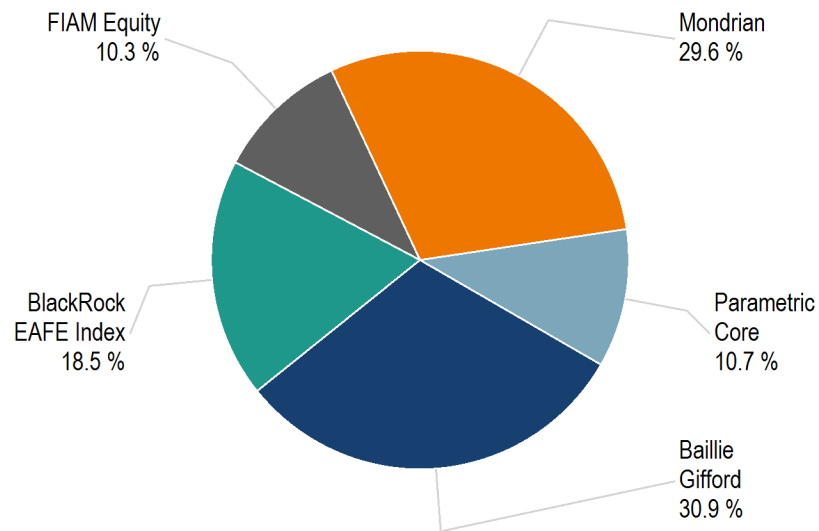


Characteristics

	Portfolio	Russell 2000
Number of Holdings	324	1,961
Weighted Avg. Market Cap. (\$B)	1.8	1.8
Median Market Cap. (\$B)	1.0	0.7
Price To Earnings	22.5	22.2
Price To Book	3.3	2.8
Price To Sales	2.4	2.7
Return on Equity (%)	15.2	10.2
Yield (%)	1.4	1.3
Beta (holdings; domestic)	1.2	1.2

Top Holdings

SYNNEX	0.7%
EMCOR GROUP	0.7%
CANTEL MED.	0.7%
TENNECO	0.7%
VANDA PHARMACEUTICALS	0.7%
NETGEAR	0.7%
GREIF 'A'	0.7%
WORTHINGTON INDS.	0.7%
AVON PRODUCTS	0.7%
ADVANCED ENERGY INDS.	0.7%



	Actual \$	Actual %	Manager Contribution to Excess Return %
Baillie Gifford	\$220,570,533	30.9%	0.4%
BlackRock EAFE Index	\$132,458,109	18.5%	0.0%
FIAM Equity	\$73,945,419	10.3%	-0.1%
Mondrian	\$211,274,136	29.6%	-1.2%
Parametric Core	\$76,620,037	10.7%	-0.4%
Actual vs. Policy Weight Difference			0.4%
<b>Total</b>	<b>\$714,868,234</b>	<b>100.0%</b>	<b>-1.0%</b>

**Statistics Summary**

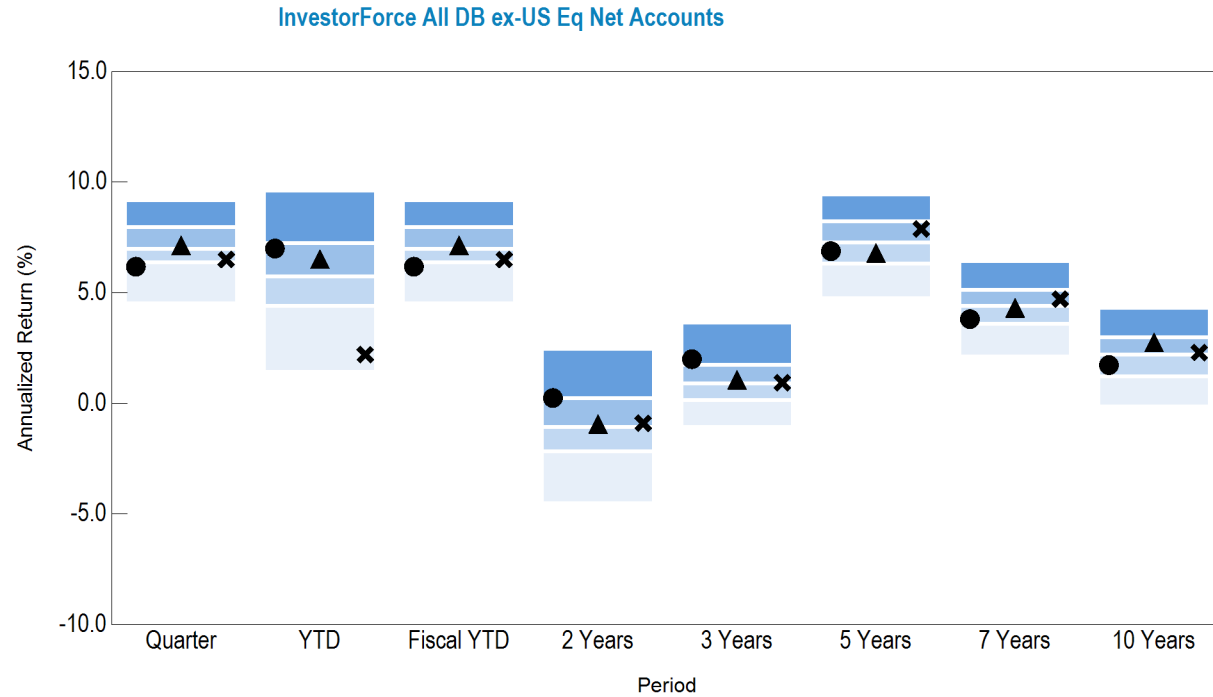
**3 Years**

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
International Equity	2.0%	12.3%	0.2	0.6	1.6%
MSCI ACWI ex US IMI	1.1%	12.6%	0.1	--	0.0%
Baillie Gifford	3.9%	13.5%	0.3	0.8	3.7%
MSCI ACWI ex US	0.9%	12.7%	0.1	--	0.0%
FIAM Equity	3.7%	11.7%	0.3	-0.1	2.5%
MSCI ACWI ex US Small Cap Gross	3.9%	12.2%	0.3	--	0.0%
Mondrian	1.3%	11.9%	0.1	0.6	4.6%
MSCI ACWI ex USA Value Gross	-1.4%	13.7%	-0.1	--	0.0%

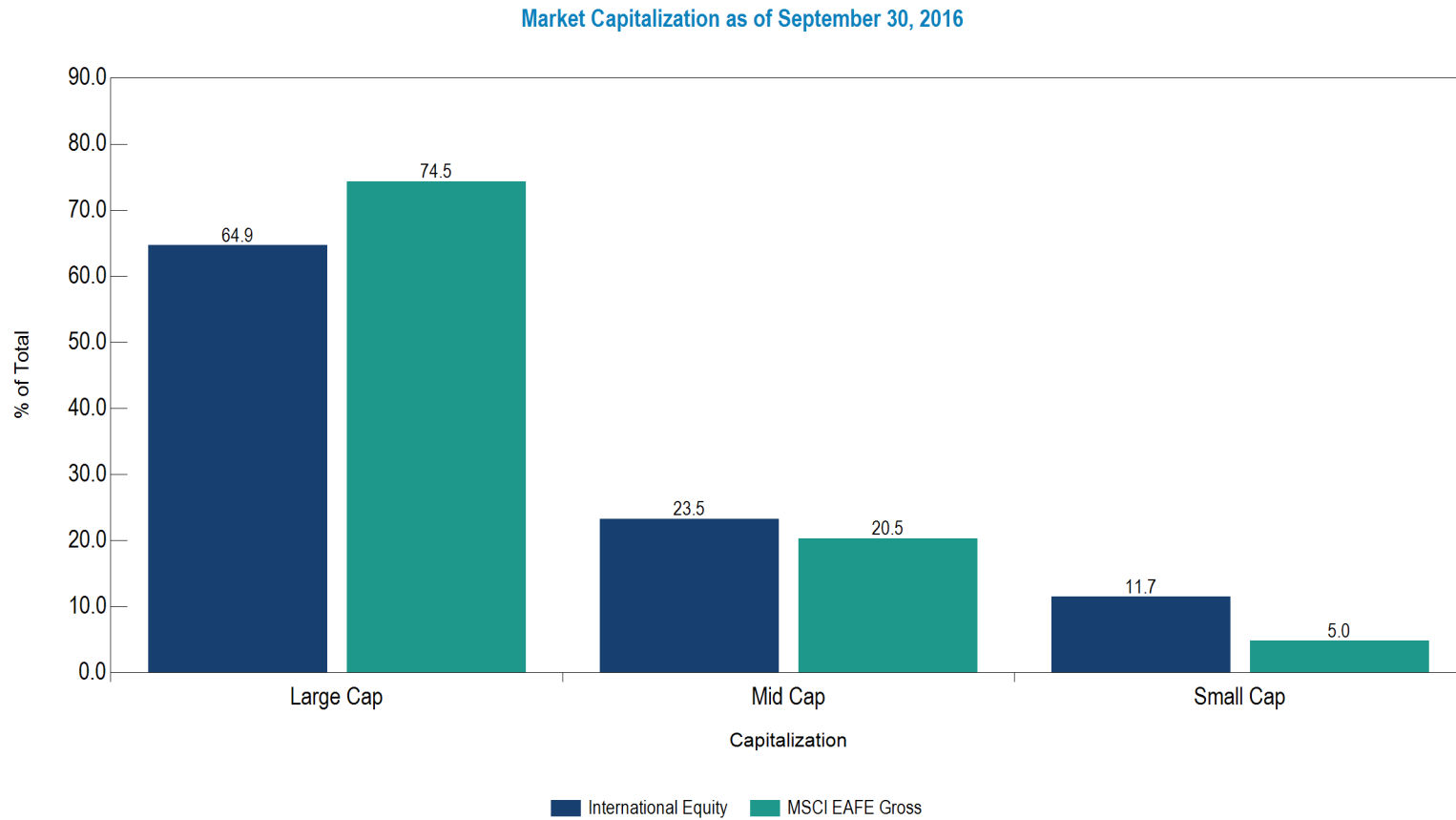
**Statistics Summary**

**5 Years**

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
International Equity	6.9%	13.3%	0.5	0.0	2.0%
MSCI ACWI ex US IMI	6.8%	14.1%	0.5	--	0.0%
Mondrian	5.9%	13.0%	0.4	0.1	4.7%
MSCI ACWI ex USA Value Gross	5.2%	15.2%	0.3	--	0.0%



	Quarter	YTD	Fiscal YTD	2 Years	3 Years	5 Years	7 Years	10 Years
<b>Return (Rank)</b>								
5th Percentile	9.2	9.6	9.2	2.4	3.7	9.4	6.4	4.3
25th Percentile	8.0	7.3	8.0	0.2	1.8	8.2	5.1	3.0
Median	7.0	5.8	7.0	-1.0	0.9	7.3	4.4	2.2
75th Percentile	6.4	4.4	6.4	-2.2	0.2	6.3	3.6	1.2
95th Percentile	4.5	1.4	4.5	-4.5	-1.1	4.8	2.1	-0.1
# of Portfolios	495	495	495	478	433	370	311	237
● International Equity	6.2 (79)	7.0 (29)	6.2 (79)	0.2 (25)	2.0 (21)	6.9 (60)	3.8 (69)	1.7 (67)
▲ MSCI ACWI ex US IMI	7.1 (45)	6.5 (39)	7.1 (45)	-0.9 (47)	1.1 (45)	6.8 (63)	4.3 (53)	2.8 (33)
✕ MSCI EAFE Gross	6.5 (71)	2.2 (92)	6.5 (71)	-0.9 (46)	0.9 (50)	7.9 (36)	4.7 (41)	2.3 (47)



Excludes FIAM Equity holdings.

See appendix for the market capitalization breakpoints.

Characteristics

	Portfolio	MSCI ACWI ex USA IMI Gross
Number of Holdings	2,572	6,183
Weighted Avg. Market Cap. (\$B)	56.8	44.3
Median Market Cap. (\$B)	7.5	1.2
Price To Earnings	23.3	19.9
Price To Book	4.2	2.5
Price To Sales	3.1	2.2
Return on Equity (%)	17.3	13.4
Yield (%)	2.8	2.9
Beta (holdings; global)	1.0	1.0

Top Holdings

UNILEVER (UK)	1.4%
NESTLE 'R'	1.2%
UNITED OVERSEAS BANK	1.1%
COCHLEAR	1.1%
ABB LTD N	1.0%
NASPERS	0.9%
GLAXOSMITHKLINE	0.9%
SYNGENTA	0.9%
TAIWAN SEMICON.SPN.ADR 1:5	0.9%
IBERDROLA	0.8%

Best Performers

	Return %
JSW	218.6%
MINERAL DEPOSITS (A:MDLX)	115.6%
OI PN	115.2%
BRAMMER (UKIR:BRAM)	94.3%
NINTENDO (J:NNDO)	84.8%
AEGEAN MARINE PTL.NET. (ANW)	82.2%
USINAS SIDERURGICAS DE MINAS GERAIS A PN	76.7%
WEIBO CLASS 'A' ADR	76.5%
FUFENG GROUP (K:FUFE)	69.6%
METALURGICA GERDAU PN (BR:GO4)	69.1%

Worst Performers

	Return %
TECH PRO TECHNOLOGY DEV. (K:TCPR)	-92.9%
DRYSHIPS	-79.9%
SUGIH ENERGY (ID:SUA)	-63.9%
ONO PHARM. (J:PS@N)	-35.4%
BLOOMBERRY RESORTS	-33.4%
SIGMAGOLD INTI PERKASA (ID:LAG)	-32.3%
CAPITA (UKIR:CPI)	-32.3%
AXTEL CPO	-32.2%
AES GENER	-31.9%
CYBERDYNE (J:DYNE)	-30.4%

Excludes FIAM Equity holdings.

International Equity Performance Attribution vs. MSCI ACWI ex USA IMI Gross

	Attribution Effects				Returns		Sector Weights				
	Total Effects	Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark			
Energy	0.0%	-0.1%	0.0%	0.0%	1.0%	2.6%	5.1%	6.4%			
Materials	-0.1%	0.0%	-0.1%	0.0%	12.0%	12.0%	5.1%	7.6%			
Industrials	0.0%	0.0%	0.0%	0.0%	8.6%	8.7%	12.8%	12.4%			
Consumer Discretionary	0.2%	0.1%	0.0%	0.0%	10.6%	10.0%	14.0%	12.1%			
Consumer Staples	-0.1%	0.0%	-0.2%	0.0%	2.7%	2.2%	14.8%	11.0%			
Health Care	0.1%	0.2%	-0.1%	0.0%	0.9%	-1.0%	10.2%	9.2%			
Financials	-0.4%	-0.2%	-0.1%	0.0%	7.9%	9.1%	17.8%	23.9%			
Information Technology	-0.4%	-0.3%	0.0%	-0.1%	10.3%	14.6%	9.2%	9.2%			
Telecommunication Services	-0.1%	-0.1%	-0.1%	0.0%	-0.4%	0.7%	5.7%	4.7%			
Utilities	0.0%	0.1%	0.0%	0.0%	2.4%	0.5%	3.8%	3.4%			
Real Estate	0.0%	--	--	--	--	--	0.0%	0.0%			
Cash	-0.1%	0.0%	-0.1%	0.0%	0.1%	--	1.6%	0.0%			
<b>Portfolio</b>	<b>-0.9%</b>	<b>=</b>	<b>-0.3%</b>	<b>+</b>	<b>-0.6%</b>	<b>+</b>	<b>0.0%</b>	<b>6.2%</b>	<b>7.1%</b>	<b>100.0%</b>	<b>100.0%</b>

Excludes FIAM Equity holdings.

Int'l Equity Performance Attribution vs. MSCI ACWI ex USA IMI Gross

	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
<b>Europe</b>									
Austria	32.5%	16.2%	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Belgium	2.3%	4.7%	0.3%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Czech Republic*	-1.4%	-0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Denmark	-7.7%	-4.0%	2.4%	1.3%	0.0%	-0.1%	0.0%	0.0%	-0.2%
Finland	9.7%	9.4%	0.7%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%
France	6.7%	6.8%	4.4%	6.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Germany	12.6%	10.0%	5.7%	5.9%	0.2%	0.0%	0.0%	0.0%	0.1%
Greece*	6.1%	1.2%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Hungary*	8.1%	10.5%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Ireland	0.3%	7.7%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Italy	-1.6%	2.5%	1.2%	1.5%	-0.1%	0.0%	0.0%	0.0%	0.0%
Luxembourg	-1.7%	7.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Netherlands	1.5%	9.6%	2.1%	2.1%	-0.2%	0.0%	0.0%	0.0%	-0.2%
Norway	8.1%	7.3%	0.2%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%
Poland*	7.5%	7.3%	0.3%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Portugal	10.0%	4.9%	0.4%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Russia*	10.0%	9.1%	0.8%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%
Spain	8.6%	9.7%	3.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Sweden	6.6%	8.4%	3.8%	2.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Switzerland	5.2%	3.1%	7.8%	6.1%	0.1%	-0.1%	0.0%	0.0%	0.1%
United Kingdom	4.5%	4.2%	15.9%	13.5%	0.0%	0.0%	-0.1%	0.0%	0.0%

Excludes FIAM Equity holdings.



Int'l Equity Performance Attribution vs. MSCI ACWI ex USA IMI Gross

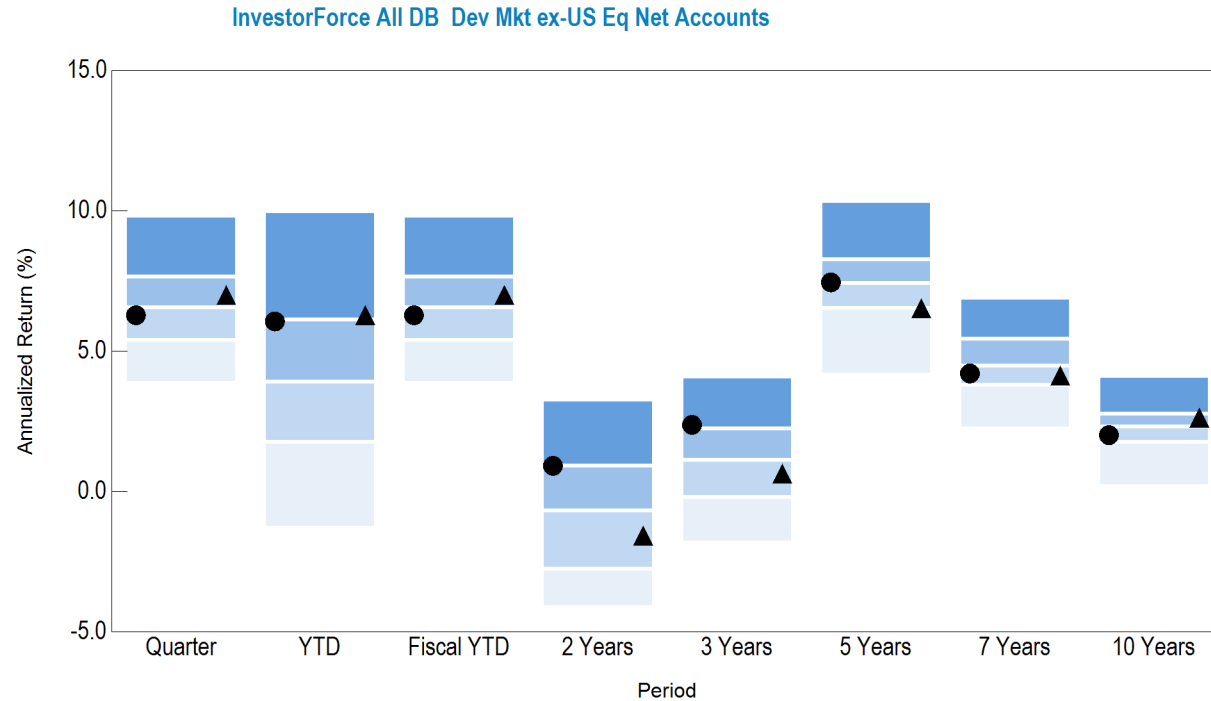
	Returns and Weights				Attribution Effects				Total Effects	
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect		
<b>AsiaPacific</b>										
Australia	10.5%	8.4%	4.3%	5.0%	0.1%	0.0%	0.0%	0.0%	0.1%	
China*	15.0%	13.4%	2.1%	5.6%	0.1%	-0.2%	0.0%	-0.1%	-0.2%	
Hong Kong	6.0%	11.4%	2.9%	2.3%	-0.1%	0.0%	0.0%	0.0%	-0.1%	
India*	7.4%	7.0%	1.7%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Indonesia*	10.9%	8.8%	0.6%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	
Japan	7.3%	8.3%	18.0%	17.5%	-0.2%	0.0%	0.0%	0.0%	-0.2%	
Korea*	8.5%	9.3%	2.8%	3.5%	0.0%	0.0%	-0.1%	0.0%	0.0%	
Malaysia*	-1.4%	-0.4%	0.9%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	
New Zealand	12.9%	9.3%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	
Philippines*	-6.7%	-4.3%	0.7%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	
Singapore	2.3%	0.9%	3.1%	1.0%	0.0%	-0.1%	0.0%	0.0%	-0.1%	
Taiwan*	11.1%	12.1%	2.7%	2.9%	0.0%	0.0%	0.0%	0.0%	0.0%	
Thailand*	4.9%	6.4%	0.4%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	
<b>Americas</b>										
Brazil*	6.6%	11.5%	1.4%	1.5%	-0.1%	0.0%	0.0%	0.0%	-0.1%	
Canada	-1.0%	4.6%	0.3%	7.0%	-0.4%	0.0%	0.1%	0.4%	0.1%	
Chile*	1.5%	-0.5%	0.5%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	
Colombia*	2.8%	2.4%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	
Mexico*	-4.4%	-2.3%	1.3%	0.9%	0.0%	0.0%	0.0%	0.0%	-0.1%	
Peru*	2.6%	1.1%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	
United States	11.6%	3.9%	0.9%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	

Excludes FIAM Equity holdings.

Int'l Equity Performance Attribution vs. MSCI ACWI ex USA IMI Gross

	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
<b>Other</b>									
Egypt*	--	15.9%	0.0%	0.0%	--	0.0%	0.0%	--	0.0%
Israel	3.7%	0.8%	0.2%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%
Kazakhstan**	6.4%	10.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Kuwait**	-2.0%	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Qatar*	6.9%	6.1%	0.4%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Romania**	6.5%	13.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
South Africa*	8.7%	7.1%	2.2%	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%
Turkey*	-6.4%	-4.6%	0.5%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
United Arab Emirates*	-0.4%	5.5%	0.3%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Totals</b>									
Americas	3.2%	4.9%	4.9%	9.8%	-0.2%	0.0%	0.1%	0.1%	0.0%
Europe	5.6%	5.9%	49.8%	45.1%	0.0%	0.0%	-0.1%	0.0%	-0.2%
Asia/Pacific	7.5%	9.0%	40.3%	42.2%	-0.5%	0.0%	-0.2%	0.0%	-0.6%
Other	5.3%	4.6%	3.5%	2.9%	0.0%	0.0%	0.0%	0.0%	0.0%
Cash	0.1%	--	1.6%	0.0%	0.0%	-0.1%	0.0%	0.0%	-0.1%
<b>Total</b>	<b>6.2%</b>	<b>7.1%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>-0.7%</b>	<b>-0.2%</b>	<b>-0.2%</b>	<b>0.1%</b>	<b>-0.9%</b>
<b>Totals</b>									
Developed	6.1%	6.5%	78.0%	77.5%	-0.2%	0.0%	-0.1%	0.0%	-0.3%
Emerging*	6.7%	8.9%	20.4%	22.5%	-0.4%	0.0%	-0.1%	0.0%	-0.5%
Frontier**	2.6%	--	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cash	0.1%	--	1.6%	0.0%	0.0%	-0.1%	0.0%	0.0%	-0.1%

Excludes FIAM Equity holdings.



	Quarter	YTD	Fiscal YTD	2 Years	3 Years	5 Years	7 Years	10 Years
<b>5th Percentile</b>	9.8	10.0	9.8	3.3	4.1	10.3	6.9	4.1
<b>25th Percentile</b>	7.7	6.1	7.7	0.9	2.3	8.3	5.4	2.8
<b>Median</b>	6.6	3.9	6.6	-0.7	1.1	7.4	4.5	2.3
<b>75th Percentile</b>	5.4	1.8	5.4	-2.7	-0.2	6.5	3.8	1.8
<b>95th Percentile</b>	3.9	-1.3	3.9	-4.1	-1.8	4.2	2.3	0.2
<b># of Portfolios</b>	153	153	153	149	141	119	100	61
<b>● Developed Markets</b>	6.3 (57)	6.1 (26)	6.3 (57)	0.9 (26)	2.4 (24)	7.5 (50)	4.2 (61)	2.0 (61)
<b>▲ MSCI ACWI ex USA Gross</b>	7.0 (41)	6.3 (25)	7.0 (41)	-1.6 (66)	0.6 (62)	6.5 (77)	4.1 (65)	2.6 (37)

Characteristics

	Portfolio	MSCI ACWI ex USA Gross
Number of Holdings	1,567	1,853
Weighted Avg. Market Cap. (\$B)	61.8	51.2
Median Market Cap. (\$B)	11.8	6.8
Price To Earnings	23.7	19.9
Price To Book	4.4	2.6
Price To Sales	3.1	2.2
Return on Equity (%)	17.5	13.5
Yield (%)	2.8	3.0
Beta (holdings; global)	1.0	1.0

Top Holdings

UNILEVER (UK)	1.6%
NESTLE 'R'	1.4%
UNITED OVERSEAS BANK	1.3%
COCHLEAR	1.3%
ABB LTD N	1.1%
GLAXOSMITHKLINE	1.0%
SYNGENTA	1.0%
TAIWAN SEMICON.SPN.ADR 1:5	1.0%
NASPERS	1.0%
IBERDROLA	0.9%

Best Performers

	Return %
MINERAL DEPOSITS (A:MDLX)	115.6%
BRAMMER (UKIR:BRAM)	94.3%
NINTENDO (J:NNDO)	84.8%
BROTHER INDUSTRIES (J:BI@N)	65.7%
ZUMTOBEL (O:ZUS)	62.0%
SOUTH32 (A:S32X)	61.8%
SEAGATE TECH.	61.0%
ZALANDO (D:ZAL)	55.0%
FORTESCUE METALS GP.	49.0%
HITACHI HIGH - TECHS. (J:NSSS)	47.4%

Worst Performers

	Return %
ONO PHARM.	-35.4%
CAPITA (UKIR:CPI)	-32.3%
CYBERDYNE	-30.4%
AGGREKO	-26.8%
BRISTOL MYERS SQUIBB	-26.7%
TRACTOR SUPPLY	-25.9%
TPG TELECOM (A:TPMX)	-25.6%
DOLLAR GENERAL	-25.3%
INGENICO GROUP (F:INGE)	-25.2%
NRG ENERGY	-25.1%

Excludes FIAM Equity holdings.

Developed Markets Performance Attribution vs. MSCI ACWI ex USA Gross

	Total Effects	Attribution Effects			Returns		Sector Weights				
		Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark			
Energy	0.0%	-0.1%	0.1%	0.0%	-0.4%	2.3%	4.5%	6.9%			
Materials	-0.2%	0.0%	-0.2%	0.0%	12.8%	12.7%	4.3%	7.1%			
Industrials	0.1%	0.1%	0.0%	0.0%	8.9%	8.4%	13.2%	11.2%			
Consumer Discretionary	0.2%	0.1%	0.1%	0.0%	11.0%	10.4%	14.4%	11.4%			
Consumer Staples	-0.1%	0.1%	-0.2%	0.1%	2.7%	2.0%	15.3%	11.6%			
Health Care	0.2%	0.2%	-0.1%	0.1%	0.7%	-1.9%	10.7%	9.4%			
Financials	-0.4%	-0.3%	-0.2%	0.0%	8.1%	9.4%	17.9%	24.5%			
Information Technology	-0.4%	-0.3%	0.0%	-0.1%	10.2%	14.9%	9.3%	8.9%			
Telecommunication Services	-0.1%	-0.1%	0.0%	0.0%	-0.6%	0.5%	5.3%	5.3%			
Utilities	0.1%	0.1%	0.0%	0.0%	1.9%	0.2%	3.5%	3.6%			
Real Estate	0.0%	--	--	--	--	--	0.0%	0.0%			
Cash	-0.1%	0.0%	-0.1%	0.0%	0.1%	--	1.7%	0.0%			
Unclassified	0.0%	--	--	--	--	--	0.0%	0.0%			
<b>Portfolio</b>	<b>-0.7%</b>	<b>=</b>	<b>-0.2%</b>	<b>+</b>	<b>-0.5%</b>	<b>+</b>	<b>0.0%</b>	<b>6.2%</b>	<b>6.9%</b>	<b>100.0%</b>	<b>100.0%</b>

Excludes FIAM Equity holdings.

Developed Markets Performance Attribution vs. MSCI ACWI ex USA Gross

	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
<b>Europe</b>									
Austria	32.5%	16.9%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Belgium	2.3%	4.4%	0.4%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Czech Republic*	--	-0.4%	0.0%	0.0%	--	0.0%	0.0%	--	0.0%
Denmark	-7.7%	-6.1%	2.6%	1.4%	0.0%	-0.2%	0.0%	0.0%	-0.2%
Finland	9.7%	7.4%	0.8%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%
France	6.7%	6.4%	4.9%	6.8%	0.0%	0.0%	0.0%	0.0%	0.0%
Germany	12.6%	9.9%	6.4%	6.1%	0.2%	0.0%	0.0%	0.0%	0.2%
Greece*	--	0.8%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
Hungary*	--	10.9%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
Ireland	0.3%	7.5%	0.1%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Italy	-1.6%	2.3%	1.3%	1.4%	-0.1%	0.0%	0.0%	0.0%	-0.1%
Luxembourg	-1.4%	6.9%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Netherlands	1.6%	9.6%	2.4%	2.2%	-0.2%	0.0%	0.0%	0.0%	-0.2%
Norway	8.1%	6.4%	0.2%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%
Poland*	--	4.0%	0.0%	0.3%	--	0.0%	0.0%	--	0.0%
Portugal	10.0%	6.5%	0.4%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Russia*	3.2%	8.7%	0.1%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%
Spain	8.6%	9.4%	3.4%	2.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Sweden	6.6%	7.5%	4.3%	1.9%	0.0%	0.1%	0.0%	0.0%	0.0%
Switzerland	5.2%	2.7%	8.7%	6.6%	0.2%	-0.1%	0.0%	0.1%	0.1%
United Kingdom	4.6%	3.6%	17.7%	13.7%	0.1%	0.0%	-0.1%	0.0%	0.1%

Excludes FIAM Equity holdings.

Developed Markets Performance Attribution vs. MSCI ACWI ex USA Gross

	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
<b>AsiaPacific</b>									
Australia	10.5%	8.0%	4.8%	5.1%	0.1%	0.0%	0.0%	0.0%	0.1%
China*	16.7%	13.9%	1.7%	5.7%	0.2%	-0.3%	0.0%	-0.1%	-0.2%
Hong Kong	5.4%	11.9%	2.6%	2.3%	-0.2%	0.0%	0.0%	0.0%	-0.2%
India*	6.8%	6.2%	1.3%	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%
Indonesia*	16.5%	9.5%	0.2%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%
Japan	7.3%	8.5%	20.1%	16.6%	-0.2%	0.0%	0.0%	0.0%	-0.2%
Korea*	9.2%	11.0%	2.2%	3.3%	0.0%	0.0%	-0.1%	0.0%	-0.1%
Malaysia*	-2.6%	-1.5%	0.5%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%
New Zealand	12.9%	12.8%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Philippines*	-9.6%	-4.6%	0.3%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Singapore	2.3%	-0.1%	3.5%	1.0%	0.0%	-0.1%	0.0%	0.1%	-0.1%
Taiwan*	11.3%	12.3%	2.1%	2.7%	0.0%	0.0%	-0.1%	0.0%	-0.1%
Thailand*	1.4%	7.3%	0.1%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Americas</b>									
Brazil*	3.0%	11.4%	0.6%	1.6%	-0.1%	-0.1%	0.0%	0.1%	-0.1%
Canada	-1.0%	5.0%	0.4%	6.9%	-0.4%	0.0%	0.1%	0.4%	0.1%
Chile*	-6.9%	-1.9%	0.1%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Colombia*	--	2.7%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
Mexico*	-7.4%	-2.3%	0.6%	0.9%	-0.1%	0.0%	0.0%	0.0%	0.0%
Peru*	-1.4%	1.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
United States	13.0%	3.9%	0.9%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%

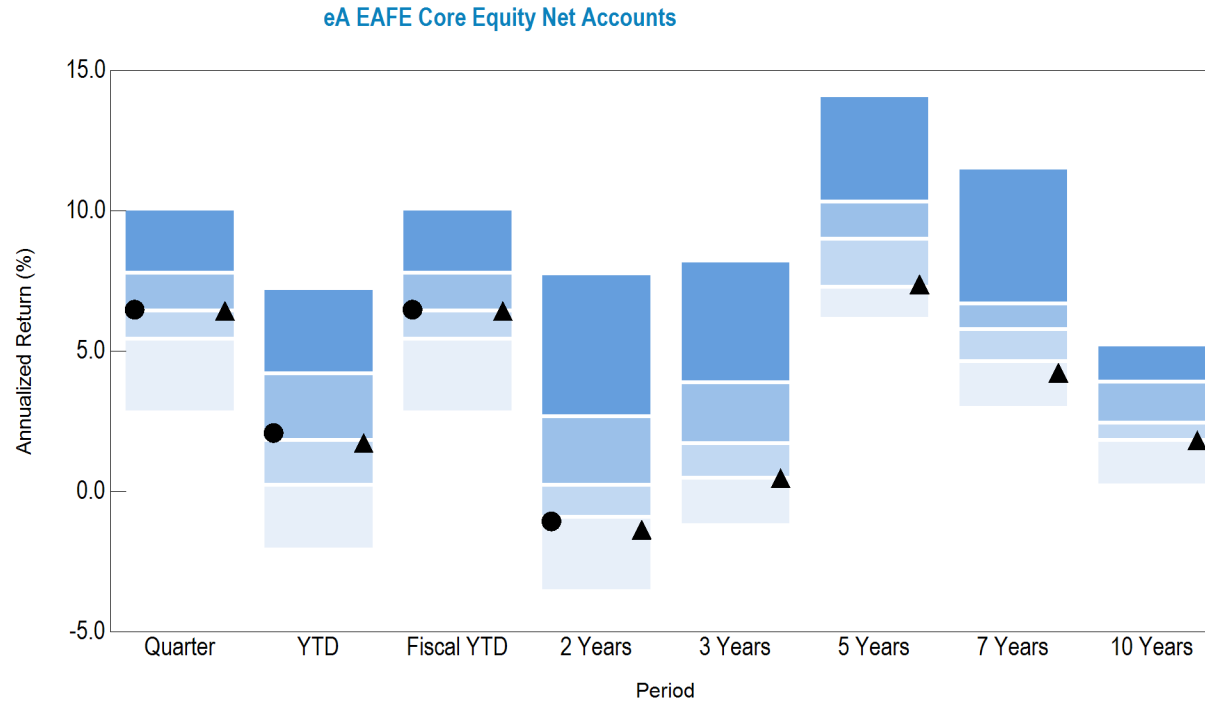
Excludes FIAM Equity holdings.

Developed Markets Performance Attribution vs. MSCI ACWI ex USA Gross

	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
<b>Other</b>									
Egypt*	--	21.6%	0.0%	0.0%	--	0.0%	0.0%	--	0.0%
Israel	3.7%	-2.1%	0.2%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%
Kazakhstan**	6.4%	10.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Qatar*	6.8%	6.6%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Romania**	6.5%	13.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
South Africa*	10.0%	6.4%	1.5%	1.6%	0.1%	0.0%	0.0%	0.0%	0.1%
Turkey*	-11.3%	-5.3%	0.1%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
United Arab Emirates*	-6.3%	6.2%	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Totals</b>									
Americas	2.5%	5.1%	2.7%	9.9%	-0.3%	0.0%	0.1%	0.2%	0.0%
Europe	5.5%	5.4%	54.0%	46.2%	0.2%	-0.1%	-0.2%	0.0%	0.0%
Asia/Pacific	7.6%	9.3%	39.4%	40.9%	-0.6%	0.0%	-0.1%	0.0%	-0.7%
Other	7.3%	3.8%	2.2%	2.9%	0.1%	0.0%	0.0%	0.0%	0.1%
Cash	0.1%	--	1.7%	0.0%	0.0%	-0.1%	0.0%	0.0%	-0.1%
<b>Total</b>	<b>6.2%</b>	<b>6.9%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>-0.6%</b>	<b>-0.2%</b>	<b>-0.2%</b>	<b>0.2%</b>	<b>-0.7%</b>
<b>Totals</b>									
Developed	6.1%	6.3%	86.3%	77.5%	0.0%	0.0%	-0.1%	0.0%	-0.1%
Emerging*	7.7%	9.1%	12.0%	22.5%	-0.3%	-0.1%	-0.1%	0.2%	-0.5%
Frontier**	6.5%	--	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cash	0.1%	--	1.7%	0.0%	0.0%	-0.1%	0.0%	0.0%	-0.1%

Excludes FIAM Equity holdings.





	Quarter	YTD	Fiscal YTD	2 Years	3 Years	5 Years	7 Years	10 Years
<b>5th Percentile</b>	10.1	7.2	10.1	7.8	8.2	14.1	11.5	5.2
<b>25th Percentile</b>	7.8	4.2	7.8	2.7	3.9	10.4	6.7	3.9
<b>Median</b>	6.5	1.8	6.5	0.3	1.7	9.0	5.8	2.5
<b>75th Percentile</b>	5.5	0.2	5.5	-0.9	0.5	7.3	4.7	1.8
<b>95th Percentile</b>	2.8	-2.1	2.8	-3.5	-1.2	6.2	3.0	0.2
<b># of Portfolios</b>	94	92	94	88	83	74	63	45
<b>● BlackRock EAFE Index</b>	6.5 (50)	2.1 (47)	6.5 (50)	-1.1 (79)	-- (--)	-- (--)	-- (--)	-- (--)
<b>▲ MSCI EAFE</b>	6.4 (52)	1.7 (52)	6.4 (52)	-1.4 (82)	0.5 (76)	7.4 (74)	4.2 (84)	1.8 (76)

Characteristics

	Portfolio	MSCI EAFE
Number of Holdings	1,441	927
Weighted Avg. Market Cap. (\$B)	119.8	52.2
Median Market Cap. (\$B)	11.6	8.9
Price To Earnings	22.8	20.5
Price To Book	4.4	2.4
Price To Sales	3.4	2.1
Return on Equity (%)	17.9	12.2
Yield (%)	2.3	3.2
Beta (holdings; global)	1.0	1.1

Top Holdings

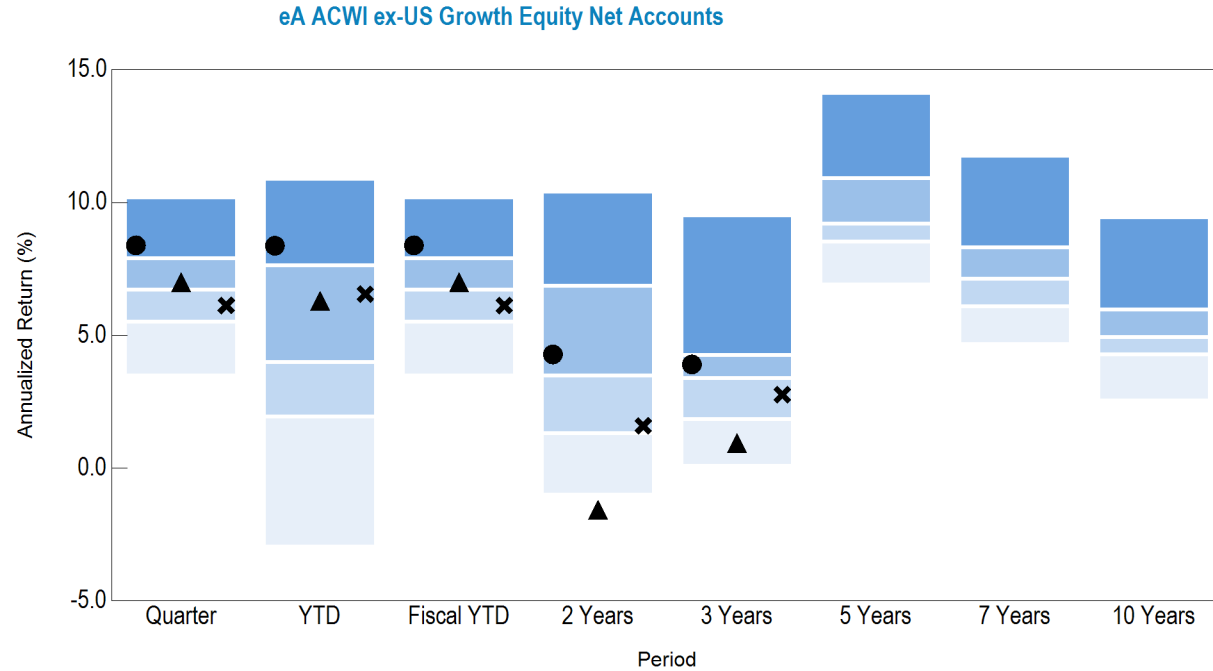
APPLE	2.7%
MICROSOFT	2.0%
EXXON MOBIL	1.6%
AMAZON.COM	1.4%
JOHNSON & JOHNSON	1.4%
FACEBOOK CLASS A	1.3%
BERKSHIRE HATHAWAY 'B'	1.2%
GENERAL ELECTRIC	1.2%
AT&T	1.1%
JP MORGAN CHASE & CO.	1.1%

Best Performers

	Return %
NINTENDO (J:NNDO)	84.8%
BROTHER INDUSTRIES (J:BI@N)	65.7%
SOUTH32	61.8%
SEAGATE TECH.	61.0%
ZALANDO	55.0%
FORTESCUE METALS GP.	49.0%
HITACHI HIGH - TECHS. (J:NSSS)	47.4%
FUJITSU (J:FT@N)	47.4%
NETAPP	46.8%
CHESAPEAKE ENERGY	46.5%

Worst Performers

	Return %
ONO PHARM. (J:PS@N)	-35.4%
CAPITA	-32.3%
CYBERDYNE	-30.4%
AGGREKO	-26.8%
BRISTOL MYERS SQUIBB	-26.7%
TRACTOR SUPPLY	-25.9%
TPG TELECOM (A:TPMX)	-25.6%
DOLLAR GENERAL	-25.3%
INGENICO GROUP	-25.2%
NRG ENERGY	-25.1%



	Quarter	YTD	Fiscal YTD	2 Years	3 Years	5 Years	7 Years	10 Years
<b>Return (Rank)</b>								
5th Percentile	10.2	10.9	10.2	10.4	9.5	14.1	11.8	9.4
25th Percentile	7.9	7.6	7.9	6.9	4.3	10.9	8.3	6.0
Median	6.7	4.0	6.7	3.5	3.4	9.2	7.1	4.9
75th Percentile	5.5	1.9	5.5	1.3	1.9	8.5	6.1	4.3
95th Percentile	3.5	-3.0	3.5	-1.0	0.1	6.9	4.7	2.6
# of Portfolios	52	52	52	47	43	40	35	27
● Baillie Gifford	8.4 (16)	8.4 (14)	8.4 (16)	4.3 (37)	3.9 (36)	-- (--)	-- (--)	-- (--)
▲ MSCI ACWI ex US	7.0 (43)	6.3 (36)	7.0 (43)	-1.6 (97)	0.9 (89)	-- (--)	-- (--)	-- (--)
✕ MSCI ACWI ex US Growth	6.1 (68)	6.5 (32)	6.1 (68)	1.6 (73)	2.8 (61)	-- (--)	-- (--)	-- (--)

Characteristics

	Portfolio	MSCI ACWI ex USA Gross
Number of Holdings	88	1,853
Weighted Avg. Market Cap. (\$B)	35.6	51.2
Median Market Cap. (\$B)	11.3	6.8
Price To Earnings	28.5	19.9
Price To Book	6.2	2.6
Price To Sales	4.4	2.2
Return on Equity (%)	24.3	13.5
Yield (%)	1.8	3.0
Beta (holdings: global)	1.1	1.0

Top Holdings

COCHLEAR	3.3%
TAIWAN SEMICON.SPN.ADR 1:5	2.5%
NASPERS	2.5%
KAO	2.2%
SHIMANO	2.2%
HARGREAVES LANSDOWN	2.1%
NOVO NORDISK 'B'	2.0%
MS&AD INSURANCE GP.HDG.	2.0%
JAPAN EXCHANGE GROUP	2.0%
ATLAS COPCO 'B'	2.0%

Best Performers

	Return %
ZALANDO (D:ZAL)	55.0%
JAPAN EXCHANGE GROUP (J:OSEX)	37.6%
ALIBABA GROUP HLDG.SPN. ADR 1:1 (BABA)	33.0%
TREASURY WINE ESTATES (A:TWEX)	24.2%
IMAGINATION TECHNOLOGIES (UKIR:IMG)	23.4%
JD.COM 'A' ADR 1:2 (JD)	22.9%
ADIDAS (D:ADS)	21.4%
COCHLEAR (A:COHX)	20.5%
RAKUTEN (J:RAKT)	20.5%
BURBERRY GROUP (UKIR:BRBY)	18.2%

Worst Performers

	Return %
CAPITA (UKIR:CPI)	-32.3%
NOVO NORDISK 'B' (DK:NON)	-21.5%
PAX GLOBAL TECHNOLOGY (K:PGTL)	-15.2%
PROTALIX BIOTH. (PLX)	-10.9%
KAKAKU.COM (J:KAKA)	-8.1%
NOVOZYMES (DK:NZY)	-7.8%
WALMART DE MEXICO 'V' (MX:WAV)	-7.3%
OLYMPUS (J:OLYC)	-6.6%
ROCHE HOLDING (S:ROG)	-5.4%
KAO (J:KA@N)	-2.8%

**Baillie Gifford Performance Attribution vs. MSCI ACWI ex USA Gross**

	Attribution Effects				Returns		Sector Weights				
	Total Effects	Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark			
Energy	0.3%	0.6%	0.2%	-0.5%	8.5%	2.3%	0.7%	6.9%			
Materials	-0.5%	-0.3%	-0.3%	0.1%	5.6%	12.7%	2.4%	7.1%			
Industrials	-0.5%	-0.4%	0.0%	-0.1%	4.7%	8.4%	13.9%	11.2%			
Consumer Discretionary	1.0%	0.4%	0.3%	0.3%	13.4%	10.5%	20.6%	11.4%			
Consumer Staples	0.2%	0.2%	-0.4%	0.3%	4.6%	1.9%	20.3%	11.6%			
Health Care	0.2%	0.2%	-0.1%	0.1%	0.6%	-1.9%	10.7%	9.4%			
Financials	-0.1%	0.3%	-0.2%	-0.2%	10.2%	9.4%	15.8%	24.5%			
Information Technology	0.7%	0.4%	0.3%	0.0%	17.7%	15.3%	13.5%	9.0%			
Telecommunication Services	0.3%	--	0.3%	--	--	0.5%	0.0%	5.3%			
Utilities	0.2%	--	0.2%	--	--	0.2%	0.0%	3.6%			
Real Estate	0.0%	--	--	--	--	--	0.0%	0.0%			
Cash	-0.1%	0.0%	-0.1%	0.0%	0.1%	--	2.0%	0.0%			
<b>Portfolio</b>	<b>1.7%</b>	<b>=</b>	<b>1.4%</b>	<b>+</b>	<b>0.3%</b>	<b>+</b>	<b>-0.1%</b>	<b>8.6%</b>	<b>7.0%</b>	<b>100.0%</b>	<b>100.0%</b>

**Baillie Gifford Performance Attribution vs. MSCI ACWI ex USA Gross**

	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
<b>Europe</b>									
Austria	--	16.9%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
Belgium	--	4.3%	0.0%	1.0%	--	0.0%	0.0%	--	0.0%
Czech Republic*	--	-0.3%	0.0%	0.0%	--	0.0%	0.0%	--	0.0%
Denmark	-12.2%	-6.1%	5.5%	1.4%	-0.1%	-0.5%	0.0%	-0.3%	-0.8%
Finland	10.8%	7.4%	1.3%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%
France	14.6%	6.4%	0.8%	6.8%	0.6%	0.1%	-0.1%	-0.5%	0.1%
Germany	32.0%	10.0%	2.7%	6.1%	1.3%	-0.1%	0.0%	-0.7%	0.5%
Greece*	--	1.3%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
Hungary*	--	10.8%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
Ireland	--	7.6%	0.0%	0.3%	--	0.0%	0.0%	--	0.0%
Italy	--	2.4%	0.0%	1.4%	--	0.1%	0.0%	--	0.1%
Netherlands	--	9.3%	0.0%	2.2%	--	0.0%	0.0%	--	-0.1%
Norway	--	6.4%	0.0%	0.5%	--	0.0%	0.0%	--	0.0%
Poland*	--	4.1%	0.0%	0.3%	--	0.0%	0.0%	--	0.0%
Portugal	10.3%	6.6%	1.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Russia*	--	8.9%	0.0%	0.9%	--	0.0%	0.0%	--	0.0%
Spain	11.3%	9.4%	2.7%	2.1%	0.0%	0.0%	0.0%	0.0%	0.1%
Sweden	13.0%	7.5%	6.5%	1.9%	0.1%	0.1%	-0.1%	0.2%	0.3%
Switzerland	0.7%	2.7%	6.0%	6.5%	-0.1%	0.0%	0.0%	0.0%	-0.1%
United Kingdom	11.0%	4.0%	17.8%	13.8%	1.0%	0.1%	-0.1%	0.2%	1.2%

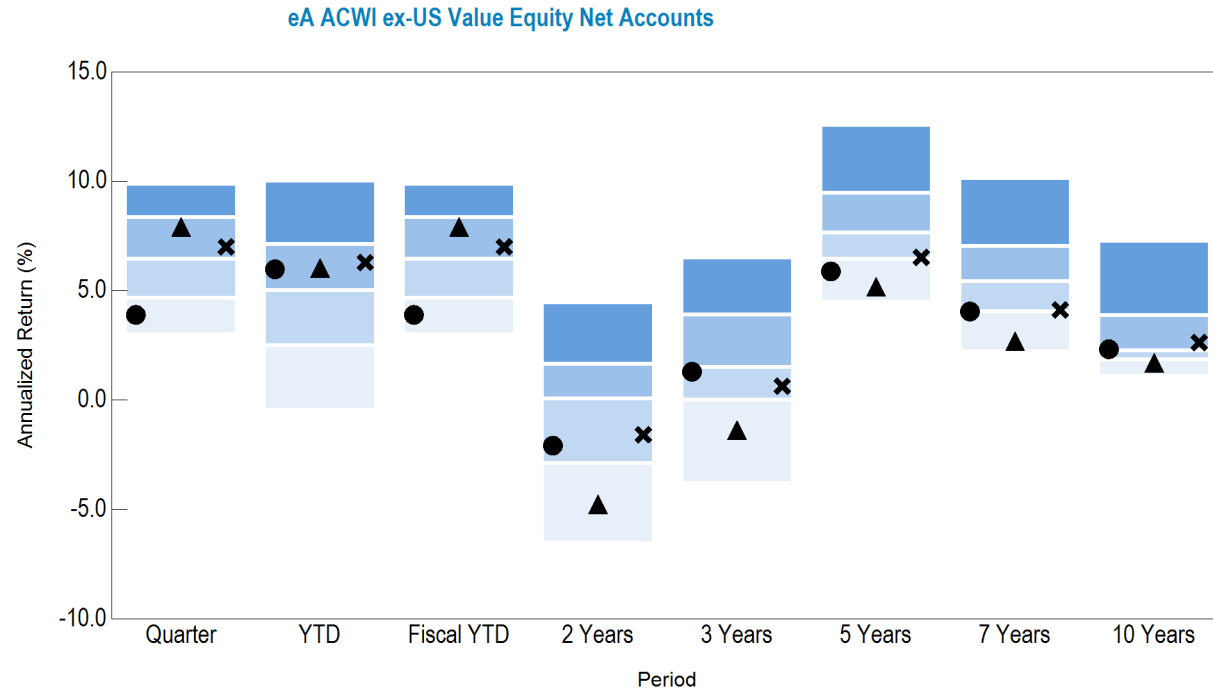
**Baillie Gifford Performance Attribution vs. MSCI ACWI ex USA Gross**

	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
<b>AsiaPacific</b>									
Australia	14.6%	8.0%	6.3%	5.1%	0.3%	0.0%	0.0%	0.1%	0.4%
China*	19.0%	13.8%	4.7%	5.8%	0.3%	-0.1%	0.0%	0.0%	0.2%
Hong Kong	1.4%	11.9%	1.4%	2.3%	-0.2%	0.0%	0.0%	0.1%	-0.2%
India*	0.8%	6.2%	1.6%	1.9%	-0.1%	0.0%	0.0%	0.0%	-0.1%
Indonesia*	--	9.5%	0.0%	0.6%	--	0.0%	0.0%	--	0.0%
Japan	6.0%	8.5%	21.2%	16.6%	-0.4%	0.0%	0.1%	-0.1%	-0.4%
Korea*	13.7%	10.9%	3.2%	3.3%	0.2%	0.0%	-0.1%	0.0%	0.1%
Malaysia*	0.9%	-1.5%	0.5%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%
New Zealand	--	12.9%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
Philippines*	-2.2%	-4.8%	0.5%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Singapore	5.3%	-0.1%	4.3%	1.0%	0.0%	-0.2%	0.0%	0.2%	0.0%
Taiwan*	12.9%	12.3%	3.4%	2.7%	0.1%	0.0%	-0.1%	0.0%	0.1%
Thailand*	--	7.4%	0.0%	0.5%	--	0.0%	0.0%	--	0.0%
<b>Americas</b>									
Brazil*	17.3%	11.3%	0.5%	1.6%	0.1%	-0.1%	0.0%	-0.1%	0.0%
Canada	--	5.0%	0.0%	6.9%	--	0.0%	0.1%	--	0.1%
Chile*	--	-1.8%	0.0%	0.3%	--	0.0%	0.0%	--	0.0%
Colombia*	--	2.7%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
Mexico*	-7.3%	-2.3%	0.8%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%
Peru*	--	1.2%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
United States	14.1%	3.9%	1.7%	0.0%	0.0%	0.0%	0.0%	0.2%	0.1%

**Baillie Gifford Performance Attribution vs. MSCI ACWI ex USA Gross**

	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
<b>Other</b>									
Egypt*	--	21.5%	0.0%	0.0%	--	0.0%	0.0%	--	0.0%
Israel	--	-2.2%	0.0%	0.5%	--	0.1%	0.0%	--	0.0%
Qatar*	--	6.6%	0.0%	0.2%	--	0.0%	0.0%	--	0.0%
South Africa*	12.3%	6.5%	3.4%	1.6%	0.1%	-0.1%	0.1%	0.1%	0.2%
Turkey*	--	-5.3%	0.0%	0.3%	--	0.0%	0.0%	--	0.0%
United Arab Emirates*	--	6.1%	0.0%	0.2%	--	0.0%	0.0%	--	0.0%
<b>Totals</b>									
Americas	9.2%	5.1%	3.0%	9.9%	0.4%	0.0%	0.1%	-0.3%	0.2%
Europe	8.2%	5.5%	44.4%	46.3%	1.7%	0.0%	-0.3%	-0.1%	1.3%
Asia/Pacific	9.0%	9.3%	47.1%	40.9%	0.1%	0.1%	-0.1%	0.0%	0.0%
Other	12.3%	3.9%	3.4%	2.9%	0.2%	0.0%	0.1%	0.0%	0.3%
Cash	0.1%	--	2.0%	0.0%	0.0%	-0.1%	0.0%	0.0%	-0.1%
<b>Total</b>	<b>8.6%</b>	<b>7.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>2.3%</b>	<b>-0.1%</b>	<b>-0.2%</b>	<b>-0.3%</b>	<b>1.7%</b>
<b>Totals</b>									
Developed	8.0%	6.3%	79.4%	77.5%	1.5%	0.0%	-0.1%	0.0%	1.4%
Emerging*	12.0%	9.2%	18.6%	22.5%	0.7%	-0.1%	-0.1%	-0.1%	0.4%
Cash	0.1%	--	2.0%	0.0%	0.0%	-0.1%	0.0%	0.0%	-0.1%





	Return (Rank)							
	Quarter	YTD	Fiscal YTD	2 Years	3 Years	5 Years	7 Years	10 Years
5th Percentile	9.9	10.0	9.9	4.5	6.5	12.6	10.1	7.3
25th Percentile	8.4	7.2	8.4	1.7	3.9	9.5	7.1	3.9
Median	6.5	5.1	6.5	0.1	1.5	7.7	5.4	2.3
75th Percentile	4.7	2.5	4.7	-2.9	0.1	6.5	4.1	1.9
95th Percentile	3.0	-0.4	3.0	-6.5	-3.8	4.5	2.3	1.1
# of Portfolios	34	33	34	30	27	21	18	15
● Mondrian	3.9 (81)	6.0 (37)	3.9 (81)	-2.1 (70)	1.3 (61)	5.9 (88)	4.1 (77)	2.3 (47)
▲ MSCI ACWI ex USA Value Gross	7.9 (29)	6.0 (37)	7.9 (29)	-4.8 (91)	-1.4 (87)	5.2 (92)	2.7 (93)	1.7 (87)
✕ MSCI ACWI ex USA Gross	7.0 (46)	6.3 (36)	7.0 (46)	-1.6 (68)	0.6 (72)	6.5 (74)	4.1 (72)	2.6 (41)

Characteristics

	Portfolio	MSCI ACWI ex USA Value Gross
Number of Holdings	137	1,036
Weighted Avg. Market Cap. (\$B)	51.5	46.4
Median Market Cap. (\$B)	15.8	6.6
Price To Earnings	19.2	14.5
Price To Book	2.7	1.4
Price To Sales	1.7	1.5
Return on Equity (%)	10.8	9.2
Yield (%)	4.1	4.0
Beta (holdings: global)	0.9	1.1

Top Holdings

ABB LTD N	2.9%
SYNGENTA	2.7%
GLAXOSMITHKLINE	2.7%
IBERDROLA	2.5%
TAKEDA PHARMACEUTICAL	2.5%
UNILEVER (UK)	2.4%
HONDA MOTOR	2.4%
KIRIN HOLDINGS	2.3%
SANOFI	2.3%
AHOLD KON.	2.3%

Best Performers

	Return %
CAIRN INDIA (IN:CEI)	47.3%
SANDS CHINA (K:SNDC)	29.7%
INDIABULLS HOUSING FIN	26.4%
BIDVEST GROUP	26.0%
G4S (UKIR:GFS)	22.9%
SAP	21.5%
LUKOIL OAO SPN.ADR 1:1	21.4%
SHIN-ETSU CHEMICAL (J:UC@N)	19.9%
ABB LTD N (S:ABB)	19.2%
BANK MANDIRI	19.0%

Worst Performers

	Return %
PEARSON (UKIR:PSO)	-22.8%
PLDT.TEL.SPN.ADR 1:1	-17.9%
ARCA CONTINENTAL (MX:ARC)	-16.1%
TUPRAS TKI.PEL.RFNE.	-14.6%
COMPANIA CERVECERIAS UNIDAS	-13.8%
COMPANIA CVCS.UNIDAS SPN.ADR 1:2 (CCU)	-13.5%
FIBRA UNO ADMINISTRACION REIT	-12.0%
WANT WANT CHINA HOLDINGS	-11.9%
MTN GROUP (R:MTNJ)	-10.7%
INFOSYS	-10.3%

**Mondrian Performance Attribution vs. MSCI ACWI ex USA Value Gross**

	Attribution Effects				Returns		Sector Weights				
	Total Effects	Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark			
Energy	-0.1%	-0.2%	0.1%	0.0%	-1.0%	1.9%	8.8%	11.3%			
Materials	-0.5%	-0.3%	-0.3%	0.1%	12.2%	15.8%	3.2%	7.6%			
Industrials	0.1%	0.1%	0.0%	0.0%	11.5%	10.3%	9.4%	9.7%			
Consumer Discretionary	-0.3%	-0.2%	0.0%	-0.1%	8.6%	11.9%	8.7%	9.3%			
Consumer Staples	-0.8%	0.0%	-0.5%	-0.2%	0.7%	2.7%	13.8%	2.5%			
Health Care	-0.2%	0.0%	-0.3%	0.1%	1.4%	0.1%	10.1%	5.4%			
Financials	-1.5%	-2.1%	-0.6%	1.1%	4.6%	10.3%	15.4%	37.6%			
Information Technology	0.0%	0.0%	0.0%	0.0%	7.7%	8.7%	9.6%	5.2%			
Telecommunication Services	-0.5%	0.0%	-0.5%	0.0%	-0.7%	-0.6%	12.0%	5.8%			
Utilities	0.1%	0.2%	-0.1%	0.0%	2.6%	-0.4%	7.0%	5.7%			
Real Estate	0.0%	--	--	--	--	--	0.0%	0.0%			
Cash	-0.2%	0.0%	-0.2%	0.0%	0.1%	--	2.1%	0.0%			
<b>Portfolio</b>	<b>-3.9%</b>	<b>=</b>	<b>-2.5%</b>	<b>+</b>	<b>-2.5%</b>	<b>+</b>	<b>1.0%</b>	<b>3.9%</b>	<b>7.9%</b>	<b>100.0%</b>	<b>100.0%</b>

Mondrian Performance Attribution vs. MSCI ACWI ex USA Value Gross

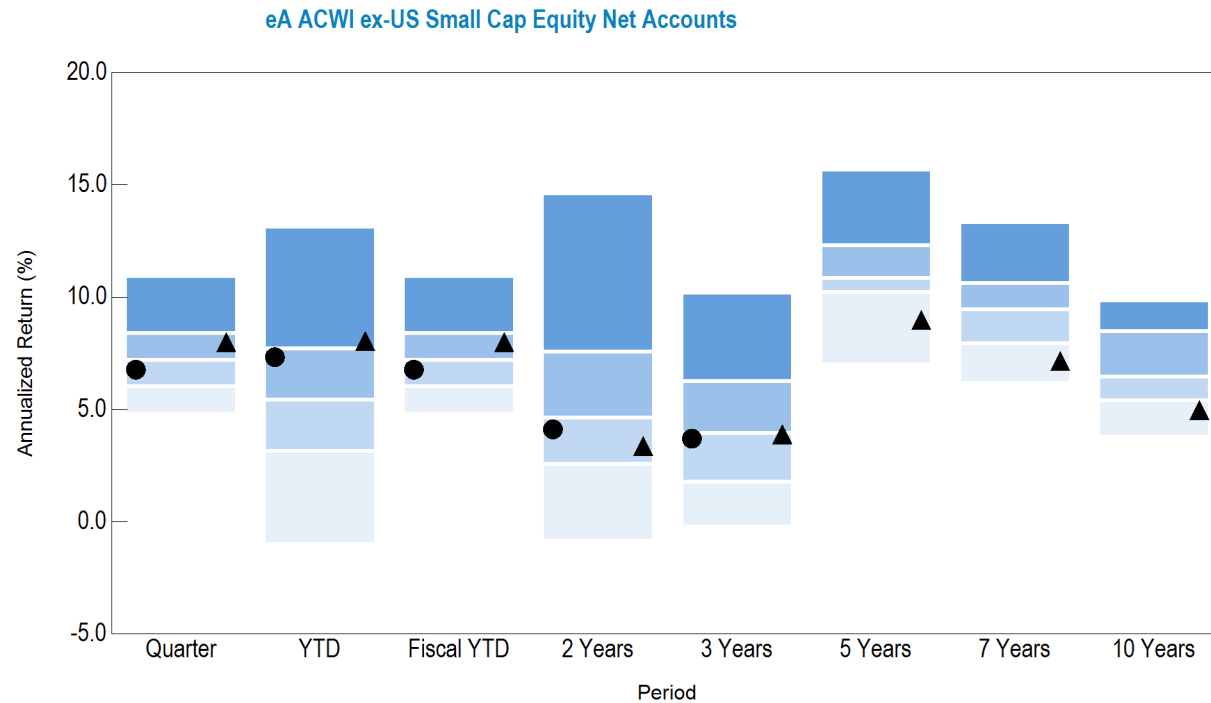
	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
<b>Europe</b>									
Austria	--	17.2%	0.0%	0.2%	--	0.0%	0.0%	--	0.0%
Belgium	--	13.6%	0.0%	0.5%	--	0.0%	0.0%	--	0.0%
Czech Republic*	--	4.9%	0.0%	0.0%	--	0.0%	0.0%	--	0.0%
Denmark	10.7%	11.6%	0.7%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%
Finland	--	7.4%	0.0%	1.1%	--	0.0%	0.0%	--	0.0%
France	2.0%	5.8%	4.8%	8.2%	-0.3%	0.1%	0.0%	0.1%	-0.1%
Germany	9.3%	10.0%	8.0%	5.8%	0.0%	0.0%	0.0%	0.0%	0.0%
Greece*	--	4.3%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
Hungary*	--	12.5%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
Ireland	--	1.7%	0.0%	0.0%	--	0.0%	0.0%	--	0.0%
Italy	-7.9%	-0.3%	2.0%	2.0%	-0.1%	0.0%	0.0%	0.0%	-0.1%
Netherlands	-1.1%	16.5%	3.9%	1.0%	-0.2%	0.2%	0.0%	-0.5%	-0.4%
Norway	--	7.2%	0.0%	0.7%	--	0.0%	0.0%	--	0.0%
Poland*	--	0.9%	0.0%	0.3%	--	0.0%	0.0%	--	0.0%
Portugal	--	9.8%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
Russia*	3.2%	6.6%	0.3%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%
Spain	5.1%	9.2%	4.3%	3.0%	-0.1%	0.0%	0.0%	-0.1%	-0.2%
Sweden	-4.5%	9.9%	3.7%	2.0%	-0.3%	0.1%	0.0%	-0.2%	-0.5%
Switzerland	8.4%	4.3%	11.3%	3.3%	0.1%	-0.3%	0.1%	0.3%	0.2%
United Kingdom	1.2%	4.5%	19.4%	16.4%	-0.6%	0.0%	-0.1%	-0.1%	-0.7%

**Mondrian Performance Attribution vs. MSCI ACWI ex USA Value Gross**

	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
<b>AsiaPacific</b>									
Australia	-4.6%	11.4%	0.9%	5.1%	-0.8%	0.0%	-0.1%	0.7%	-0.3%
China*	0.3%	9.5%	0.4%	5.9%	-0.5%	-0.1%	0.0%	0.5%	-0.1%
Hong Kong	6.6%	14.2%	2.9%	2.3%	-0.2%	0.0%	0.0%	0.0%	-0.2%
India*	11.2%	4.4%	2.2%	1.9%	0.1%	0.0%	0.0%	0.0%	0.1%
Indonesia*	16.5%	14.2%	0.5%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%
Japan	8.0%	11.1%	14.7%	16.4%	-0.5%	0.0%	0.0%	0.0%	-0.5%
Korea*	13.3%	12.5%	1.9%	3.4%	0.0%	0.0%	-0.1%	0.0%	-0.1%
Malaysia*	-4.1%	-1.5%	1.1%	0.7%	0.0%	0.0%	0.0%	0.0%	-0.1%
New Zealand	--	14.8%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
Philippines*	-17.9%	-3.3%	0.4%	0.4%	-0.1%	0.0%	0.0%	0.0%	-0.1%
Singapore	-0.5%	-1.2%	4.5%	1.0%	0.0%	-0.3%	0.0%	0.0%	-0.3%
Taiwan*	9.1%	10.6%	2.8%	2.7%	0.0%	0.0%	0.0%	0.0%	0.0%
Thailand*	1.4%	6.9%	0.3%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Americas</b>									
Brazil*	-2.9%	18.1%	1.3%	1.6%	-0.3%	0.0%	0.0%	0.1%	-0.3%
Canada	-1.0%	4.9%	1.1%	7.1%	-0.4%	0.1%	0.1%	0.4%	0.1%
Chile*	-6.9%	-6.4%	0.3%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Colombia*	--	-0.7%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
Mexico*	-7.6%	-0.6%	1.1%	0.9%	-0.1%	0.0%	0.0%	0.0%	-0.1%
Peru*	-1.4%	1.9%	0.4%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
United States	8.9%	3.9%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

**Mondrian Performance Attribution vs. MSCI ACWI ex USA Value Gross**

	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
<b>Other</b>									
Egypt*	--	18.9%	0.0%	0.0%	--	0.0%	0.0%	--	0.0%
Israel	--	0.5%	0.0%	0.5%	--	0.0%	0.0%	--	0.0%
Kazakhstan**	6.4%	7.9%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Qatar*	6.8%	6.5%	0.6%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Romania**	6.5%	7.9%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
South Africa*	2.9%	6.3%	1.1%	1.6%	-0.1%	0.0%	0.0%	0.0%	0.0%
Turkey*	-11.3%	-5.9%	0.3%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
United Arab Emirates*	-6.3%	3.8%	0.3%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Totals</b>									
Americas	-2.2%	6.1%	4.8%	10.1%	-0.9%	0.0%	0.1%	0.5%	-0.3%
Europe	3.4%	6.4%	58.3%	46.0%	-1.4%	-0.1%	-0.1%	-0.4%	-1.9%
Asia/Pacific	6.3%	10.2%	32.5%	41.0%	-1.4%	-0.1%	-0.3%	0.3%	-1.5%
Other	0.8%	3.9%	2.3%	2.9%	-0.1%	0.0%	-0.1%	0.0%	-0.1%
Cash	0.1%	--	2.1%	0.0%	0.0%	-0.2%	0.0%	0.0%	-0.2%
<b>Total</b>	<b>3.9%</b>	<b>7.9%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>-3.7%</b>	<b>-0.3%</b>	<b>-0.3%</b>	<b>0.4%</b>	<b>-3.9%</b>
<b>Totals</b>									
Developed	4.0%	7.7%	82.6%	77.2%	-2.7%	0.0%	-0.2%	-0.2%	-3.0%
Emerging*	4.0%	8.4%	15.2%	22.8%	-1.0%	0.0%	-0.1%	0.3%	-0.7%
Frontier**	6.5%	--	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cash	0.1%	--	2.1%	0.0%	0.0%	-0.2%	0.0%	0.0%	-0.2%



	Quarter	YTD	Fiscal YTD	2 Years	3 Years	5 Years	7 Years	10 Years
<b>Return (Rank)</b>								
5th Percentile	10.9	13.1	10.9	14.6	10.2	15.7	13.3	9.8
25th Percentile	8.4	7.7	8.4	7.6	6.3	12.3	10.6	8.5
Median	7.2	5.5	7.2	4.6	4.0	10.9	9.5	6.5
75th Percentile	6.1	3.2	6.1	2.6	1.8	10.2	8.0	5.4
95th Percentile	4.8	-1.0	4.8	-0.8	-0.2	7.0	6.2	3.8
# of Portfolios	36	35	36	29	23	18	16	12
● FIAM Equity	6.8 (60)	7.3 (31)	6.8 (60)	4.1 (58)	3.7 (64)	-- (--)	-- (--)	-- (--)
▲ MSCI ACWI ex US Small Cap Gross	8.0 (31)	8.0 (22)	8.0 (31)	3.4 (63)	3.9 (55)	9.0 (83)	7.1 (91)	5.0 (79)

Characteristics

	Portfolio	MSCI ACWI ex-US Small Cap
No. of Securities	226	4,320
Wgtd. Avg. Market Cap (000's)	2,671	1,986
Price to Book Ratio	1.7	1.5
Return on Equity	12.2%	10.7%

Ten Holdings

NIHON PARKERIZING CO LTD	1.9
TECHTRONIC INDUSTRIES CO LTD	1.6
OBIC CO LTD	1.5
FRUTAROM INDS LTD	1.1
NITTO KOHKI CO LTD	1.0
QUEBECOR INC CL B SUB VTG	1.0
SURUGABANK LTD	1.0
REGUS PLC	1.0
MISUMI GROUP INC	1.0
JUNGHEINRICH AG NON-VTG PFD	0.9

Best Performers (Absolute Return %)

LIFESTYLE CHINA GROUP LTD	256.2
MINERAL DEPOSITS LTD	115.6
BRAMMER PLC	94.3
KINGBOARD LAMINAT HOLDINGS LTD	63.5
ZUMTOBEL GROUP AG	61.6
TCC INTERNATIONAL HLDGS LTD	52.0
RELIANCE CAPITAL LTD	41.2
NIHON PARKERIZING CO LTD	39.6
TEGMAGESTAO LOGISTICA	37.1
DOWA HOLDINGS CO LTD	36.2

Worst Performers (Absolute Return %)

WESTERN ENERGY SERVICES CORP	(32.9)
INGENICO GROUP	(25.1)
AWE LTD	(23.2)
ASALEO CARE LTD	(20.2)
T SUKUI CORP	(19.1)
AEON FINANCIAL SERVICE CO LTD	(17.7)
LIFESTYLE INTL HLDGS LTD	(17.5)
PAX GLOBAL TECHNOLOGY LTD	(15.2)
SEOBU T&D	(14.9)
LG INNOTEK CO LTD	(14.8)



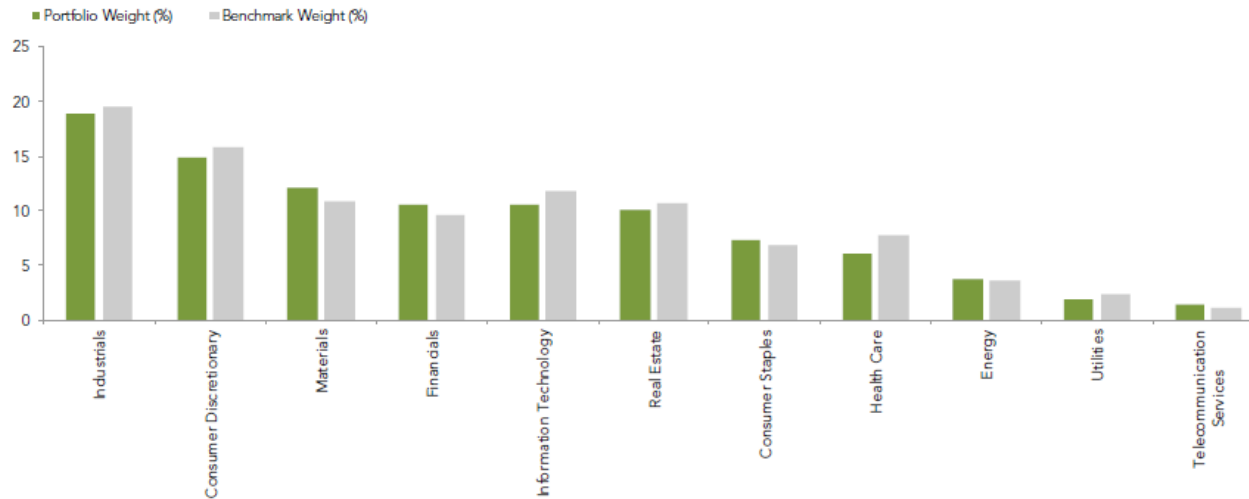
# FIAM Equity Regional and Sector Weights

Period Ending: September 30, 2016

## REGIONAL WEIGHTS



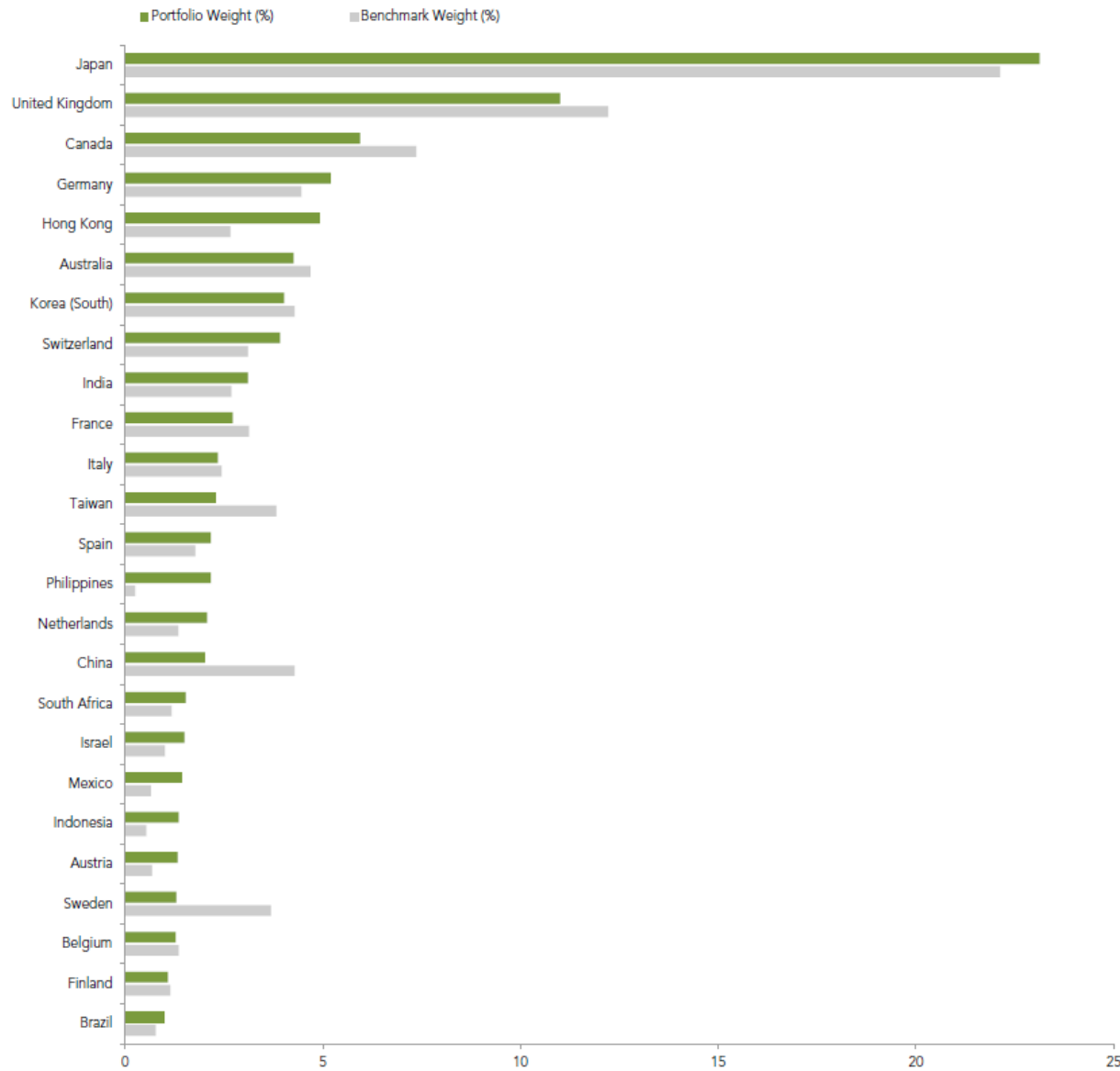
## SECTOR WEIGHTS



Sector breakdowns are only applied to equities and convertibles and the allocation percentages may not add to 100%.

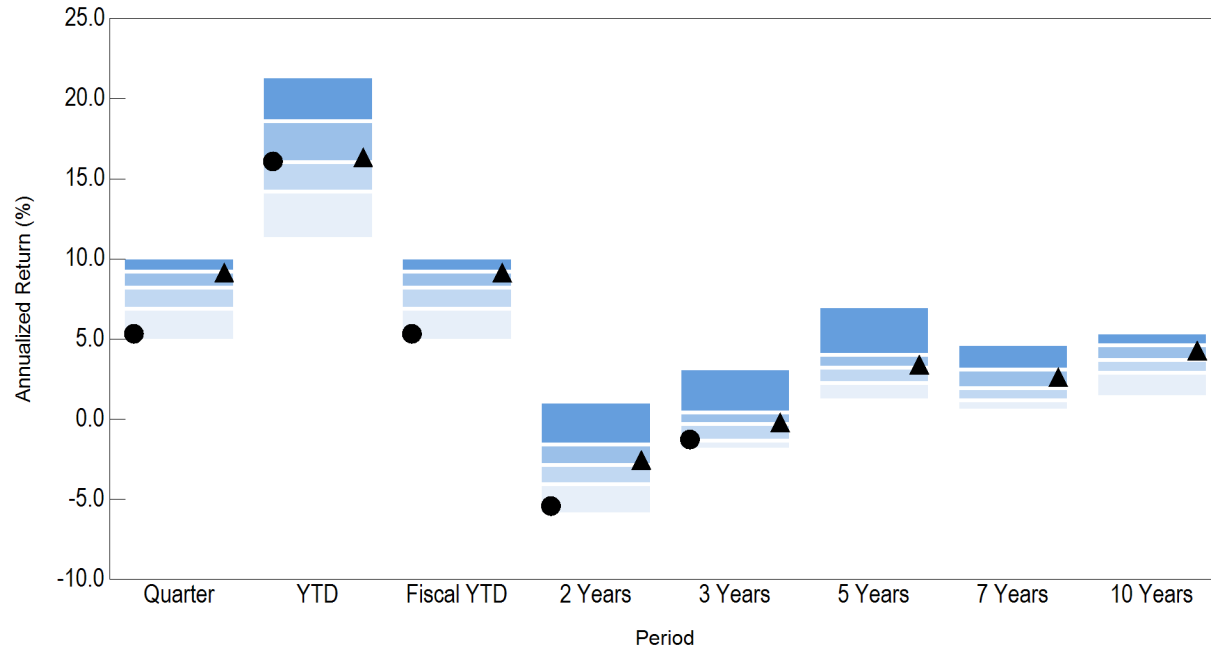
On August 31, 2016, the Real Estate sector was created under the Global Industry Classification Standard (GICS) by carving out securities from the Financials sector.

TOP 25 COUNTRY WEIGHTS

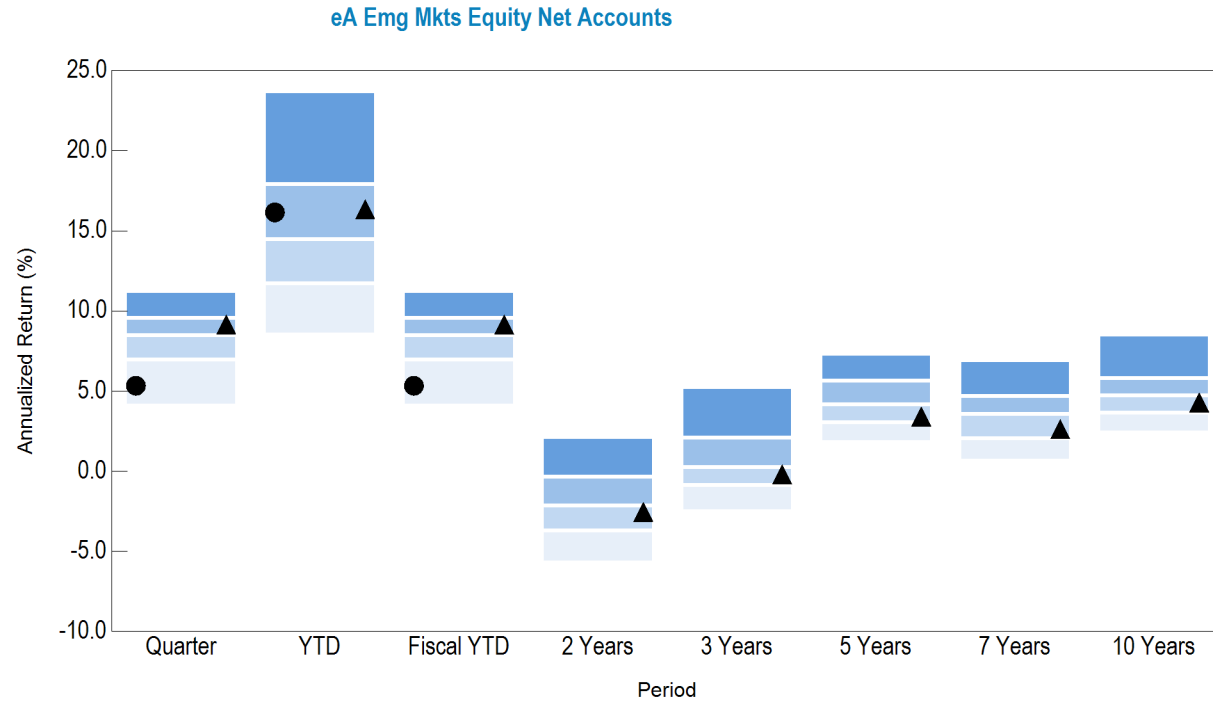


Benchmark: MSCI AC Wid Sm Cap xUS(N)

InvestorForce All DB Emg Mkt Eq Net Accounts



	Return (Rank)											
5th Percentile	10.1	21.4	10.1	1.1	3.1	7.0	4.6	5.4				
25th Percentile	9.2	18.6	9.2	-1.6	0.4	4.0	3.1	4.6				
Median	8.2	16.0	8.2	-2.8	-0.3	3.2	1.9	3.7				
75th Percentile	6.9	14.2	6.9	-4.0	-1.3	2.3	1.2	2.9				
95th Percentile	4.9	11.2	4.9	-5.9	-1.9	1.2	0.6	1.4				
# of Portfolios	87	87	87	83	74	49	22	16				
● Emerging Markets	5.3 (92)	16.1 (50)	5.3 (92)	-5.4 (93)	-1.3 (75)	-- (--)	-- (--)	-- (--)	-- (--)			
▲ MSCI Emerging Markets Gross	9.2 (26)	16.4 (47)	9.2 (26)	-2.6 (42)	-0.2 (47)	3.4 (46)	2.6 (29)	4.3 (30)				



	Quarter		YTD		Fiscal YTD		2 Years		3 Years		5 Years		7 Years		10 Years	
<b>Return (Rank)</b>																
5th Percentile	11.2	23.7	11.2	2.1	5.2	7.3	6.9	8.5								
25th Percentile	9.6	17.9	9.6	-0.4	2.1	5.7	4.7	5.8								
Median	8.5	14.5	8.5	-2.1	0.3	4.2	3.6	4.7								
75th Percentile	7.0	11.7	7.0	-3.7	-0.9	3.1	2.1	3.7								
95th Percentile	4.1	8.6	4.1	-5.7	-2.5	1.8	0.7	2.4								
# of Portfolios	167	166	167	159	147	105	73	49								
● Parametric Core	5.3 (91)	16.1 (37)	5.3 (91)	-- (--)	-- (--)	-- (--)	-- (--)	-- (--)								
▲ MSCI Emerging Markets Gross	9.2 (36)	16.4 (34)	9.2 (36)	-2.6 (58)	-0.2 (62)	3.4 (69)	2.6 (68)	4.3 (63)								

Characteristics

	Portfolio	MSCI Emerging Markets Gross
Number of Holdings	1,072	833
Weighted Avg. Market Cap. (\$B)	19.5	53.0
Median Market Cap. (\$B)	3.0	4.7
Price To Earnings	20.0	19.1
Price To Book	2.9	2.8
Price To Sales	2.5	2.3
Return on Equity (%)	15.4	16.9
Yield (%)	2.8	2.5
Beta (holdings; global)	1.0	1.0

Top Holdings

SBERBANK OF RUSSIA	1.1%
TAIWAN SEMICON.MNFG.	0.9%
AMERICA MOVIL SAB DE CV SPN.ADR 'L' 1:20	0.9%
CHINA MOBILE	0.9%
OAO GAZPROM SPN.ADR 1:2	0.7%
SASOL	0.7%
NASPERS	0.7%
SAMSUNG ELECTRONICS	0.7%
LUKOIL OAO SPN.ADR 1:1	0.6%
CIELO ON	0.6%

Best Performers

	Return %
JSW	218.6%
OI PN (BR:LR4)	115.2%
AEGEAN MARINE PTL.NET.	82.2%
USINAS SIDERURGICAS DE MINAS GERAIS A PN (BR:US5)	76.7%
WEIBO CLASS 'A' ADR	76.5%
FUFENG GROUP	69.6%
METALURGICA GERDAU PN (BR:GO4)	69.1%
GEELY AUTOMOBILE HDG.	65.2%
INDUS MOTOR COMPANY	65.2%
TONG YANG IND. (TW:TOY)	64.1%

Worst Performers

	Return %
TECH PRO TECHNOLOGY DEV. (K:TCPR)	-92.9%
DRYSHIPS (DRYS)	-79.9%
SUGIH ENERGY (ID:SUA)	-63.9%
BLOOMBERRY RESORTS	-33.4%
SIGMAGOLD INTI PERKASA	-32.3%
AXTEL CPO	-32.2%
AES GENER (CL:CHG)	-31.9%
WEST CHINA CEMENT (K:WCC)	-29.0%
EMPRESA NACIONAL DE ELECTRICIDAD	-28.4%
INTEGER PL SR.A B C D E	-27.1%

**Parametric Core Performance Attribution vs. MSCI Emerging Markets Gross**

	Attribution Effects				Returns		Sector Weights				
	Total Effects	Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark			
Energy	-0.2%	-0.1%	0.0%	0.0%	6.2%	8.2%	9.9%	7.5%			
Materials	0.0%	0.0%	0.1%	0.0%	9.6%	10.4%	11.8%	6.5%			
Industrials	-0.1%	0.0%	-0.1%	0.0%	4.9%	4.6%	9.3%	5.9%			
Consumer Discretionary	-0.3%	-0.1%	0.0%	-0.2%	6.6%	9.6%	10.0%	10.5%			
Consumer Staples	0.0%	0.1%	-0.2%	0.1%	2.7%	1.3%	10.7%	8.5%			
Health Care	-0.2%	0.0%	-0.2%	0.1%	2.8%	2.5%	6.2%	2.7%			
Financials	-0.8%	-0.8%	-0.1%	0.1%	6.4%	10.0%	16.9%	26.1%			
Information Technology	-1.6%	-1.0%	-0.8%	0.2%	11.0%	16.0%	8.3%	22.5%			
Telecommunication Services	-0.3%	-0.1%	-0.2%	0.0%	0.9%	2.2%	9.2%	6.7%			
Utilities	0.0%	0.1%	-0.3%	0.1%	4.3%	1.0%	7.1%	3.2%			
Real Estate	0.0%	--	--	--	--	--	0.0%	0.0%			
Cash	0.0%	0.0%	0.0%	0.0%	0.1%	--	0.5%	0.0%			
Unclassified	0.0%	--	--	--	--	--	0.0%	0.0%			
<b>Portfolio</b>	<b>-3.4%</b>	<b>=</b>	<b>-1.9%</b>	<b>+</b>	<b>-1.9%</b>	<b>+</b>	<b>0.4%</b>	<b>5.7%</b>	<b>9.1%</b>	<b>100.0%</b>	<b>100.0%</b>

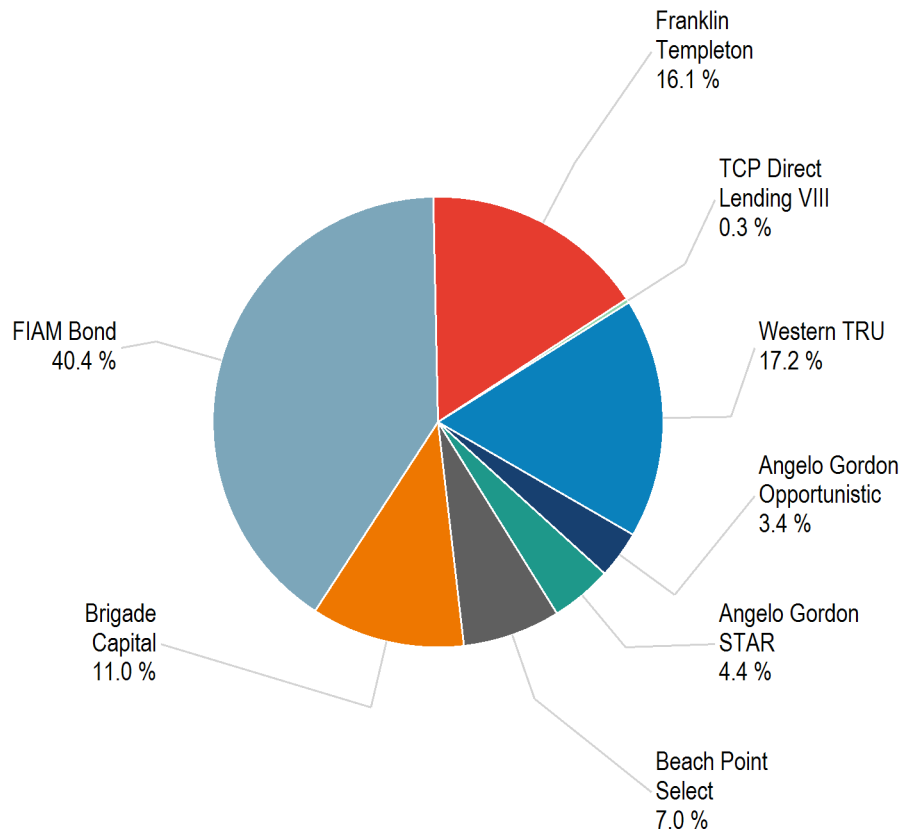
Parametric Core Performance Attribution vs. MSCI Emerging Markets Gross

	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
<b>Europe</b>									
Czech Republic*	-1.4%	-0.4%	0.6%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Greece*	6.1%	0.8%	1.5%	0.4%	0.0%	-0.1%	0.0%	0.1%	0.0%
Hungary*	8.1%	10.9%	1.1%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Luxembourg	-6.1%	9.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Netherlands	-9.1%	9.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Poland*	7.5%	4.0%	3.3%	1.1%	0.0%	-0.2%	0.1%	0.1%	0.0%
Russia*	10.8%	8.7%	6.9%	3.8%	0.1%	0.0%	0.0%	0.1%	0.2%
United Kingdom	-13.7%	4.0%	0.4%	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.1%
<b>AsiaPacific</b>									
China*	10.3%	13.9%	5.3%	25.5%	-0.9%	-1.2%	0.0%	0.7%	-1.4%
Hong Kong	8.5%	11.9%	5.5%	0.0%	0.0%	0.2%	0.0%	-0.2%	0.0%
India*	8.5%	6.2%	5.4%	8.4%	0.3%	0.1%	-0.1%	-0.1%	0.2%
Indonesia*	9.1%	9.5%	4.5%	2.8%	0.0%	0.0%	0.0%	0.0%	0.0%
Korea*	6.8%	11.0%	7.6%	14.6%	-0.6%	0.1%	-0.4%	0.3%	-0.5%
Malaysia*	-0.1%	-1.5%	3.8%	3.0%	0.0%	-0.1%	0.0%	0.0%	0.0%
Philippines*	-4.7%	-4.6%	3.7%	1.6%	0.0%	-0.2%	-0.1%	0.0%	-0.3%
Singapore	5.9%	-0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Taiwan*	10.8%	12.3%	7.8%	12.1%	-0.2%	-0.1%	-0.1%	0.1%	-0.3%
Thailand*	5.7%	7.3%	3.4%	2.3%	0.0%	0.0%	0.0%	0.0%	-0.1%
<b>Americas</b>									
Brazil*	9.1%	11.4%	7.7%	7.2%	-0.2%	0.0%	0.0%	0.0%	-0.2%
Chile*	3.5%	-1.9%	3.7%	1.2%	0.1%	-0.2%	0.0%	0.1%	0.0%
Colombia*	2.8%	2.7%	1.9%	0.5%	0.0%	-0.1%	0.0%	0.0%	-0.1%
Mexico*	-2.0%	-2.3%	7.1%	4.1%	-0.1%	-0.2%	0.0%	0.0%	-0.3%
Peru*	5.0%	1.1%	1.8%	0.4%	0.0%	-0.1%	0.0%	0.1%	0.0%
United States	4.5%	3.9%	1.4%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%

**Parametric Core Performance Attribution vs. MSCI Emerging Markets Gross**

	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
<b>Other</b>									
Egypt*	--	21.6%	0.0%	0.2%	--	0.0%	0.0%	--	0.0%
Kuwait**	-2.0%	1.9%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Qatar*	6.9%	6.6%	1.7%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%
South Africa*	6.4%	6.4%	7.4%	7.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Turkey*	-5.2%	-5.3%	3.8%	1.4%	0.0%	-0.2%	-0.1%	0.0%	-0.3%
United Arab Emirates*	2.7%	6.2%	1.6%	0.9%	0.0%	0.0%	0.0%	0.0%	-0.1%
<b>Totals</b>									
Americas	3.8%	5.4%	23.5%	13.5%	-0.3%	0.0%	0.0%	-0.3%	-0.6%
Europe	7.8%	7.1%	14.0%	5.7%	0.0%	-0.2%	0.1%	0.1%	0.0%
Asia/Pacific	6.9%	10.6%	47.3%	70.2%	-2.1%	-0.3%	-0.7%	0.7%	-2.4%
Other	2.9%	5.2%	14.8%	10.6%	-0.1%	-0.3%	-0.1%	0.0%	-0.4%
Cash	0.1%	--	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Total</b>	<b>5.7%</b>	<b>9.1%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>-2.5%</b>	<b>-0.8%</b>	<b>-0.6%</b>	<b>0.5%</b>	<b>-3.4%</b>
<b>Totals</b>									
Developed	6.2%	--	7.7%	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.1%
Emerging*	5.7%	9.1%	91.5%	100.0%	-2.9%	0.0%	-0.6%	0.2%	-3.2%
Frontier**	-2.0%	--	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cash	0.1%	--	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%





	Actual \$	Actual %	Manager Contribution to Excess Return %
Angelo Gordon Opportunistic	\$21,332,000	3.4%	0.2%
Angelo Gordon STAR	\$27,375,000	4.4%	0.2%
Beach Point Select	\$43,087,939	7.0%	0.1%
Brigade Capital	\$68,344,302	11.0%	0.3%
FIAM Bond	\$250,365,014	40.4%	0.4%
Franklin Templeton	\$99,875,590	16.1%	-0.2%
TCP Direct Lending VIII	\$2,136,150	0.3%	0.0%
Western Asset TRU	\$106,528,498	17.2%	0.4%
Actual vs. Policy Weight Difference			-0.6%
<b>Total</b>	<b>\$619,044,493</b>	<b>100.0%</b>	<b>0.9%</b>

**Statistics Summary**

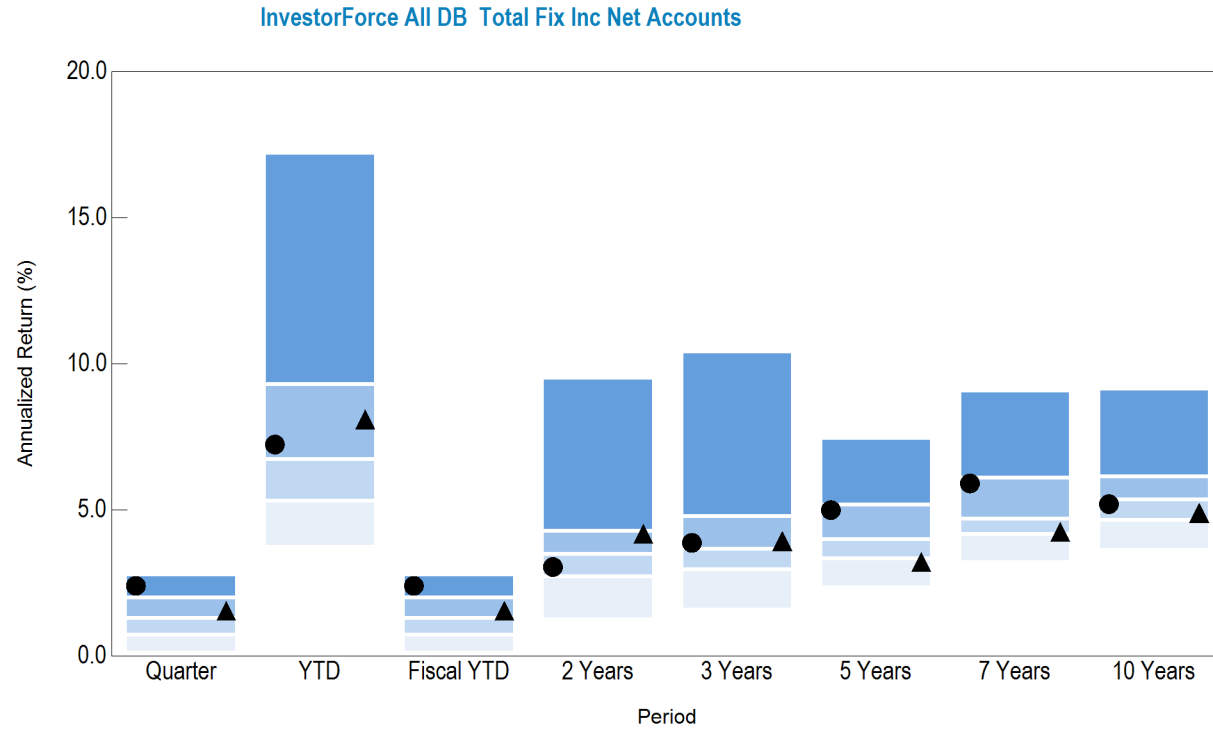
**3 Years**

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Fixed Income	3.9%	2.9%	1.3	0.0	1.9%
Blended Fixed Income Index	3.9%	2.9%	1.3	--	0.0%
US Fixed Income	4.5%	2.7%	1.6	0.2	1.4%
Blended US Fixed Index	4.2%	2.9%	1.4	--	0.0%
FIAM Bond	4.6%	2.8%	1.6	0.7	0.9%
Barclays Aggregate	4.0%	2.6%	1.5	--	0.0%
Angelo Gordon STAR	9.5%	5.8%	1.6	0.8	7.0%
Barclays Aggregate	4.0%	2.6%	1.5	--	0.0%
Brigade Capital	3.1%	7.4%	0.4	-0.5	4.6%
Barclays BA Intermediate HY	5.3%	5.0%	1.1	--	0.0%
Franklin Templeton	0.2%	6.0%	0.0	-0.3	6.6%
Barclays Multi-verse	2.2%	4.2%	0.5	--	0.0%

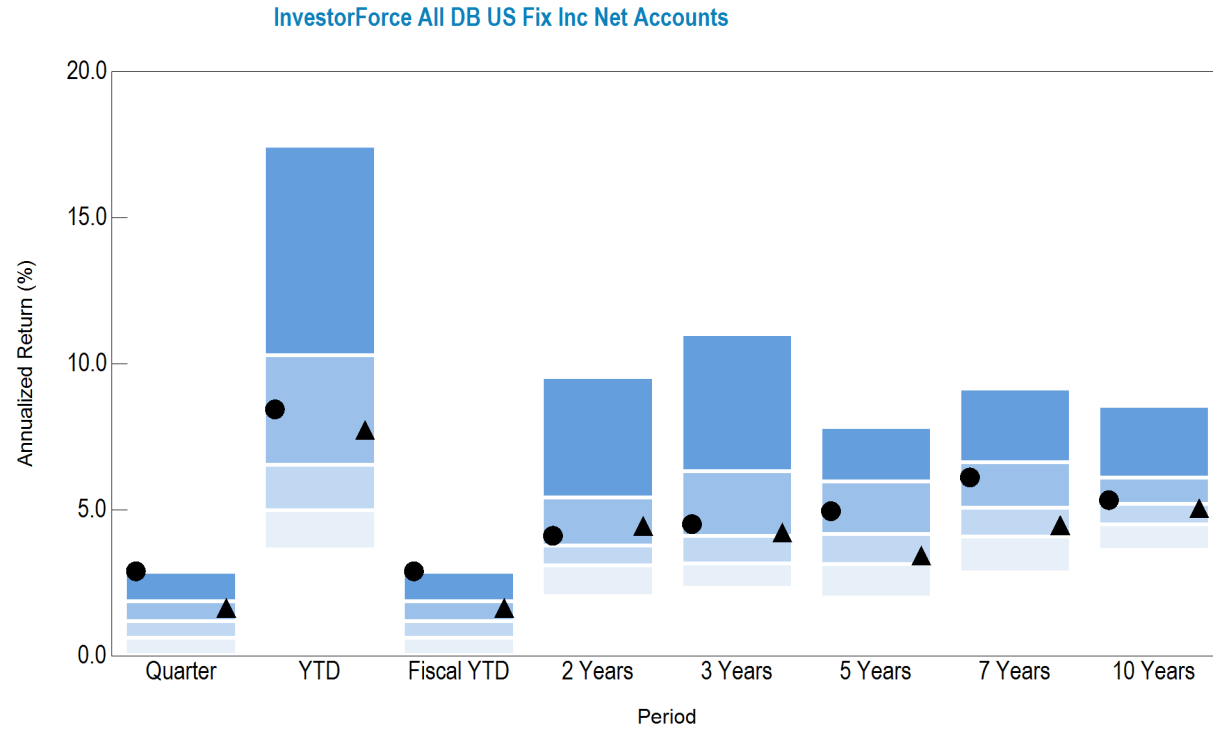
Statistics Summary

5 Years

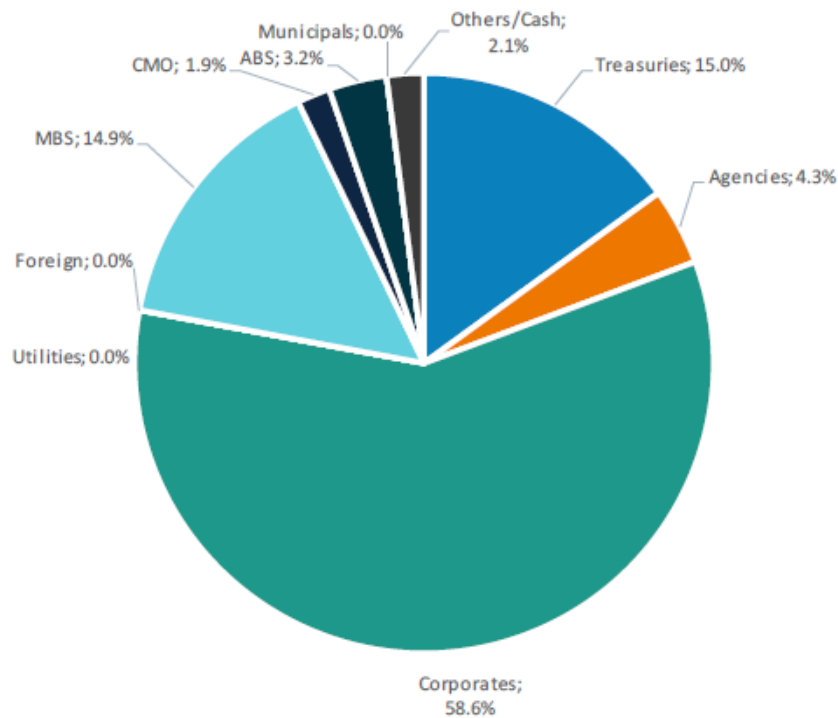
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Fixed Income	5.0%	3.5%	1.4	0.9	2.1%
Blended Fixed Income Index	3.2%	3.2%	1.0	--	0.0%
US Fixed Income	5.0%	3.0%	1.6	1.1	1.4%
Blended US Fixed Index	3.4%	3.2%	1.1	--	0.0%
FIAM Bond	4.0%	2.9%	1.3	1.1	0.8%
Barclays Aggregate	3.1%	2.7%	1.1	--	0.0%
Brigade Capital	6.6%	6.3%	1.0	0.3	4.4%
Barclays BA Intermediate HY	5.2%	5.1%	1.0	--	0.0%
Franklin Templeton	4.4%	8.5%	0.5	0.3	7.6%
Barclays Multi-verse	2.0%	4.2%	0.4	--	0.0%



	Return (Rank)							
	Quarter	YTD	Fiscal YTD	2 Years	3 Years	5 Years	7 Years	10 Years
5th Percentile	2.8	17.2	2.8	9.5	10.4	7.5	9.1	9.1
25th Percentile	2.0	9.3	2.0	4.3	4.8	5.2	6.1	6.2
Median	1.3	6.8	1.3	3.5	3.7	4.0	4.7	5.4
75th Percentile	0.7	5.3	0.7	2.7	3.0	3.3	4.2	4.7
95th Percentile	0.1	3.7	0.1	1.3	1.6	2.4	3.2	3.6
# of Portfolios	346	345	346	335	321	282	231	193
● Fixed Income	2.4 (12)	7.2 (42)	2.4 (12)	3.0 (64)	3.9 (44)	5.0 (28)	5.9 (28)	5.2 (57)
▲ Blended Fixed Income Index	1.5 (40)	8.1 (34)	1.5 (40)	4.2 (29)	3.9 (42)	3.2 (79)	4.2 (73)	4.9 (68)



	Return (Rank)							
	Quarter	YTD	Fiscal YTD	2 Years	3 Years	5 Years	7 Years	10 Years
5th Percentile	2.9	17.5	2.9	9.5	11.0	7.8	9.1	8.5
25th Percentile	1.9	10.3	1.9	5.4	6.3	6.0	6.6	6.1
Median	1.2	6.6	1.2	3.8	4.1	4.2	5.1	5.2
75th Percentile	0.6	5.0	0.6	3.1	3.2	3.2	4.1	4.5
95th Percentile	0.1	3.7	0.1	2.1	2.3	2.0	2.9	3.6
# of Portfolios	448	448	448	442	399	343	284	205
● US Fixed Income	2.9 (5)	8.4 (31)	2.9 (5)	4.1 (40)	4.5 (41)	5.0 (34)	6.1 (32)	5.3 (49)
▲ Blended US Fixed Index	1.6 (34)	7.7 (35)	1.6 (34)	4.4 (33)	4.2 (48)	3.4 (70)	4.5 (68)	5.1 (56)



Sector*	Account Weight	BC Aggregate Weight	Difference
Treasuries	15.0%	36.2%	-21.1%
Agencies	4.3%	8.1%	-3.8%
Corporates	58.6%	25.9%	32.7%
Utilities	0.0%	0.0%	0.0%
Foreign	0.0%	0.0%	0.0%
MBS	14.9%	27.8%	-12.8%
CMO	1.9%	0.0%	1.9%
ABS	3.2%	2.1%	1.1%
Municipals	0.0%	0.0%	0.0%
Others/Cash	2.1%	0.0%	2.1%
<b>TOTAL</b>	<b>100.0%</b>	<b>100.0%</b>	<b>0.0%</b>

\* Sector Allocation excludes Opportunistic Credit Managers.

US Fixed Income  
Bond Summary Statistics

Period Ending: September 30, 2016

Portfolio Characteristics*		Portfolio	BC Aggregate
Total Number of Securities			
Total Market Value	\$	356,893,511	
Current Coupon		2.48	3.20
Yield to Maturity		2.76	1.96
Average Life		7.30	7.77
Duration		3.93	5.60
Quality		AA-	AA

Yield to Maturity		% Held
Range		
0.0 - 5.0		n/a
5.0 - 7.0		n/a
7.0 - 9.0		n/a
9.0 - 11.0		n/a
11.0 - 13.0		n/a
13.0+		n/a
Unclassified		n/a

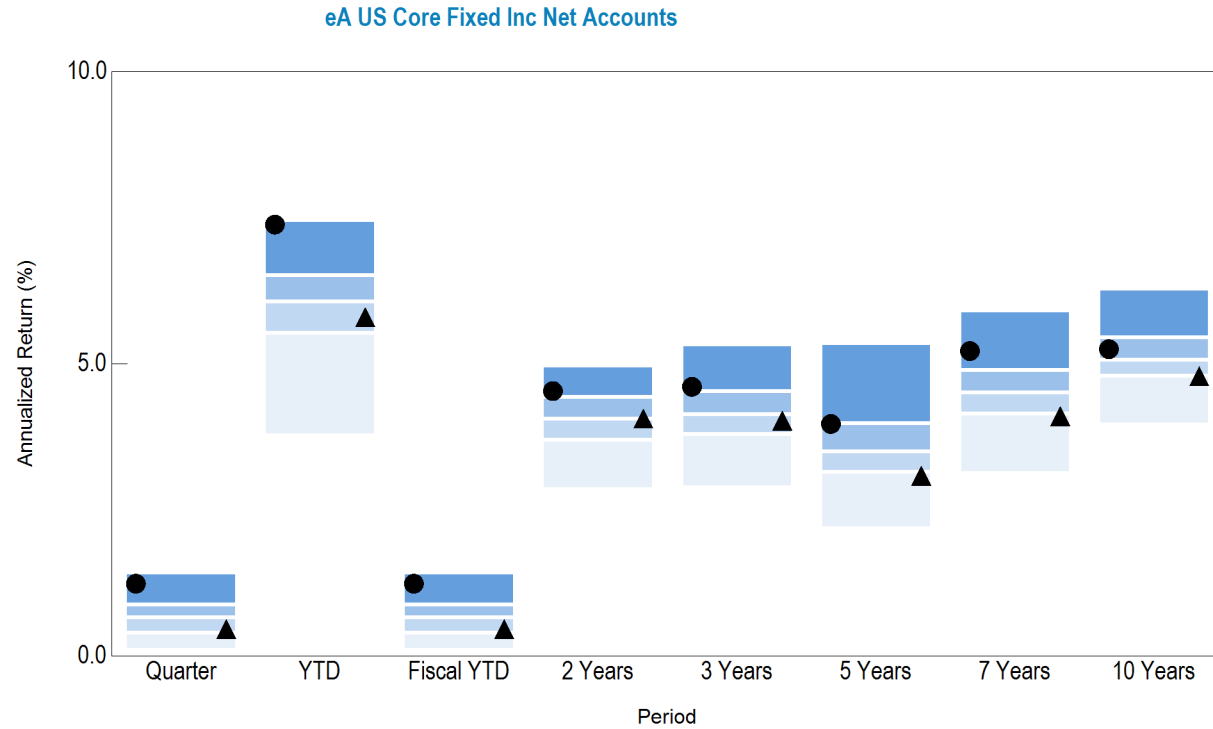
Average Life		% Held
Range		
0.0 - 1.0		2.2
1.0 - 3.0		7.4
3.0 - 5.0		57.6
5.0 - 10.0		20.6
10.0 - 20.0		2.7
20.0+		9.5
Unclassified		0.0

Duration		% Held
Range		
0.0 - 1.0		31.3
1.0 - 3.0		15.0
3.0 - 5.0		24.0
5.0 - 7.0		11.7
7.0 - 10.0		6.5
10.0+		11.4
Unclassified		0.0

Quality		% Held
Range		
Govt (10)		31.9
Aaa (10)		1.5
Aa (9)		1.7
A (8)		13.4
Baa (7)		47.2
Below Baa (6-1)		2.2
Other		2.2

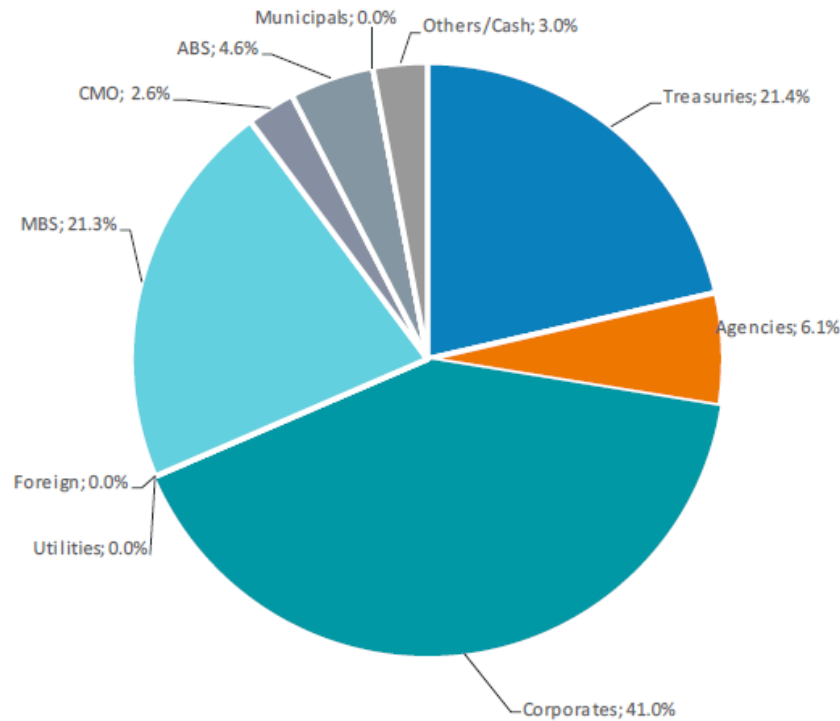
Coupon		% Held
Range		
0.0 - 5.0		82.3
5.0 - 7.0		12.8
7.0 - 9.0		2.3
9.0 - 11.0		0.1
11.0 - 13.0		0.0
13.0+		2.6
Unclassified		0.0

\* Characteristics excludes Opportunistic Credit Managers.



	Return (Rank)							
5th Percentile	1.4	7.5	1.4	5.0	5.3	5.3	5.9	6.3
25th Percentile	0.9	6.5	0.9	4.4	4.5	4.0	4.9	5.5
Median	0.7	6.1	0.7	4.1	4.1	3.5	4.5	5.1
75th Percentile	0.4	5.5	0.4	3.7	3.8	3.2	4.2	4.8
95th Percentile	0.1	3.8	0.1	2.9	2.9	2.2	3.1	4.0
# of Portfolios	113	112	113	111	111	103	95	83
● FIAM Bond	1.2 (10)	7.4 (6)	1.2 (10)	4.5 (20)	4.6 (21)	4.0 (26)	5.2 (18)	5.2 (40)
▲ Barclays Aggregate	0.5 (72)	5.8 (64)	0.5 (72)	4.1 (50)	4.0 (61)	3.1 (79)	4.1 (79)	4.8 (78)





Sector	Account Weight	BC Aggregate Weight	Difference
Treasuries	21.4%	36.2%	-14.8%
Agencies	6.1%	8.1%	-1.9%
Corporates	41.0%	25.9%	15.1%
Utilities	0.0%	0.0%	0.0%
Foreign	0.0%	0.0%	0.0%
MBS	21.3%	27.8%	-6.5%
CMO	2.6%	0.0%	2.6%
ABS	4.6%	2.1%	2.5%
Municipals	0.0%	0.0%	0.0%
Others/Cash	3.0%	0.0%	3.0%
<b>TOTAL</b>	<b>100.0%</b>	<b>100.0%</b>	<b>0.0%</b>

FIAM Bond Market Duration Pool  
Bond Summary Statistics

Period Ending: September 30, 2016

Portfolio Characteristics		
		Portfolio
Total Number of Securities		933
Total Market Value	\$	250,365,014
Current Coupon		3.54
Yield to Maturity		2.60
Average Life		8.55
Duration		5.81
Quality		A+

BC Aggregate	
	3.20
	1.96
	7.77
	5.60
	AA

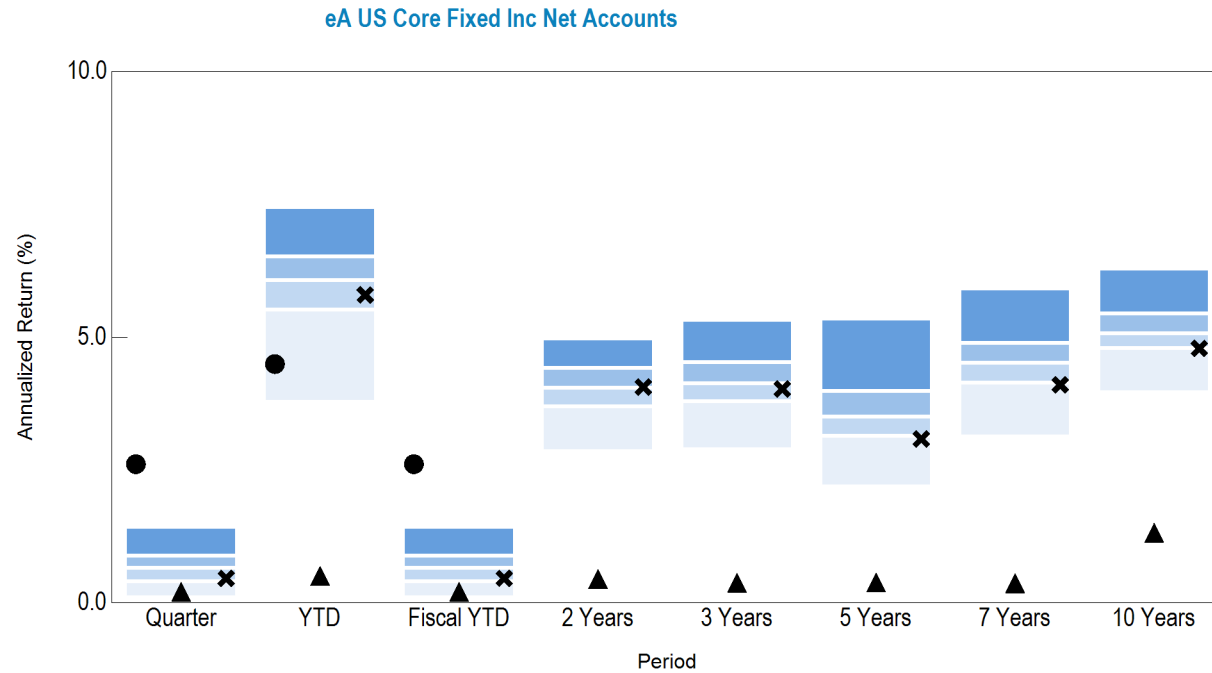
Yield to Maturity	
Range	% Held
0.0 - 5.0	91.4
5.0 - 7.0	5.4
7.0 - 9.0	0.4
9.0 - 11.0	0.2
11.0 - 13.0	0.1
13.0+	2.5
Unclassified	0.0

Average Life	
Range	% Held
0.0 - 1.0	3.1
1.0 - 3.0	10.5
3.0 - 5.0	39.6
5.0 - 10.0	29.4
10.0 - 20.0	3.8
20.0+	13.6
Unclassified	0.0

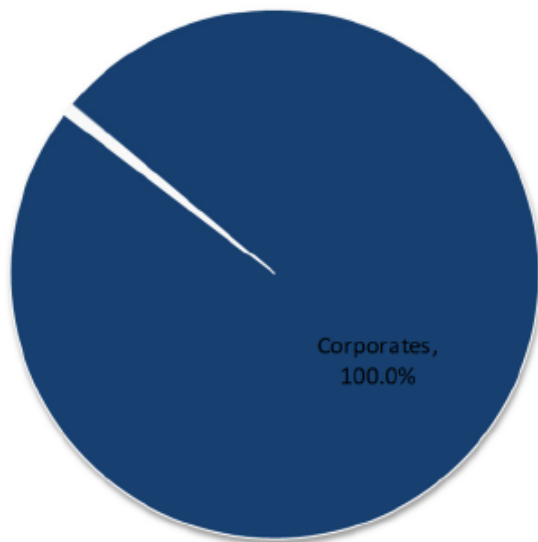
Duration	
Range	% Held
0.0 - 1.0	2.1
1.0 - 3.0	21.4
3.0 - 5.0	34.2
5.0 - 7.0	16.7
7.0 - 10.0	9.3
10.0+	16.3
Unclassified	0.0

Quality	
Range	% Held
Govt (10)	45.4
Aaa (10)	2.1
Aa (9)	2.5
A (8)	19.1
Baa (7)	24.7
Below Baa (6-1)	3.1
Other	3.2

Coupon	
Range	% Held
0.0 - 5.0	74.8
5.0 - 7.0	18.2
7.0 - 9.0	3.3
9.0 - 11.0	0.1
11.0 - 13.0	0.0
13.0+	3.7
Unclassified	0.0



	Return (Rank)							
	Quarter	YTD	Fiscal YTD	2 Years	3 Years	5 Years	7 Years	10 Years
5th Percentile	1.4	7.5	1.4	5.0	5.3	5.3	5.9	6.3
25th Percentile	0.9	6.5	0.9	4.4	4.5	4.0	4.9	5.5
Median	0.7	6.1	0.7	4.1	4.1	3.5	4.5	5.1
75th Percentile	0.4	5.5	0.4	3.7	3.8	3.2	4.2	4.8
95th Percentile	0.1	3.8	0.1	2.9	2.9	2.2	3.1	4.0
# of Portfolios	113	112	113	111	111	103	95	83
● Western TRU	2.6 (2)	4.5 (92)	2.6 (2)	-- (--)	-- (--)	-- (--)	-- (--)	-- (--)
▲ 3-Month Libor Total Return USD	0.2 (90)	0.5 (99)	0.2 (90)	0.4 (99)	0.4 (99)	0.4 (99)	0.4 (99)	1.3 (99)
✕ Barclays Aggregate	0.5 (72)	5.8 (64)	0.5 (72)	4.1 (50)	4.0 (61)	3.1 (79)	4.1 (79)	4.8 (78)



Sector	Account Weight	BC Aggregate Weight	Difference
Treasuries	0.0%	36.2%	-36.2%
Agencies	0.0%	8.1%	-8.1%
Corporates	100.0%	25.9%	74.1%
Utilities	0.0%	0.0%	0.0%
Foreign	0.0%	0.0%	0.0%
MBS	0.0%	27.8%	-27.8%
CMO	0.0%	0.0%	0.0%
ABS	0.0%	2.1%	-2.1%
Municipals	0.0%	0.0%	0.0%
Others/Cash	0.0%	0.0%	0.0%
<b>TOTAL</b>	<b>100.0%</b>	<b>100.0%</b>	<b>0.0%</b>

Portfolio Characteristics			Portfolio	BC Aggregate
Total Number of Securities			2	
Total Market Value	\$		106,528,498	
Current Coupon			0.00	3.20
Yield to Maturity			3.14	1.96
Average Life			4.37	7.77
Duration			-0.49	5.60
Quality			A-	AA

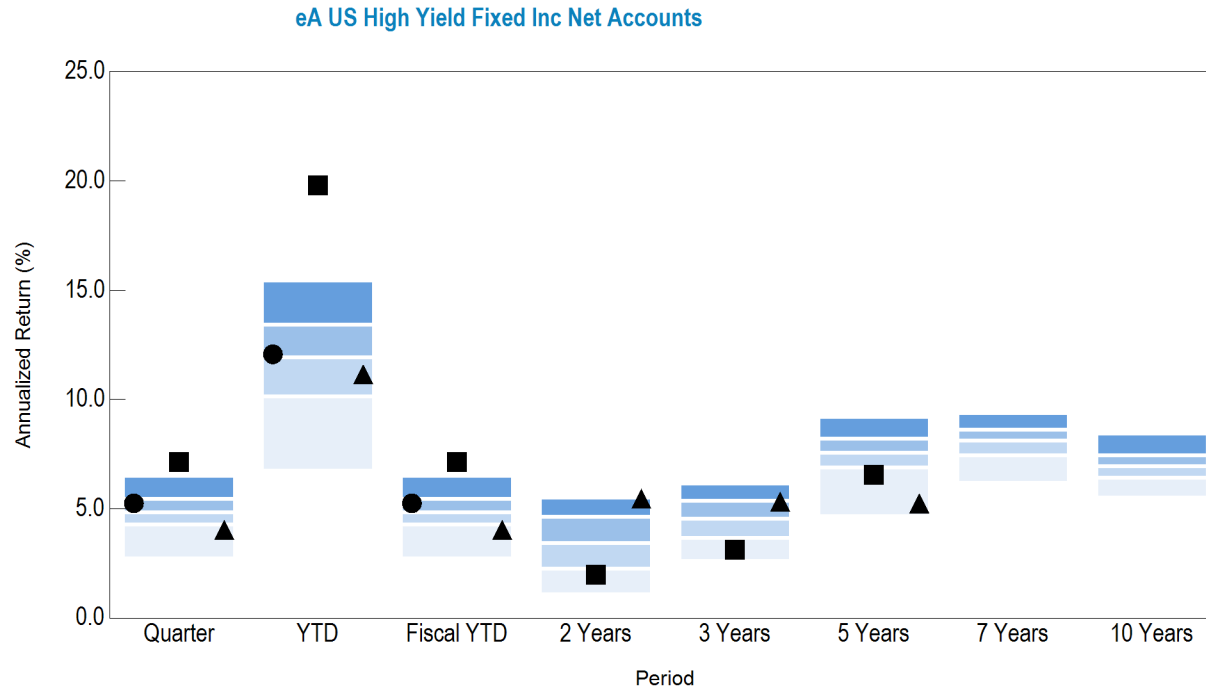
Yield to Maturity		
Range		% Held
0.0 - 5.0		n/a
5.0 - 7.0		n/a
7.0 - 9.0		n/a
9.0 - 11.0		n/a
11.0 - 13.0		n/a
13.0+		n/a
Unclassified		n/a

Average Life		
Range		% Held
0.0 - 1.0		0.0
1.0 - 3.0		0.0
3.0 - 5.0		100.0
5.0 - 10.0		0.0
10.0 - 20.0		0.0
20.0+		0.0
Unclassified		0.0

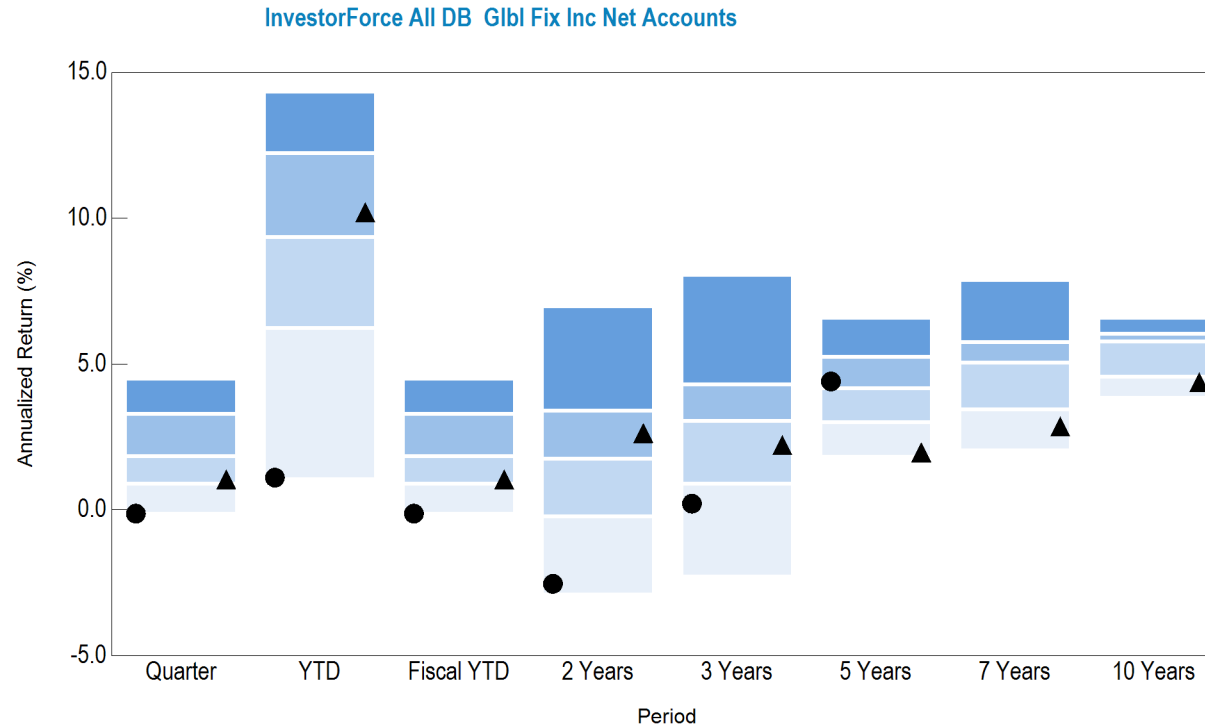
Duration		
Range		% Held
< 1.0		100.0
1.0 - 3.0		0.0
3.0 - 5.0		0.0
5.0 - 7.0		0.0
7.0 - 10.0		0.0
10.0+		0.0
Unclassified		0.0

Quality		
Range		% Held
Govt (10)		0.0
Aaa (10)		0.0
Aa (9)		0.0
A (8)		0.0
Baa (7)		100.0
Below Baa (6-1)		0.0
Other		0.0

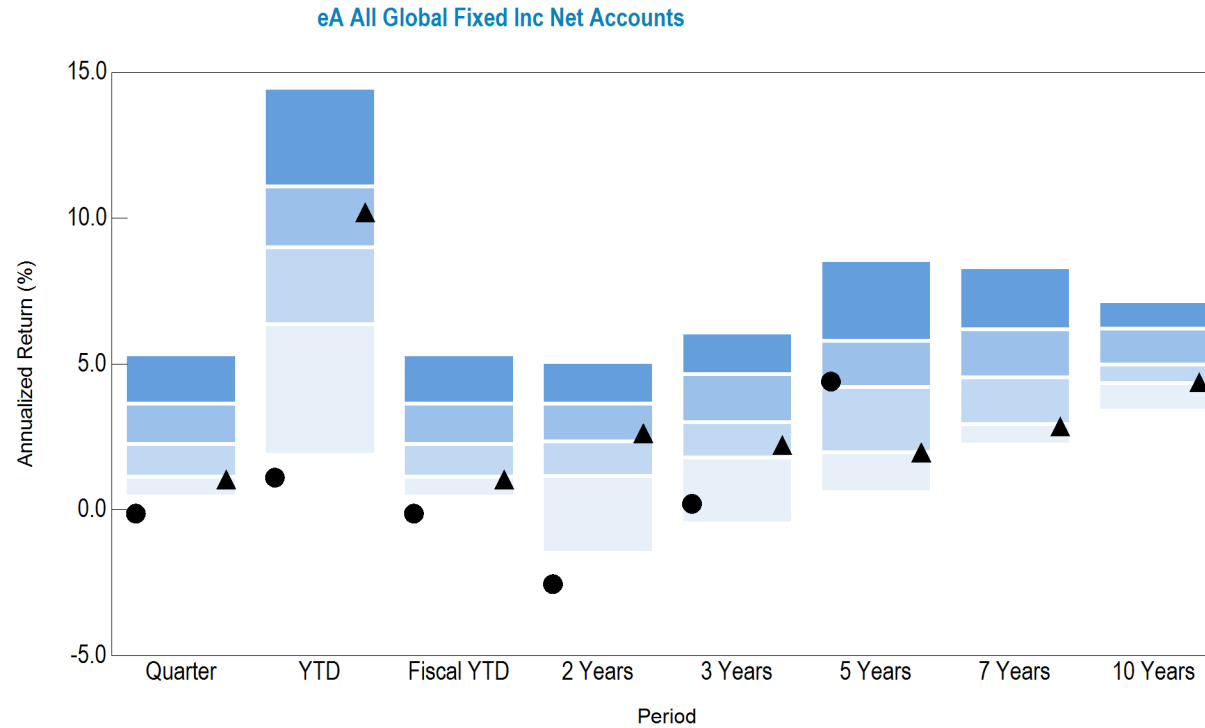
Coupon		
Range		% Held
0.0 - 5.0		100.0
5.0 - 7.0		0.0
7.0 - 9.0		0.0
9.0 - 10.0		0.0
10.0+		0.0
Unclassified		0.0



	Return (Rank)							
	Quarter	YTD	Fiscal YTD	2 Years	3 Years	5 Years	7 Years	10 Years
5th Percentile	6.5	15.4	6.5	5.5	6.1	9.2	9.4	8.4
25th Percentile	5.5	13.4	5.5	4.6	5.4	8.2	8.6	7.5
Median	4.8	11.9	4.8	3.4	4.6	7.6	8.1	7.0
75th Percentile	4.3	10.1	4.3	2.3	3.7	6.9	7.5	6.4
95th Percentile	2.7	6.8	2.7	1.1	2.6	4.7	6.2	5.5
# of Portfolios	87	87	87	82	80	74	63	52
● Beach Point Select	5.2 (32)	12.1 (50)	5.2 (32)	-- (--)	-- (--)	-- (--)	-- (--)	-- (--)
■ Brigade Capital	7.1 (1)	19.8 (1)	7.1 (1)	2.0 (84)	3.1 (86)	6.6 (78)	-- (--)	-- (--)
▲ Barclays BA Intermediate HY	4.0 (80)	11.1 (64)	4.0 (80)	5.5 (6)	5.3 (27)	5.2 (94)	-- (--)	-- (--)

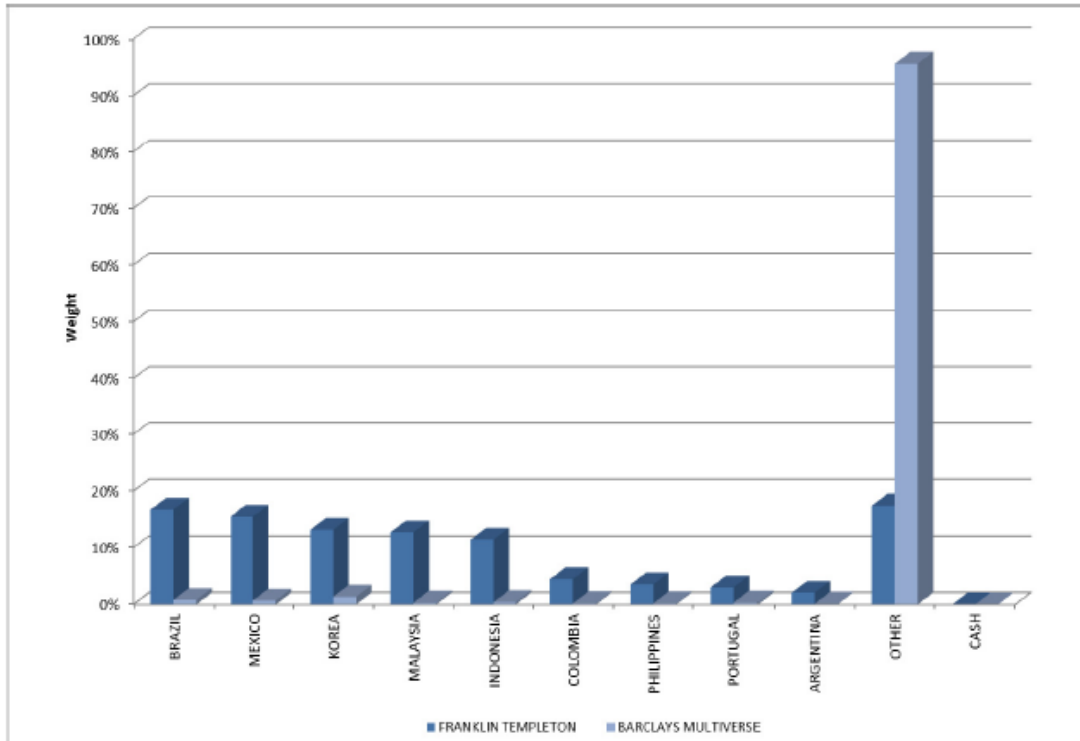


	Return (Rank)							
	Quarter	YTD	Fiscal YTD	2 Years	3 Years	5 Years	7 Years	10 Years
5th Percentile	4.5	14.3	4.5	7.0	8.0	6.6	7.9	6.6
25th Percentile	3.3	12.2	3.3	3.4	4.3	5.3	5.8	6.1
Median	1.9	9.4	1.9	1.8	3.1	4.2	5.1	5.8
75th Percentile	0.9	6.3	0.9	-0.2	0.9	3.0	3.5	4.6
95th Percentile	-0.1	1.1	-0.1	-2.9	-2.3	1.8	2.1	3.9
# of Portfolios	40	40	40	38	35	27	20	14
● Global Fixed Income	-0.1 (95)	1.1 (95)	-0.1 (95)	-2.5 (95)	0.2 (86)	4.4 (43)	-- (--)	-- (--)
▲ Barclays Multi-verse	1.0 (72)	10.2 (42)	1.0 (72)	2.6 (41)	2.2 (60)	2.0 (89)	2.9 (91)	4.4 (78)

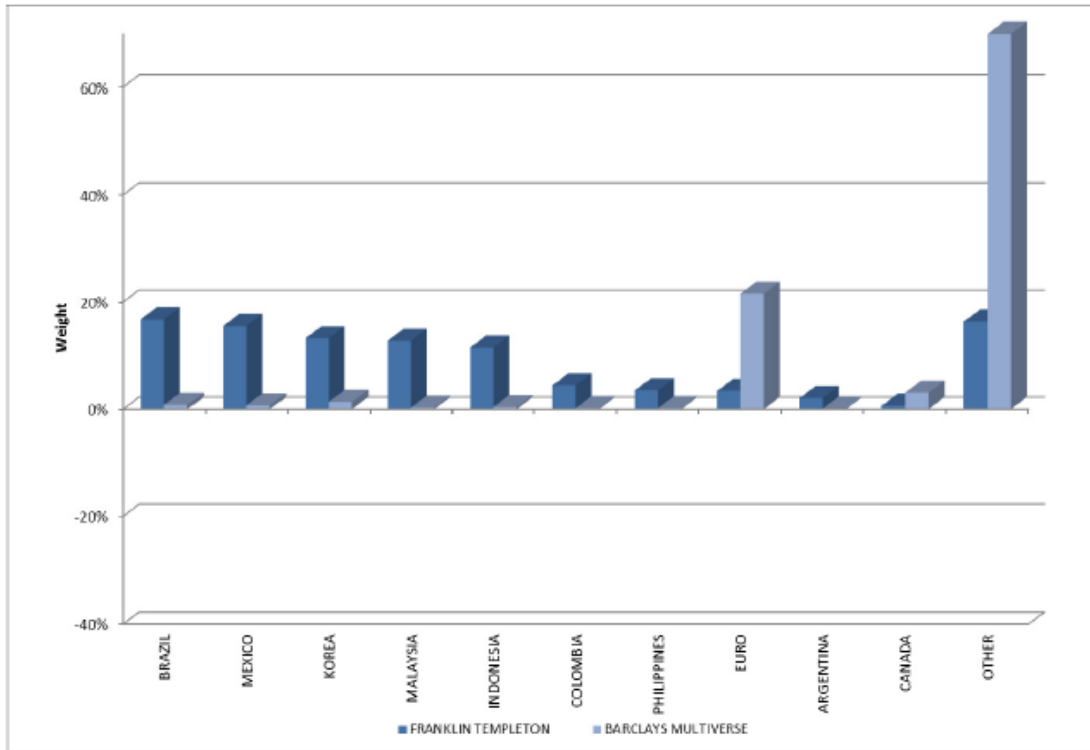


	Return (Rank)							
	Quarter	YTD	Fiscal YTD	2 Years	3 Years	5 Years	7 Years	10 Years
5th Percentile	5.3	14.5	5.3	5.1	6.1	8.6	8.3	7.1
25th Percentile	3.7	11.1	3.7	3.7	4.7	5.8	6.2	6.2
Median	2.3	9.0	2.3	2.4	3.0	4.2	4.6	5.0
75th Percentile	1.1	6.4	1.1	1.2	1.8	2.0	2.9	4.4
95th Percentile	0.5	1.9	0.5	-1.5	-0.4	0.6	2.2	3.4
# of Portfolios	174	173	174	158	153	125	97	73
● Franklin Templeton	-0.1 (98)	1.1 (97)	-0.1 (98)	-2.5 (97)	0.2 (92)	4.4 (48)	-- (--)	-- (--)
▲ Barclays Multi-verse	1.0 (79)	10.2 (34)	1.0 (79)	2.6 (44)	2.2 (66)	2.0 (77)	2.9 (78)	4.4 (73)

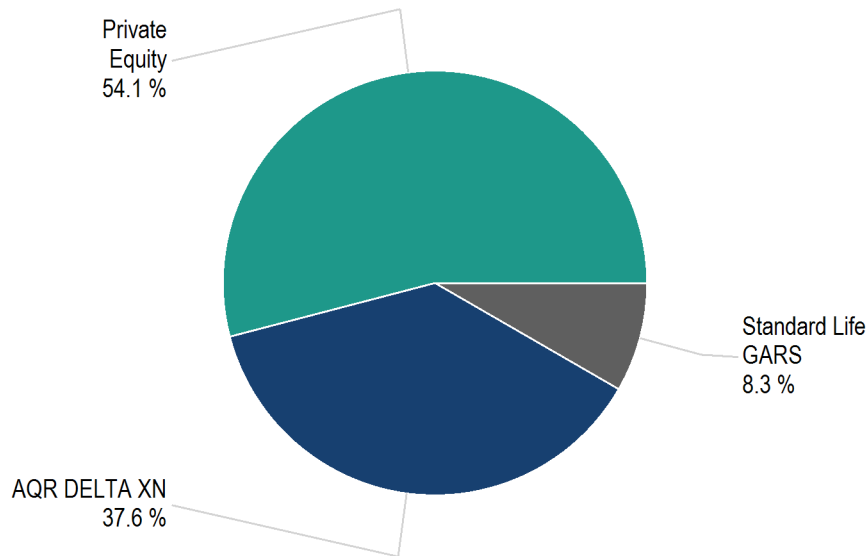




COUNTRY	MARKET VALUE	FRANKLIN TEMPLETON	BARCLAYS MULTIVERSE	DIFF
BRAZIL	\$ 16,699	16.7%	0.8%	+15.9%
MEXICO	\$ 15,444	15.5%	0.7%	+14.8%
KOREA	\$ 13,153	13.2%	1.3%	+11.8%
MALAYSIA	\$ 12,693	12.7%	0.3%	+12.4%
INDONESIA	\$ 11,410	11.4%	0.4%	+11.0%
COLOMBIA	\$ 4,478	4.5%	0.2%	+4.3%
PHILIPPINES	\$ 3,521	3.5%	0.2%	+3.3%
PORTUGAL	\$ 3,004	3.0%	0.3%	+2.7%
ARGENTINA	\$ 2,068	2.1%	0.1%	+2.0%
OTHER	\$ 17,407	17.4%	95.7%	-78.2%
CASH	\$ -	0.0%	0.0%	0.0%
	\$ 99,876	100.0%	100.0%	0.0%



CURRENCY	MARKET VALUE	FRANKLIN TEMPLETON	BARCLAYS MULTIVERSE	DIFF
BRAZIL	\$ 16,699	16.7%	0.8%	+15.9%
MEXICO	\$ 15,444	15.5%	0.7%	+14.8%
KOREA	\$ 13,153	13.2%	1.3%	+11.8%
MALAYSIA	\$ 12,693	12.7%	0.3%	+12.4%
INDONESIA	\$ 11,410	11.4%	0.4%	+11.0%
COLOMBIA	\$ 4,478	4.5%	0.2%	+4.3%
PHILIPPINES	\$ 3,521	3.5%	0.2%	+3.3%
EURO	\$ 3,428	3.4%	21.6%	-18.1%
ARGENTINA	\$ 2,068	2.1%	0.1%	+2.0%
CANADA	\$ 667	0.7%	3.1%	-2.4%
OTHER	\$ 16,317	16.3%	71.3%	-55.0%
	\$ 99,876	100.0%	100.0%	0.0%



	Actual \$	Actual %	Manager Contribution to Excess Return %
AQR DELTA XN	\$153,000,131	37.6%	0.2%
Private Equity	\$219,858,478	54.1%	2.8%
Standard Life GARS	\$33,577,294	8.3%	-0.1%
Actual vs. Policy Weight Difference			-0.2%
<b>Total</b>	<b>\$406,435,903</b>	<b>100.0%</b>	<b>2.7%</b>

**Statistics Summary**

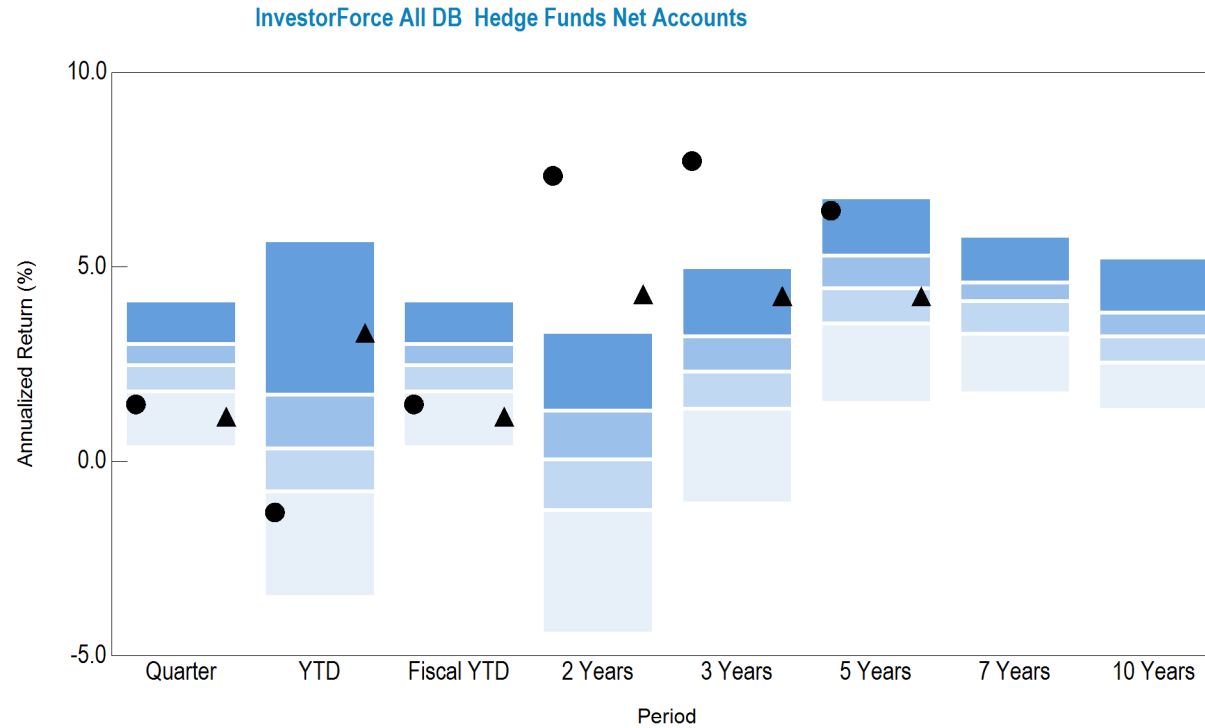
**3 Years**

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Alternatives	7.0%	5.1%	1.4	0.5	6.5%
Alternatives Allocation Index	4.1%	6.1%	0.7	--	0.0%
Private Equity	19.0%	10.7%	1.8	0.4	14.3%
Russell 3000 +3%	13.4%	10.8%	1.2	--	0.0%
Hedge Fund/Absolute Return	7.7%	5.1%	1.5	0.7	5.1%
Libor 1 month +4%	4.2%	0.1%	41.5	--	0.0%
AQR DELTA XN	8.1%	5.2%	1.5	0.7	5.2%
Libor 1 month +4%	4.2%	0.1%	41.5	--	0.0%

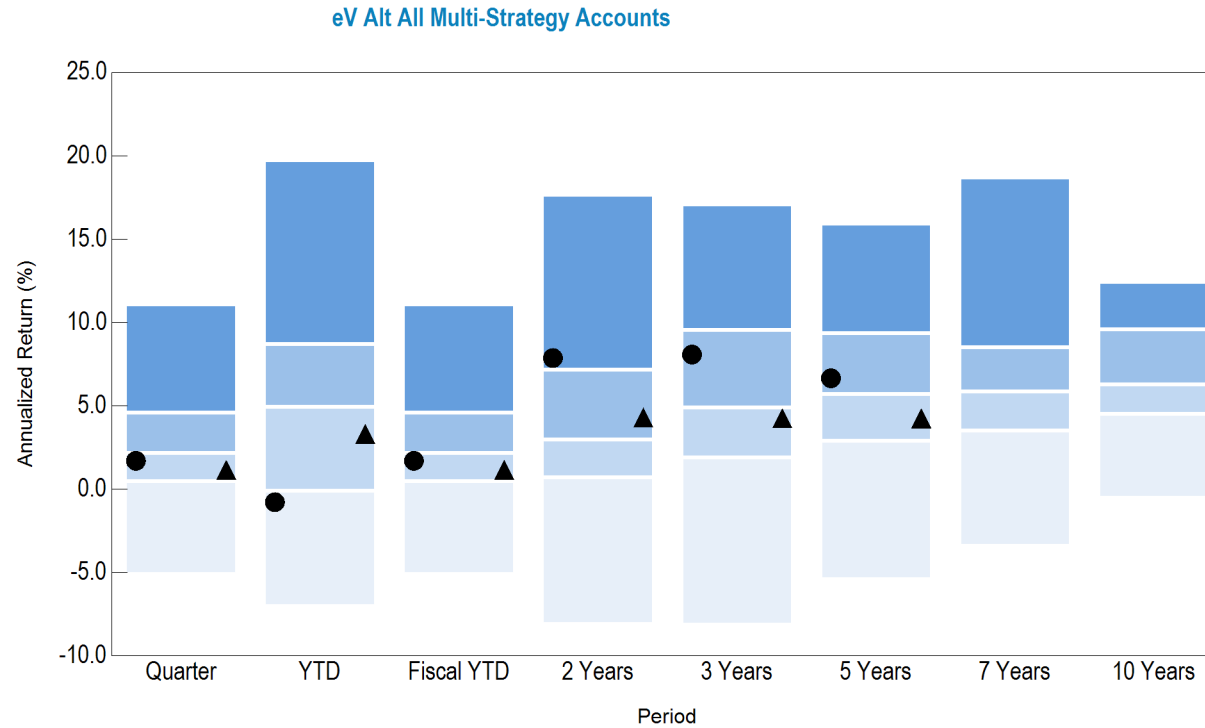
**Statistics Summary**

**5 Years**

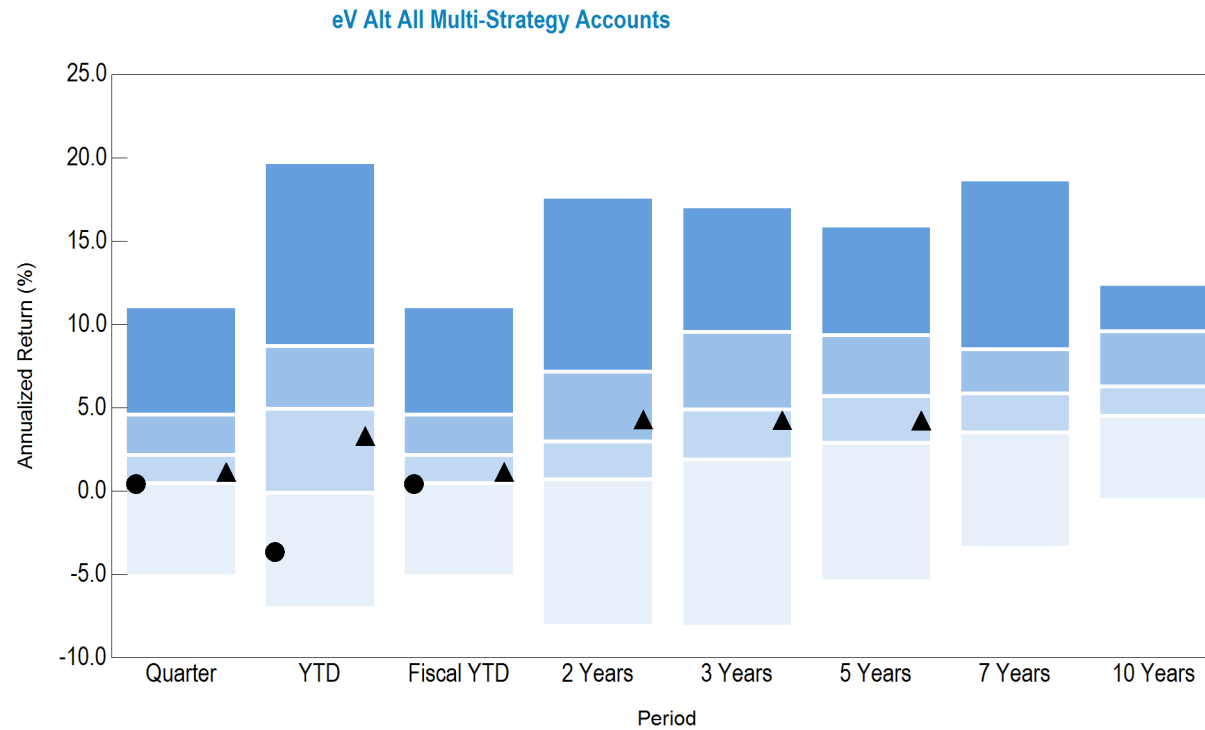
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Alternatives	6.6%	5.8%	1.1	0.0	5.8%
Alternatives Allocation Index	6.4%	6.3%	1.0	--	0.0%
Private Equity	13.2%	10.5%	1.3	-0.4	15.7%
Russell 3000 +3%	19.4%	11.2%	1.7	--	0.0%
Hedge Fund/Absolute Return	6.4%	5.2%	1.2	0.4	5.2%
Libor 1 month +4%	4.2%	0.1%	44.4	--	0.0%
AQR DELTA XN	6.7%	5.3%	1.2	0.5	5.3%
Libor 1 month +4%	4.2%	0.1%	44.4	--	0.0%



	Return (Rank)							
5th Percentile	4.1	5.7	4.1	3.3	5.0	6.8	5.8	5.2
25th Percentile	3.0	1.7	3.0	1.3	3.2	5.3	4.6	3.8
Median	2.5	0.3	2.5	0.1	2.3	4.5	4.1	3.2
75th Percentile	1.8	-0.8	1.8	-1.2	1.4	3.6	3.3	2.5
95th Percentile	0.4	-3.5	0.4	-4.4	-1.1	1.5	1.8	1.3
# of Portfolios	246	245	246	238	229	196	139	72
● Hedge Fund/Absolute Return	1.5 (86)	-1.3 (83)	1.5 (86)	7.3 (1)	7.7 (1)	6.4 (8)	-- (--)	-- (--)
▲ Libor 1 month +4%	1.1 (89)	3.3 (13)	1.1 (89)	4.3 (5)	4.2 (12)	4.2 (55)	-- (--)	-- (--)

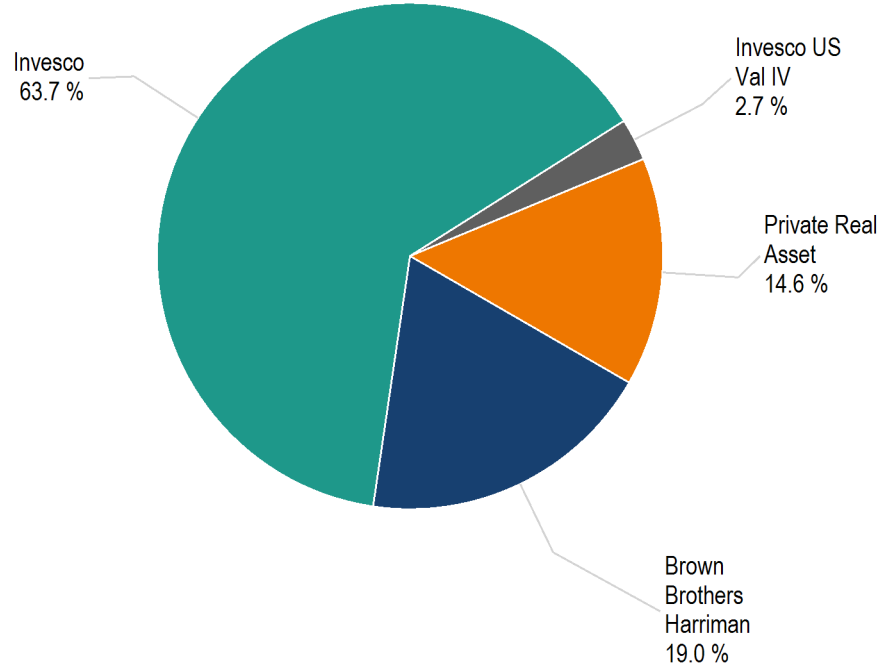


	Quarter	YTD	Fiscal YTD	2 Years	3 Years	5 Years	7 Years	10 Years
<b>Return (Rank)</b>								
5th Percentile	11.1	19.7	11.1	17.6	17.1	15.9	18.7	12.4
25th Percentile	4.6	8.7	4.6	7.2	9.6	9.4	8.5	9.6
Median	2.2	4.9	2.2	3.0	4.9	5.7	5.9	6.3
75th Percentile	0.5	-0.1	0.5	0.7	1.9	2.9	3.5	4.5
95th Percentile	-5.1	-7.0	-5.1	-8.1	-8.1	-5.4	-3.4	-0.5
# of Portfolios	220	217	220	196	173	134	105	68
● AQR DELTA XN	1.7 (59)	-0.8 (78)	1.7 (59)	7.9 (24)	8.1 (31)	6.7 (44)	-- (--)	-- (--)
▲ Libor 1 month +4%	1.1 (68)	3.3 (55)	1.1 (68)	4.3 (44)	4.2 (56)	4.2 (62)	-- (--)	-- (--)



	Return (Rank)							
5th Percentile	11.1	19.7	11.1	17.6	17.1	15.9	18.7	12.4
25th Percentile	4.6	8.7	4.6	7.2	9.6	9.4	8.5	9.6
Median	2.2	4.9	2.2	3.0	4.9	5.7	5.9	6.3
75th Percentile	0.5	-0.1	0.5	0.7	1.9	2.9	3.5	4.5
95th Percentile	-5.1	-7.0	-5.1	-8.1	-8.1	-5.4	-3.4	-0.5
# of Portfolios	220	217	220	196	173	134	105	68
● Standard Life GARS	0.4 (77)	-3.7 (90)	0.4 (77)	-- (--)	-- (--)	-- (--)	-- (--)	-- (--)
▲ Libor 1 month +4%	1.1 (68)	3.3 (55)	1.1 (68)	4.3 (44)	4.2 (56)	4.2 (62)	-- (--)	-- (--)





	Actual \$	Actual %	Manager Contribution to Excess Return %
Invesco	\$238,253,364	63.7%	-0.3%
Invesco US Val IV	\$9,997,857	2.7%	0.0%
Brown Brother Harriman	\$70,921,074	19.0%	0.0%
Private Real Asset	\$54,691,244	14.6%	-0.1%
Actual vs. Policy Weight Difference			1.2%
<b>Total</b>	<b>\$373,863,539</b>	<b>100.0%</b>	<b>0.8%</b>

**Statistics Summary**

**3 Years**

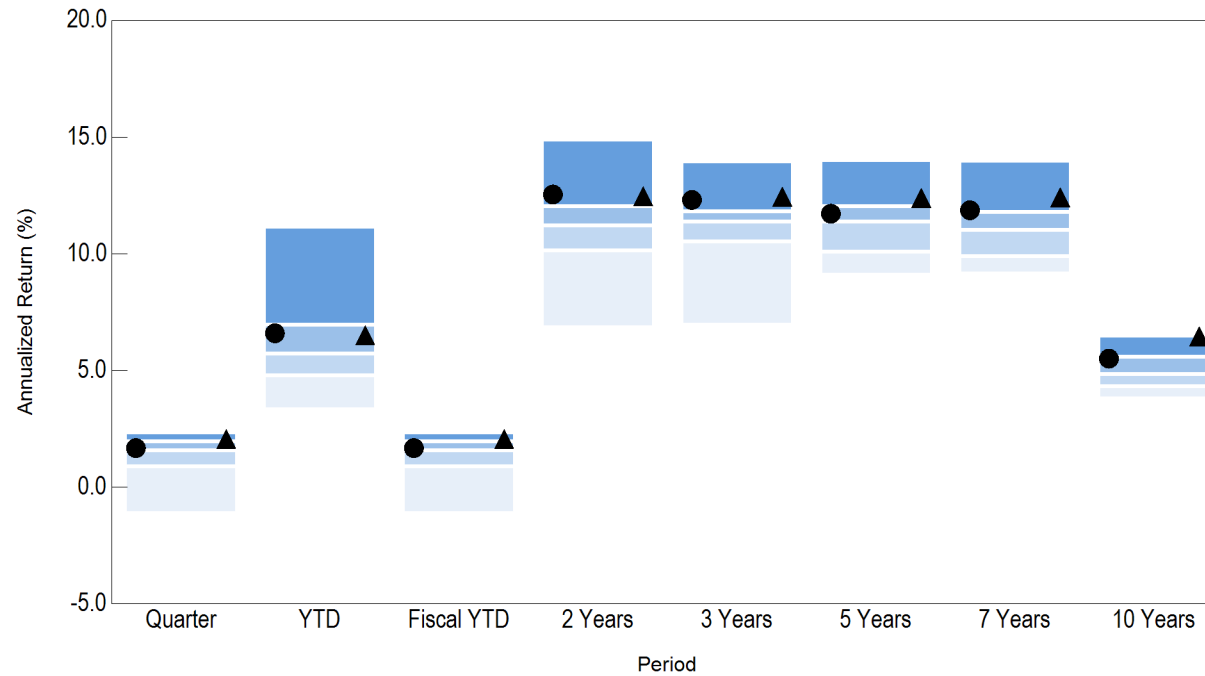
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Real Estate	12.31%	5.30%	2.30	-0.09	1.49%
NCREIF ODCE	12.45%	5.07%	2.44	--	0.00%
Invesco	12.17%	5.26%	2.29	-0.18	1.56%
NCREIF ODCE	12.45%	5.07%	2.44	--	0.00%
TIPS	1.23%	3.14%	0.36	-0.85	1.38%
Barclays US TIPS	2.40%	4.13%	0.56	--	0.00%
Brown Brothers Harriman	1.23%	3.14%	0.36	-0.85	1.38%
Barclays US TIPS	2.40%	4.13%	0.56	--	0.00%

**Statistics Summary**

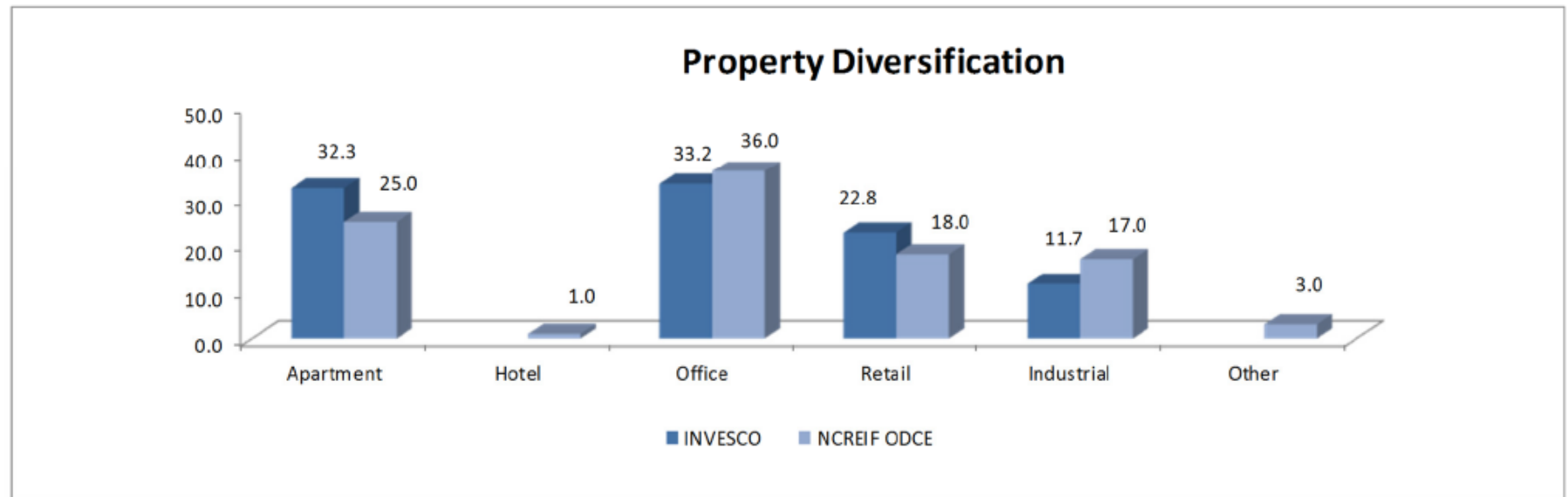
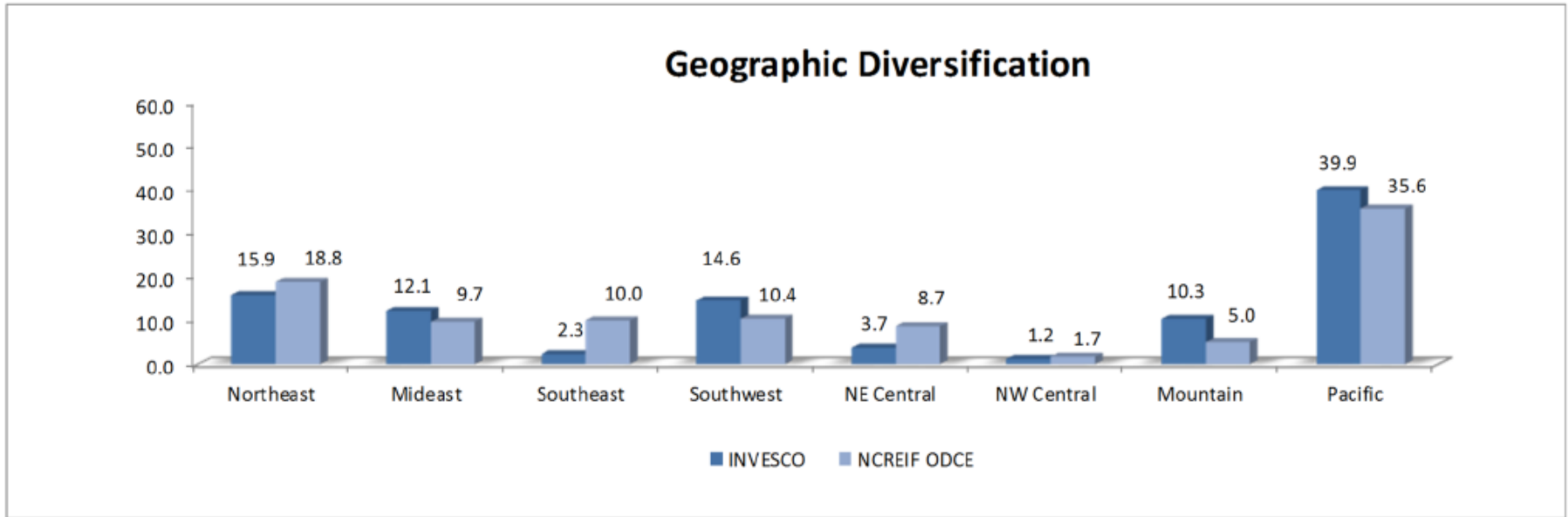
**5 Years**

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error Rank
Real Estate	11.72%	5.05%	2.30	-0.45	26
NCREIF ODCE	12.40%	5.01%	2.46	--	1
Invesco	11.63%	5.03%	2.30	-0.49	--
NCREIF ODCE	12.40%	5.01%	2.46	--	--
TIPS	1.29%	4.35%	0.28	-0.56	--
Barclays US TIPS	1.92%	4.74%	0.39	--	--
Brown Brothers Harriman	1.29%	4.35%	0.28	-0.56	53
Barclays US TIPS	1.92%	4.74%	0.39	--	1

InvestorForce All DB Real Estate Pub Net Accounts



	Return (Rank)							
5th Percentile	2.3	11.2	2.3	14.9	13.9	14.0	14.0	6.5
25th Percentile	2.0	7.0	2.0	12.1	11.8	12.1	11.8	5.6
Median	1.6	5.7	1.6	11.2	11.4	11.4	11.0	4.8
75th Percentile	0.9	4.8	0.9	10.2	10.6	10.1	9.9	4.3
95th Percentile	-1.1	3.3	-1.1	6.9	7.0	9.1	9.2	3.8
# of Portfolios	92	92	92	89	86	72	66	34
● Real Estate	1.7 (47)	6.6 (30)	1.7 (47)	12.5 (18)	12.3 (15)	11.7 (35)	11.9 (20)	5.5 (27)
▲ NCREIF ODCE	2.1 (12)	6.5 (32)	2.1 (12)	12.5 (18)	12.4 (15)	12.4 (17)	12.4 (14)	6.5 (6)



INVESCO Core Real Estate  
Real Estate Valuation Analysis

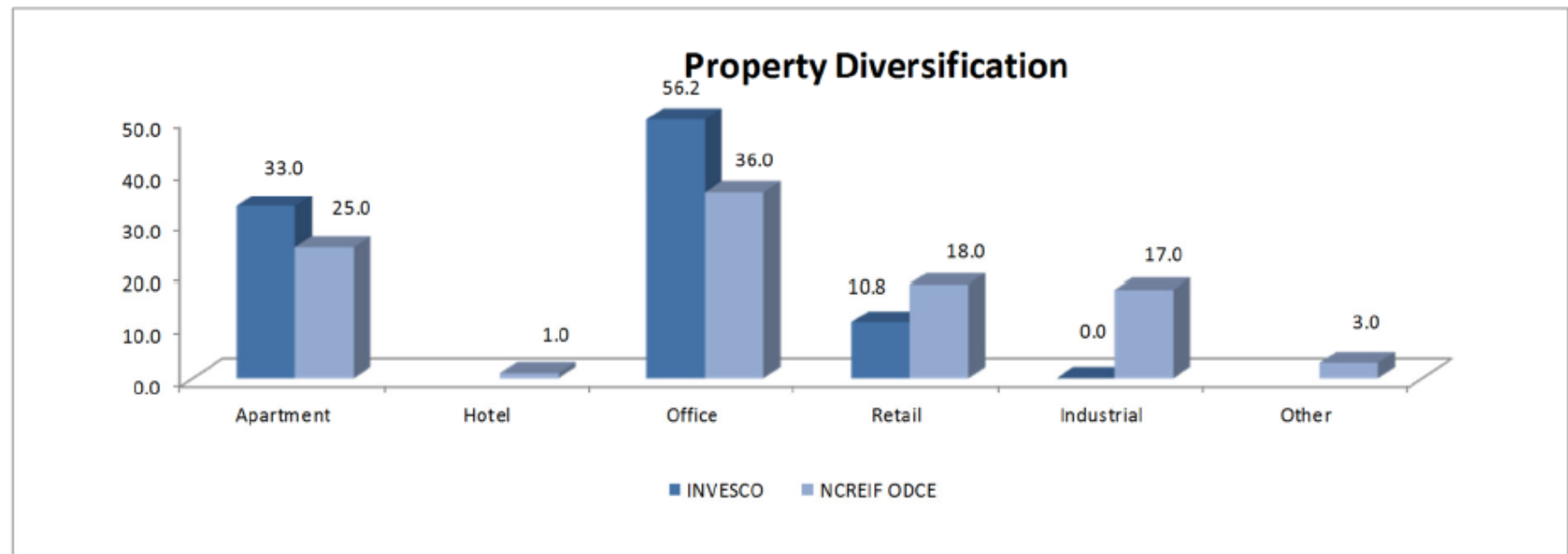
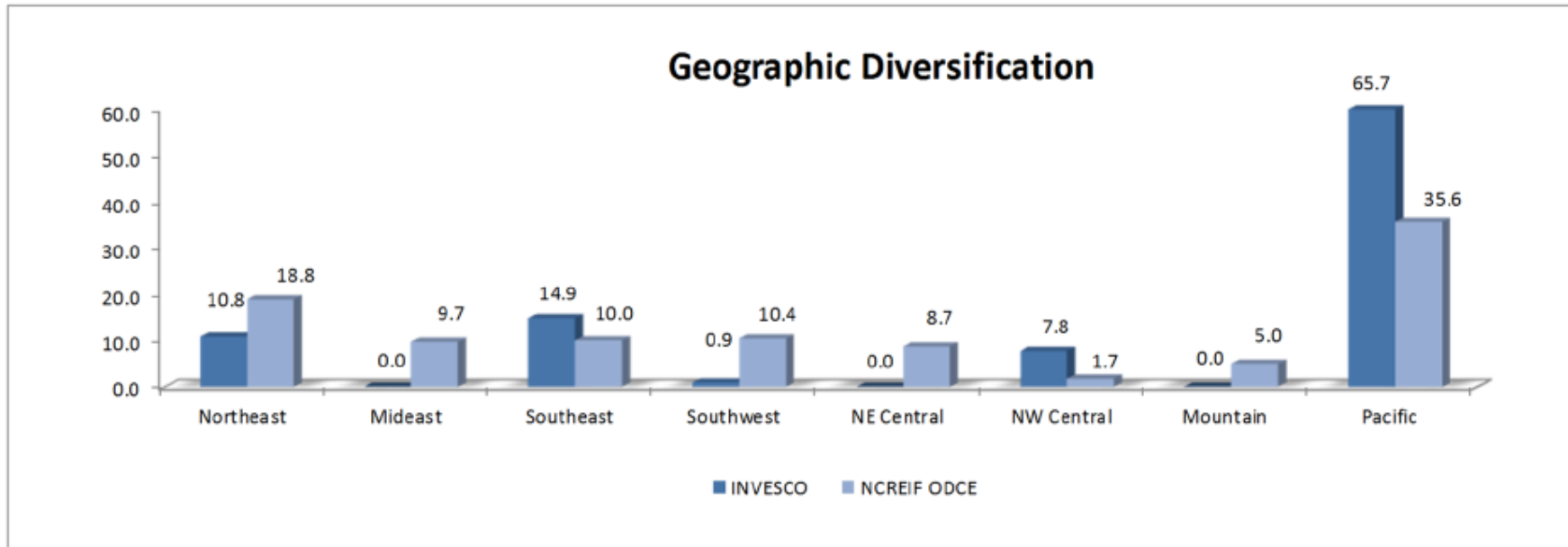
Period Ending: September 30, 2016

Property Name	MSA	Prior Quarter Carry Value	Current Quarter Carry Value	Net Market Value	Date Added to Fund	Last Valuation Date	SamCERA ownership as of 06/30/2016 2.94%
<b>APARTMENTS</b>							
Milestone Apt Portfolio	Various States - South	\$2,259,791	\$0	\$0	2Q06	Sold 3Q16	\$0
Stoneridge Apartments	Pleasanton, CA	\$227,400,000	\$228,000,000	\$228,000,000	4Q06	September-16	\$6,704,370
Instrata Pentagon City	Arlington, VA	\$151,000,000	\$148,000,000	\$87,937,766	3Q10	September-16	\$2,585,822
Ladd Tower	Portland, OR	\$135,000,000	\$135,000,000	\$77,718,649	4Q10	September-16	\$2,285,327
Legacy Fountain Plaza	San Jose, CA	\$144,957,952	\$151,956,119	\$151,956,119	1Q11	September-16	\$4,468,290
Instrata Gramercy (fka The Elektra)	New York, NY	\$173,100,000	\$173,000,000	\$99,935,452	1Q11	September-16	\$2,938,615
Instrata Brooklyn Heights (fka 75 Clinton Street)	Brooklyn, NY	\$70,800,000	\$70,800,000	\$70,800,000	1Q12	September-16	\$2,081,883
The Artisan Laguna Beach	Orange County, CA	\$158,000,000	\$159,000,000	\$97,009,737	3Q12	September-16	\$2,852,584
The GoodWynn	Atlanta, GA	\$100,000,000	\$100,000,000	\$63,000,000	4Q12	September-16	\$1,852,523
Instrata Hell's Kitchen	New York, NY	\$210,000,000	\$210,000,000	\$135,552,000	1Q13	September-16	\$3,985,925
Sunset Vine Tower	Los Angeles, CA	\$98,200,000	\$96,000,000	\$96,000,000	2Q13	September-16	\$2,822,893
The Ashton	Dallas, TX	\$118,000,000	\$119,000,000	\$61,415,334	4Q13	September-16	\$1,805,926
The Pointe at Westchester	West Chester, PA	\$67,600,000	\$62,700,000	\$62,700,000	4Q13	September-16	\$1,843,702
206 Bell	Seattle, WA	\$44,900,000	\$45,800,000	\$45,800,000	4Q13	September-16	\$1,346,755
Cadence Union Station	Denver, CO	\$88,000,000	\$86,700,000	\$49,313,375	1Q14	September-16	\$1,450,066
Joseph Arnold Lofts	Seattle, WA	\$72,000,000	\$70,100,000	\$35,614,500	2Q14	September-16	\$1,047,249
Verve	Denver, CO	\$108,000,000	\$113,000,000	\$113,000,000	3Q14	September-16	\$3,322,780
Broadstone Little Italy	San Diego CA	\$118,000,000	\$118,000,000	\$64,422,899	3Q14	September-16	\$1,894,364
33 Tehama	San Francisco, CA	\$106,251,501	\$154,801,246	\$151,417,265	3Q14	September-16	\$4,452,445
The Parker	Portland, OR	\$66,200,000	\$66,200,000	\$33,160,863	1Q15	September-16	\$975,100
Legacy West Apartments	Plano, TX	\$47,216,576	\$62,419,279	\$51,285,906	1Q15	September-16	\$1,508,069
Village at Park Place	Irvine, CA	\$70,733,481	\$89,020,025	\$80,475,429	2Q15	September-16	\$2,366,391
Wheaton 121	Wheaton, IL	\$92,700,000	\$93,100,000	\$93,100,000	2Q15	September-16	\$2,737,618
Jefferson Marketplace	Washington, DC	\$142,000,000	\$146,000,000	\$75,012,179	4Q15	September-16	\$2,205,743
Retreat at Park Meadows	Littleton, CO	\$126,000,000	\$127,000,000	\$127,000,000	4Q15	September-16	\$3,734,452
North Water	Chicago, IL	\$256,000,000	\$261,000,000	\$261,000,000	1Q16	September-16	\$7,674,740
2270 Broadway	Oakland, CA	\$18,938,467	\$18,940,464	\$18,940,464	1Q16	September-16	\$556,947
Runway at Playa Vista -Apartments	Playa Vista, CA	\$149,460,000	\$149,990,000	\$86,522,500	1Q16	September-16	\$2,544,206
Clayton Lane Apartments	Denver, CO	\$32,048,746	\$33,043,200	\$33,043,200	1Q16	September-16	\$971,640
Biscayne 27	Miami, FL	\$15,676,778	\$16,100,714	\$16,100,714	2Q16	September-16	\$473,444
Flats 8300	Washington DC	\$207,000,000	\$214,000,000	\$110,500,000	2Q16	September-16	\$3,249,267
		<b>\$3,417,243,292</b>	<b>\$3,518,671,047</b>	<b>\$2,677,734,351</b>			<b>\$78,739,133</b>
<b>INDUSTRIAL</b>							
Arjons Industrial Park	San Diego CA	\$39,500,000	\$39,500,000	\$39,500,000	2Q04	September-16	\$1,161,503
Gateway Business Park	Dallas TX	\$13,100,000	\$13,100,000	\$13,100,000	2Q04	September-16	\$385,207
Hayward Industrial	Oakland CA	\$151,700,000	\$149,300,000	\$149,300,000	3Q04-3Q07	September-16	\$4,390,186
Lackman Park	Kansas City MO-KS	\$24,300,000	\$24,700,000	\$24,700,000	2Q04	September-16	\$726,307
Crossroads Industrial	Kansas City MO-KS	\$7,900,000	\$7,900,000	\$7,900,000	1Q06	September-16	\$232,301
Oakesdale Commerce Center	Seattle - Belle - Eve WA	\$49,900,000	\$49,900,000	\$49,900,000	1Q06	September-16	\$1,467,316
South Bay Industrial	Los Angeles, CA	\$45,100,000	\$45,800,000	\$45,800,000	4Q06	September-16	\$1,346,755
Steeplechase 95 International Business Park	Capitol Heights, MD	\$92,700,000	\$92,800,000	\$92,800,000	1Q11	September-16	\$2,728,796
Airport Trade Center Portfolio	Dallas, TX	\$119,900,000	\$120,700,000	\$120,700,000	1Q11	September-16	\$3,549,199
IE Logistics	San Bernardino, CA	\$129,600,000	\$129,900,000	\$129,900,000	3Q11	September-16	\$3,819,727
Railhead Drive Industrial	Dallas, TX	\$62,000,000	\$62,100,000	\$62,100,000	4Q11	September-16	\$1,826,059
Empire Gateway aka Chino South Logistics Center	Chino, CA	\$241,000,000	\$242,000,000	\$242,000,000	4Q12	September-16	\$7,116,042
SFO Logistics Center	San Francisco, CA	\$142,000,000	\$142,000,000	\$142,000,000	4Q13	September-16	\$4,175,529
Miami Industrial Portfolio	Various ,FL	\$91,208,994	\$92,388,194	\$56,701,347	1Q16	September-16	\$1,667,311
OMP Burbank	Los Angeles, CA	\$67,139,802	\$67,483,981	\$67,483,981	2Q16	September-16	\$1,984,375
		<b>\$1,277,048,796</b>	<b>\$1,279,572,175</b>	<b>\$1,243,885,328</b>			<b>\$36,576,613</b>

INVESCO Core Real Estate  
Real Estate Valuation Analysis

Period Ending: September 30, 2016

OFFICE							
55 Cambridge Parkway	Boston MA - NH	\$252,000,000	\$257,000,000	\$257,000,000	4Q06	September-16	\$7,557,119
The Executive Building	Washington, D.C.	\$231,000,000	\$228,000,000	\$228,000,000	2Q08	September-16	\$6,704,370
1111 Pennsylvania Avenue	Washington, D.C.	\$310,000,000	\$313,000,000	\$313,000,000	4Q10	September-16	\$9,203,806
1800 Larimer	Denver, CO	\$314,000,000	\$314,000,000	\$314,000,000	1Q11	September-16	\$9,233,212
Hillview Office	San Jose, CA	\$78,000,000	\$77,300,000	\$77,300,000	3Q12	September-16	\$2,273,017
Williams Tower	Houston, TX	\$585,000,000	\$586,000,000	\$400,122,479	1Q13	September-16	\$11,765,654
Westlake Park Place	Westlake Village, CA	\$111,000,000	\$111,000,000	\$111,000,000	4Q13	September-16	\$3,263,970
101 Second	San Francisco, CA	\$371,000,000	\$373,000,000	\$373,000,000	1Q14	September-16	\$10,968,114
Energy Crossing II	Houston, TX	\$113,000,000	\$108,000,000	\$108,000,000	2Q14	September-16	\$3,175,754
1776 Wilson Blvd.	Arlington, VA	\$95,000,000	\$93,900,000	\$93,900,000	3Q14	September-16	\$2,761,142
631 Howard	San Francisco, CA	\$90,500,000	\$93,600,000	\$93,600,000	3Q14	September-16	\$2,752,320
Barton Oaks	Austin, TX	\$84,500,000	\$86,500,000	\$86,500,000	3Q14	September-16	\$2,543,544
Hercules East and South Campus	Los Angeles, CA	\$149,711,997	\$156,943,473	\$156,943,473	3Q14	September-16	\$4,614,944
The Reserve	Playa Vista, CA	\$352,073,107	\$354,240,239	\$354,240,239	1Q15	September-16	\$10,416,481
Fort Point Portfolio	Boston, MA	\$210,580,355	\$215,519,271	\$126,647,580	2Q15	September-16	\$3,724,089
Legacy West Office	Plano, TX	\$33,962,800	\$46,622,955	\$29,459,005	1Q15	September-16	\$866,246
Summit IV	Aliso Viejo, CA	\$113,000,000	\$120,000,000	\$81,383,501	2Q15	September-16	\$2,393,093
1101 Westlake	Seattle, WA	\$85,300,000	\$85,300,000	\$85,300,000	3Q15	September-16	\$2,508,258
		<b>\$3,579,628,259</b>	<b>\$3,619,925,938</b>	<b>\$3,289,396,277</b>			<b>\$96,725,133</b>
RETAIL							
Broadway at Surf	Chicago IL	\$33,100,000	\$33,100,000	\$33,100,000	2Q04	September-16	\$973,310
Chandler Pavilion	Phoenix - Mesa AZ	\$22,700,000	\$22,500,000	\$22,500,000	2Q04	September-16	\$661,615
Matthews Township	Charlotte - G - RH NC-SC	\$26,000,000	\$26,000,000	\$26,000,000	2Q04	September-16	\$764,533
Windward Commons	Atlanta GA	\$24,800,000	\$0	\$0	2Q04	Sold 3Q16	\$0
Cityline at Tenley	Washington, D.C.	\$58,100,000	\$58,600,000	\$58,600,000	4Q05	September-16	\$1,723,141
Ridgehaven Shopping Center	Minnetonka, MN	\$42,600,000	\$41,500,000	\$41,500,000	4Q05	September-16	\$1,220,313
The Beacon Retail	San Francisco, CA	\$65,000,000	\$65,100,000	\$65,100,000	1Q06	September-16	\$1,914,274
The Beacon Garage (units)	San Francisco, CA	\$35,600,000	\$35,600,000	\$35,600,000	1Q06	September-16	\$1,046,823
The Beacon Office (210 King)	San Francisco, CA	\$23,000,000	\$22,400,000	\$22,400,000	1Q15	September-16	\$658,675
Hawthorne Plaza	Overland Park, KS	\$54,800,000	\$54,800,000	\$54,800,000	4Q07	September-16	\$1,611,401
The Loop	Boston MA - NH	\$96,400,000	\$96,900,000	\$96,900,000	1Q08	September-16	\$2,849,357
Westbank Market	Austin, TX	\$60,300,000	\$59,600,000	\$59,600,000	3Q10	September-16	\$1,752,546
910 Lincoln Road	Miami, FL	\$36,600,000	\$37,100,000	\$37,100,000	4Q10	September-16	\$1,090,930
Lake Pointe Village	Houston, TX	\$76,350,000	\$76,850,000	\$76,850,000	4Q11	September-16	\$2,259,784
Safeway Kapahulu	Hawaii	\$85,700,000	\$86,200,000	\$49,797,625	4Q11	September-16	\$1,464,306
Safeway Burlingame	San Francisco, CA	\$56,600,000	\$56,700,000	\$33,792,391	4Q11	September-16	\$993,670
Shamrock Plaza	Oakland, CA	\$38,100,000	\$38,600,000	\$22,256,549	4Q11	September-16	\$654,457
Pavilions Marketplace	West Hollywood, CA	\$62,200,000	\$62,400,000	\$37,565,865	1Q12	September-16	\$1,104,629
130 Prince	New York, NY	\$219,000,000	\$203,700,000	\$203,700,000	2Q12	September-16	\$5,989,825
Safeway Pleasanton	Pleasanton, CA	\$81,200,000	\$81,800,000	\$81,800,000	4Q12	September-16	\$2,405,340
Liberty Wharf	Boston, MA	\$89,700,000	\$90,000,000	\$56,304,262	4Q12	September-16	\$1,655,634
Shops at Legacy	Plano, TX	\$109,710,916	\$109,710,916	\$109,710,916	3Q13	September-16	\$3,226,064
Pasadena Commons	Pasadena, CA	\$51,800,000	\$52,900,000	\$52,900,000	4Q14	September-16	\$1,555,532
Rush Street Retail	Chicago, IL	\$15,500,000	\$15,600,000	\$15,600,000	4Q14	September-16	\$458,720
Legacy West Retail	Plano, TX	\$124,005,640	\$135,408,223	\$117,316,492	1Q15	September-16	\$3,449,707
Legacy West Land	Plano, TX	\$8,469,173	\$8,535,453	\$8,535,453	2Q16	September-16	\$250,986
131-137 Spring Street	New York, NY	\$230,887,714	\$230,879,027	\$118,235,626	3Q15	September-16	\$3,476,734
Runway at Playa Vista - Retail	Playa Vista, CA	\$118,720,000	\$117,130,000	\$54,722,500	1Q16	September-16	\$1,609,122
139 Spring	New York, NY	\$116,017,200	\$117,008,800	\$117,008,800	1Q16	September-16	\$3,440,659
Clayton Lane	Denver, CO	\$142,504,211	\$143,003,528	\$95,906,360	1Q16	September-16	\$2,820,139
4th & Colorado	Santa Monica, CA	\$12,640,000	\$12,720,000	\$12,720,000	1Q16	September-16	\$374,033
Shops at Crystals	Las Vegas, NV	\$271,980,000	\$287,500,000	\$148,970,038	2Q16	September-16	\$4,380,484
		<b>\$2,490,084,854</b>	<b>\$2,479,845,947</b>	<b>\$1,966,892,877</b>			<b>\$57,836,745</b>
<b>Portfolio Total</b>		<b>\$10,764,005,201</b>	<b>\$10,898,015,107</b>	<b>\$9,177,908,833</b>			<b>\$269,877,624</b>





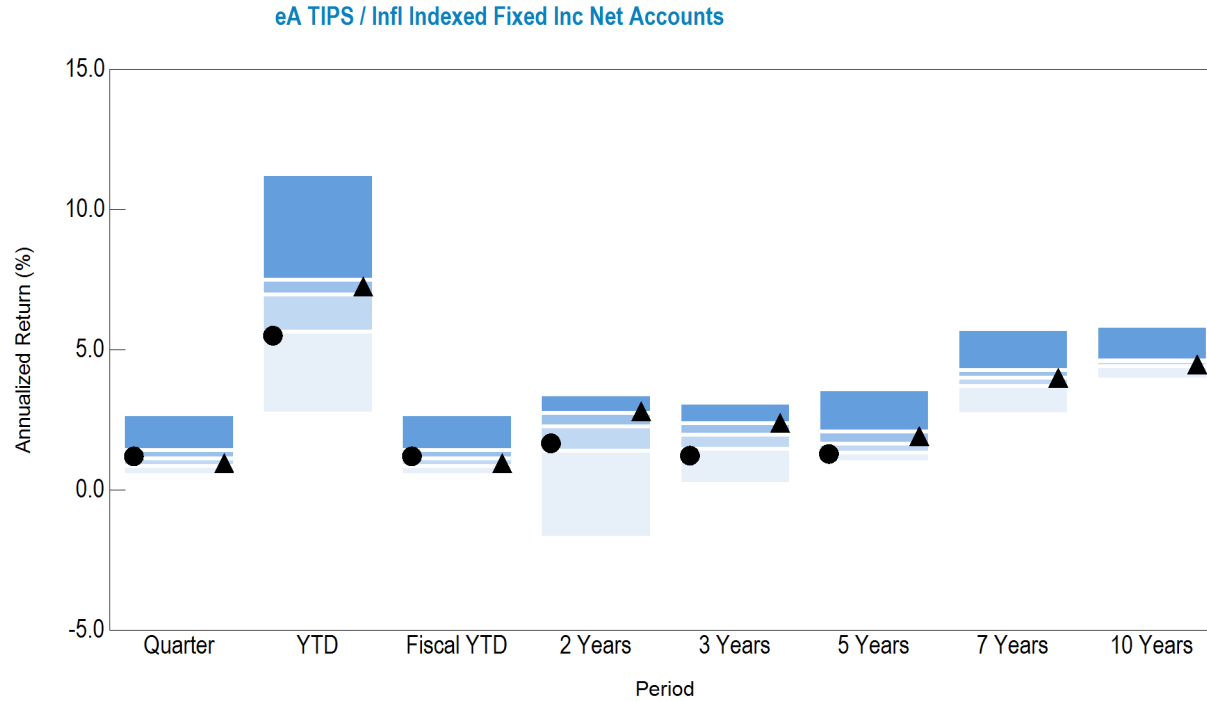
INVESCO US Val IV  
Real Estate Valuation Analysis

Period Ending: September 30, 2016

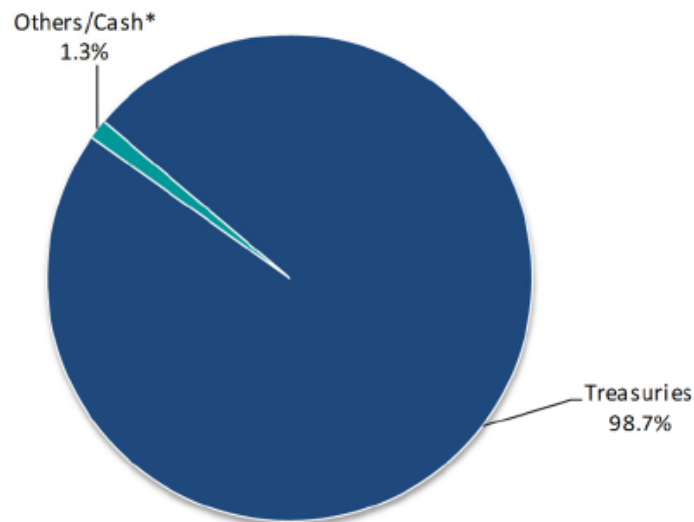
Property Name	Region Classification	Geographic Classification	MSA	Prior Quarter Carry Value	Current Quarter Carry Value	Net Market Value	Date Added to Fund	Last Valuation Date
<b>APARTMENTS</b>								
Brookwood	West	Southeast	Atlanta, GA	\$53,711,062	\$62,580,557	\$21,542,131	3Q14	September-16
Broadstone Harbor Beach	East	Southeast	Ft. Lauderdale, FL	\$65,349,263	\$75,441,690	\$37,077,878	1Q15	September-16
Downtown East	MidWest	West North Central	Minneapolis, MN	\$51,940,118	\$72,000,000	\$32,630,400	2Q15	September-16
Wyndham Park	West	Pacific	Portland, OR	\$81,000,000	\$88,000,000	\$46,575,759	2Q15	September-16
Legacy West Mid-Rise	MidWest	Southwest	Dallas, TX	\$7,858,777	\$8,210,036	\$8,219,939	2Q16	September-16
				<b>\$259,859,221</b>	<b>\$306,232,284</b>	<b>\$146,046,108</b>		
<b>INDUSTRIAL</b>								
<b>OFFICE</b>								
55 Hawthorne	East	Pacific	San Francisco, CA	\$126,100,000	\$119,000,000	\$54,658,806	3Q14	September-16
Silicon Valley Towers	East	Pacific	San Jose, CA	\$87,000,000	\$98,000,000	\$51,551,120	2Q15	September-16
Post 3rd	West	Pacific	Los Angeles, CA	\$78,528,274	\$82,246,503	\$32,719,029	1Q16	September-16
LAM Campus	West	Pacific	San Jose, CA	\$82,000,000	\$82,204,986	\$82,081,500	2Q16	September-16
Fashion Island	West	Pacific	San Mateo, CA	\$0	\$140,669,073	\$55,284,518	3Q16	September-16
				<b>\$373,628,274</b>	<b>\$522,120,562</b>	<b>\$276,294,972</b>		
<b>RETAIL</b>								
Ledgewood Mall	East	Northeast	Roxbury, NJ	\$30,000,000	\$32,000,000	\$16,660,704	3Q15	September-16
Paramus Retail Portfolio	East	Northeast	Paramus, NJ	\$58,800,000	\$68,500,000	\$31,913,154	4Q15	September-16
				<b>\$88,800,000</b>	<b>\$100,500,000</b>	<b>\$48,573,858</b>		
<b>Portfolio Total</b>				<b>\$722,287,495</b>	<b>\$928,852,846</b>	<b>\$470,914,938</b>		

TIPS / Inflation Indexed Fixed Income  
Peer Universe Comparison

Period Ending: September 30, 2016



	Return (Rank)							
	Quarter	YTD	Fiscal YTD	2 Years	3 Years	5 Years	7 Years	10 Years
5th Percentile	2.7	11.3	2.7	3.4	3.1	3.6	5.7	5.8
25th Percentile	1.4	7.5	1.4	2.8	2.4	2.1	4.3	4.6
Median	1.1	7.0	1.1	2.3	2.0	1.7	4.0	4.6
75th Percentile	0.9	5.7	0.9	1.4	1.5	1.4	3.7	4.4
95th Percentile	0.5	2.7	0.5	-1.7	0.2	1.0	2.7	4.0
# of Portfolios	18	18	18	16	16	14	8	5
● Brown Brothers Harriman	1.2 (48)	5.5 (84)	1.2 (48)	1.7 (71)	1.2 (83)	1.3 (85)	-- (--)	-- (--)
▲ Barclays US TIPS	1.0 (63)	7.3 (41)	1.0 (63)	2.8 (20)	2.4 (26)	1.9 (34)	4.0 (53)	4.5 (69)



Sector	Account Weight	Barclays TIPS	
		Index	Difference
Treasuries	98.7%	100.0%	-1.3%
Agencies	0.0%	0.0%	0.0%
Corporates	0.0%	0.0%	0.0%
Utilities	0.0%	0.0%	0.0%
Foreign	0.0%	0.0%	0.0%
MBS	0.0%	0.0%	0.0%
CMO	0.0%	0.0%	0.0%
ABS	0.0%	0.0%	0.0%
Municipals	0.0%	0.0%	0.0%
Others/Cash*	1.3%	0.0%	1.3%
<b>TOTAL</b>	<b>100.0%</b>	<b>100.0%</b>	<b>0.0%</b>

\* May include Derivatives, Futures, Swaps, Credit Default Swaps, Total Return Swaps or Currency Contracts.

Portfolio Characteristics		
		Portfolio
Total Number of Securities		12
Total Market Value	\$	70,921,074
Current Coupon		0.80
Yield to Maturity		-0.16
Average Life		
Duration		4.70
Quality		GOV

Barclays TIPS	
Total Number of Securities	37
Total Market Value	N/A
Current Coupon	0.84
Yield to Maturity	-0.13
Average Life	
Duration	6.59
Quality	AAA

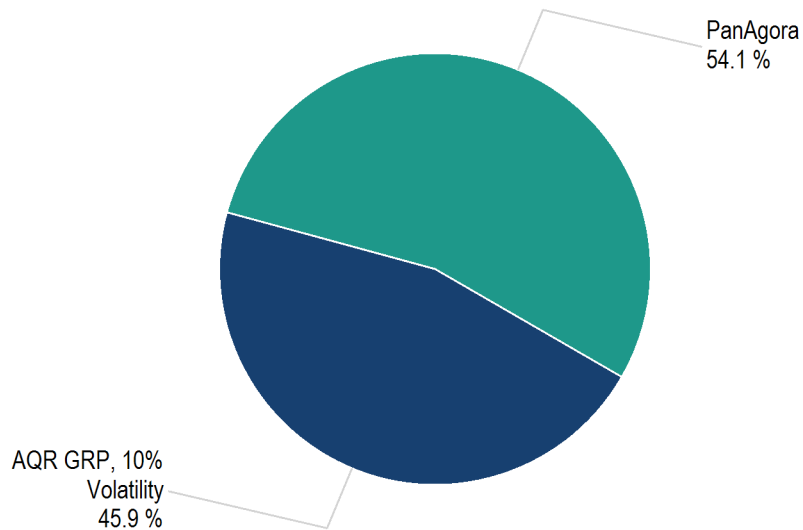
Yield to Maturity	
Range	% Held
0.0 - 5.0	100.0
5.0 - 7.0	n/a
7.0 - 9.0	n/a
9.0 - 11.0	n/a
11.0 - 13.0	n/a
13.0+	n/a
Unclassified	n/a

Average Life	
Range	% Held
0.0 - 3.0	15.5
3.0 - 5.0	16.5
5.0 - 10.0	44.8
10.0- 15.0	12.1
15.0+	11.0
Unclassified	0.0

Duration	
Range	% Held
0.0 - 3.0	15.5
3.0 - 5.0	16.5
5.0 - 10.0	44.8
10.0- 15.0	12.1
15.0+	11.0
Unclassified	0.0

Quality	
Range	% Held
Govt (10)	98.8
Aaa (10)	0.0
Aa (9)	0.0
A (8)	0.0
Baa (7)	0.0
Below Baa (6-1)	0.0
Other	1.2

Coupon	
Range	% Held
0.0 - 5.0	100.0
5.0 - 7.0	0.0
7.0 - 9.0	0.0
9.0 - 11.0	0.0
11.0 - 13.0	0.0
13.0+	0.0
Unclassified	0.0



	Actual \$	Actual %	Manager Contribution to Excess Return %
AQR GRP, 10% Volatility	\$131,507,185	45.9%	-0.3%
PanAgora	\$155,038,456	54.1%	-0.3%
Actual vs. Policy Weight Difference			0.0%
<b>Total</b>	<b>\$286,545,641</b>	<b>100.0%</b>	<b>-0.6%</b>

**Statistics Summary**

**3 Years**

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Risk Parity	7.3%	8.6%	0.8	-0.1	6.4%
60/40 Russell 3000/Barclays Aggregate	8.0%	6.6%	1.2	--	0.0%
AQR GRP, 10% Volatility	4.0%	8.7%	0.4	-0.6	6.5%
60/40 Russell 3000/Barclays Aggregate	8.0%	6.6%	1.2	--	0.0%
PanAgora	--	--	--	--	--
60/40 Russell 3000/Barclays Aggregate	8.0%	6.6%	1.2	--	0.0%

**Statistics Summary**

**5 Years**

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Risk Parity	7.4%	8.8%	0.8	-0.5	6.7%
60/40 Russell 3000/Barclays Aggregate	11.1%	6.8%	1.6	--	0.0%
AQR GRP, 10% Volatility	5.4%	8.9%	0.6	-0.8	6.8%
60/40 Russell 3000/Barclays Aggregate	11.1%	6.8%	1.6	--	0.0%
PanAgora	--	--	--	--	--
60/40 Russell 3000/Barclays Aggregate	11.1%	6.8%	1.6	--	0.0%

Total Fund  
Performance Summary (Gross of Fees)

Period Ending: September 30, 2016

	3 Mo (%)	YTD (%)	Fiscal YTD (%)	2 Yrs (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
<b>Total Fund</b>	<b>3.8</b>	<b>7.6</b>	<b>3.8</b>	<b>5.2</b>	<b>6.8</b>	<b>10.3</b>	<b>5.2</b>
<i>Policy Index</i>	3.8	7.7	3.8	4.6	6.4	10.2	5.9
<i>Allocation Index</i>	3.5	7.5	3.5	4.5	6.3	--	--
<b>Total Fund ex Overlay</b>	<b>3.9</b>	<b>7.3</b>	<b>3.9</b>	<b>4.9</b>	<b>6.7</b>	<b>10.2</b>	<b>5.2</b>
<i>Policy Index</i>	3.8	7.7	3.8	4.6	6.4	10.2	5.9
<i>Allocation Index</i>	3.5	7.5	3.5	4.5	6.3	--	--
<b>Public Equity</b>	<b>5.1</b>	<b>7.2</b>	<b>5.1</b>	<b>4.5</b>	<b>6.9</b>	<b>13.1</b>	<b>5.0</b>
<i>Blended Public Equity Index</i>	5.7	7.6	5.7	3.8	6.4	12.8	5.6
<b>US Equity</b>	<b>4.4</b>	<b>7.1</b>	<b>4.4</b>	<b>6.9</b>	<b>9.4</b>	<b>16.1</b>	<b>6.4</b>
<i>Blended US Equity Index</i>	4.7	8.4	4.7	7.0	9.9	16.3	7.4
<i>Russell 3000</i>	4.4	8.2	4.4	7.0	10.4	16.4	7.4
<b>Large Cap Equity</b>	<b>4.2</b>	<b>7.2</b>	<b>4.2</b>	<b>7.5</b>	<b>10.6</b>	<b>16.3</b>	<b>6.6</b>
<i>Russell 1000</i>	4.0	7.9	4.0	6.9	10.8	16.4	7.4
Barrow Hanley	5.0	5.1	5.0	5.0	8.2	16.2	--
<i>Russell 1000 Value</i>	3.5	10.0	3.5	5.4	9.7	16.2	5.9
BlackRock S&P 500 Index	3.9	7.9	3.9	7.2	11.2	--	--
<i>S&amp;P 500</i>	3.9	7.8	3.9	7.1	11.2	16.4	7.2
Brown Advisory	3.7	2.4	3.7	7.4	8.5	--	--
<i>Russell 1000 Growth</i>	4.6	6.0	4.6	8.3	11.8	16.6	8.8
DE Shaw	5.3	10.6	5.3	9.6	12.4	18.6	--
<i>Russell 1000</i>	4.0	7.9	4.0	6.9	10.8	16.4	7.4
<b>Small Cap Equity</b>	<b>6.1</b>	<b>6.7</b>	<b>6.1</b>	<b>4.3</b>	<b>4.3</b>	<b>15.0</b>	<b>5.5</b>
<i>Russell 2000</i>	9.0	11.5	9.0	8.1	6.7	15.8	7.1
QMA US Small Cap	--	--	--	--	--	--	--
<i>Russell 2000</i>	9.0	11.5	9.0	8.1	6.7	15.8	7.1
<b>International Equity</b>	<b>6.3</b>	<b>7.3</b>	<b>6.3</b>	<b>0.7</b>	<b>2.4</b>	<b>7.2</b>	<b>2.1</b>
<i>MSCI ACWI ex US IMI</i>	7.1	6.5	7.1	-0.9	1.1	6.8	2.8
<i>MSCI EAFE Gross</i>	6.5	2.2	6.5	-0.9	0.9	7.9	2.3

Total Fund  
Performance Summary (Gross of Fees)

Period Ending: September 30, 2016

	3 Mo (%)	YTD (%)	Fiscal YTD (%)	2 Yrs (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
<b>Developed Markets</b>	<b>6.4</b>	<b>6.4</b>	<b>6.4</b>	<b>1.3</b>	<b>2.7</b>	<b>7.8</b>	<b>2.4</b>
MSCI ACWI ex USA Gross	7.0	6.3	7.0	-1.6	0.6	6.5	2.6
Baillie Gifford	8.5	8.7	8.5	4.8	4.3	--	--
MSCI ACWI ex US	7.0	6.3	7.0	-1.6	0.9	--	--
MSCI ACWI ex US Growth	6.1	6.5	6.1	1.6	2.8	--	--
BlackRock EAFE Index	6.5	2.1	6.5	-1.0	--	--	--
MSCI EAFE	6.4	1.7	6.4	-1.4	0.5	7.4	1.8
MSCI EAFE Gross	6.5	2.2	6.5	-0.9	0.9	7.9	2.3
FIAM Equity	7.0	8.0	7.0	5.0	4.5	--	--
MSCI ACWI ex US Small Cap Gross	8.0	8.0	8.0	3.4	3.9	9.0	5.0
Mondrian	4.0	6.3	4.0	-1.7	1.6	6.2	2.6
MSCI ACWI ex USA Value Gross	7.9	6.0	7.9	-4.8	-1.4	5.2	1.7
MSCI ACWI ex USA Gross	7.0	6.3	7.0	-1.6	0.6	6.5	2.6
<b>Emerging Markets</b>	<b>5.4</b>	<b>16.4</b>	<b>5.4</b>	<b>-4.8</b>	<b>-0.6</b>	<b>--</b>	<b>--</b>
MSCI Emerging Markets Gross	9.2	16.4	9.2	-2.6	-0.2	3.4	4.3
Parametric Core	5.4	16.4	5.4	--	--	--	--
MSCI Emerging Markets Gross	9.2	16.4	9.2	-2.6	-0.2	3.4	4.3
<b>Fixed Income</b>	<b>2.5</b>	<b>7.5</b>	<b>2.5</b>	<b>3.4</b>	<b>4.2</b>	<b>5.3</b>	<b>5.5</b>
Blended Fixed Income Index	1.5	8.1	1.5	4.2	3.9	3.2	4.9
<b>US Fixed Income</b>	<b>3.0</b>	<b>8.7</b>	<b>3.0</b>	<b>4.5</b>	<b>4.9</b>	<b>5.3</b>	<b>5.6</b>
Blended US Fixed Index	1.6	7.7	1.6	4.4	4.2	3.4	5.1
<b>Core Fixed</b>	<b>1.7</b>	<b>6.6</b>	<b>1.7</b>	<b>4.2</b>	<b>4.6</b>	<b>4.3</b>	<b>5.1</b>
Barclays Aggregate	0.5	5.8	0.5	4.1	4.0	3.1	4.8
FIAM Bond	1.3	7.5	1.3	4.7	4.7	4.1	5.4
Western TRU	2.7	4.7	2.7	--	--	--	--
3-Month Libor Total Return USD	0.2	0.5	0.2	0.4	0.4	0.4	1.3
Barclays Aggregate	0.5	5.8	0.5	4.1	4.0	3.1	4.8



Total Fund  
Performance Summary (Gross of Fees)

Period Ending: September 30, 2016

	3 Mo (%)	YTD (%)	Fiscal YTD (%)	2 Yrs (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
<b>Opportunistic Credit</b>	<b>5.9</b>	<b>12.9</b>	<b>5.9</b>	<b>5.4</b>	<b>7.1</b>	<b>11.3</b>	<b>--</b>
<i>Barclays BA Intermediate HY</i>	4.0	11.1	4.0	5.5	5.3	5.2	--
Angelo Gordon Opportunistic	5.4	5.9	5.4	3.7	--	--	--
Angelo Gordon STAR	5.2	6.0	5.2	7.4	11.0	--	--
<i>Barclays Aggregate</i>	0.5	5.8	0.5	4.1	4.0	3.1	4.8
Beach Point Select	5.5	12.9	5.5	--	--	--	--
<i>Barclays BA Intermediate HY</i>	4.0	11.1	4.0	5.5	5.3	5.2	--
Brigade Capital	7.1	20.1	7.1	2.6	3.8	7.1	--
<i>Barclays BA Intermediate HY</i>	4.0	11.1	4.0	5.5	5.3	5.2	--
50% <i>Barclays HY/ 50% Bank Loan</i>	4.3	11.2	4.3	3.8	4.5	6.9	--
TCP Direct Lending VIII	--	--	--	--	--	--	--
<i>Barclays BA Intermediate HY</i>	4.0	11.1	4.0	5.5	5.3	5.2	--
<b>Global Fixed Income</b>	<b>-0.1</b>	<b>1.1</b>	<b>-0.1</b>	<b>-2.5</b>	<b>0.3</b>	<b>4.6</b>	<b>--</b>
<i>Barclays Multi-verse</i>	1.0	10.2	1.0	2.6	2.2	2.0	4.4
Franklin Templeton	-0.1	1.1	-0.1	-2.5	0.3	4.6	--
<i>Barclays Multi-verse</i>	1.0	10.2	1.0	2.6	2.2	2.0	4.4
<b>Risk Parity</b>	<b>2.2</b>	<b>16.5</b>	<b>2.2</b>	<b>4.9</b>	<b>7.3</b>	<b>7.6</b>	<b>--</b>
60/40 Russell 3000/ <i>Barclays Aggregate</i>	2.8	7.4	2.8	6.0	8.0	11.1	6.7
AQR GRP, 10% Volatility	2.2	13.2	2.2	0.4	4.1	5.6	--
PanAgora	2.2	19.5	2.2	9.3	--	--	--
60/40 Russell 3000/ <i>Barclays Aggregate</i>	2.8	7.4	2.8	6.0	8.0	11.1	6.7
60/40 MSCI World/ <i>Barclays Global Aggregate</i>	3.1	6.1	3.1	3.8	5.7	8.8	--
<b>Alternatives</b>	<b>6.2</b>	<b>5.3</b>	<b>6.2</b>	<b>6.6</b>	<b>7.1</b>	<b>6.8</b>	<b>--</b>
<i>Alternatives Allocation Index</i>	3.5	7.0	3.5	2.2	4.1	6.4	--
<i>Blended Alternatives Index</i>	3.7	7.2	3.7	2.9	5.4	9.4	--
<b>Private Equity</b>	<b>10.5</b>	<b>9.2</b>	<b>10.5</b>	<b>18.1</b>	<b>19.0</b>	<b>13.2</b>	<b>--</b>
Russell 3000 +3%	5.5	10.3	5.5	10.0	13.4	19.4	10.4

Total Fund  
Performance Summary (Gross of Fees)

Period Ending: September 30, 2016

	3 Mo (%)	YTD (%)	Fiscal YTD (%)	2 Yrs (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
<b>Hedge Fund/Absolute Return</b>	<b>1.5</b>	<b>-1.3</b>	<b>1.5</b>	<b>7.3</b>	<b>7.7</b>	<b>6.6</b>	<b>--</b>
<i>Libor 1 month +4%</i>	1.1	3.3	1.1	4.3	4.2	4.2	--
<b>AQR DELTA XN</b>	<b>1.7</b>	<b>-0.8</b>	<b>1.7</b>	<b>7.9</b>	<b>8.1</b>	<b>6.8</b>	<b>--</b>
<i>Libor 1 month +4%</i>	1.1	3.3	1.1	4.3	4.2	4.2	--
<b>Standard Life GARS</b>	<b>0.4</b>	<b>-3.7</b>	<b>0.4</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<i>Libor 1 month +4%</i>	1.1	3.3	1.1	4.3	4.2	4.2	--
<b>Inflation Pool</b>	<b>1.4</b>	<b>--</b>	<b>1.4</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<i>Blended Inflation Pool Index</i>	0.6	--	0.6	--	--	--	--
<b>Real Estate</b>	<b>1.8</b>	<b>6.9</b>	<b>1.8</b>	<b>12.9</b>	<b>12.7</b>	<b>12.1</b>	<b>5.9</b>
<i>NCREIF ODCE</i>	2.1	6.5	2.1	12.5	12.4	12.4	6.5
<b>Invesco</b>	<b>1.7</b>	<b>6.9</b>	<b>1.7</b>	<b>12.7</b>	<b>12.5</b>	<b>12.0</b>	<b>5.9</b>
<i>NCREIF ODCE</i>	2.1	6.5	2.1	12.5	12.4	12.4	6.5
<b>Invesco US Val IV</b>	<b>3.8</b>	<b>6.6</b>	<b>3.8</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<i>NCREIF ODCE</i>	2.1	6.5	2.1	12.5	12.4	12.4	6.5
<i>NCREIF CEVA 1Q Lag - NET</i>	2.2	10.3	2.2	15.5	--	--	--
<b>TIPS</b>	<b>1.2</b>	<b>5.6</b>	<b>1.2</b>	<b>1.8</b>	<b>1.4</b>	<b>1.4</b>	<b>--</b>
<i>Barclays US TIPS</i>	1.0	7.3	1.0	2.8	2.4	1.9	4.5
<b>Brown Brothers Harriman</b>	<b>1.2</b>	<b>5.6</b>	<b>1.2</b>	<b>1.8</b>	<b>1.4</b>	<b>1.4</b>	<b>--</b>
<i>Barclays US TIPS</i>	1.0	7.3	1.0	2.8	2.4	1.9	4.5
<b>Private Real Asset</b>	<b>0.0</b>	<b>44.6</b>	<b>0.0</b>	<b>22.0</b>	<b>--</b>	<b>--</b>	<b>--</b>
<i>CPI +5%</i>	1.4	5.4	1.4	5.4	--	--	--
<b>Cash</b>	<b>0.2</b>	<b>0.6</b>	<b>0.2</b>	<b>1.0</b>	<b>0.8</b>	<b>0.7</b>	<b>1.0</b>
<i>91 Day T-Bills</i>	0.1	0.2	0.1	0.1	0.1	0.1	0.8
<b>General Account</b>	<b>0.2</b>	<b>0.8</b>	<b>0.2</b>	<b>1.5</b>	<b>1.1</b>	<b>0.7</b>	<b>1.4</b>
<b>Treasury &amp; LAIF</b>	<b>0.1</b>	<b>1.1</b>	<b>0.1</b>	<b>1.1</b>	<b>1.0</b>	<b>0.9</b>	<b>1.0</b>
<i>91 Day T-Bills</i>	0.1	0.2	0.1	0.1	0.1	0.1	0.8

## **Angelo, Gordon & Co. – AG STAR Fund**

The STAR Fund will focus on CMBS and non-Agency RMBS priced between 25-75% of par, which AG believes are even today mispriced due to their complex nature and a dearth of natural buyers capable of accurately valuing these assets. In addition, AG will target securities that are well-positioned to benefit from home and commercial property price stabilization and recovery, and/or borrower credit quality improvement. In this regard the STAR Fund will be more aggressive than the PPIP Fund since it will target securities that are more geared to a recovery of the commercial and residential real estate markets. The Fund will utilize a moderate amount of leverage (1x to 1.5x) and is targeting a base-case 15% net IRR with a downside return in the mid/high single digits and an upside projection of 25%+ returns.

## **Angelo, Gordon & Co. – AG Opportunistic Whole Loan Fund**

As bank balance sheets have strengthened since the crisis, Angelo Gordon expects approximately \$40 billion of re-performing loans and non-performing loans will trade hands each year in the near term. By acquiring these loans at a discounted price and replacing original servicers with better-focused special servicers, Angelo Gordon believes it can improve operational efficiency and generate attractive returns. To take advantage of this opportunity, Angelo Gordon established this Opportunistic Whole Loan Fund to make investments primarily in a portfolio of non-performing loans and re-performing, but will also include investments in new residential mortgage loans and excess mortgage servicing rights. Opportunistic investments in commercial mortgage loans and other mortgage related investments may also be included in the Fund's portfolio. Angelo Gordon has been an active participant in the residential and consumer debt market since 2008. The Partnership's investment approach to residential mortgage loans and securities is guided by an analytically based investment process anchored by distressed asset valuation and cash flow modeling. Angelo Gordon's analysis of re-performing and non-performing loans begins with its loan due diligence process. This process will include a review of substantially all of the properties in the pool, as well as a review of the loan files backing the loan pool. In addition, a macro overlay is embedded in the investment process which incorporates general economic trends, along with specific views on interest rates, unemployment, collateral appreciation or depreciation, governmental intervention in creditors' rights and liquidation timelines.

## **AQR Delta**

The AQR DELTA Fund aims to deliver efficient exposure to a well-diversified portfolio of hedge fund strategies, including Convertible Arbitrage, Event Driven, Fixed Income Relative Value, Equity Market Neutral, Long/Short Equity, Dedicated Short Bias, Global Macro, Managed Futures, and Emerging Markets. The Delta Fund's approach is to capture and deliver the "hedge fund risk premiums" that explain much of the returns of each of these strategies by building bottom-up positions in each strategy. AQR's research has demonstrated that many hedge funds use similar strategies to generate returns. These strategies are often well-known, widely understood and share common exposures. AQR's experience and research suggests much of the insight underlying these strategies - as well as a meaningful portion of their returns - can be captured using a dynamic, disciplined investment approach. Just as the equity risk premium can explain a large portion of the returns from equity investing, hedge fund risk premiums can explain the returns from hedge fund investing. Importantly, while compensation for equity risk is dependent on economic growth, hedge fund risk premiums are largely unrelated to economic activity, and thus provide attractive diversification properties.

## **AQR – Risk Parity**

The objective of Global Risk Parity (GRP) is to generate excess returns from a risk diversified portfolio of asset exposures. AQR believes that its approach maximizes the diversification benefit across a broad range of economic environments. For many institutional portfolios, equity risk has historically been the predominant risk and the source of most return expectations since equities offer higher expected returns to compensate for their high risk. Investor preference for and concentration in equities has been driven by their expected return needs, which cannot be satisfied in a well-diversified un-levered portfolio. GRP is a diversified portfolio that can be scaled to similar levels of risk as a portfolio concentrated in equities, but with a higher expected return resulting from diversification across asset class risk. The approach helps do away with the compromise of concentrating in high risk assets to meet high return needs. Consistent with portfolio theory, the GRP strategy is designed to maximize diversification across a broad spectrum of liquid global risk premia to create a portfolio with higher expected risk-adjusted returns. Research shows that risk-adjusted returns across asset classes are similar over the long-term. Since realized risk-adjusted returns across asset classes are similar, AQR expects a portfolio that is diversified equally by risk to perform better. The Global Risk Premium strategy aims to deliver efficient market exposure across four broad asset classes in a risk balanced fashion.

## **Baillie Gifford – ACWI ex US Focus Equities**

ACWI ex US Focus is a fundamental growth strategy. Research is organized primarily by regional teams, with each member of the ACWI ex US Focus Portfolio Construction Group representing a regional team. Four global sector groups also contribute research. Baillie Gifford conducts approximately 2000 company meetings annually both in Edinburgh and onsite. Companies are evaluated on their growth opportunity relative to the average company, their ability to execute on that opportunity, and the degree to which probability of future success is already valued by the market. Baillie Gifford's basic philosophy is that share prices ultimately follow earnings. They believe that the stock market has a recurring tendency to under-appreciate the value of long-term compound growth. The process seeks to add value through use of proprietary fundamental research to identify companies exhibiting some combination of sustained above average growth, and attractive financial characteristics. The portfolio generally holds 80-120 stocks, with country and sector weights +/-6% relative to the index and industry weights +/- 5% relative to the index.

## **Barrow Hanley – Diversified Large Cap Value**

Barrow Hanley takes a bottom up value approach to equity investing. They seek to buy stocks that exhibit all three of the following characteristics: price/earnings and price/book ratios below the market, and dividend yield above the market (with the S&P 500 representing the market). Their view is that a portfolio that emphasizes low price/book and high dividend yield stocks will provide some protection in down markets and participation in improving economic cycles. In addition to their basic valuation criteria, Barrow Hanley is also looking for profitable companies with earnings growth greater than the market. After the quantitative screening process, Barrow Hanley's equity research team conducts qualitative analysis of candidate investments. This involves forecasting ROE 5-years out and treating this forecast as the basis for earnings, book value and dividend yield projections for the same five year period. These projections are used as inputs into a dividend discount model and relative return model. Stocks that appear to be attractively valued according to both of these models comprise the firm's buy list. The portfolio managers construct the portfolio with 70-90 of the buy list names. Securities are weighted approximately equally, with core positions in the range of 1.5%. Sector weightings are limited to 35% (at cost) and industry weightings are limited to 15%. Stocks are generally held for three to four years, resulting in average turnover of 25% - 35%.

## **Beach Point Select Fund**

Beach Point Select Fund is a commingled fund vehicle within the firm's Opportunistic Credit strategy. This fund focuses on off-the-run, complex, and less-liquid securities. It is a best ideas portfolio of distressed debt, special situations, private/direct loans, catalyst-driven high yield bonds and bank loans, and credit-informed equities with a North American and European focus. The Select Fund differs from other funds and accounts in the Opportunistic Credit strategy by pursuing a more concentrated portfolio and emphasizing a higher percentage of less-liquid/private investments. Beach Point invests up and down the entire capital structure and it constructs portfolios with a bottom-up, research-driven approach that also takes into account top-down macro considerations. Its investment process includes idea generation, detailed credit analysis, relative value decision making and investment selection, portfolio construction and on-going monitoring. The ultimate goal of its investment process is to produce a well-diversified investment portfolio with limited downside risk and substantial upside potential.

## **BlackRock – EAFE Index**

The EAFE Index Fund seeks to replicate the return of the MSCI EAFE Index. This index represents the developed equity markets outside of North America: Europe, Austral, Asia and the Far East.

## **BlackRock – S&P 500 Index**

The Equity Index Fund seeks to capture the growth potential of large companies and achieve broad diversification with low costs by fully replicating the Standard & Poor's (S&P) 500 Index. Representing approximately 80% of the total US equity market capitalization, the S&P 500 Index is one of the most widely followed benchmarks of US stock market performance. Introduced in 1977, this fund was the investment management industry's first institutional S&P 500 Index fund.

## **Brigade – Opportunistic Credit**

Opportunistic Credit is a fundamental, bottom-up strategy focused on high yield corporate bonds and bank loans with tactical allocations to structured securities, convertibles and other sectors of the bond markets as they become attractive on a relative value basis. While performing credits represent the majority, Brigade will invest up to 35% of the portfolio in distressed securities and restructuring situations if these types of opportunities are attractive on a risk-adjusted basis and the timing is right with respect to the credit cycle. The portfolio is comprised of mostly North American issuers, but they are not restricted geographically and expect to have a moderate allocation to Europe over time. Although the portfolio is generally long-only, Brigade has the ability to implement a limited amount of tactical macro hedges.

## **Brown Advisory – Large Cap Growth Equity**

Brown Advisory's Large-Cap Growth Equity philosophy is based on the belief that concentrated portfolios of fundamentally strong businesses should generate returns in excess of the portfolio's index and the broad market, with an acceptable level of risk. The success of the philosophy is based on a talented, highly collaborative investment team with a long-term outlook, performing deep investment research on a broad universe of stocks. This culminates in bottom-up company selection that strives to identify drivers of growth in the large capitalization universe. With conviction in strict investment criteria and rigorous due diligence, Brown concentrate its portfolios in its best ideas, creating the potential for above-average returns. The objective is to exceed the returns of the strategy's benchmark, the Russell 1000 Growth Index, over a full market cycle (typically 3-5 years) on a risk-adjusted basis.

## **Brown Brothers Harriman – Inflation Indexed Securities**

BBH manages TIPS using three main types of strategies: Fundamental, Technical and Opportunistic. The Fundamental bucket has two sub-strategies, real yield duration and real yield curve slope vs. nominal yield curve slope. The Technical strategies consist of yield curve roll-down, auction cycle trading, seasonal vs. non-seasonal CPI and security selection/option value analysis. Finally, nominal Treasuries vs. TIPS, sector relative value (i.e., corporate or Agency inflation-linked bonds) and non-Dollar inflation-linked bonds make up the Opportunistic group. Real yield duration is held to +/- 1 year vs. the benchmark and the portfolio has a limited allocation to non-index securities, typically 5-10% with a maximum of 20% (including nominal Treasuries).

## **DE Shaw – DE Shaw US Broad Market Core Alpha Extension Fund**

The D. E. Shaw group believes that there exist some market inefficiencies that may be identified through quantitative analysis, advanced technology, and the insight of practitioners. Identifying these inefficiencies involves a process of hypothesis formulation, testing, and validation. Importantly, to avoid data-mining, the hypothesis formulation precedes the analysis of the historical data. D.E. Shaw's Structured Equity strategies rely largely on quantitative and computational investment techniques developed by the D. E. Shaw over the last 19 years in the course of research conducted for purposes of managing the firm's hedge funds. In addition to its beta one strategies, D.E. Shaw manages substantial assets in its hedge fund strategies. D.E. Shaw's investment process involves a suite of quantitative models, each designed to capitalize on a distinct and uncorrelated set of market inefficiencies. Some of these models are technical in nature and involve price and volume inputs. Other models rely on fundamental data, such as figures gleaned from corporate balance sheets or income statements. Still others, again quantitative, anticipate or react to a particular corporate event or set of events. These models typically operate with forecast horizons of a few weeks to many months. The ability to trade on shorter-term signals distinguishes D.E. Shaw from many of its long only and 130/30 peers. Portfolio construction involves the use of a proprietary optimizer which runs dynamically throughout the trading day. The portfolio is broadly diversified with several hundred long and short positions. Over- and under-weighting of sectors and industries relative to the benchmark will be quite modest, with the intention that most of the alpha be generated by security selection. The US Broad Market Core Alpha Extension Fund is a 130/30 strategy which maintains a beta that is approximately neutral to the Russell 1000 Index.

## **Eaton Vance/Parametric – Structured Emerging Markets Core Equity**

Parametric utilizes a structured, rules-based approach, which they believe is capable of generating enhanced returns with lower volatility compared to both traditional active management and passive capitalization weighted indices. The basic idea is to structure the portfolio with more balanced country weights than the market cap weighted indices, and also to capture a rebalancing premium. This provides more diversification and greater exposure to smaller countries than is provided by the market cap weighted indices. The approach is to divide emerging markets countries into three tiers, and to equally weight the countries within each tier. Tier 1 countries are the largest eight countries that dominate the cap weighted index. Each successive tier is comprised of smaller countries, each of which is given a smaller target weighting in the model portfolio. In aggregate, the eight Tier 1 countries are given a much lower weighting than in the capitalization weighted index, but they nevertheless comprise more than 50% of the portfolio. The Core SEM strategy targets excess return of 3% over a market cycle with 2.5%-4.5% tracking error. It is designed to generate a level of volatility 90%-100% of the MSCI EM index. The strategy invests in 44 countries and will typically hold 700-1,000 securities. Turnover is expected to be in the range of 5%-15%.

## **Franklin Templeton Investments – Global Fixed Income**

Franklin Templeton manages the global bond mandate in an unconstrained fashion using a top-down, fundamental framework. In the short term and on a country-by-country basis there are often inefficiencies in global bond and currency markets, however, over the longer term the market will generally price to fundamentals. Thus, FT focuses on fundamental research to identify long-term opportunities and uses short-term market inefficiencies to build positions in such investments. The investment and portfolio construction process begins with the determination of the Fund's or institutional client's investment objectives, resulting in a set of risk-return parameters and exposure limits within which the portfolio is managed. Next the firm's global economic outlook for the industrialized countries is developed, with a focus on interest rate and exchange rate forecasts. The portfolio's interest rate outlook is a function of global general equilibrium macroeconomic analysis as well as country-specific research. Macroeconomic conditions in the G-3 economies are analyzed first, primarily with respect to how current and projected growth and inflation dynamics are expected to influence monetary policy. This analysis is then extended out to the rest of the industrialized countries (G-13) as well as emerging markets, which results in broad targets for cash, duration, currencies and the developed/emerging market mix. Using the firm's interest rate and exchange rate outlook, probability-weighted horizon returns for bonds of various countries are then calculated. This analysis is used to establish specific country weights and duration targets based on risk-adjusted expected total return measured in the portfolio's base currency. Analysis of emerging markets includes sovereign credit analysis along with greater emphasis on capital flows, inter-market dynamics and trends in the level of risk aversion in the market.

## **INVESCO Realty Advisors – INVESCO Core Equity, LLC**

SamCERA is a founding member of INVESCO's open end Core Equity real estate fund and rolled its separate account properties into the fund. INVESCO Core Equity, LLC (the "Fund") is a perpetual life, open-end vehicle which invests in a diversified portfolio of institutional quality office, retail, industrial and multifamily residential real estate assets. The Fund buys core properties that are located within the United States, typically requiring an investment of \$10 million or more. The portfolio cannot be more than 30% leveraged.

## **INVESCO Realty Advisors – INVESCO US Val IV**

Invesco has provided SamCERA with Core Real Estate exposure since 2004 through the Invesco Core Equity Fund. The Invesco real estate team manages around \$62B in assets with investments and offices around the globe. Invesco Value Fund IV will look to acquire fundamentally sound but broken "core" assets that can be repositioned into institutional-quality, income producing properties. Investments will be limited to direct equity interests in office, multi-family, retail and industrial properties across the US. The Fund is expected to be geographically concentrated in U.S. gateway cities and top 25 Metropolitan Statistical Areas (MSA's). Invesco Value Fund IV will provide a nice compliment to the more conservative Invesco Core Fund and offer the potential of enhanced returns to the SamCERA Real Estate portfolio.

## **Mondrian Investment Partners – International Equity**

Mondrian is a value-oriented, defensive manager whose investment philosophy is based on the principle that investments must be evaluated for their fundamental long-term value. The firm's philosophy involves three stated investment objectives: 1) provide a rate of return meaningfully greater than the client's domestic rate of inflation, 2) structure client portfolios that preserve capital during protracted international market declines, and 3) provide portfolio performance that is less volatile than benchmark indices and other international managers. Mondrian applies typical value screening criteria to a universe of 1,500 stocks, from which 500 are selected for more detailed work. Through fundamental research, and the deliberations of the Investment Committee, the universe is further reduced to a list of 150 stocks. The investment team conducts detailed fundamental analysis on the remaining stocks, a process which includes applying the firm's dividend discount model consistently across all markets and industries. Mondrian also uses a purchasing power parity model to give an accurate currency comparison of the value of the stocks under consideration. The firm will only consider buying stocks in countries with good investor protection practices and relatively simple repatriation procedures. A computer based optimization program is employed in the portfolio construction process. Mondrian's portfolio holds 80-125 issues.

## **Panagora – Diversified Risk Multi Asset Fund**

The Multi Asset team is headed up by Edward Qian, CIO of the group, and the founder of Panagora's risk parity strategy. A staff of approximately thirteen works in this group on research and portfolio construction, with some people spending more time on the former and some more on the latter. Panagora implements risk parity by distinguishing between three categories of assets: equities, nominal fixed income, and inflation protection. Each of these categories corresponds to a respective economic environment: economic growth, economic contraction and inflation. Panagora's risk allocation targets 40% each from equities and nominal fixed income, and 20% from inflation protection. In addition to applying concept of risk parity between asset classes, Panagora also applies it within each asset class. The 40/40/20 allocation to equities/nominal fixed income/inflation protection is a long term strategic allocation. In 2009 Panagora introduced what they refer to as "Dynamic Risk Allocation" or "DRA," which involves tactically tilting the risk allocations away from the neutral targets in order to enhance returns and reduce risk.

## **Pyramis Global Advisors – Broad Market Duration Commingled Pool**

Pyramis' Broad Market Duration (BMD) investment strategy seeks to achieve absolute and risk-adjusted returns in excess of the BC U.S. Aggregate Index, focusing its investments in US Treasuries, agencies, investment grade corporate bonds, mortgage-backed and asset-backed securities. The BMD commingled pool can also hold small, opportunistic positions in out-of-benchmark securities, such as inflation-linked bonds. The investable universe includes all US dollar denominated, investment grade debt securities. The BMD investment approach emphasizes issuer and sector valuation and individual security selection. Through the integration of fundamental and quantitative research and trading, the BMD strategy is implemented in a team environment. Risk management technology is utilized to explicitly quantify benchmark exposures on a daily basis, and Pyramis uses the same analytical framework to assess both index and portfolio risk. Tracking error should range between 40 and 60 basis points per annum over the benchmark, and stringent portfolio construction risk control rules are strictly adhered to.



## **Pyramis Global Advisors – Select International Small Cap**

Pyramis Select International Small Cap is a core strategy. The approach is designed to leverage Pyramis/Fidelity's proprietary resources to add value exclusively via stock selection. To that end the portfolio is constructed to be regionally neutral, with only modest deviations from the benchmark's country and sector weights. The investment process involves three basic stages. The first stage is the security level research conducted by the analysts. The second stage is stock selection from within the pool of names that are highly ranked by the analysts. The third step is portfolio construction and risk management. The essential differentiating feature of this strategy is the breadth of coverage that is made possible by the large staff of analysts. Analysts actively conduct regular fundamental research on, and give a formal rating of 1-5, 1200-1300 international small cap companies. While there is no single firm-wide approach to security research, analysts are expected to establish an upside target for any given stock and assign a formal rating. The decision making structure is quite efficient, with portfolio manager Rob Feldman making all the buy and sell decisions. His role, as he puts it, is to be an intelligent user of the analysts' research. He selects the 1- and 2- rated stocks that he thinks are compelling and additive to his portfolio, and he sells names when they are downgraded by the analysts. There are approximately 200 holdings in the portfolio. Country and sector weights are within 3 percentage points of the benchmark and position sizes are within 2 percentage points of the benchmark. Turnover tends to be in the 60%-80% range.

## **Quantitative Management Associates – QMA Small-Cap Core**

Quantitative Management Associates (QMA) utilizes a bottom-up quantitative framework in order provide a diversified exposure to core U.S. small-cap stocks, while attempting to produce consistent outperformance versus the benchmark with moderate tracking error levels. QMA uses an adaptive, systematic investment process to exploit opportunities created by mispriced securities to consistently add value over long time periods. Bottom-up stock selection drives exposure to key sources of alpha (valuation, growth, and quality). The QMA stock selection model adapts to changes in company growth rates and market environments by putting more emphasis on valuation for slowly growing companies, and more emphasis on future growth projections for companies with higher projected growth rates.

## **Standard Life Global Absolute Return Strategy (GARS)**

The Standard Life Global Absolute Return Strategy (GARS) was initially launched in 2005 to help address Standard Life's own pension plan's deficit problem. GARS' primary investment objective is to deliver a positive absolute return over the medium to long term with lower volatility than equities, irrespective of market conditions. It seeks returns through dynamic allocation to investment opportunities in traditional and advanced asset classes, and also separately exploits the team's security selection expertise. In the search for attractive investment positions, the team follows a rigorous research process. This includes a variety of research techniques, including broad global macro-economic, fundamental analysis, quantitative research and valuation modeling. The GARS investment process is designed to capitalize on an array of research and investment techniques and draws together the team's three-year investment insights. The team then rigorously examines and review position proposals to approve a high conviction, short list of positions that work well together. Having a cash benchmark means that GARS has a potentially unrestricted investment universe and all portfolio holdings are at the Portfolio Manager's discretion. The GARS portfolio also routinely uses a variety of conventional derivatives for investment, liquidity, efficiency and hedging purposes. The GARS strategy has experienced significant growth in its asset under management since it becomes available to external investors in 2006.

### **Tennenbaum Capital Partners - TCP Direct Lending Fund VIII**

TCP Direct Lending Fund VIII is a private investment fund managed by Tennenbaum Capital Partners ("TCP"). The Fund is designed to continue TCP's successful strategy of investing in privately-originated, performing senior secured debt primarily in North America-based companies with target enterprise values between \$100 million and \$1.5 billion. The Fund will include positions in 1st lien, 2nd lien and unitranche debt, with a preference for floating-rate debt, which TCP believes provides better flexibility to adapt to market conditions. TCP's direct lending strategy has generated attractive investment opportunities across market cycles, as evidenced by the Firm's prior direct lending track record. Fund VIII targets an unlevered annual yield of approximately 9-12%, with its return primarily driven by current income.

### **Western Asset Management – Total Return Unconstrained (TRU)**

Western Asset's Total Return Unconstrained strategy (TRU) seeks to provide bond-like risk and return over the long term, but does not have a benchmark. This allows for asset allocation based on value rather than using the construction of a benchmark as baseline positioning. The investment approach is active with very broad latitude on duration (-3 to +8 years) and on asset allocation across all of the eligible sectors in a core plus mandate. The portfolio must have at least 50% of its holdings in investment-grade securities. The flexibility offered by this strategy allows for defensive positioning in rising rate environments and opportunistic deployment of capital when value opportunities arise. It also allows the portfolio managers to emphasize (or deemphasize) either credit or rates when one or the other appears to offer greater (or lesser) value. um non-US exposure.

# Policy Index and Benchmark History

Period Ending: September 30, 2016

Total Plan Policy Index	As of													
	9/1/16	1/1/16	7/1/14	1/1/14	2/1/13	1/1/11	10/1/10	1/1/09	5/1/07	6/1/00	3/1/99	9/1/98	7/1/96	
10 Year Treasury +2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	8.0%	10.0%	10.0%	
60% Russell 3000/40% BC Aggregate (RP)	8.0%	8.0%	8.0%	8.0%	6.0%	6.0%	6.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Barclays Aggregate	10.0%	10.0%	10.0%	9.3%	11.0%	11.0%	12.9%	27.0%	27.0%	29.0%	25.0%	21.0%	21.0%	
Barclays BA Intermediate HY	5.0%	5.0%	5.0%	5.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Barclays BBB	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Barclays Credit BAA	0.0%	0.0%	0.0%	0.0%	3.5%	3.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Barclays Multiverse	3.0%	3.0%	3.0%	3.8%	4.4%	4.4%	4.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Barclays TIPS	2.0%	2.0%	2.0%	2.0%	3.1%	3.3%	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Bloomberg Commodity	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Citigroup non-US WGBI	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.0%	9.0%	9.0%	
CPI + 5% (RA)	2.0%	2.0%	2.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Libor +4% (HF)	5.0%	5.0%	4.0%	4.0%	3.0%	3.0%	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
MSCI ACWI ex-US	0.0%	0.0%	0.0%	0.0%	18.0%	18.0%	18.0%	21.0%	21.0%	15.0%	0.0%	0.0%	0.0%	
MSCI ACWI ex-US IMI	20.0%	20.0%	20.0%	20.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
MSCI EAFE	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	20.0%	20.0%	20.0%	
NCREIF ODCE	7.0%	7.0%	6.0%	6.0%	5.0%	5.0%	5.0%	6.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
NCREIF Property	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.0%	6.0%	0.0%	0.0%	0.0%	
Russell 1000	0.0%	24.0%	24.0%	24.0%	28.0%	28.0%	28.0%	37.0%	37.0%	40.0%	22.0%	20.0%	20.0%	
Russell 1000 Value	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.0%	5.0%	0.0%	
Russell 2000	0.0%	4.0%	6.0%	6.0%	7.0%	7.0%	7.0%	9.0%	9.0%	10.0%	15.0%	15.0%	15.0%	
Russell 3000	28.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Russell 3000 +3% (PE)	7.0%	7.0%	7.0%	7.0%	8.0%	8.0%	8.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
S&P 500	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.0%	
	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	

# Policy Index and Benchmark History

Period Ending: September 30, 2016

Total Equity Benchmark	As of:					
	9/1/16	1/1/16	1/1/14	10/1/10	5/1/07	6/1/00
MSCI ACWI ex-US	0.0%	0.0%	0.0%	34.0%	31.3%	23.1%
MSCI ACWI ex-US IMI	41.7%	41.7%	40.0%	0.0%	0.0%	0.0%
MSCI EAFE	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Russell 1000	0.0%	50.0%	48.0%	52.8%	55.2%	61.5%
Russell 1000 Value	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Russell 2000	0.0%	8.3%	12.0%	13.2%	13.5%	15.4%
Russell 3000	58.3%					
S&P 500	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

US Equity Benchmark	As of:					
	9/1/16	1/1/16	6/1/00	3/1/99	9/1/98	7/1/96
Russell 1000	0%	85.7%	80%	52%	50.0%	50.0%
Russell 1000 Value	0%	0.0%	0%	12%	12.5%	0.0%
Russell 2000	0%	14.3%	20%	36%	37.5%	37.5%
Russell 3000	100%					
S & P 500	0%	0.0%	0%	0%	0.0%	12.5%
	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

International Equity Benchmark	As of:		
	1/1/14	6/1/00	1/1/96
MSCI ACWI ex US	0.0%	100.0%	0.0%
MSCI ACWI ex US IMI	100.0%	0.0%	0.0%
MSCI EAFE	0.0%	0.0%	100.0%
	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

Total Fixed Income Benchmark	As of:					
	4/1/16	7/1/14	1/1/14	2/1/13	1/1/11	10/1/10
Barclays Aggregate	55.5%	50.0%	46.3%	50.0%	50.0%	58.6%
Barclays BA Intermediate HY	27.8%	25.0%	25.0%	0.0%	0.0%	0.0%
Barclays BBB	0.0%	0.0%	0.0%	0.0%	0.0%	7.3%
Barclays Credit BAA	0.0%	0.0%	0.0%	16.0%	15.0%	0.0%
Barclays Multiverse	16.7%	15.0%	18.8%	20.0%	20.0%	20.5%
Barclays TIPS	0.0%	10.0%	10.0%	14.0%	15.0%	13.6%
Citigroup non-US WGBI	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

US Fixed Income Benchmark	As of:					
	4/1/16	7/1/14	1/1/14	2/1/13	1/1/11	10/1/10
Barclays Aggregate	66.7%	58.8%	56.9%	62.5%	62.5%	73.7%
Barclays BA Intermediate HY	33.3%	29.4%	30.8%	0.0%	0.0%	0.0%
Barclays BBB	0.0%	0.0%	0.0%	0.0%	0.0%	9.1%
Barclays Credit BAA	0.0%	0.0%	0.0%	20.0%	18.8%	0.0%
Barclays TIPS	0.0%	11.8%	12.3%	17.5%	18.8%	17.2%
	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

Opportunistic Credit Benchmark	As of:	
	1/1/14	12/1/09
Barclays BA Intermediate HY	100.0%	0.0%
Barclays Credit BAA	0.0%	100.0%
	<b>100.0%</b>	<b>100.0%</b>

Risk Parity Benchmark	As of:
	10/1/10
Barclays Aggregate	40.0%
Russell 3000	60.0%
	<b>100.0%</b>

Alternatives Benchmark	As of:			
	4/1/16	1/1/16	1/1/14	1/1/11
60% Russell 3000/40% BC Aggregate (RP)	0.0%	0.0%	0.0%	30.0%
Bloomberg Commodity	0.0%	17.7%	18.8%	15.0%
CPI + 5% (RA)	0.0%	11.8%	12.5%	0.0%
Libor +4% (HF)	41.7%	29.4%	25.0%	15.0%
Russell 3000 +3% (PE)	58.3%	41.2%	43.8%	40.0%
	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

Private Equity Benchmark	As of:
	10/1/10
Russell 3000 +3%	100.0%
	<b>100.0%</b>

Hedge Fund Benchmark	As of:
	10/1/10
Libor +4%	100.0%
	<b>100.0%</b>

Inflation Pool	As of:
	4/1/16
Barclays TIPS	14.3%
Bloomberg Commodity	21.4%
CPI + 5% (RA)	14.3%
NCREIF ODCE	50.0%
	<b>100.0%</b>

Real Asset Benchmark	As of:
	1/1/14
CPI + 5%	100.0%
	<b>100.0%</b>

Real Estate Benchmark	As of:		
	1/1/09	6/1/00	7/1/96
10 Year Treasury +2%	0.0%	0.0%	100.0%
NCREIF ODCE	100.0%	0.0%	0.0%
NCREIF Property	0.0%	100.0%	0.0%
	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

Baillie Gifford Benchmark	As of:	
	1/1/14	5/1/12
MSCI ACWI ex-US	100.0%	0.0%
MSCI EAFE	0.0%	100.0%
	<b>100.0%</b>	<b>100.0%</b>

Baillie Gifford Secondary Benchmark	As of:	
	1/1/14	5/1/12
MSCI ACWI ex-US Growth	100.0%	0.0%
MSCI EAFE Growth	0.0%	100.0%
	<b>100.0%</b>	<b>100.0%</b>

Brigade Secondary Benchmark	As of:	
	8/1/10	
Barclays High Yield	50.0%	
Credit Suisse Leveraged Loans	50.0%	
	<b>100.0%</b>	

**FEE SCHEDULES**

Baillie Gifford

First \$25 million:	0.60% per annum
Next \$75 million:	0.50% per annum
Next \$300 million:	0.40% per annum
Thereafter:	0.30% per annum

Barrow, Hanley, Mewhinney & Strauss

First \$15 million:	0.75% per annum
Next \$10 million:	0.55% per annum
Next \$75 million:	0.45% per annum
Next \$100 million:	0.35% per annum
Next \$800 million:	0.25% per annum
Thereafter:	0.15% per annum

BlackRock-Russell S&P 500 Fund

First \$250 million:	0.02% per annum
Thereafter:	0.015% per annum

BlackRock-EAFE Equity Index Fund

On All Assets:	0.05% per annum
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Brown Advisory

First \$50 million:	0.47% per annum
Next \$50 million:	0.45% per annum
Next \$200 million:	0.40% per annum
Thereafter:	0.35% per annum

Brown Brothers Harriman

On All Assets:	0.15% per annum
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Clifton Group

First \$50 million:	0.12% per annum
Next \$100 million:	0.10% per annum
Thereafter:	0.05% per annum
Plus monthly reporting fee of \$1500	

Franklin Templeton Investment

First \$50 million:	0.45% per annum
Next \$50 million:	0.35% per annum
Thereafter:	0.30% per annum

Mondrian Investment Partners

Assets Below \$190 million	
First \$20 million:	1.00% per annum
Thereafter:	0.33% per annum
Assets Above \$190 million	
First \$50 million:	1.00% per annum
Next \$150 million:	0.19% per annum
Thereafter:	0.33% per annum

Parametric

On All Assets:	0.35% per annum
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FIAM Bond

First \$50 million:	0.20% per annum
Next \$50 million:	0.175% per annum
Next \$100 million:	0.10% per annum
Thereafter:	0.085% per annum

FIAM Equity

On All Assets:	0.90% per annum
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Western Asset Management

On All Assets:	0.25% per annum
Performance Fee:	20%

QMA

First \$50 million:	0.55% per annum
Thereafter:	0.50% per annum

Name	Primary Benchmark	Rule 1	Rule 2	Rule 3
Barrow Hanley	Russell 1000 Value	R	✓	R
Brown Advisory	Russell 1000 Growth	--	--	--
DE Shaw	Russell 1000	✓	✓	✓
QMA US Small Cap	Russell 2000	--	--	--
Baillie Gifford	MSCI ACWI ex US	--	--	--
FIAM Equity	MSCI ACWI ex US Small Cap Gross	--	--	--
Mondrian	MSCI ACWI ex USA Value Gross	✓	R	✓
Parametric Core	MSCI Emerging Markets Gross	--	--	--
FIAM Bond	Barclays Aggregate	✓	✓	✓
Western TRU	3-Month Libor Total Return USD	--	--	--
Beach Point Select	Barclays BA Intermediate HY	--	--	--
Brigade Capital	Barclays BA Intermediate HY	✓	R	✓
TCP Direct Lending VIII	Barclays BA Intermediate HY	--	--	--
Franklin Templeton	Barclays Multi-verse	✓	✓	✓

Rule 1 - Manager has underperformed the benchmark index for the five year period.

Rule 2 - Manager has underperformed the 50th percentile in the appropriate style universe for the five year period.

Rule 3 - Excess 5 Year Sharpe Ratio vs. Benchmark is positive



Name	Primary Benchmark	Rule 1	Rule 2	Rule 3
Barrow Hanley	Russell 1000 Value	✓	✓	✗
Brown Advisory	Russell 1000 Growth	--	--	--
DE Shaw	Russell 1000	✓	✓	✓
QMA US Small Cap	Russell 2000	--	--	--
Baillie Gifford	MSCI ACWI ex US	--	--	--
FIAM Equity	MSCI ACWI ex US Small Cap Gross	--	--	--
Mondrian	MSCI ACWI ex USA Value Gross	✓	✗	✓
Parametric Core	MSCI Emerging Markets Gross	--	--	--
FIAM Bond	Barclays Aggregate	✓	✓	✓
Western TRU	3-Month Libor Total Return USD	--	--	--
Beach Point Select	Barclays BA Intermediate HY	--	--	--
Brigade Capital	Barclays BA Intermediate HY	✓	✗	✓
TCP Direct Lending VIII	Barclays BA Intermediate HY	--	--	--
Franklin Templeton	Barclays Multi-verse	✓	✓	✓

Rule 1 - Manager has underperformed the benchmark index for the five year period.

Rule 2 - Manager has underperformed the 50th percentile in the appropriate style universe for the five year period.

Rule 3 - Excess 5 Year Sharpe Ratio vs. Benchmark is positive

Manager Performance Comparison (Gross of Fees)

Period Ending: September 30, 2016

	Jul	Aug	Sep	3rd Qtr. 2016	Difference	2nd Qtr. 2016	Difference	1st Qtr. 2016	Difference	4th Qtr. 2015	Difference	3rd Qtr. 2015	Difference
Verus	3.48%	1.59%	-0.16%	4.97%		1.69%		-1.50%		5.41%		-8.68%	
Barrow Hanley	3.49%	1.62%	-0.18%	4.98%	-0.01%	1.69%	0.00%	-1.51%	0.01%	5.40%	0.01%	-8.69%	0.01%
Russell 1000 Value Index	2.90%	0.77%	-0.21%	3.48%		4.58%		1.64%		5.64%		-8.40%	
Verus	3.69%	0.14%	0.02%	3.86%		2.46%		1.36%		7.05%		-6.43%	
BlackRock S&P 500 Fund	3.69%	0.14%	0.02%	3.86%	0.00%	2.46%	-0.00%	1.37%	-0.01%	7.05%	0.00%	-6.43%	0.00%
S&P 500 Index	3.69%	0.14%	0.02%	3.85%		2.46%		1.34%		7.03%		-6.43%	
Verus	4.02%	-0.75%	0.48%	3.74%		-0.04%		-1.26%		7.68%		-4.87%	
BrownAdvisory	4.06%	-0.75%	0.46%	3.75%	-0.01%	-0.05%	0.00%	-1.26%	0.00%	7.68%	0.01%	-4.89%	0.02%
Russell 1000 Growth Index	4.72%	-0.50%	0.37%	4.58%		0.61%		0.75%		7.33%		-5.28%	
Verus	4.47%	0.38%	0.44%	5.32%		4.28%		0.75%		6.11%		-5.87%	
D.E. Shaw	4.47%	0.38%	0.44%	5.33%	-0.01%	4.29%	-0.01%	0.76%	-0.01%	6.10%	0.00%	-5.86%	-0.01%
Russell 1000 Index	3.81%	0.13%	0.08%	4.03%		2.54%		1.18%		6.51%		-6.83%	
Verus	6.76%	-0.45%	2.08%	8.50%		-0.20%		0.42%		7.59%		-11.60%	
Baillie Gifford	6.81%	-0.48%	2.12%	8.55%	-0.05%	-0.21%	0.01%	0.42%	0.00%	7.57%	0.02%	-11.54%	-0.06%
MSCI ACWI ex US	4.97%	0.65%	1.28%	7.00%		-0.40%		-0.26%		3.29%		-12.11%	
MSCI ACWI ex US Growth	4.82%	-0.34%	1.58%	6.11%		0.64%		-0.24%		5.05%		-10.73%	
Verus	5.08%	0.08%	1.26%	6.49%		-1.24%		-2.90%		4.72%		-10.21%	
BlackRock EAFE Equity	5.08%	0.08%	1.26%	6.49%	0.00%	-1.24%	-0.00%	-2.90%	-0.00%	4.72%	0.00%	-10.21%	0.00%
MSCI EAFE (Net)	5.07%	0.07%	1.23%	6.43%		-1.46%		-3.01%		4.71%		-10.24%	
MSCI EAFE (Gross)	5.08%	0.08%	1.27%	6.51%		-1.19%		-2.89%		4.75%		-10.19%	
Verus	4.53%	-0.08%	2.44%	7.00%		-0.16%		1.12%		5.51%		-9.65%	
FIAM Equity	4.53%	-0.08%	2.44%	6.99%	0.01%	-0.15%	-0.01%	1.11%	0.01%	5.51%	0.00%	-9.65%	0.00%
MSCI ACWI -ex US Small Cap Index	5.59%	-0.22%	2.51%	8.00%		-0.72%		0.76%		5.34%		-9.95%	
Verus	2.91%	0.65%	0.39%	3.99%		0.49%		1.70%		2.33%		-10.72%	
Mondrian	2.91%	0.66%	0.40%	4.00%	-0.01%	0.50%	-0.01%	1.70%	-0.00%	2.33%	0.00%	-10.73%	0.01%
MSCI ACWI -ex US Value Index	5.12%	1.68%	0.97%	7.92%		-1.46%		-0.29%		1.50%		-13.49%	
MSCI ACWI -ex US	4.97%	0.65%	1.28%	7.00%		-0.40%		-0.26%		3.29%		-12.11%	

# Manager Performance Comparison (Gross of Fees)

Period Ending: September 30, 2016

	Jul	Aug	Sep	3rd Qtr. 2016	Difference	2nd Qtr. 2016	Difference	1st Qtr. 2016	Difference	4th Qtr. 2015	Difference	3rd Qtr. 2015	Difference
Verus	4.37%	0.35%	0.64%	5.41%		1.40%		8.88%		-0.97%		-11.81%	
Parametric Core	4.39%	0.37%	0.66%	5.47%	-0.06%	1.42%	-0.02%	8.91%	-0.03%	-0.97%	0.00%	-11.81%	0.00%
MSCI EM Market Index	5.09%	2.52%	1.32%	9.15%		0.80%		5.74%		0.72%		-17.78%	
Verus	1.00%	0.18%	0.09%	1.27%		2.77%		3.28%		-0.39%		0.50%	
FIAM Bond	1.00%	0.18%	0.09%	1.27%	-0.00%	2.77%	0.00%	3.28%	0.00%	-0.39%	0.00%	0.50%	0.00%
BC Aggregate Index	0.63%	-0.11%	-0.06%	0.46%		2.21%		3.02%		-0.58%		1.24%	
Verus	1.62%	0.97%	0.06%	2.67%		2.62%		-0.64%		0.63%		-1.01%	
Western TRU	1.62%	0.97%	0.06%	2.67%	0.00%	2.62%	-0.01%	-0.63%	-0.01%	0.63%	0.00%	-1.00%	-0.01%
3-Month Libor Total Return USD Index	0.07%	0.07%	0.07%	0.21%		0.17%		0.13%		0.13%		0.08%	
BC Aggregate Index	0.63%	-0.11%	-0.06%	0.46%		2.21%		3.04%		-0.58%		1.24%	
Verus (Net)				5.38%		0.31%		0.70%		-0.57%		0.34%	
Angelo Gordon Opportunistic				5.38%	0.00%	0.31%	0.00%	0.70%	0.00%		-0.57%		0.34%
BC Aggregate Index				-0.06%		2.21%		0.92%		-0.57%		1.24%	
Verus (Net)				5.17%		2.05%		-2.17%		-0.91%		1.22%	
Angelo Gordon STAR Fund (Net)				5.17%	0.00%	2.05%	0.00%	-2.17%	0.00%		-0.91%		1.22%
BC Aggregate Index				-0.06%		2.21%		0.92%		-0.57%		1.24%	
Verus	2.26%	1.77%	1.38%	5.50%		4.23%		2.67%		-1.35%		-0.41%	
Beach Point Select (Net)	2.17%	1.69%	1.30%	5.25%	0.25%	3.98%	0.26%	2.41%	0.26%	-1.35%	0.00%	-0.66%	0.25%
Barclays BA Intermediate HY	2.27%	1.38%	0.34%	4.04%		3.29%		3.43%		0.01%		-3.00%	
Verus	3.15%	2.65%	1.20%	7.15%		8.52%		3.29%		-6.30%		-5.87%	
Brigade Capital	3.11%	2.62%	1.21%	7.09%	0.06%	8.48%	0.05%	3.29%	0.00%	-6.30%	-0.01%	-5.87%	0.00%
Barclays BA Intermediate HY	2.27%	1.38%	0.34%	4.04%		3.29%		3.43%		0.01%		-3.00%	
50% Barclays HY/ 50% Bank Loan	2.05%	1.44%	0.77%	4.32%		4.19%		2.34%		-2.00%		-3.05%	

Manager Performance Comparison (Gross of Fees)

Period Ending: September 30, 2016

	Jul	Aug	Sep	3rd Qtr. 2016	Difference	2nd Qtr. 2016	Difference	1st Qtr. 2016	Difference	4th Qtr. 2015	Difference	3rd Qtr. 2015	Difference
Verus	-0.62%	1.46%	-0.95%	-0.13%		1.11%		0.12%		2.22%		-6.66%	
Franklin Templeton Investments	-0.62%	1.46%	-0.95%	-0.13%	-0.00%	1.11%	0.00%	0.12%	0.00%	2.22%	0.00%	-6.66%	0.00%
BC Multiverse	0.84%	-0.36%	0.57%	1.05%		3.00%		5.88%		-0.87%		0.49%	
Verus	0.98%	-0.27%	1.52%	2.23%		5.80%		4.65%		-2.87%		-7.67%	
AQR GRP, 10% Volatility (Net)	0.98%	-0.27%	1.52%	2.24%	-0.01%	5.80%	-0.00%	4.65%	0.00%	-2.87%	0.00%	-7.67%	0.00%
60% R3000/ 40% BC Agg	2.63%	0.11%	0.07%	2.82%		2.47%		1.89%		3.54%		-3.89%	
60% MSCI World/ 40% BC GlobalAgg	2.77%	0.03%	0.31%	3.13%		1.62%		1.21%		3.37%		-4.60%	
Verus	2.69%	-0.44%	-0.04%	2.20%		7.99%		8.22%		-0.50%		-3.78%	
PanAgora (Net)	2.69%	-0.44%	-0.04%	2.20%	-0.00%	7.99%	0.00%	8.23%	-0.01%	-0.50%	0.00%	-3.78%	0.00%
60% R3000/ 40% BC Agg	2.63%	0.11%	0.07%	2.82%		2.47%		1.89%		3.54%		-3.89%	
60% MSCI World/ 40% BC GlobalAgg	2.77%	0.03%	0.31%	3.13%		1.62%		1.21%		3.37%		-4.60%	
Verus	0.78%	-0.13%	1.04%	1.69%		-1.39%		-1.06%		2.54%		7.68%	
AQR DELTA XN	0.78%	-0.13%	1.04%	1.70%	-0.01%	-1.39%	-0.00%	-1.07%	0.01%	2.54%	0.00%	7.68%	0.00%
Labor + 4%	0.39%	0.36%	0.39%	1.14%		1.13%		0.99%		1.09%		1.05%	
Verus	0.35%	0.55%	-0.48%	0.42%		-0.85%		-3.24%		0.00%		0.00%	
Standard Life GARS	0.35%	0.55%	-0.48%	0.42%	-0.00%	-0.85%	-0.01%	-3.25%	-0.01%	0.00%	0.00%	0.00%	0.00%
Labor + 4%	0.39%	0.36%	0.39%	1.14%		1.13%		0.99%		0.00%		0.00%	
Verus				1.68%		3.64%		1.47%		2.44%		2.98%	
INVESCO Real Estate				1.68%	0.00%	3.62%	0.02%	1.47%	0.00%	2.50%	-0.06%	2.96%	0.02%
NCREIF NFI ODCE Index				2.07%		2.13%		2.18%		3.34%		3.68%	
Verus				3.82%		2.31%		-0.19%		0.00%		0.00%	
Invesco US Val IV				3.82%	0.00%	2.31%	0.00%	-0.19%	0.00%	0.00%	0.00%	0.00%	0.00%
NCREIF NFI ODCE Index				2.07%		2.13%		2.18%		3.34%		3.68%	
NCREIF CEVA 1Q Lag - NET				2.17%		1.99%		5.84%		2.98%		4.88%	
Verus	0.66%	-0.12%	0.70%	1.24%		0.90%		3.41%		-0.18%		-1.87%	
Brown Brothers Harriman	0.68%	-0.15%	0.69%	1.22%	0.02%	0.91%	-0.02%	3.52%	-0.11%	-0.18%	-0.00%	-1.88%	0.01%
BC U.S Tips	0.87%	-0.45%	0.55%	0.97%		1.71%		4.46%		-0.64%		-1.14%	

**1 MSCI**

**1.1 MSCI US MARKET BREAKPOINTS**

Break Point*	Companies included
Large Cap	1-200
Medium-Large Cap	201-550
Medium Cap	551-750
Medium-Small Cap	751-2500
Small Cap	2501+

\*MSCI only categorizes equities per size into large, mid and small cap. For InvestorForce Report analytics coherence regarding domestic benchmarks the buffer zones of the mid-cap category are used to determine Medium-Large and Medium-Small Cap categories.

As Of	Large Cap	Medium Large Cap	Medium Cap	Medium Small Cap	Small Cap
9/30/2016	15.239	9.375	4.416	2.520	0
6/30/2016	15.358	9.43	4.548	2.591	0
3/31/2016	15.358	9.43	4.548	2.591	0
12/31/2015	16.507	9.968	5.069	2.917	0
9/30/2015	16.507	9.968	5.069	2.917	0
6/30/2015	15.288	9.09	4.506	2.596	0
3/31/2015	15.356	9.083	4.491	2.577	0
12/31/2014	15.356	9.083	4.491	2.577	0

*Number in billion USD*

InvestorForce Report reflects changes in the MSCI breakpoints once MSCI publishes new breakpoints. For months when no new breakpoints are published always the last breakpoints are applied. Changes usually but always happen around re-balancing of the indexes. Some index reviews do not contain changes to the market-cap breakpoints.

1.2 MSCI DEVELOPED AND EMERGING MARKET BREAKPOINTS

In case of MSCI Indexes to define the Size - Segment Indexes for a market, the following free float - adjusted market capitalization Market Coverage Target Ranges are applied to the Market Investable Equity Universe:

Break Point	Companies included
Large Cap Index	70% ±5%
Standard Index*	85% ±5%
Investable Market Index**	99%+1% or -0.5%

\* Standard Index (Large+Mid)

\*\*Investable Market Index (Large+Mid+Small)

MSCI Country Classification can be found here: <https://www.msci.com/market-classification>

For Emerging Markets, the Global Minimum Size Reference is set at *one-half* the corresponding level of full market capitalization used for the Developed Markets for each size-segment.

As Of	Large Cap DM	Large Cap EM	Medium Cap DM	Medium Cap EM	Small Cap
9/30/2016	14.180	7.090	5.076	2.538	0
6/30/2016	14.180	7.090	5.076	2.538	0
3/31/2016	14.077	7.0385	5.046	2.523	0
12/31/2015	14.077	7.0385	5.046	2.5230	0
9/30/2015	14.883	7.4415	5.359	2.6795	0
6/30/2015	14.883	7.4415	5.359	2.6795	0
3/31/2015	13.368	6.684	4.781	2.3905	0
12/31/2014	13.368	6.684	4.781	2.3905	0

Number in billion USD

InvestorForce Report shows changes in the MSCI breakpoints once MSCI publishes a new one. For months when no new breakpoints are published always the last breakpoint is applied. Changes usually happen around re-balancing of the indexes.

## 2 RUSSELL US BREAKPOINTS

The market capitalization breakpoints that appear in the Market Capitalization Chart are defined by the Russell 3000 Index and change for each period end. Russell calculated the total market capitalization of each security for the end of the period, based on the total shares and price, to determine whether it is large enough for inclusion in one or more of the Russell Breakpoints.

Once the market capitalization for each security is determined, each security is then placed in the appropriate market capitalization breakpoint. A market capitalization breakpoint is determined by the break between the companies below.

Break Point	Companies included
Large Cap	50 Largest US Companies
Medium Large Cap	Next largest 150 US Companies
Medium Cap	Next largest 300 US Companies
Medium Small Cap	Next largest 500 US Companies
Small Cap	All US Companies below 1,000 largest

After the breakpoints are determined by the ranges above, new members are assigned on the basis of the breakpoints and existing members are reviewed to determine if they fall within a cumulative 5% market cap range around the new market capitalization breakpoints. If an existing securities market cap falls within this 5%, it will remain in its current index rather than move into a new market capitalization based index.

As Of	Large Cap	Medium Large Cap	Medium Cap	Medium Small Cap	Small Cap
9/30/2016	78.745	23.385	7.394	2.533	0
6/30/2016	77.349	22.250	7.1432	2.444	0
3/31/2016	83.360	22.414	7.435	2.395	0
12/31/2015	90.075	24.308	8.141	2.936	0
9/30/2015	88.944	23.139	7.993	2.946	0
6/30/2015	92.87	25.07	8.797	3.352	0
3/31/2015	93.082	25.494	8.794	3.384	0
12/31/2014	89.92	25.19	8.51	3.29	0
9/30/2014	84.51	24.44	7.97	3.04	0
6/30/2014	80.39	23.62	8.07	3.24	0
3/31/2014	76.77	23.15	7.83	3.06	0

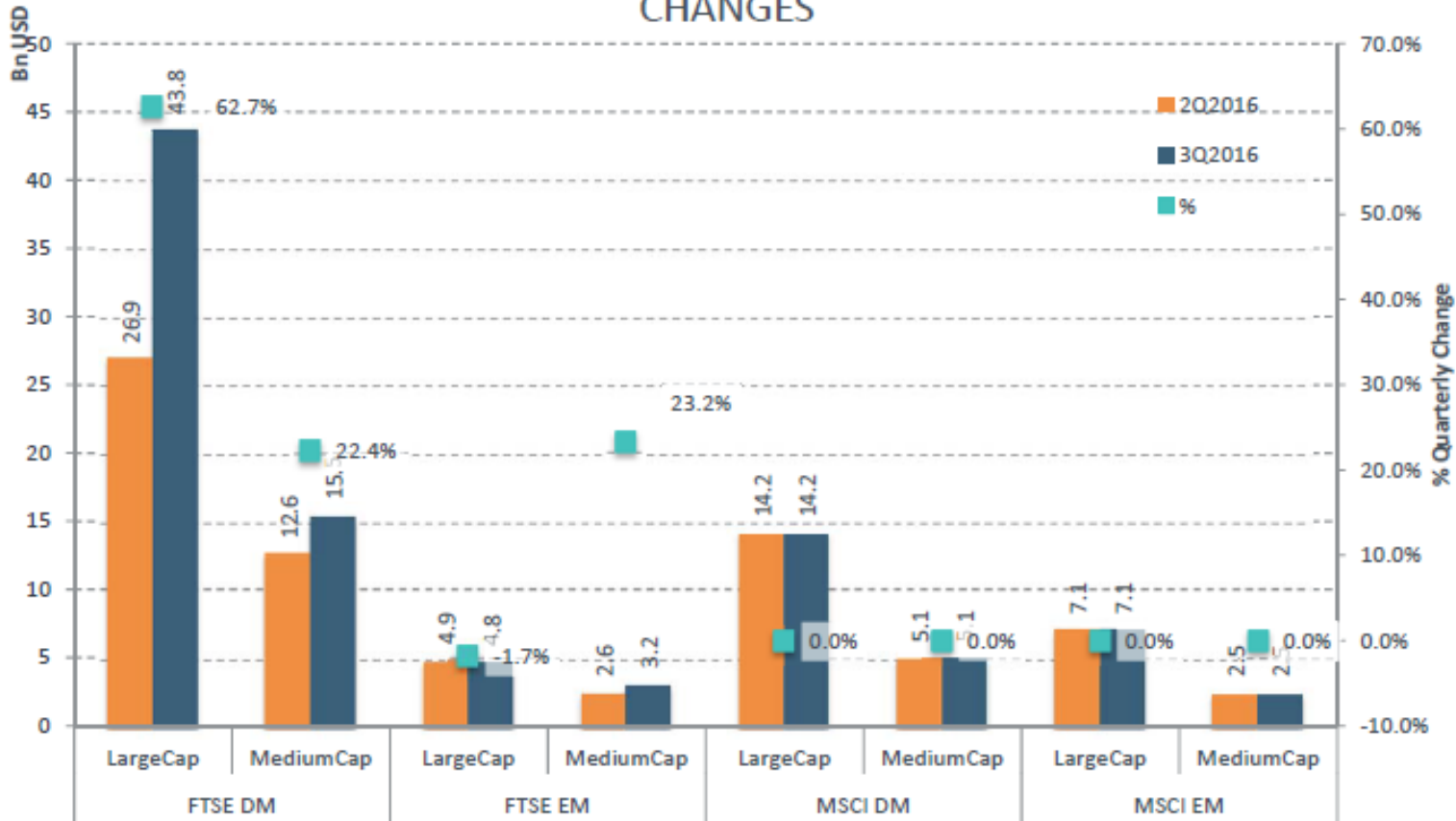
As Of	Large Cap	Medium Large Cap	Medium Cap	Medium Small Cap	Small Cap
12/31/2013	77.11	22.27	7.65	3.03	0
9/30/2013	72.4	19.93	7.15	2.71	0
6/30/2013	68.47	19.36	6.48	2.46	0
3/31/2013	64.31	18.64	6.39	2.39	0
12/31/2012	58.45	16.8	5.75	2.13	0
9/30/2012	57.06	16.48	5.49	2.08	0
6/30/2012	55.65	16.13	5.14	1.99	0
3/31/2012	57.58	16.43	5.55	2.13	0
12/31/2011	51.97	14.66	4.93	1.93	0
9/30/2011	45.35	13.88	4.38	1.66	0
6/30/2011	54.25	15.95	5.66	2.16	0
3/31/2011	52.22	15.69	5.7	2.16	0
12/31/2010	49.54	14.8	5.16	2.04	0
9/30/2010	42.83	13.13	4.64	1.8	0
6/30/2010	39.95	11.58	4.1	1.59	0
3/31/2010	42.43	12.61	4.3	1.68	0

Numbers are billions USD



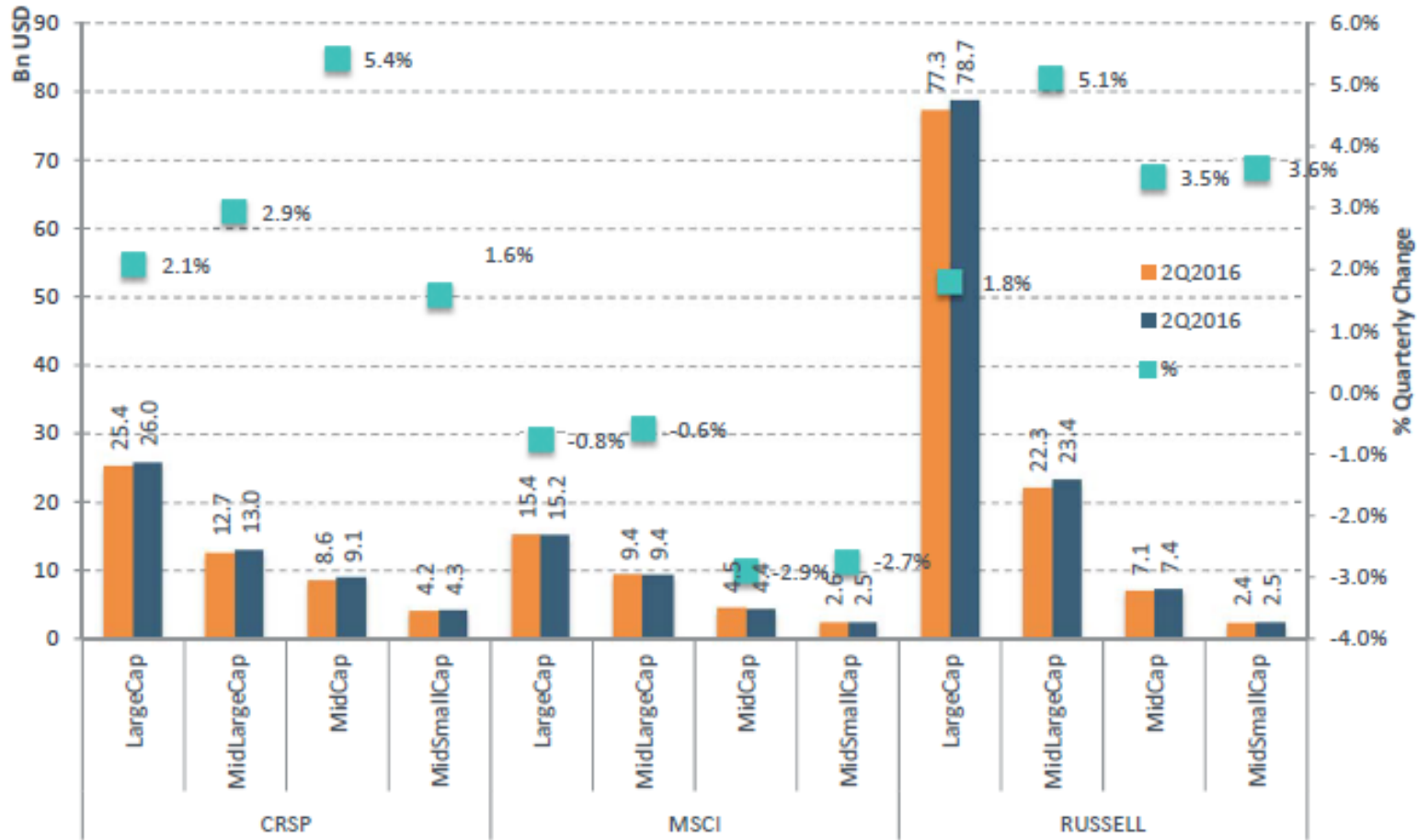
**BREAKPOINT TRENDS**

**3Q2016 DEVELOPED AND EMERGING MARKET BREAKPOINT CHANGES**



MSCI is releasing market capitalization breakpoints less frequently than FTSE, hence the market capitalization breakpoints are longer in effect, showing as no change.

### 3Q2016 US MARKET BREAKPOINT CHANGES



MSCI is releasing market capitalization breakpoints less frequently than others, hence the market capitalization breakpoints are longer in effect. This could result in no change.



**PERSPECTIVES**  
**THAT DRIVE**  
**ENTERPRISE**  
**SUCCESS**

4<sup>TH</sup> QUARTER 2016  
Investment Landscape

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Other assets 38

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Appendix 41

# 3<sup>rd</sup> quarter summary

## THE ECONOMIC CLIMATE

- The U.S. labor market continues to improve but at a slower pace. Real wage growth has risen but not as quickly as other periods of similar labor market tightness. Consumer expenditures remain the primary positive contributor to GDP growth. *p. 8, 9*
- U.S. inflation has risen steadily with Core CPI at 2.3% YoY as of August. Energy and gasoline prices continue to weigh on the Headline CPI figure of 1.1% YoY. *p. 13*
- The presidential election approaches. There has historically been a weak relationship between election outcomes and market performance. This election appears to have unique characteristics and may cause more unpredictable effects. *p. 18*

## MARKET PORTFOLIO IMPACTS

- Central bank discussions indicate we may be nearing fiscal expansion as a next form of policy accommodation. As fiscal policies are typically less analyzed and less understood by investors, markets may be more prone to surprise in this environment. *p. 20*

## THE INVESTMENT CLIMATE

- U.S. corporate earnings are expected to decline by -2.1%, which would be the sixth consecutive quarter of YoY decline. Almost all of this decline is attributable to energy sector weakness. *p. 30*
- Low inflation and low bond yields may help to explain higher than usual equity valuations. However, this does not negate the fact that higher equity valuations historically have materially reduced subsequent returns. *p. 35*

## ASSET ALLOCATION ISSUES

- We continue to remain underweight risk and believe that downside market potential outweighs upside market potential. *p. 29*
- Emerging market earnings per share growth turned positive in 2016, reversing a 5-year downward trend. Valuations remain below average on a relative basis and upside potential seems attractive. Investors may consider moving to an overweight in emerging market equities, though risks should be carefully considered. *p. 33*

We remain underweight to risk

Investors should be watchful of corporate earnings, and U.S. inflation trends

# What drove the market in Q3?

**“FED STANDS PAT, BUT SAYS CASE FOR RATE INCREASE HAS STRENGTHENED”**

## December Rate Hike Expectations

Apr 29th	May 31st	June 30th	July 29th	Aug 31st	Sep 30th
41%	42%	9%	31%	45%	51%

Source: WSJ, September 22<sup>nd</sup> 2016

**“U.S. GOVERNMENT BONDS RALLY AS CENTRAL BANKS CALM INVESTORS”**

## 10-Year Treasury Yield

Aug 26th	Sep 2nd	Sep 9th	Sep 16th	Sep 23rd	Sep 30 <sup>th</sup>
1.63%	1.60%	1.67%	1.69%	1.62%	1.59%

Source: WSJ, September 22<sup>nd</sup> 2016

**“ELECTION UNCERTAINTY WEIGHS ON MARKETS”**

## U.S. Presidential Election Polls

March 31st		June 30th		September 30th	
Trump	Clinton	Trump	Clinton	Trump	Clinton
39.1%	49.7%	39.8%	44.6%	44.4%	47.5%

Source: CNBC, September 27<sup>th</sup> 2016

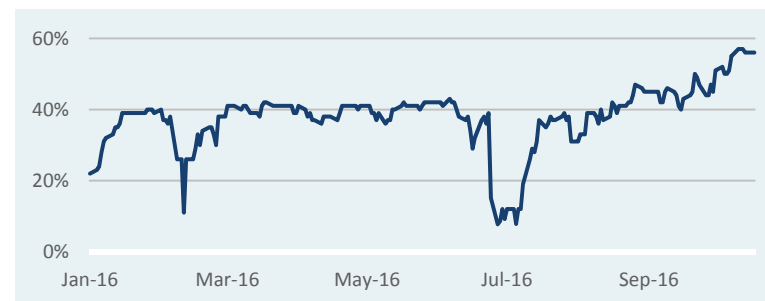
**“POUND STERLING FALLS BELOW \$1.31 HITTING NEW 31-YEAR LOW”**

## GBP/USD

Apr 29th	May 31st	June 30th	July 29th	Aug 31st	Sep 30th
\$1.46	\$1.45	\$1.32	\$1.33	\$1.31	\$1.30

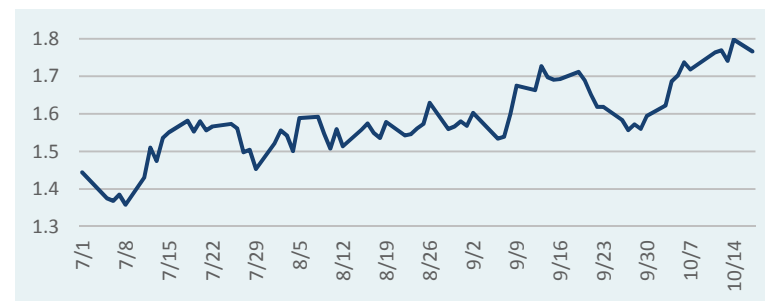
Source: The Independent, July 5<sup>th</sup> 2016

## DECEMBER RATE HIKE EXPECTATIONS



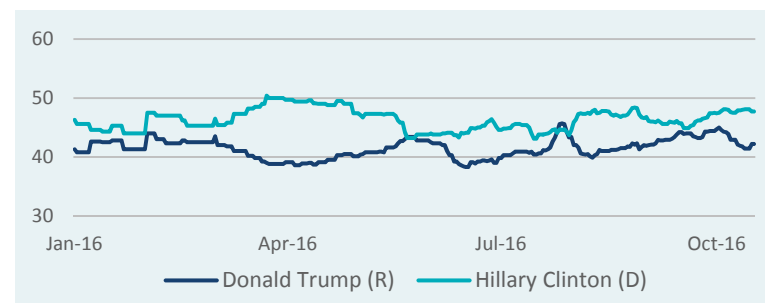
Source: Bloomberg, as of 10/17/16

## U.S. 10-YEAR TREASURY YIELD



Source: Federal Reserve, as of 10/17/16

## U.S. PRESIDENTIAL ELECTION POLLS



Source: Bloomberg, Real Clear Politics, as of 10/17/16

# Economic environment

# U.S. economics summary

- U.S. real GDP grew 1.4% YoY in Q2, up from 0.8% in Q1. This positive growth reflects contributions from greater consumer expenditures, exports, and non-residential fixed investments. These were partially offset by a decrease in private inventory investment.
- Headline inflation (CPI) rose 1.1% as of August YoY while core CPI rose 2.3%. Lower energy prices, and gasoline in particular (-17.8%), have weighed heavily on the headline inflation figure. Medical care services (+4.9%) and shelter (+3.4%) contributed to higher prices.
- If the U.S. economy continues to move closer to full employment and higher inflation, the market has expected the Fed to want to push harder for rate

“normalization”. However, the fear of disrupting financial markets and raising rates too early, too quickly, remains.

- Over the last few quarters we have continued to see the slow and steady return to the workforce of discouraged workers. This may help explain why productivity growth and wage inflation are lower than might be expected at this level of unemployment.
- Additions to nonfarm payrolls averaged slightly under 200,000 in the third quarter as the overall labor market continued to show strength. The unemployment rate increased slightly to 5.0% as more people entered the labor force.

	Most Recent	12 Months Prior
GDP ( <i>annual YoY</i> )	1.4% 6/30/16	3.9% 6/30/15
Inflation ( <i>CPI YoY, Headline</i> )	1.1% 8/31/16	0.2% 8/31/15
Expected Inflation ( <i>5yr-5yr forward</i> )	1.8% 9/30/16	1.8% 9/30/15
Fed Funds Rate	0.25% 9/30/16	0.12% 9/30/15
10 Year Rate	1.6% 9/30/16	2.0% 9/30/15
U-3 Unemployment	5.0% 9/30/16	5.1% 9/30/15
U-6 Unemployment	9.7% 9/30/16	10.0% 9/30/15



# U.S. economics – GDP growth

U.S. real GDP grew 1.4% YoY in the second quarter, up from 0.8% in the first quarter. This positive growth reflects contributions from personal consumption expenditures, exports, and non-residential fixed investment. These were partially offset by a decrease in private inventory investment.

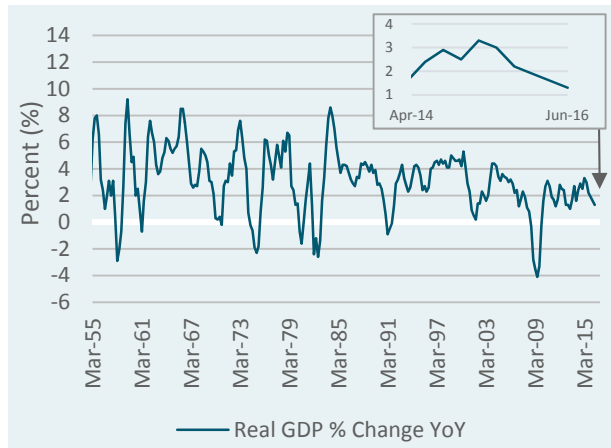
Domestic exports of goods and services grew 1.8% YoY in the second quarter while imports grew 0.2%. A stronger U.S. dollar and weaker demand from China have likely detracted somewhat from export growth.

The manufacturing sector continues to show weakness as durable goods orders have declined during three of the past four months. Additionally, shipments of manufactured durable goods also fell in August, down -0.4%.

The IMF cut U.S. growth expectations to 1.6% for 2016, down from 2.6% in 2015 and down 0.6% from three months prior. Lower business investment has been a primary headwind to growth, with investment decreasing for three consecutive quarters.

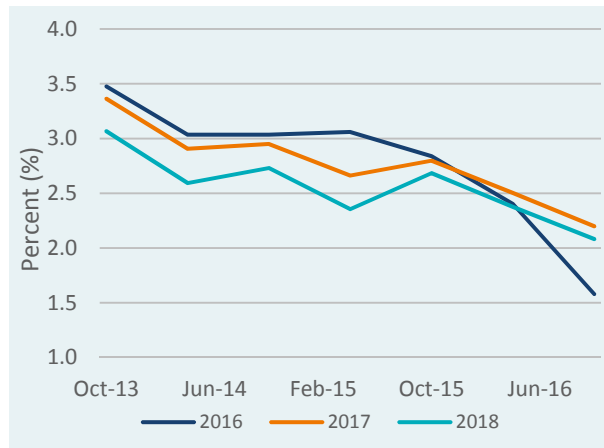
**Consumer spending continues to drive growth**

**U.S. REAL GDP GROWTH**



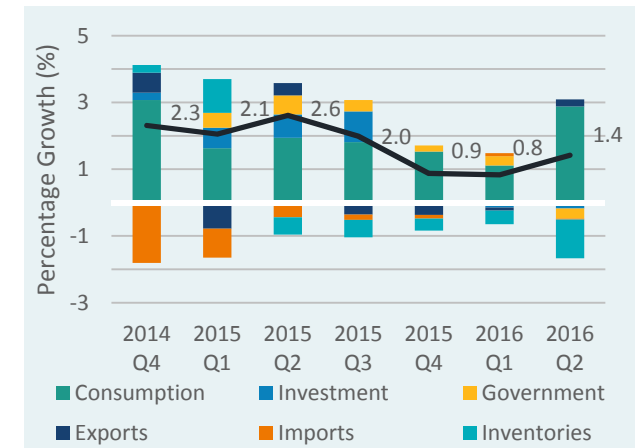
Source: FRED, as of 6/30/16

**IMF U.S. GROWTH EXPECTATIONS**



Source: IMF, as of 10/4/16

**U.S. GDP COMPONENTS**



Source: FRED

# U.S. economics – Unemployment

U.S. unemployment has fluctuated between 4.7% and 5.0% over the past year, and currently sits at a rate of 5.0%. The back-and-forth pull between unemployment rate and participation rate continues as workers rejoin the workforce (higher participation) which then adds to the employment candidate pool (higher unemployment).

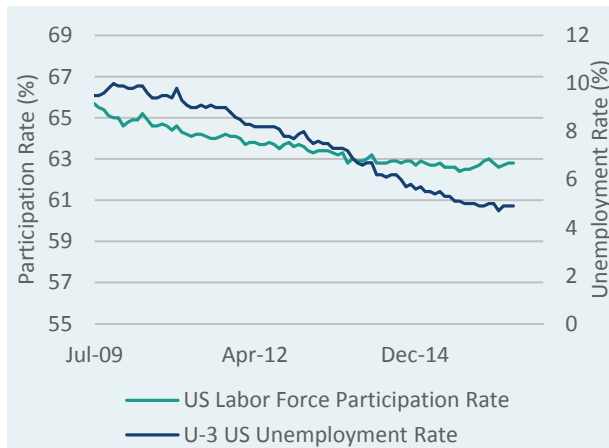
Average length of unemployment has trended downward to 27.6 weeks in August relative to 28.3

weeks one year prior. This is still substantially higher than the long-term median of 14 weeks (since 1948).

In August 151,000 nonfarm jobs were added, below the trailing 12 month average of 204,000.

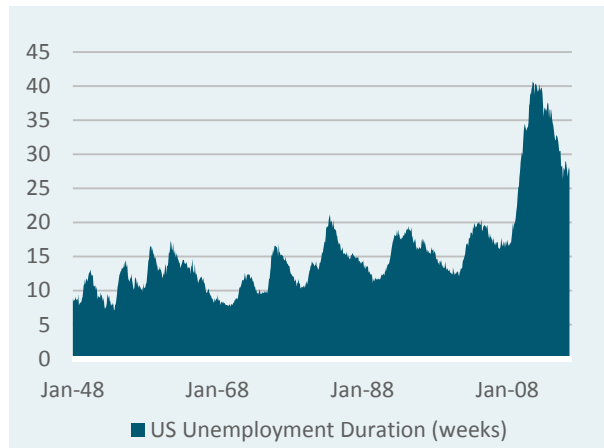
Over the past year, real average hourly earnings have risen by 1.3%. Positive upward pressure in average hourly earnings may help sustain economic growth and may also add to inflation pressures.

**U.S. UNEMPLOYMENT & PARTICIPATION**



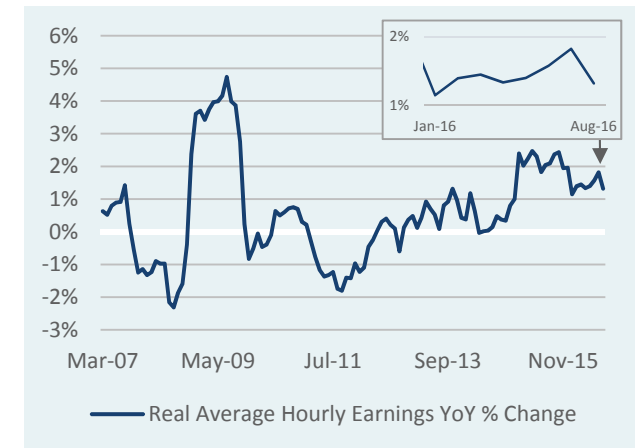
Source: FRED, as of 8/31/16

**UNEMPLOYMENT DURATION**



Source: FRED, as of 8/31/16

**REAL AVERAGE HOURLY EARNINGS**



Source: FRED, as of 8/31/16

# U.S. economics – The consumer

While corporates and governments seem to be at a later stage in terms of their credit cycles, consumer credit expansion has not been as pronounced. A healthy deleveraging has occurred across households since the global financial crisis, with credit expansion only picking up in recent years. It may make sense that the U.S. consumer has been a major contributor to economic growth.

Relatively strong gains in spending have been accompanied by modest increases in real wages and disposable income. Consumer lending growth accelerated

during the quarter, in part due to low borrowing costs and higher consumer confidence. Consumer loans at commercial banks rose 8.8% year-over-year in August. While this growth rate is higher than what we have seen during the current economic expansion, it is within a normal range with regard to historical experience.

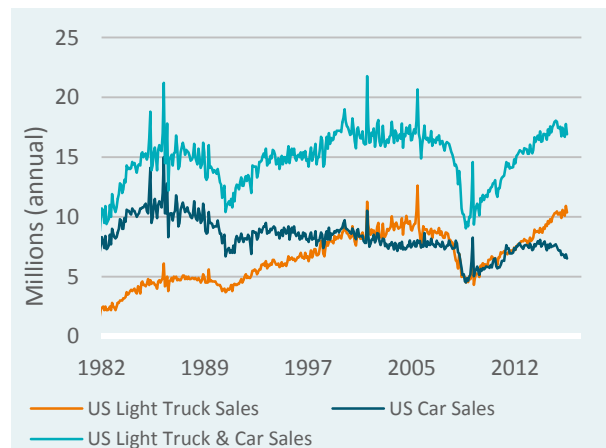
Auto sales have also been robust this year, a good indicator of consumer strength, though sales growth has flattened somewhat and automakers have increased per-vehicle incentive spending to all time highs.

## CONSUMER LOAN GROWTH



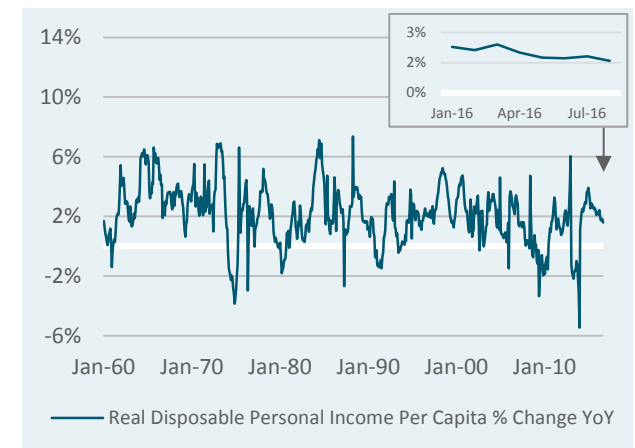
Source: FRED, as of 8/31/16

## AUTO SALES



Source: FRED, as of 8/31/16

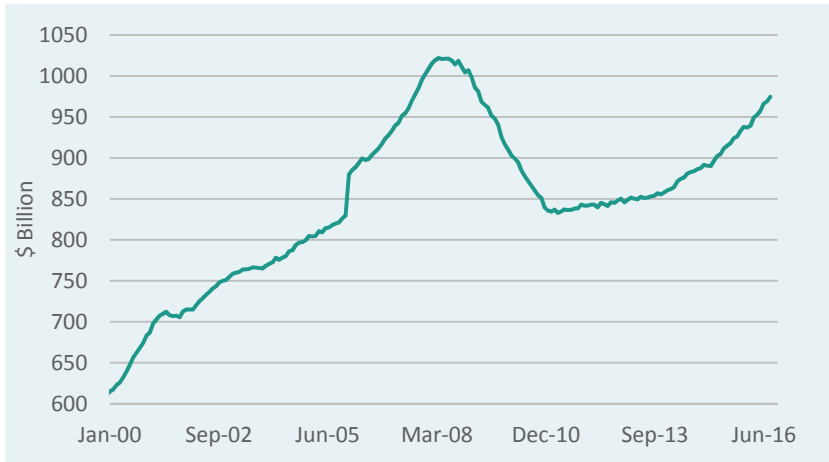
## GROWTH OF DISPOSABLE INCOME



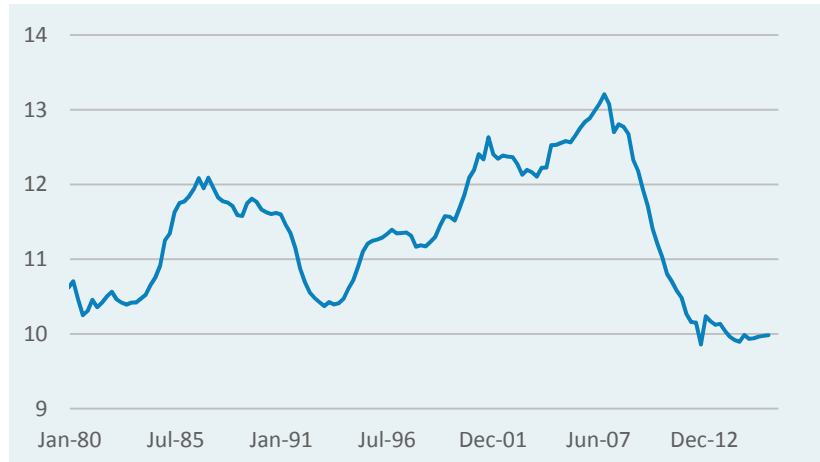
Source: FRED, as of 8/31/16

# U.S. economics – The consumer

US REVOLVING OUTSTANDING CONSUMER CREDIT



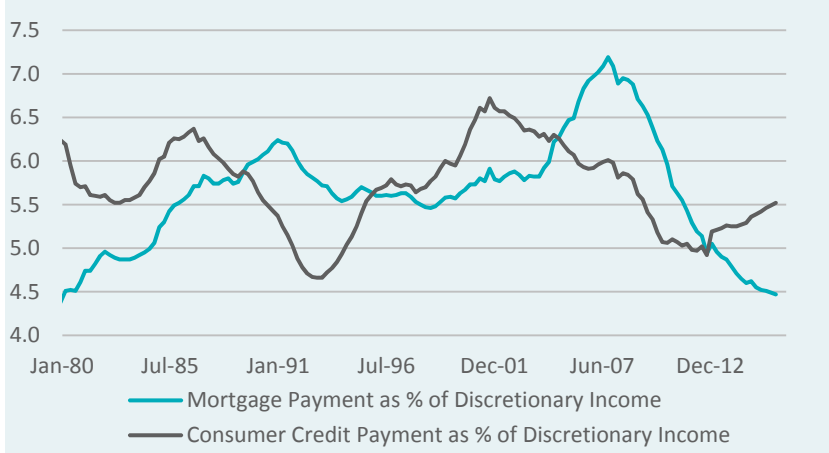
US HOUSEHOLD DEBT AS % OF DISPOSABLE INCOME



Consumer credit expansion has not been as robust as previous recoveries

Debt service ratios remain low

HOUSEHOLD DEBT SERVICE RATIO %



HOUSING STARTS



Source: FRED, as of 8/31/16

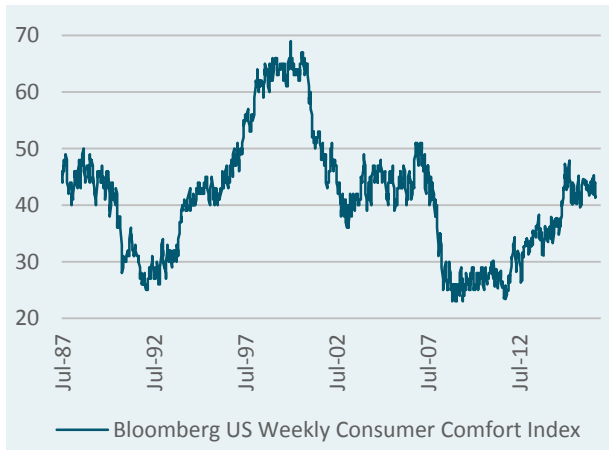
# U.S. economics – Sentiment

Consumer sentiment weakened slightly over the quarter. The University of Michigan Sentiment Index ended the quarter lower. Those surveyed indicated that current conditions worsened while expectations for future conditions brightened. The Bloomberg Consumer Comfort Index also declined, falling to its lowest level since mid-December.

zero for 18 consecutive months. However, following July the indicator slipped back into slightly negative territory.

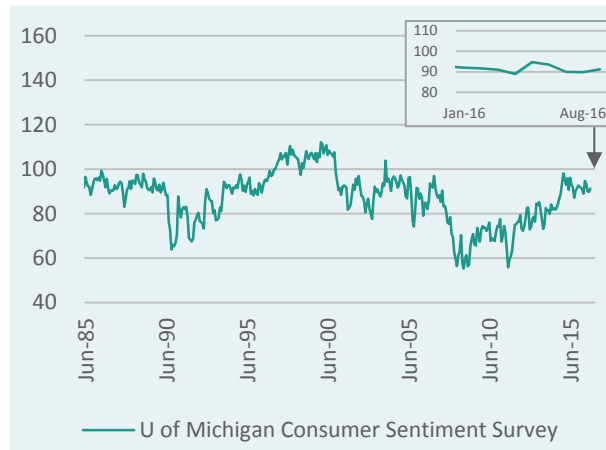
The Citigroup Economic Surprise Index unexpectedly jumped into positive territory in July after staying below

**CONSUMER COMFORT INDEX**



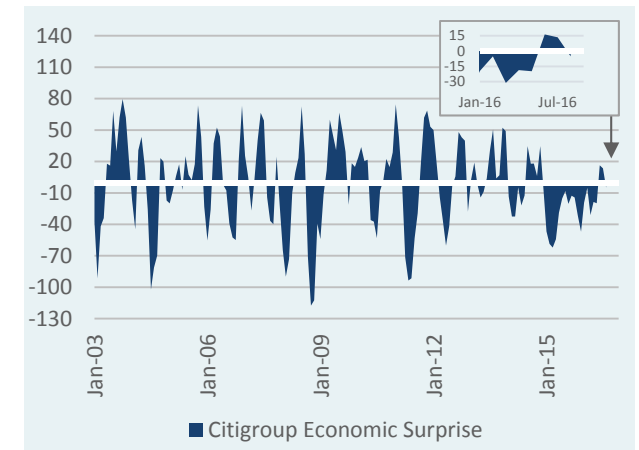
Source: Bloomberg, as of 9/25/16 (see Appendix)

**CONSUMER SENTIMENT**



Source: University of Michigan, as of 9/30/16 (see Appendix)

**ECONOMIC SURPRISE**



Source: Bloomberg, as of 9/30/16 (see Appendix)

# U.S. economics – Housing

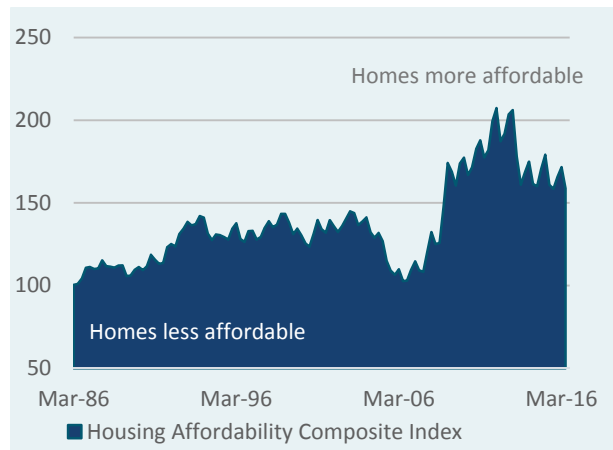
U.S. housing inventories are near historic lows across single and multifamily markets. Limited supply may help to put upward pressure on new construction activity, which has been below average.

Vacancy rates are near all-time lows in the rental space while homeownership rates continue to fall. Demand for rental properties has increased and multifamily housing starts continue to ramp up; however, multifamily homes are thought to contribute

substantially less to economic growth than that of single-family homes. This may factor into future economic growth.

Lower mortgage rates and moderate wage growth have helped to suppress household debt burdens through greater discretionary income. These forces have contributed to a stronger consumer which may bolster future home purchase and ownership trends, especially as home affordability remains high.

## HOME AFFORDABILITY



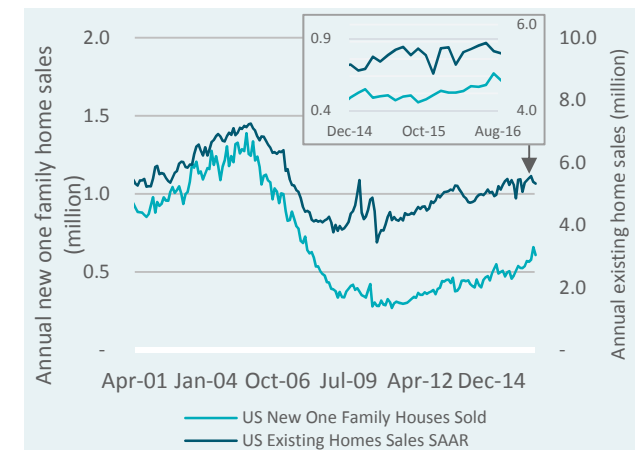
Source: National Association of Realtors, as of 6/30/16

## HOMEOWNERSHIP RATE



Source: FRED, as of 7/1/2016

## NEW & EXISTING HOME SALES



Source: Bloomberg, as of 8/31/16

# U.S. economics – Inflation

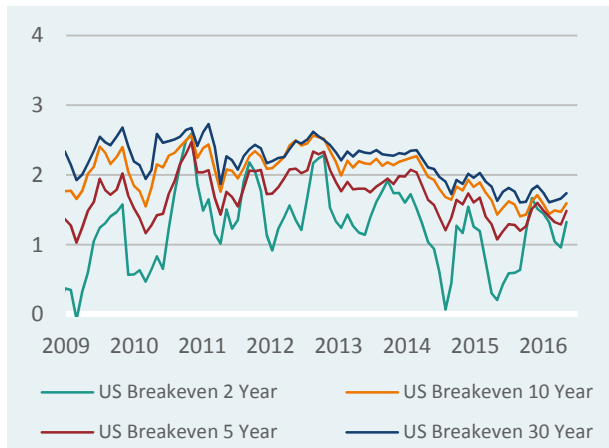
Inflation expectations were mixed during the quarter. The University of Michigan Inflation Expectations Survey reflected lower expected inflation, while the U.S. 10yr TIPS Breakeven indicated higher expectations.

Headline inflation rose 1.1% YoY while core inflation rose 2.3% YoY. Energy and gasoline continue to weigh on prices, while medical care services and shelter (housing costs) put upward pressure on overall prices.

Inflation surveys and inflation-sensitive instruments are inherently different and we might therefore expect discrepancies across these indicators.

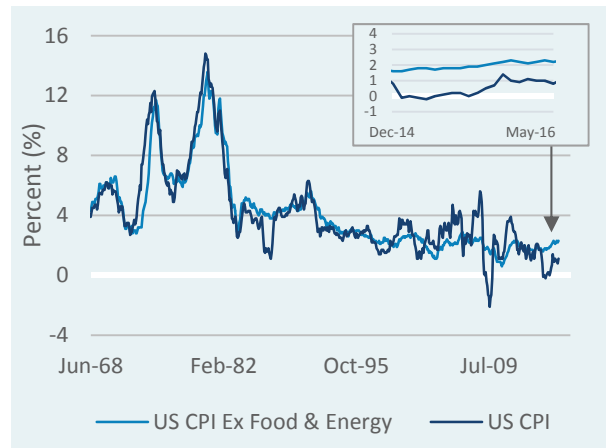
Public fear of inflation remains very low, and the Federal Reserve is hesitant to raise rates. We believe investors should be watchful of inflation trends. An inflation overshoot remains a potential danger, given less worry over inflation and less ability and/or willingness of the Fed to raise rates.

**U.S. TIPS BREAKEVEN INFLATION**



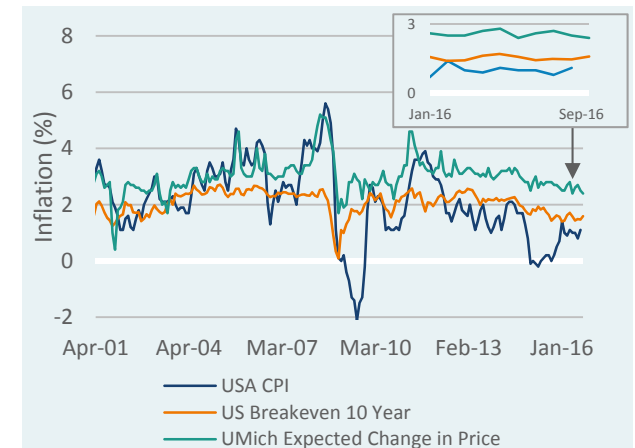
Source: FRED, as of 8/31/16

**U.S. CPI (YOY)**



Source: FRED, as of 7/31/16

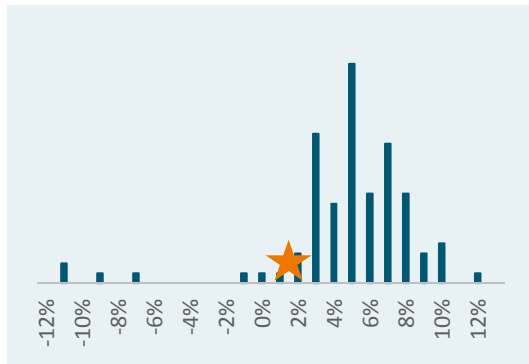
**MARKET EXPECTATIONS OF INFLATION**



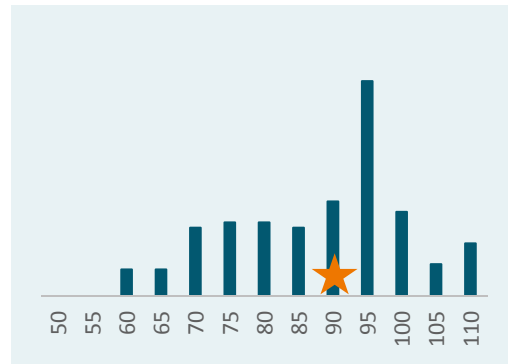
Source: Bloomberg, as of 9/30/16

# Where are we now?

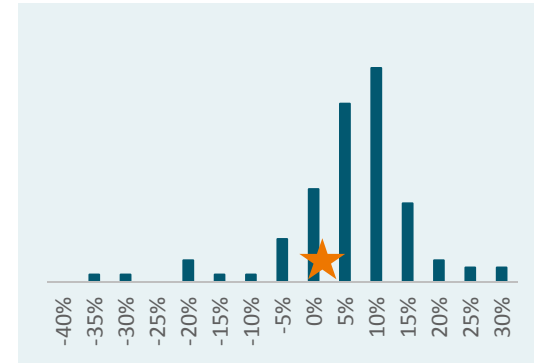
RETAIL SALES, YOY (SINCE 1993)



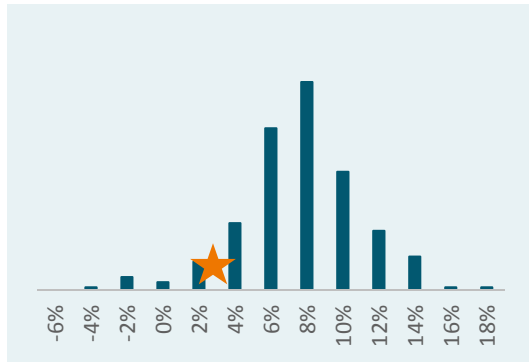
U OF MICH. CONFIDENCE (SINCE 1978)



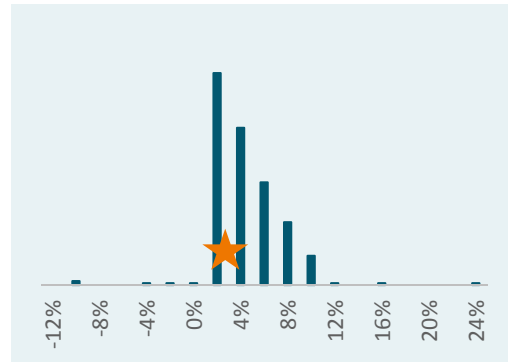
DURABLE GOODS ORDERS, YOY (SINCE 1992)



PERSONAL INCOME, YOY (1948)



PERSONAL CONSUMPTION, YOY (SINCE 1947)



CITI SURPRISE INDEX (SINCE 2003)



While these metrics clearly do not fall at the top end of their historical distribution, they are not outside normal ranges

Source: Bloomberg, as of 9/30/16



# International economics summary

- Developed economies continued to experience slow growth and low inflation. While inflation ticked up slightly in the Eurozone to 0.4%, it remains materially under the ECB’s target of “below, but close to, 2%”.
- The ECB left monetary policy unchanged at its September meeting, and cut economic growth expectations for the next three years.
- The BOJ shook up its monetary policy after completing a “comprehensive assessment of its current easing programs”. The central bank stated it will intentionally overshoot its inflation target of 2% and introduced a 0% target for the 10-year yield.
- Britain elected new prime minister Theresa May, who will be responsible for implementing Brexit. Increased uncertainty surrounding the timing and nature of the political change will continue. The potential impact of this uncertainty led to the first rate cut by the BOE since 2009.
- The IMF once again downgraded global growth forecasts for 2016 and 2017, this time to just above 3%. It now warns against economic stagnation and states that countries have found themselves in the position of relying on monetary and fiscal policy to lift growth prospects, and that this may be unsustainable.

Area	GDP (Real, YoY)	Inflation (CPI, YoY)	Unemployment
United States	1.4% <i>6/30/16</i>	1.1% <i>8/31/16</i>	5.0% <i>9/30/16</i>
Western Europe	1.8% <i>6/30/16</i>	0.4% <i>9/30/16</i>	8.5% <i>6/30/16</i>
Japan	0.8% <i>6/30/16</i>	(0.5%) <i>8/31/16</i>	3.2% <i>6/30/16</i>
BRIC Nations	5.1% <i>6/30/16</i>	3.8% <i>6/30/16</i>	5.5% <i>6/30/16</i>
Brazil	(3.8%) <i>6/30/16</i>	9.0% <i>8/31/16</i>	11.7% <i>9/30/16</i>
Russia	(0.6%) <i>6/30/16</i>	6.9% <i>8/31/16</i>	5.6% <i>6/30/16</i>
India	7.1% <i>6/30/16</i>	5.1% <i>8/31/16</i>	7.1% <i>12/31/15</i>
China	6.7% <i>6/30/16</i>	1.3% <i>8/31/16</i>	4.1% <i>6/30/16</i>

# International economics

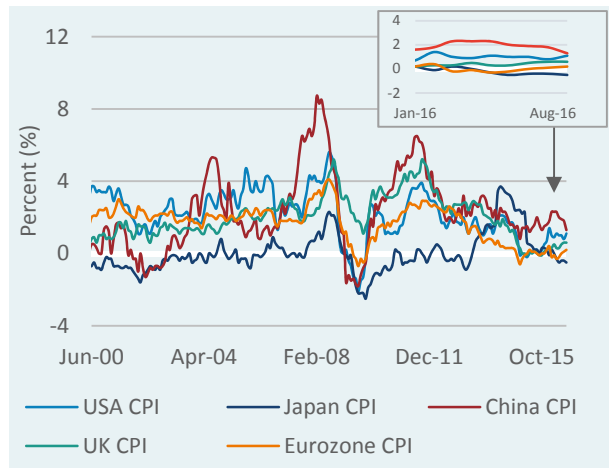
Further downward revisions and lackluster growth in Europe and Japan have encouraged central banks to maintain stimulus measures. Japan implemented a policy initiative which will target a 0% yield for the 10-year government bond. Japan continues to struggle with deflation as headline CPI fell to -0.5% YoY in August.

While economic data released in the U.K. post-Brexit has significantly beaten expectations, uncertainty remains regarding the specific details of the country's exit from the European Union. In its latest report, the BOE lowered the

2017 growth forecast to 0.8% from 2.3%. The central bank also expects inflation to hit 2.4% in 2018 and 2019, citing the fall of the pound sterling.

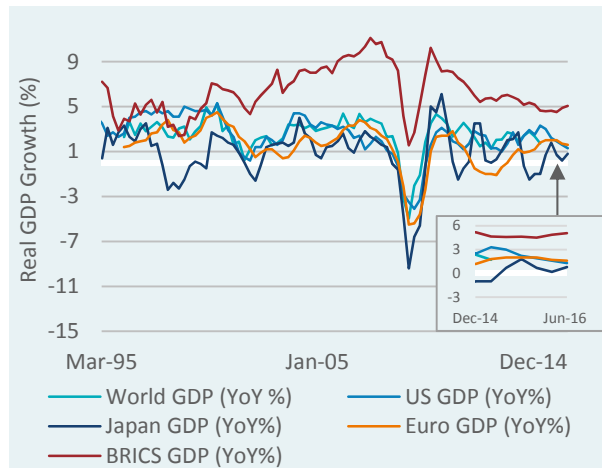
Emerging market economic growth picked up slightly at 4.6% YoY in the second quarter. After a drop off in growth following the global financial crisis, the outlook for emerging economies has improved. With slow growth expectations for developed markets, an opportunity may exist in both emerging market equities and fixed income.

## INTERNATIONAL INFLATION



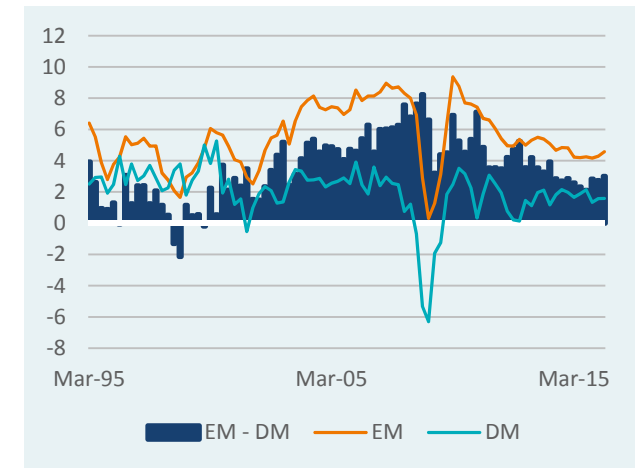
Source: Bloomberg, as of 8/31/16

## REAL GDP GROWTH



Source: Bloomberg, as of 6/30/16

## EM VS. DM REAL GDP GROWTH



Source: Bloomberg, as of 6/30/16

# Post-Brexit

There have been significant changes in U.K. and European political behavior following the Brexit vote. Rear guard actions in both Parliament and the courts in the U.K. have begun to attempt to slow or stop the implementation of Brexit. The Prime Minister has said that Article 50 will be triggered in March 2017.

One of the key elements of the discussion has been debate over whether Brexit should be a 'hard' Brexit (full withdrawal from the Single Market) or a 'soft' Brexit (with continuing participation in the Single Market for a fee, and with continuing free movement of people). Pro-Brexit

campaigners point out that this issue was extensively discussed during the campaign, while Remainers claim that the U.K. population was ill-informed during the run-up to the vote, although their hand is weakened by the fact that their predictions of economic chaos were a Brexit vote to win have so far failed to materialize.

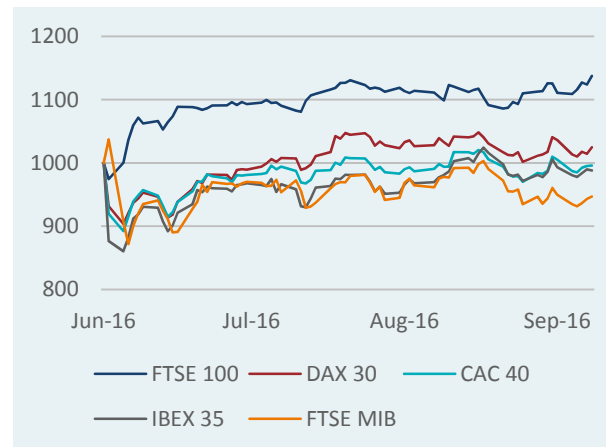
The remaining EU members remain unsure how to proceed, with hard-line negotiators appointed by the EU but strong financial interests in many countries in close ongoing trading links with the U.K.

**GBP/USD**



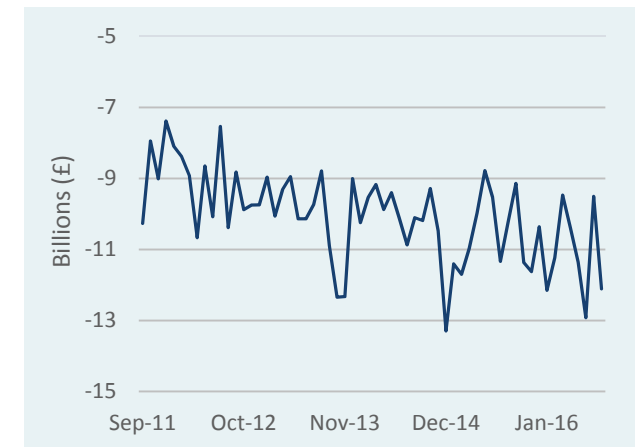
Source: FRED, as of 10/19/16

**EUROPEAN EQUITY MOVEMENT**



Source: Bloomberg, 6/23-9/30/16 – shown in local currency terms

**U.K. BALANCE OF TRADE**



Source: Bloomberg, as of 9/30/16

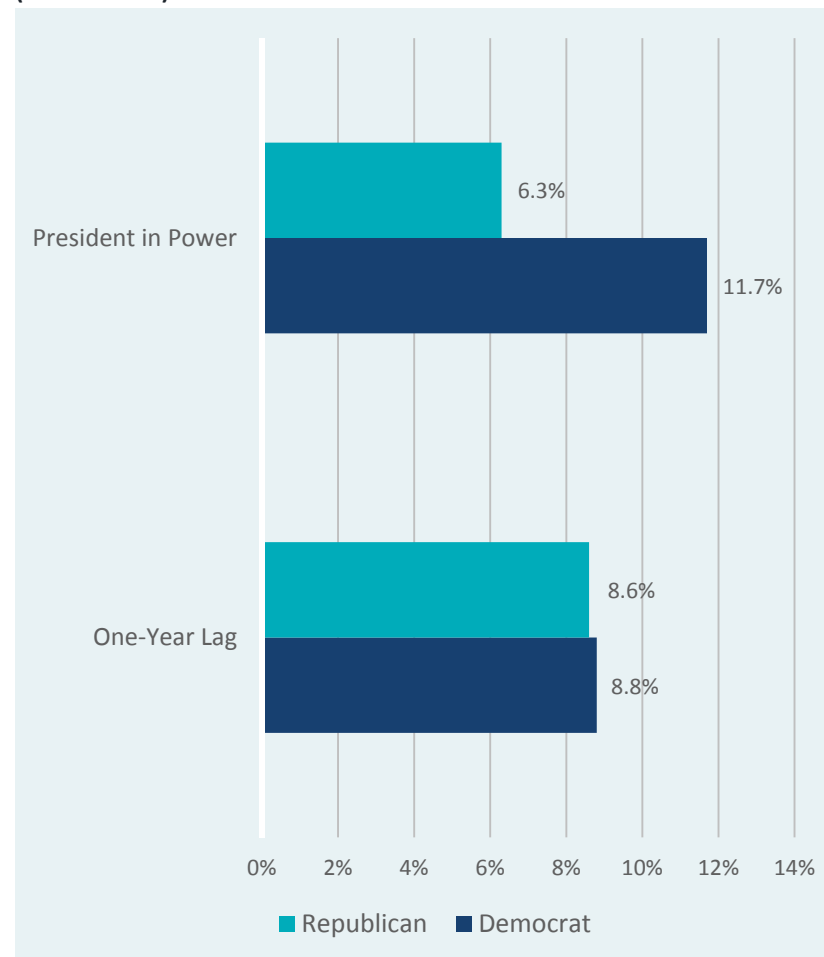
# U.S. presidential election

Correlation between election results and long-term market performance has generally been weak, and the outcome depends on how the data is sliced. The S&P 500 has experienced greater price appreciation with a Democrat in power, but the results are less clear when a one-year policy lag is introduced; research results depend on how the relationship is defined.

It appears that a Clinton win would most likely result in little change from the current macroeconomic policy. However, strong congressional pressure would be likely on trade issues, and there would be continuing challenges to the long term sustainability of the Affordable Care Act. Both candidates have supported increased spending on infrastructure, which would provide support for the materials and construction sectors.

A Trump win might bring greater uncertainty because his economic policy plans are less known/understood. Trump's impact may also be felt more quickly through his use of executive orders to reshape the regulatory environment, and some policies enacted by Obama may be undone, through the same means.

**AVERAGE CALENDAR YEAR S&P 500 PRICE RETURN  
(1951-2015)**



The relationship between election results and market performance is weak

*Note: Top chart = annualized return during time in office, Lower chart = annualized return during time in office but with 1-year lag*

# Fixed income rates & credit

# Interest rate environment

- The U.S. Treasury curve continued to flatten, influenced by increased expectations of an interest rate hike by the end of the year.
- Global interest rates remain near all time lows, although volatility picked up. Continued easing by central banks in addition to low inflation and expectations for slowing growth contribute to an environment of secularly low yields.
- When thinking about bond yields today, it may be useful not only to consider nominal yields, which are at historic lows, but also *real* yields, which paint a much more reasonable picture. Current levels of inflation and future expectations may help put things into context. Furthermore, investors may see markets drive yields higher if inflation expectations were to rise.
- Negative yielding sovereign and corporate debt was \$11.6 trillion at quarter end, mostly from Japan and the Eurozone. We remain concerned about Japanese and European rates as negative yields and low liquidity detract from the attractiveness of these assets.
- Yields on Japanese Treasuries increased sharply in late July after the BOJ chose to keep stimulus measures on hold. The 10-year JGB yield briefly traded around 0% before falling back into negative territory at the end of September.
- European sovereign bonds sold off during the beginning of September over concerns that central banks may begin cutting back on monetary easing measures.

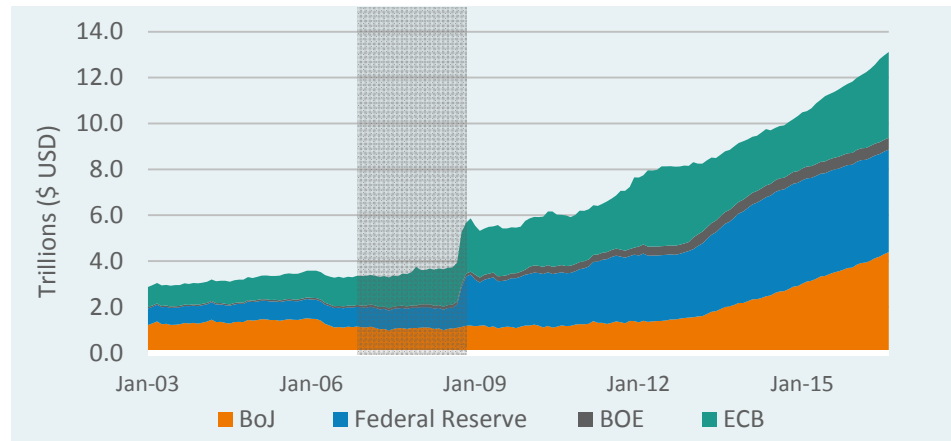
Area	Short Term (3M)	10 Year
United States	0.27%	1.59%
Germany	(0.76%)	(0.12%)
France	(0.67%)	0.19%
Spain	(0.60%)	0.88%
Italy	(0.39%)	1.19%
Greece	3.34%	8.28%
U.K.	0.32%	0.75%
Japan	(0.33%)	(0.09%)
Australia	1.75%	1.91%
China	2.23%	2.74%
Brazil	13.73%	11.60%
Russia	9.80%	8.17%

Source: Bloomberg, as of 9/30/16

# Unwinding QE

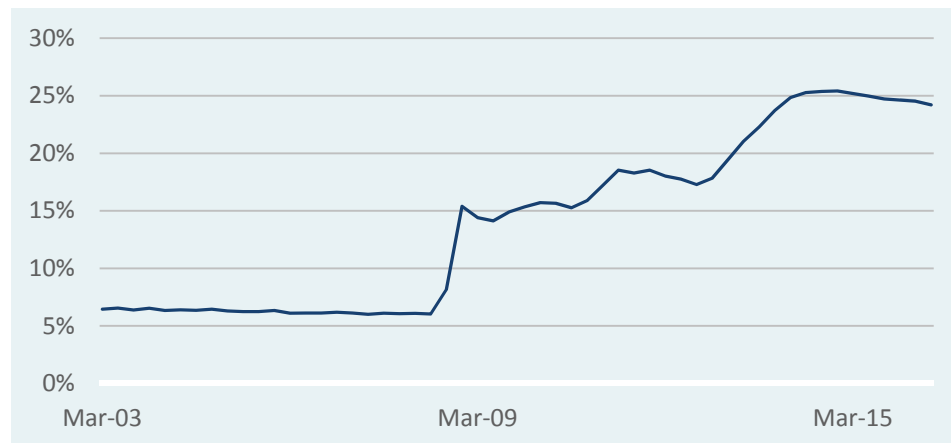
- It appears that we may be nearing the end stage of monetary policy expansion, with over \$7 trillion added to central bank balance sheets. The way in which central banks choose to unwind asset purchases, or how they manage them, could have a significant impact on financial markets.
- Balance sheets may be slowly trimmed through gradual asset sales, or by allowing existing bonds to mature. Shrinking the balance sheet in this manner naturally has a tightening effect, which places downward pressure on asset prices.
- Balance sheet sizes may also be maintained for some time or possibly indefinitely. Were the velocity of money to begin to pick up this balance sheet expansion might lead to inflationary pressure.
- Balance sheets might also be monetized by writing off assets, allowing governments to “walk away” from their debt. With few historical comparisons, forecasting the effects of such write offs is exceptionally difficult. In addition to inflation concerns, this strategy could undermine the independence of central banks and public confidence in them.

**CENTRAL BANKS BALANCE SHEETS**



Source: FRED, Federal Reserve, BOE, ECB, Verus, as of 8/1/16

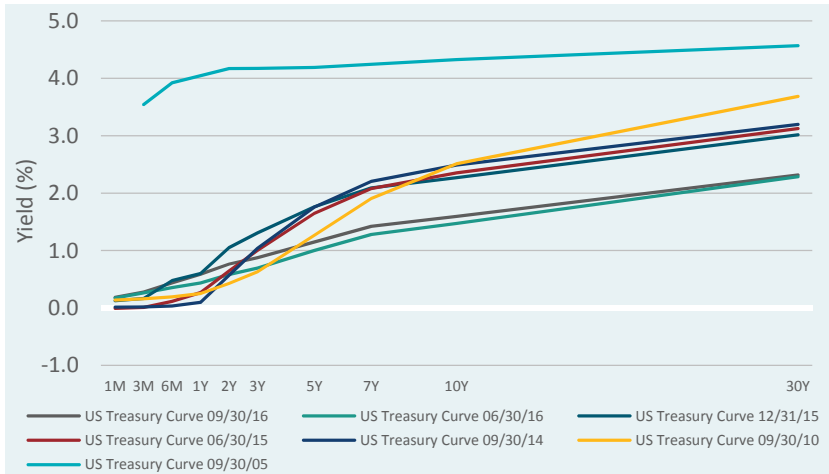
**FEDERAL RESERVE ASSETS TO GDP**



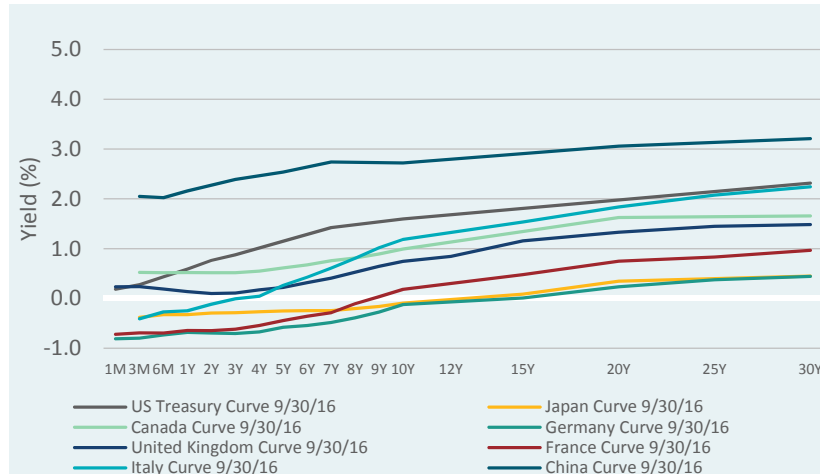
Source: FRED, as of 6/30/16

# Yield environment

U.S. YIELD CURVE

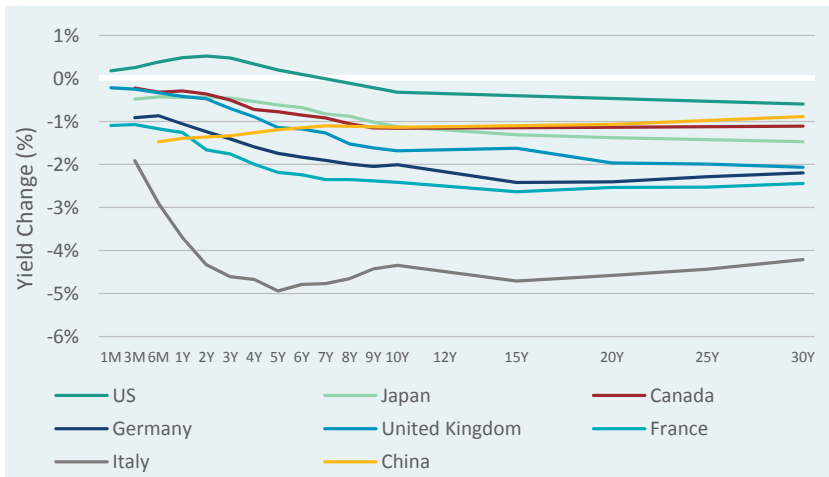


GLOBAL GOVERNMENT YIELD CURVES

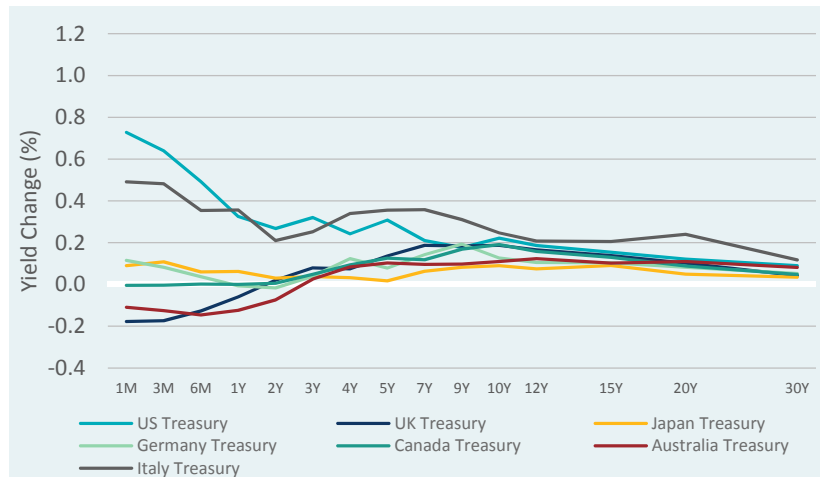


Global investors continue to prefer U.S. Treasuries due to higher relative yields

YIELD CURVE CHANGES OVER LAST FIVE YEARS



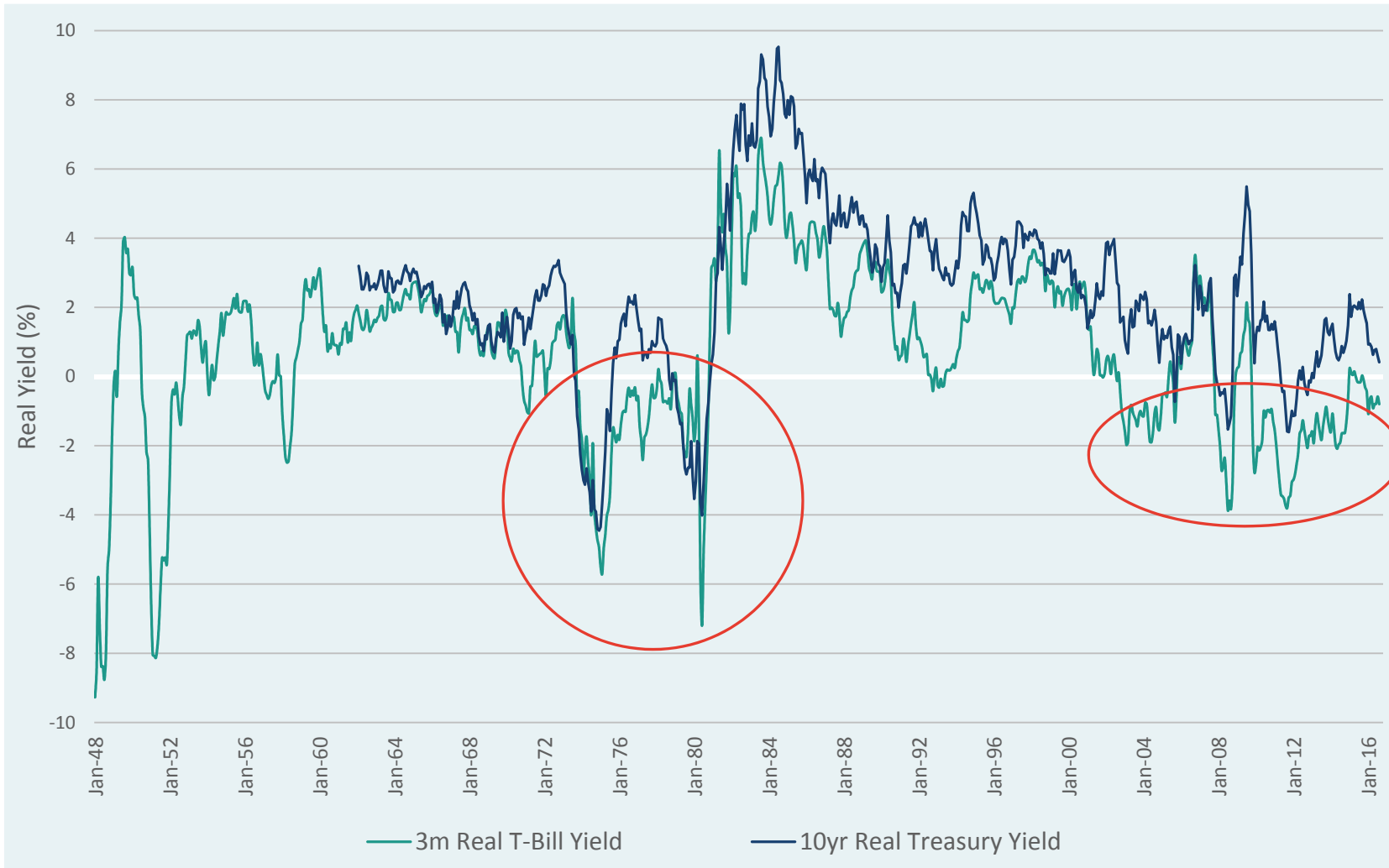
IMPLIED CHANGES OVER NEXT YEAR



Source: Bloomberg, as of 9/30/16



# Yield environment



Negative real yields are not a new phenomenon

Yield levels should be viewed in context of the inflation environment

Source: Verus, as of 8/31/16

# Credit environment

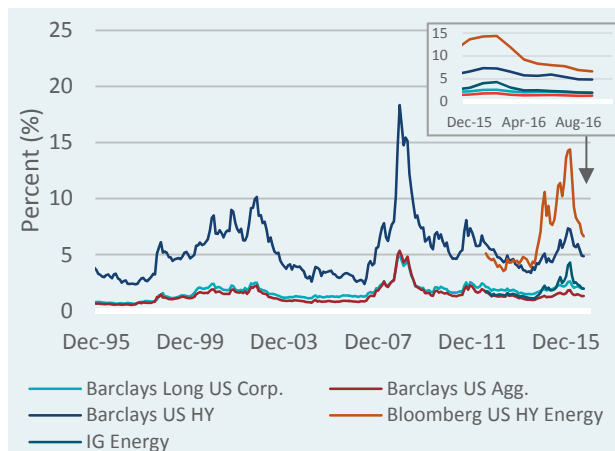
High yield returns across all sectors - energy and metals and mining in particular - have been strong since the trough in Q1. As evidence of this performance, high yield spreads have compressed to below 5.1% as of September from a high of 8.9% earlier in the year.

U.S. credit markets have broadly normalized following increased volatility in Q1. While below the long-term trend, U.S. GDP growth has remained positive, which has been a tailwind to credit markets in general. In addition, foreign demand for U.S. credit issuance has

remained positive as low developed market yields have been supportive of the “carry trade”, where investors buy relatively higher yielding assets.

LIBOR rates have increased meaningfully as investors prepared for the pending regulatory changes to money market funds. Prime funds will now report a floating NAV. This change has prompted some investors to redeem their exposures, thereby reducing their demand for commercial paper and LIBOR-based loans causing the rate to increase.

## CREDIT SPREADS



Source: Barclays Capital Indices, Bloomberg, as of 9/30/16

## 3 MONTH LIBOR



Source: Bloomberg, as of 9/30/16

## SPREADS

Market	Credit Spread (9/30/16)	Credit Spread (1 Year Ago)
Long US Corporate	1.8%	2.1%
US Aggregate	0.9%	1.2%
US High Yield	5.1%	6.8%
US High Yield Energy	6.6%	11.4%
US Bank Loans	3.9%	3.9%

Source: Barclays, Credit Suisse, Bloomberg, as of 9/30/16

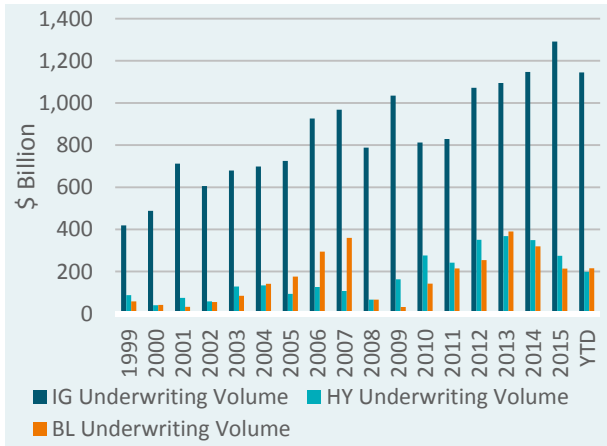
# Issuance and default

Defaults have trended higher in recent months, particularly in the high yield debt space. Default rates have risen well above the trailing 20-year average and are at the highest levels since the global financial crisis; however, much of this activity has been driven specifically by energy issuers. Overall issuance is on track for a year-over-year decline.

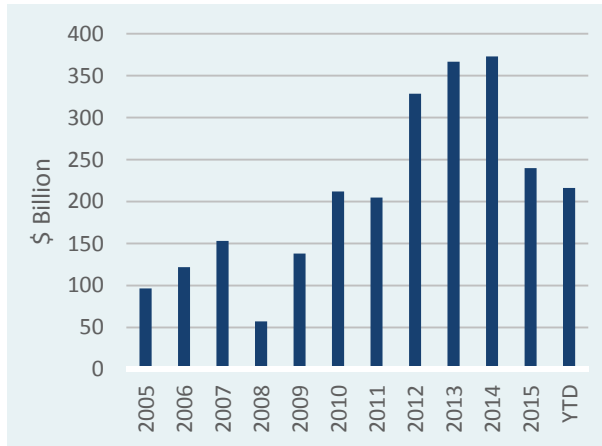
New bond issuance in emerging markets, especially corporates, has continued at a relatively strong pace. Many of these issuers can only borrow in U.S. dollars. As such, eventual rises in U.S. interest rates would increase borrowing costs. Investors' appetites for emerging market debt remains strong based on relative value compared to developed market bonds.

The recent increase in LIBOR rates has been a headwind for bank loan borrowers, as reflected in flattening issuance.

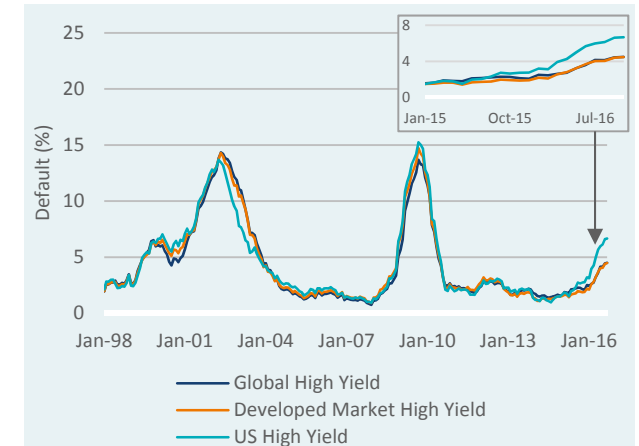
## U.S. DEBT ISSUANCE



## EM DEBT ISSUANCE



## HY DEFAULT TRENDS (ROLLING 1 YEAR)

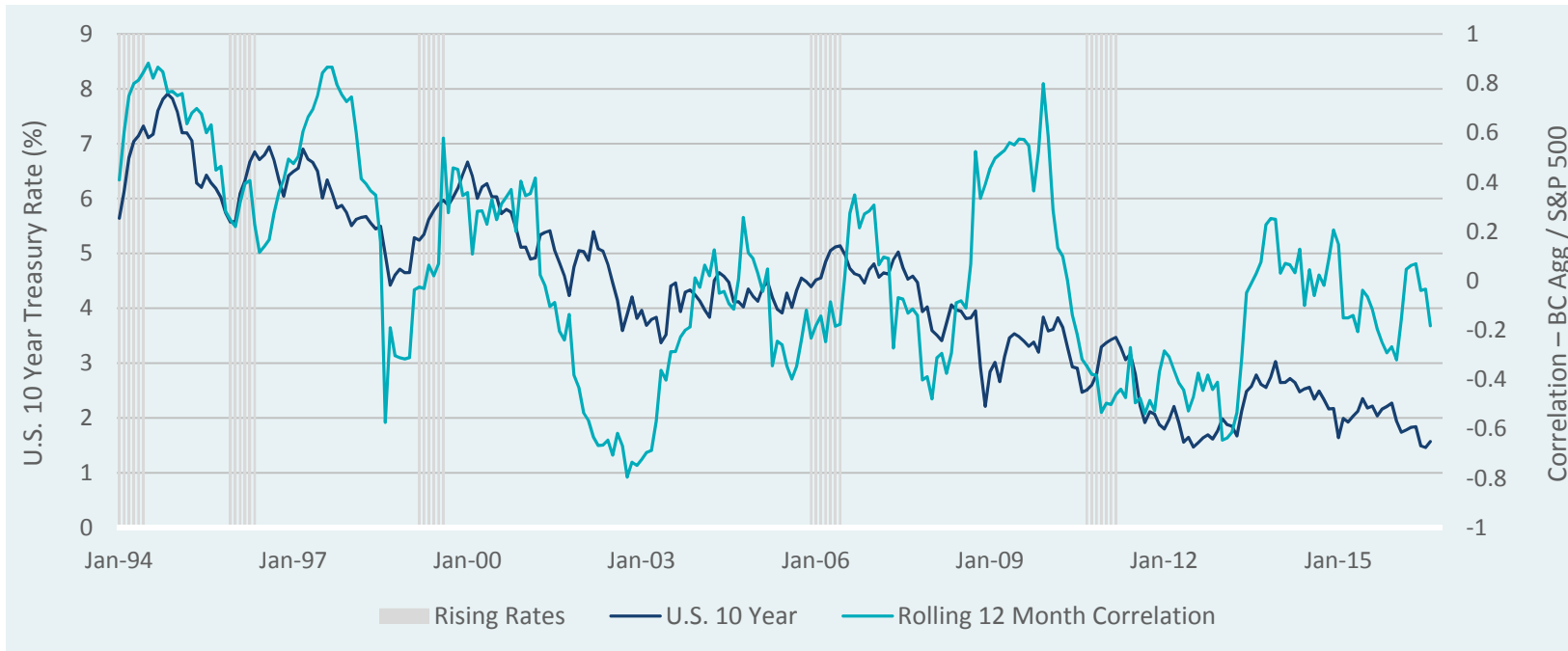


Source: Bloomberg, BofA Merrill Lynch, as of 9/30/16

Source: JP Morgan, as of 9/30/16

Source: Credit Suisse, BofA, as of 9/30/16

# Fixed income – rising yields



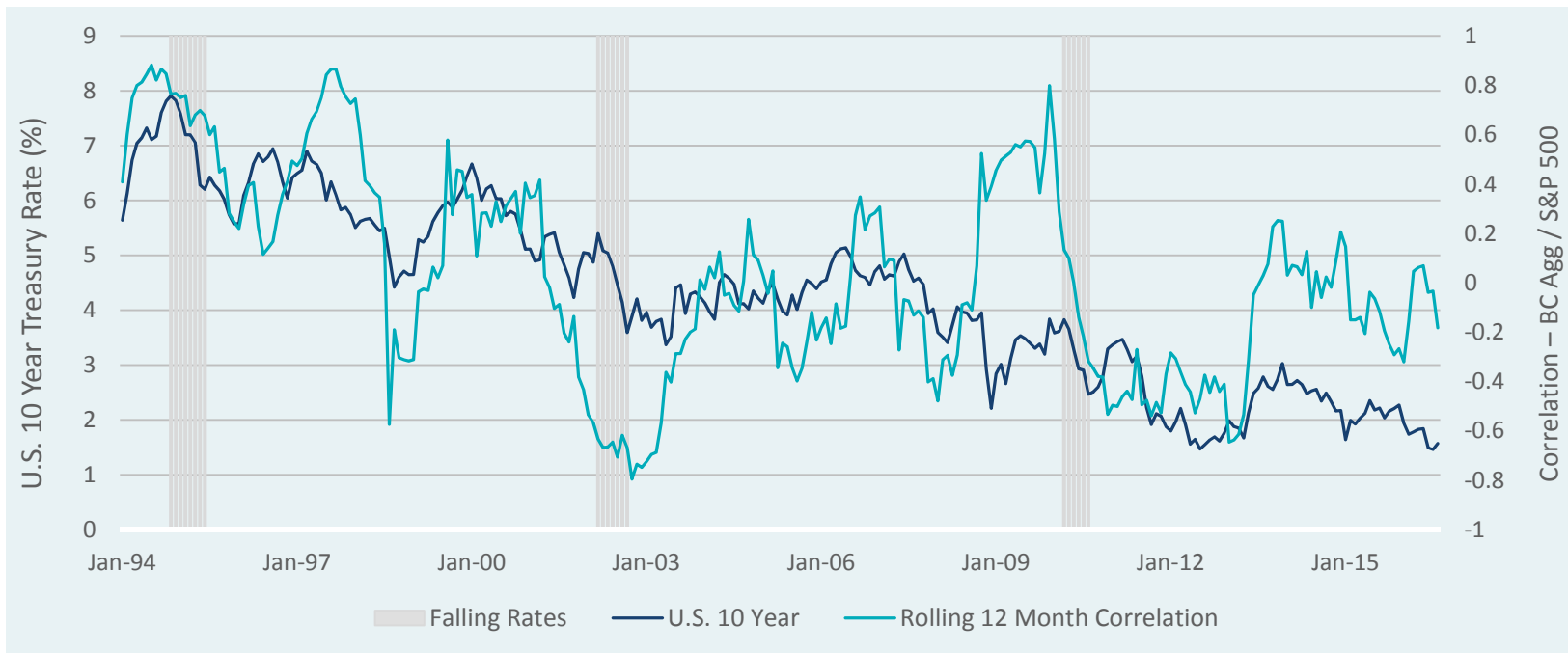
During rising yield environments (6 months of consecutive rising yields) BC Agg and S&P 500 returns have shown very different correlation

We are currently in a negative correlation environment

Date	Months	Yield increase	Average return correlation*
Jan 1994-Jun 1994	6	1.68	0.70
Dec 1995-May 1996	6	1.28	0.30
Mar 1999-Aug 1999	6	0.73	0.11
Dec 2005-June 2006	7	0.75	-0.18
Sep 2010-Mar 2011	7	0.96	-0.44

\*Rolling 12 Month correlation between Barclays US Aggregate and S&P 500. "Rising yield environment" is defined as 6 months of consecutive yield increases  
Source: Bloomberg, MPI, as of 8/31/16

# Fixed income – decreasing yields



Correlations have varied during decreasing yield environments (6 months of falling yields), from -0.66 to 0.71

Diversification benefits have not been clearly linked to the rate environment

Date	Months	Yield decrease	Average return correlation*
Nov 1994-June 1995	8	1.70	0.71
Mar 2002-Sep 2002	7	1.80	-0.66
Mar 2010-Aug 2010	6	1.36	-0.07

\*Rolling 12 Month correlation between Barclays US Aggregate and S&P 500. "Decreasing yield environment" is defined as 6 months of consecutive yield decreases.

Source: Bloomberg, MPI, as of 8/31/16

# Equity

# Equity environment

- Equity market risks continue to appear asymmetrical to the downside - the U.S. equity market in particular.
- U.S. equities rallied to start the quarter as central banks communicated to the markets that further monetary easing would be available if necessary, in response to the Brexit vote. In the final two months of the quarter, the U.S. equity markets stayed relatively flat and volatility was below average.
- A sixth consecutive quarter of year-over-year earnings decline is expected for the S&P. FactSet has forecast a -2.1% earnings decline for Q3.
- Information technology (12.9%) was the best performing sector in the S&P 500 by a large margin on the back of higher earnings expectations. Utilities (-5.9%) and telecom services (-5.6%) were the worst performing sectors in the index.
- The FTSE 100 (hedged) returned 7.1% over the third quarter after concerns over the impact of Brexit somewhat subsided.
- The U.S. dollar fell 0.7% in Q3 on a trade-weighted basis. Recent dollar stabilization may be disrupted if the Fed goes ahead with further rate hikes. As most developed economies remain in easing mode, further U.S. hikes would likely add to dollar strength.

	QTD TOTAL RETURN		YTD TOTAL RETURN		1 YEAR TOTAL RETURN	
	(unhedged)	(hedged)	(unhedged)	(hedged)	(unhedged)	(hedged)
US Large Cap (Russell 1000)	4.0%		7.9%		14.9%	
US Small Cap (Russell 2000)	9.0%		11.5%		15.5%	
US Large Value (Russell 1000 Value)	3.5%		10.0%		16.2%	
US Large Growth (Russell 1000 Growth)	4.6%		6.0%		13.8%	
International Large (MSCI EAFE)	6.4%	6.3%	1.7%	(1.0%)	6.5%	5.3%
Eurozone (Euro Stoxx 50)	6.3%	4.8%	(2.4%)	(4.1%)	0.4%	0.5%
U.K. (FTSE 100)	4.0%	7.1%	0.6%	14.1%	1.5%	18.4%
Japan (NIKKEI 225)	8.2%	5.9%	4.4%	(14.3%)	13.6%	(6.2%)
Emerging Markets (MSCI Emerging Markets)	9.0%	6.3%	16.0%	9.7%	16.8%	10.7%

Source: Russell Investments, MSCI, STOXX, FTSE, Nikkei, as of 9/30/16

# Domestic equity

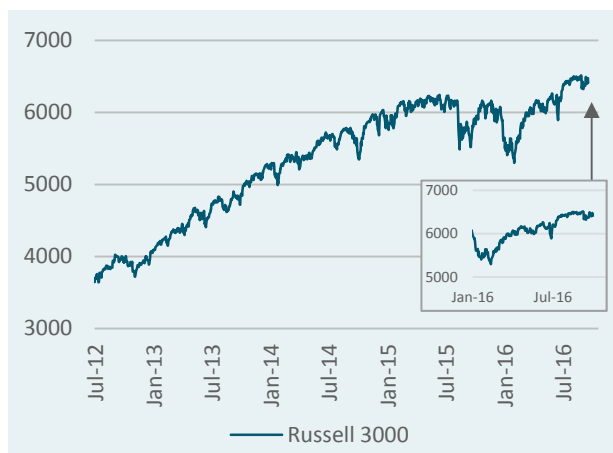
After minimal reaction to Brexit, domestic equities continued higher in July, then delivered two quiet months to finish the quarter. The S&P 500 returned 3.9% in Q3. The market appears to be taking a wait-and-see approach with important oncoming events such as elections and Federal Reserve meetings.

With higher equity prices and lower overall earnings, valuations have expanded. The forward earnings multiple for the S&P 500 was 18.5 at quarter end,

relative to its 25-year average of 16.6 (in the 81<sup>st</sup> percentile). Year-over-year earnings growth is expected to be negative for the sixth consecutive quarter, heavily influenced by the energy sector and lower oil prices. As the effects of monetary stimulus on U.S. financial markets wanes, earnings will play an important role for future equity returns.

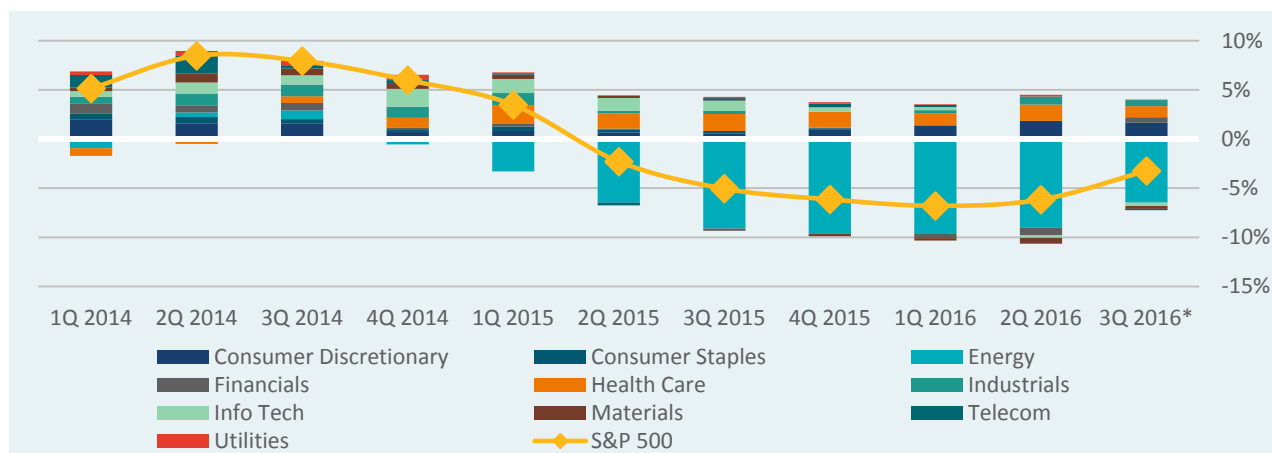
U.S. earnings results will likely dictate the path of equities

## U.S. EQUITIES



Source: Russell Investments, as of 9/26/16

## SECTOR IMPACT ON S&P 500 EARNINGS GROWTH



Source: Bloomberg, as of 9/30/16



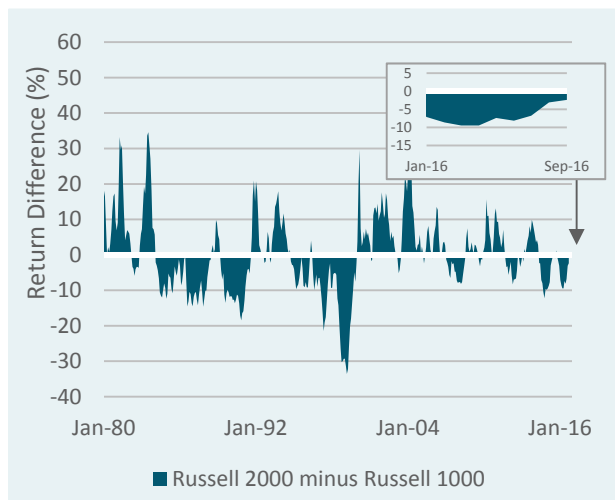
# Domestic equity size and style

Growth stocks outperformed value during the third quarter as the Russell 1000 Growth Index and Russell 1000 Value Index returned 4.6% and 3.5%, respectively. However, value has outperformed growth by 4.0% year-to-date.

3.5% year-to-date, reversing a recent trend of large cap outperformance. The relative P/E ratio of small to large cap equities at the end of September was 2.07 - well above its long-term average of 1.39 - suggesting that small cap stocks may be relatively overvalued.

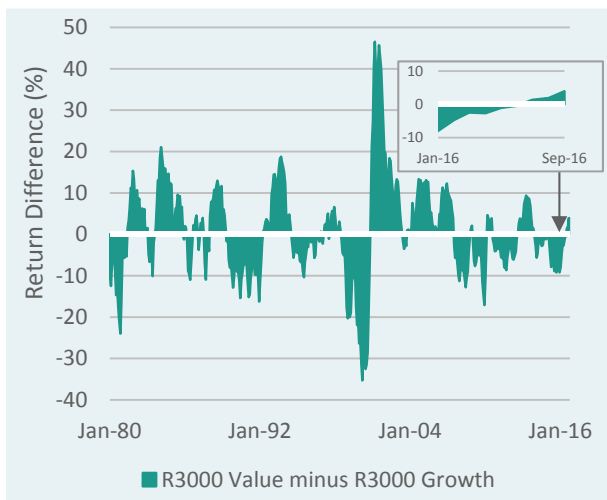
In the third quarter, the Russell 2000 Index returned 9.0% and the Russell 1000 Index returned 4.0%. Small cap equities have also beaten large cap equities by

**SMALL CAP VS LARGE CAP (YOY)**



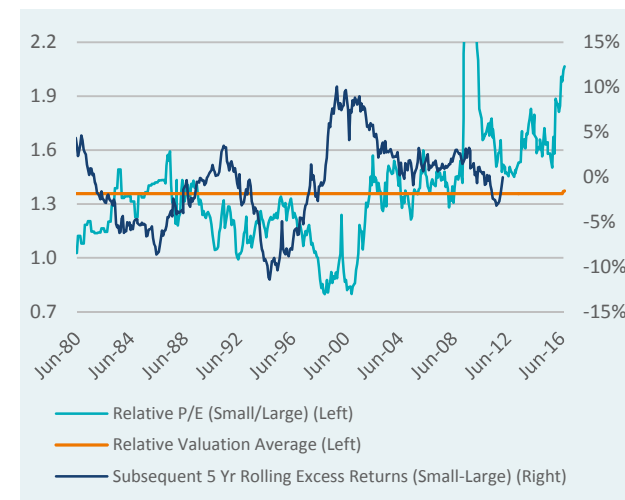
Source: Russell Investments, as of 9/30/16

**VALUE VS GROWTH (YOY)**



Source: Russell Investments, as of 9/30/16

**RELATIVE P/E RATIO (SMALL VS LARGE)**



Source: Russell, Bloomberg, as of 9/30/16

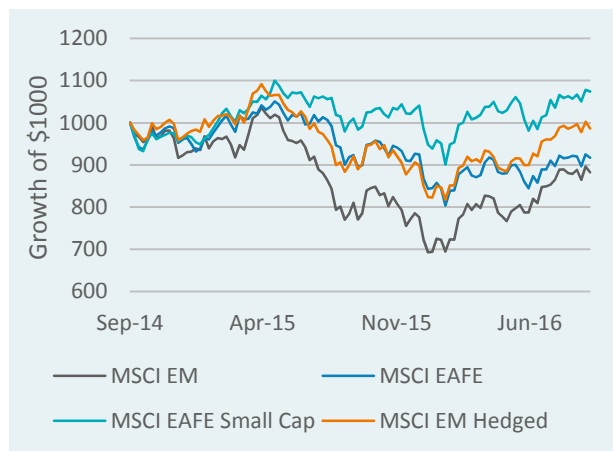
# International equity

Central banks remained accommodative in Q3, helping to generate a rally in international equities. Low and negative yields in Japan and the Eurozone helped maintain the relative attractiveness of equities in these markets.

On a hedged basis, international developed equities outperformed domestic equities with the MSCI EAFE returning 6.3%, and the S&P 500 returning only 3.9% during the quarter.

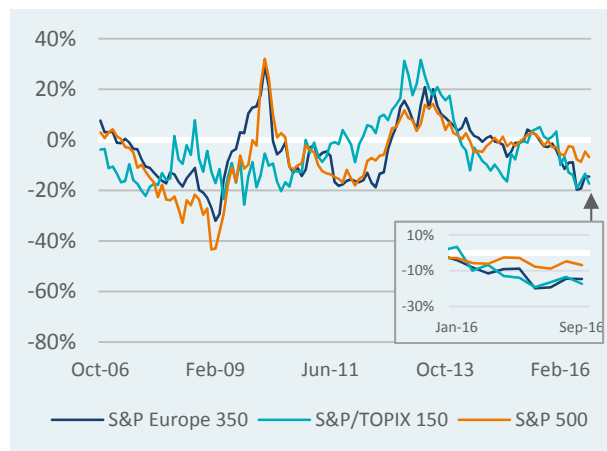
Financial stocks continue to lag, though the third quarter saw more healthy returns. Banks in Japan and the Eurozone were given a boost when the BOJ and ECB chose not to increase stimulus measures. Significant headwinds remain, however, as negative interest rates continue to hurt bank profitability.

**GLOBAL EQUITY PERFORMANCE**



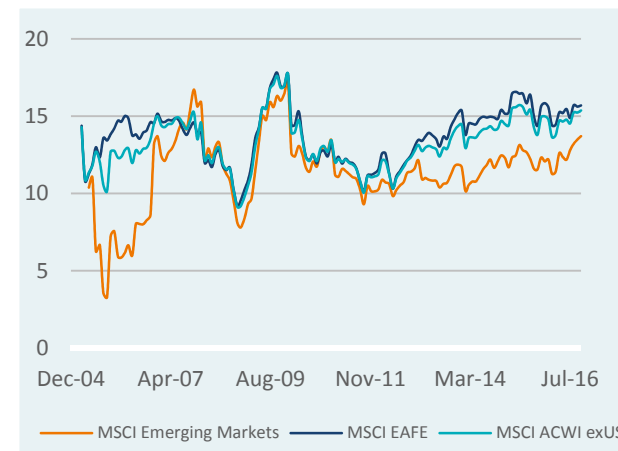
Source: Bloomberg, as of 9/30/16

**12-MONTH ROLLING RELATIVE FINANCIAL SECTOR RETURNS**



Source: MPI, as of 9/30/16, in local currency terms

**INTERNATIONAL FORWARD P/E RATIOS**



Source: MSCI, as of 9/30/16

# Emerging market equity

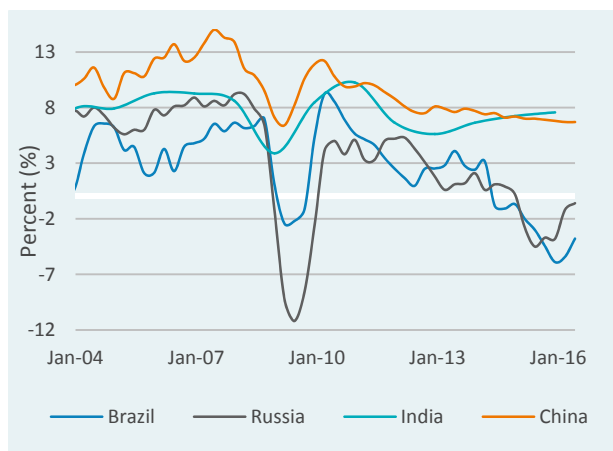
Emerging market equities experienced a rebound during Q3, returning 6.3% on a hedged basis and 9% unhedged. Emerging market earnings per share growth turned positive in 2016, reversing a 5-year downward trend. Valuations remain below average and materially more attractive than those of developed markets.

Moderating commodity prices, continued developed central bank accommodation, less U.S. dollar strengthening, and stability in China, have helped to bolster investor risk appetites and the emerging market

outlook, fueling fund flows into these markets.

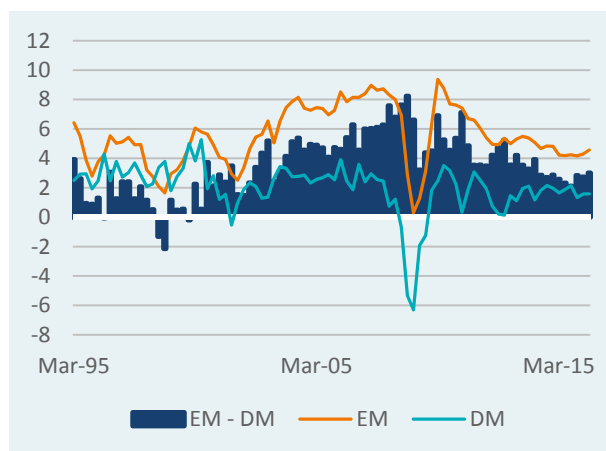
Many emerging market economies experienced a rough readjustment period following the commodity supercycle reversal and saw severe currency depreciation. However, many economies such as Russia have allowed currency devaluation to work as an effective economic shock absorber to mitigate current account problems which these economies often experience during commodity (export) price choppiness.

**ECONOMIC GROWTH (REAL GDP YOY)**



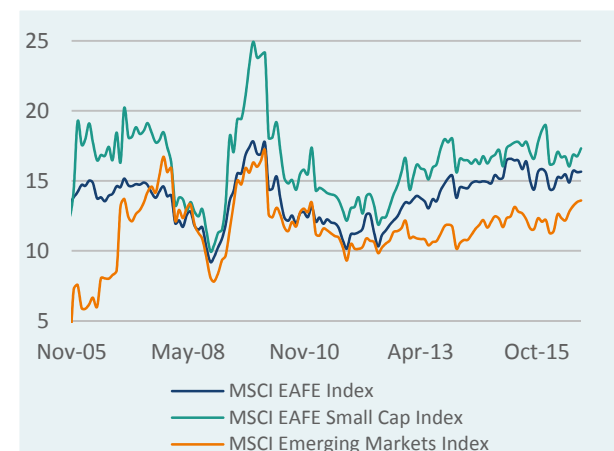
Source: Bloomberg, as of 6/30/16

**EM VS. DM REAL GDP GROWTH**



Source: Bloomberg, as of 6/30/16

**FORWARD P/E**



Source: MSCI, as of 9/30/16

# Equity valuations

Domestic large cap equity valuations remain above average. The forward earnings multiple for the S&P 500 was 18.5 at quarter end, relative to its 25-year average of 16.6. This places the forward P/E in the 81<sup>st</sup> percentile of the past 25 years.

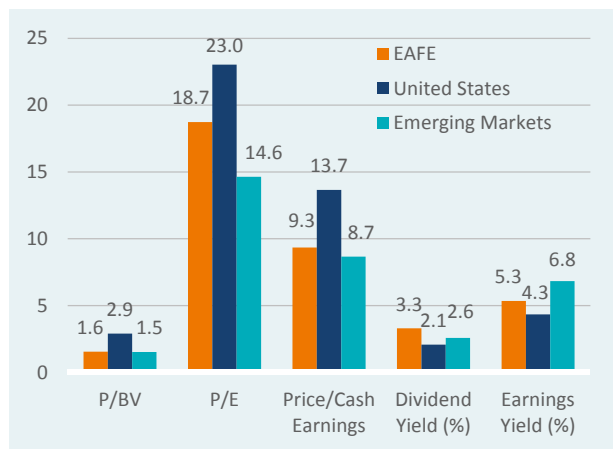
Large cap equity valuations are also slightly above average based on the Shiller P/E ratio.

Small cap equity valuations are above long-term

averages, suggesting that small caps are currently overvalued. The forward P/E ratio for the Russell 2000 as of September 30<sup>th</sup> was 28.1, compared to the long-term average of 25.3.

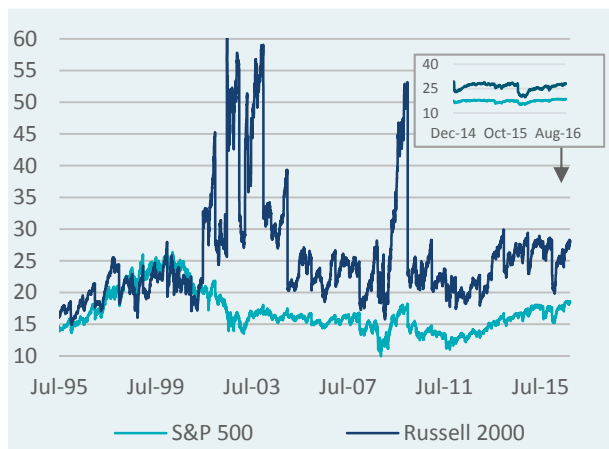
Historically, low interest rate and low inflationary environments have coincided with above-average valuations (see slide 35). This makes it difficult to tell whether equities are truly overvalued or if current valuations simply reflect the economic environment.

## MSCI VALUATION METRICS (3 MONTH AVERAGE)



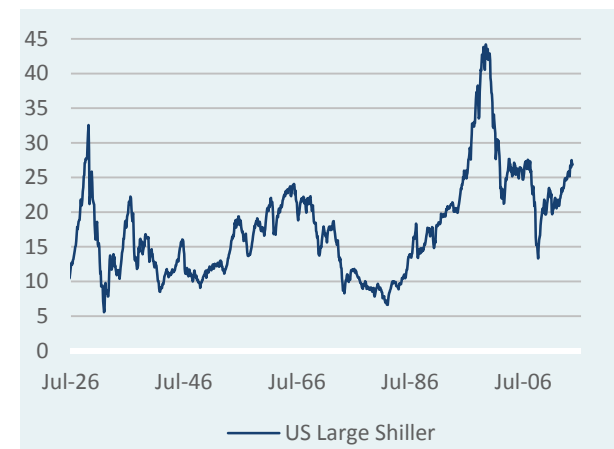
Source: MSCI, as of 9/30/16

## FORWARD P/E



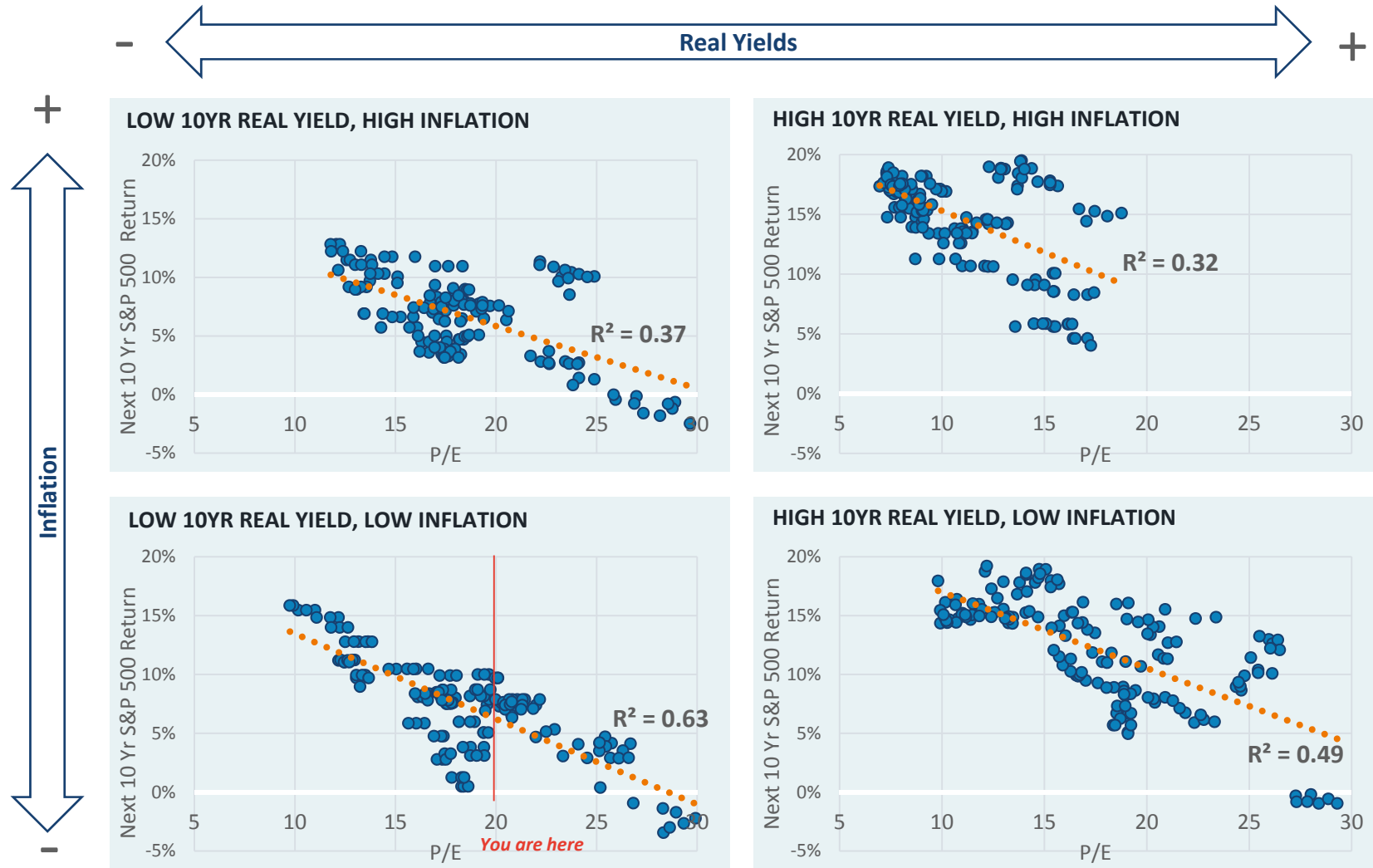
Source: Yale/Shiller, Verus as of 9/30/16

## S&P 500 SHILLER P/E RATIO



Source: Yale/Shiller, as of 9/30/16

# Putting valuations into context



P/E tends to be higher during low yield, low inflation environments

Just because environment may justify higher P/E, higher valuations still bode poorly for future returns

Using data since 1954, sorted the economic environment into the above 4 market environments: low 10yr Treasury real yield & high inflation, high 10yr Treasury real yield & high inflation, low 10yr Treasury real yield & low inflation, and high 10yr real yield & low inflation. Within each quadrant, plotted each point-in-time P/E level for the S&P 500 (the x-axis) and the subsequent 10 year equity return (y-axis).

# Equity volatility

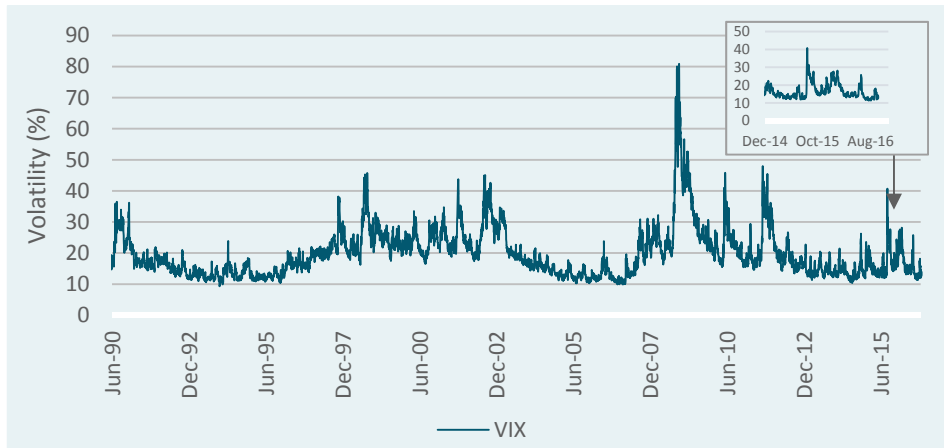
Following a substantial spike in volatility during the Brexit vote announcement, equity volatility fell and remained subdued. The VIX index has averaged around a level of 20 during the past 25 years. More recently investors have seen VIX levels below this average which is typical during equity bull markets.

Volatility expectations, as indicated by VIX, continue to be low, though we might expect rising levels given

political uncertainty leading up to the U.S. presidential election.

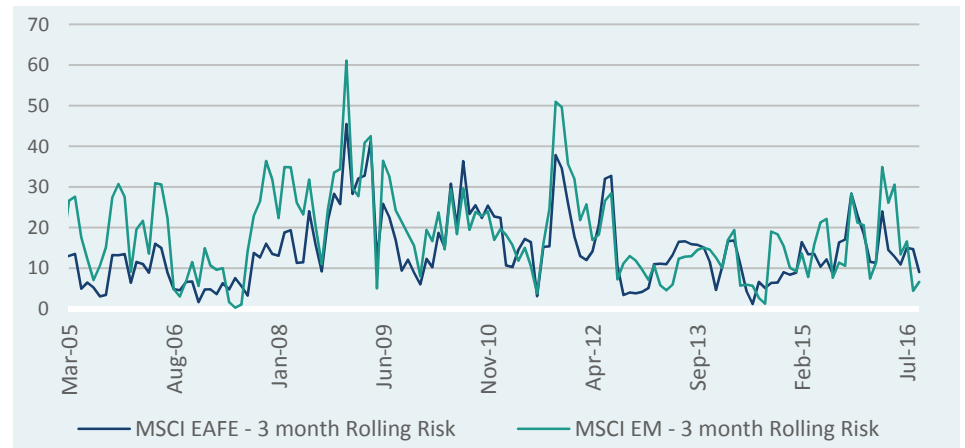
International equity market volatility has remained in a normal range, following choppiness during news surrounding and following the Brexit referendum. Unhedged currency exposure has also added to variation in investors' experienced equity returns – and much more so in recent years.

## U.S. EQUITY VOLATILITY



Source: CBOE, as of 9/22/16

## INTERNATIONAL EQUITY VOLATILITY



Source: MSCI, as of 9/30/16

# Long-term equity performance



Source: MPI, as of 9/30/16

# Other assets



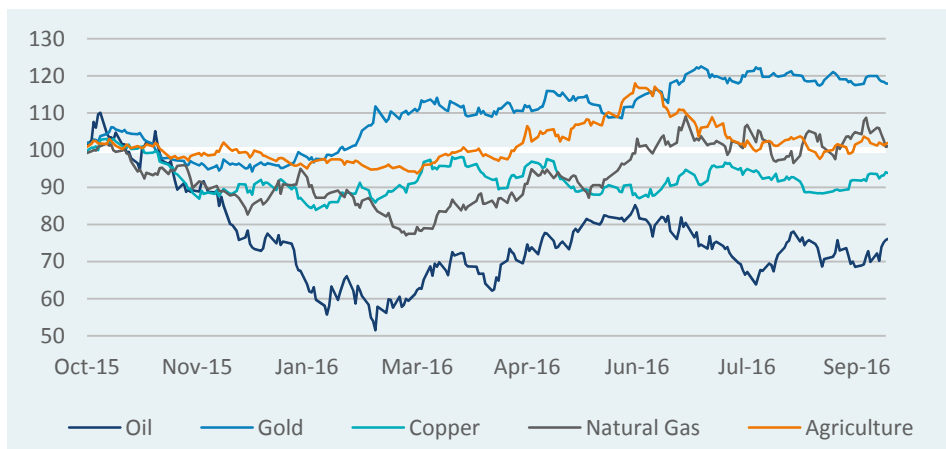
# Commodities

Commodity prices, and oil in particular, continue to fill the news headlines. Though short-term price movements are not particularly relevant to portfolio decision-making, effects of the commodity supercycle reversal are important.

Declining profits in the energy sector have pushed U.S. equity earnings into negative territory for the past 1.5 years. Many commodity exporting nations have

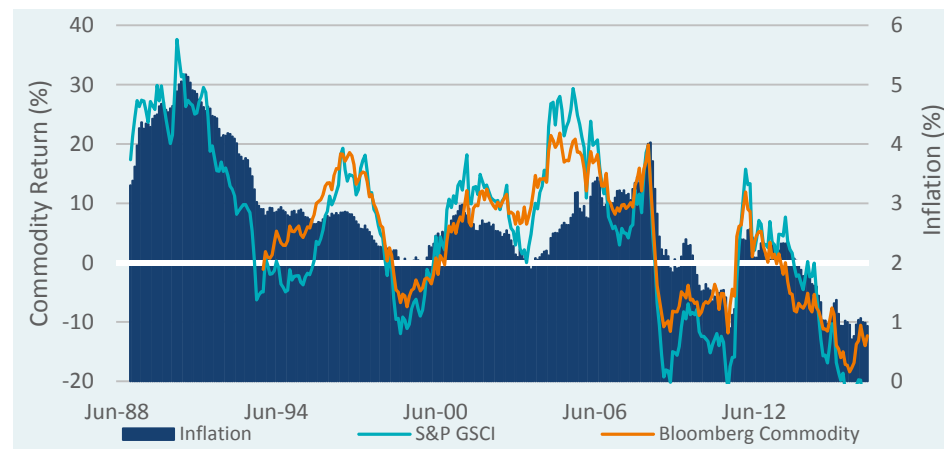
realized extreme currency devaluation which has harshly impacted the unhedged returns of foreign investors. Here at home energy-related debt defaults are accelerating and fueling worries that a prolonged energy slump could have a serious fallout effects for the U.S. energy sector. OPEC members and non-members alike continue discussions regarding production cut strategies and agreements, though it is debatable whether these agreements will be upheld.

## COMMODITY PERFORMANCE



Source: Bloomberg, as of 9/30/16

## INFLATION BETA



Source: Standard & Poor's, Bloomberg, as of 9/30/16

# Currency

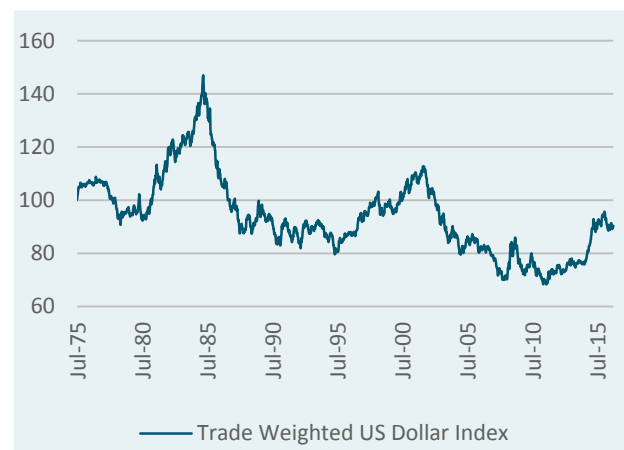
The U.S. dollar, weighted by major trading partners, fell 0.7% in the third quarter, benefitting investors with unhedged equity exposure. The pound sterling has had the opposite effect for U.S. investors, as new multi-decade lows were reached during the quarter, following a significant market flash crash (but recovery).

After a recent period of appreciation, the dollar has stabilized so far this year. Moderation of the USD would have a positive impact on earnings of U.S. companies with significant international exposure.

However, with the Fed expected to continue increasing interest rates while other central banks are still in easing mode, there may be upward pressure on the dollar as interest rate differentials increase.

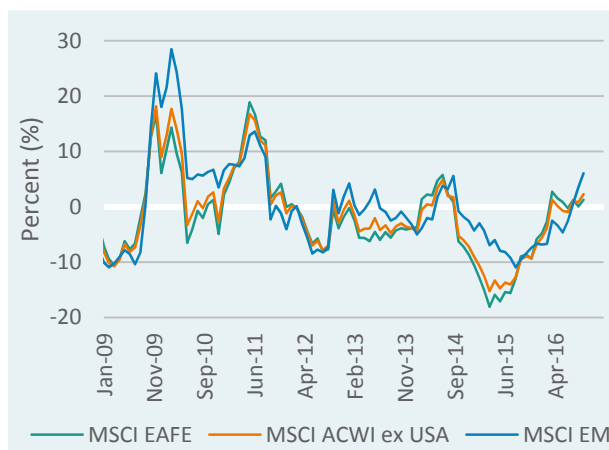
The pound sterling fell to a 31-year low against the U.S. dollar, influenced by uncertainty surrounding the details of the U.K.'s exit from the European Union. Theresa May announced that she would invoke Article 50 by March 2017.

**LONG-TERM TRADE WEIGHTED USD**



Source: FRED, as of 9/30/16

**EFFECT OF CURRENCY (1YR ROLLING)**



Source: MSCI, as of 9/30/16

**GBP/USD**



Source: FRED, as of 10/19/16

# Appendix

# Periodic table of returns – September 2016

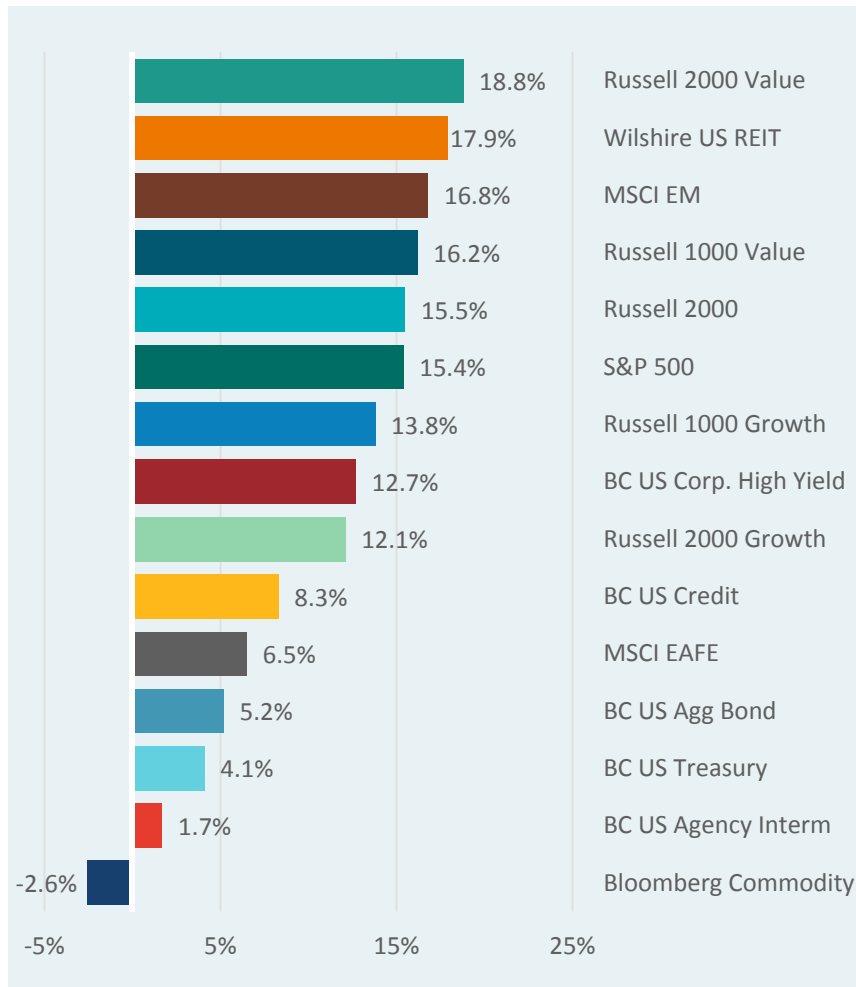
	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	YTD	5-Year	10-Year
Small Cap Value	74.8	16.6	38.4	23.2	35.2	38.7	66.4	31.8	14.0	25.9	56.3	26.0	34.5	32.6	39.8	5.2	79.0	29.1	14.3	18.6	43.3	13.5	10.1	16.0	16.6	8.8
Emerging Markets Equity	32.9	8.1	37.8	23.1	32.9	27.0	43.1	22.8	8.4	10.3	48.5	22.2	21.4	26.9	16.2	1.4	37.2	26.9	7.8	18.1	38.8	13.2	5.7	15.5	16.4	8.3
Small Cap Equity	26.3	6.4	37.2	22.4	31.8	20.3	33.2	12.2	7.3	6.7	47.3	20.7	20.1	23.5	15.8	-6.5	34.5	24.5	2.6	17.9	34.5	13.0	0.9	11.5	16.2	7.4
Large Cap Value	23.8	4.4	31.0	21.6	30.5	19.3	27.3	11.6	3.3	1.6	46.0	18.3	14.0	22.2	11.8	-21.4	32.5	19.2	1.5	17.5	33.5	11.8	0.6	10.0	16.1	7.4
Large Cap Equity	19.3	3.2	28.5	21.4	22.4	16.2	26.5	7.0	2.8	1.0	39.2	16.5	7.5	18.4	11.6	-25.9	28.4	16.8	0.4	16.4	33.1	6.0	0.0	8.9	15.8	7.1
60/40 Global Portfolio	18.9	2.6	25.7	16.5	16.2	15.6	24.3	6.0	2.5	-5.9	30.0	14.5	7.1	16.6	10.9	-28.9	27.2	16.7	0.1	16.3	32.5	5.6	-0.4	8.0	15.4	5.9
Small Cap Growth	18.1	0.4	19.6	14.4	13.9	8.7	21.3	4.1	-2.4	-6.0	29.9	14.3	6.3	15.5	10.3	-33.8	23.3	16.1	-2.1	15.3	23.3	4.9	-0.8	7.9	11.5	5.8
US Bonds	13.4	-1.5	18.5	11.3	12.9	4.9	20.9	-3.0	-5.6	-11.4	29.7	12.9	5.3	15.1	7.0	-35.6	20.6	15.5	-2.9	14.6	12.1	4.2	-1.4	7.5	7.4	4.8
Large Cap Growth	10.2	-1.8	15.2	10.3	10.6	1.2	13.2	-7.3	-9.1	-15.5	25.2	11.4	4.7	13.3	7.0	-36.8	19.7	13.1	-4.2	11.5	11.0	3.4	-2.5	6.0	7.2	4.6
Commodities	9.7	-2.0	11.6	9.9	9.7	-2.5	11.4	-7.8	-9.2	-15.7	23.9	9.1	4.6	10.4	5.8	-37.6	18.9	10.2	-5.5	10.5	9.0	2.8	-3.8	5.8	3.2	3.9
Real Estate	3.1	-2.4	11.1	6.4	5.2	-5.1	7.3	-14.0	-12.4	-20.5	11.6	6.9	4.6	9.1	4.4	-38.4	11.5	8.2	-5.7	4.8	0.1	0.0	-4.4	4.3	3.1	1.8
International Equity	2.9	-2.9	7.5	6.0	2.1	-6.5	4.8	-22.4	-19.5	-21.7	9.0	6.3	4.2	4.8	-0.2	-38.5	5.9	6.5	-11.7	4.2	-2.0	-1.8	-7.5	1.7	3.0	1.8
Cash	1.4	-3.5	5.7	5.1	-3.4	-25.3	-0.8	-22.4	-20.4	-27.9	4.1	4.3	3.2	4.3	-1.6	-43.1	0.2	5.7	-13.3	0.1	-2.3	-4.5	-14.9	0.2	0.1	0.8
Hedge Funds of Funds	-1.1	-7.3	-5.2	3.6	-11.6	-27.0	-1.5	-30.6	-21.2	-30.3	1.0	1.4	2.4	2.1	-9.8	-53.2	-16.9	0.1	-18.2	-1.1	-9.5	-17.0	-24.7	-0.1	-9.4	-5.3

- Large Cap Equity
- Small Cap Growth
- Commodities
- Large Cap Value
- International Equity
- Real Estate
- Large Cap Growth
- Emerging Markets Equity
- Hedge Funds of Funds
- US Bonds
- 60% MSCI ACWI/40% BC Global Bond
- Small Cap Equity
- Cash

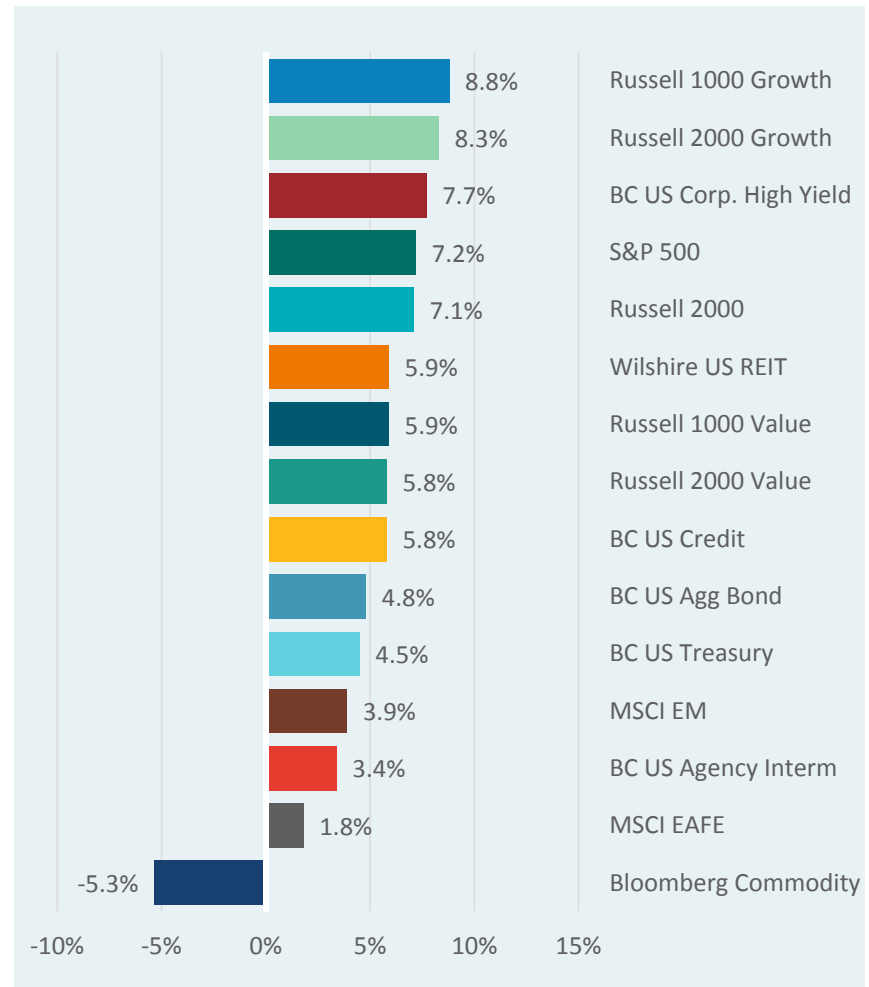
Source Data: Morningstar, Inc., Hedge Fund Research, Inc. (HFR), National Council of Real Estate Investment Fiduciaries (NCREIF). Indices used: Russell 1000, Russell 1000 Value, Russell 1000 Growth, Russell 2000, Russell 2000 Value, Russell 2000 Growth, MSCI EAFE, MSCI EM, BC Agg, T-Bill 90 Day, Bloomberg Commodity, NCREIF Property, HFRI FOF, MSCI ACWI, BC Global Bond. NCREIF Property performance data as of 6/30/16.

# Major asset class returns

ONE YEAR ENDING SEPTEMBER



TEN YEARS ENDING SEPTEMBER

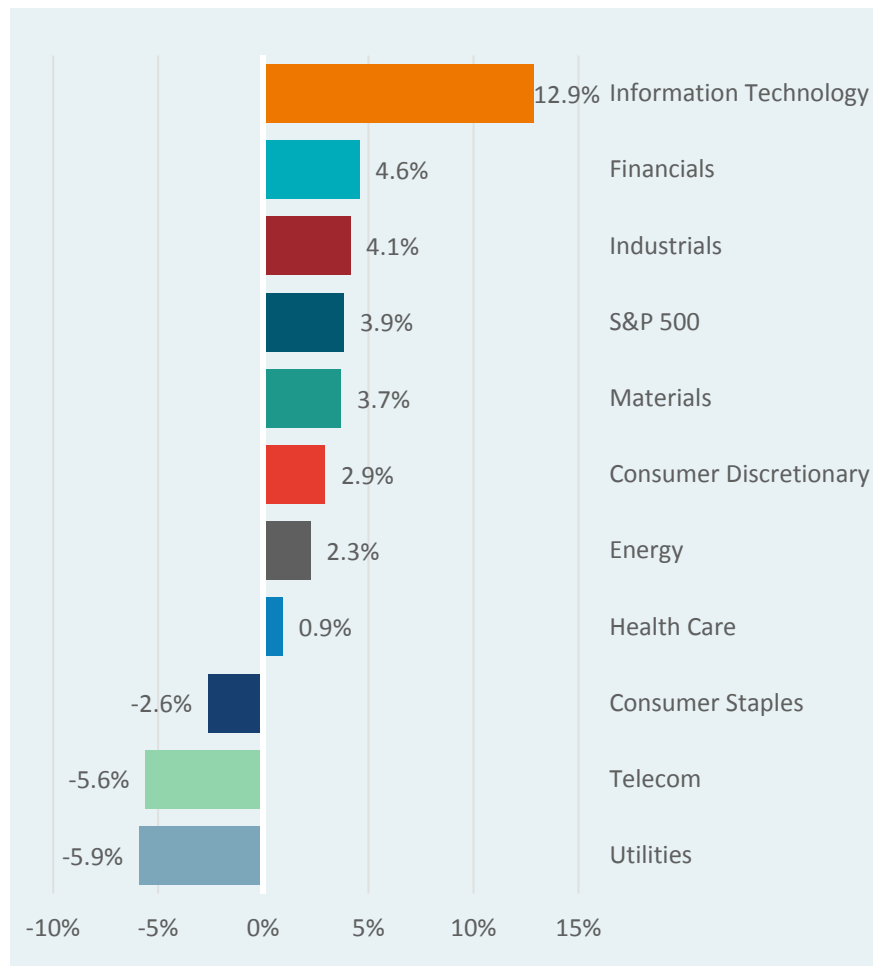


Source: Morningstar, as of 9/30/16

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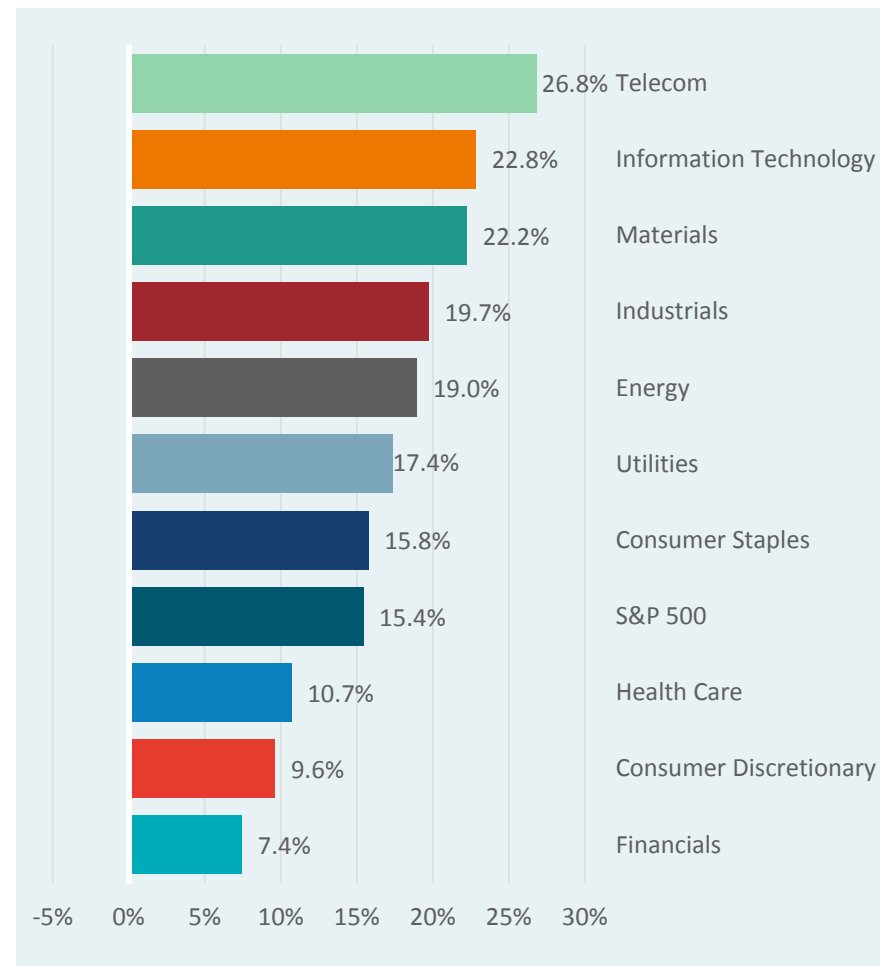
# S&P 500 and S&P 500 sector returns

QTD



Source: Morningstar, as of 6/30/16

ONE YEAR ENDING SEPTEMBER



Source: Morningstar, as of 6/30/16

# Detailed index returns

## DOMESTIC EQUITY

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
<b>Core Index</b>							
S&P 500	0.0	3.9	7.8	15.4	11.2	16.4	7.2
S&P 500 Equal Weighted	0.1	4.5	10.6	16.1	10.8	17.4	8.8
DJ Industrial Average	(0.4)	2.8	7.2	15.5	9.2	13.8	7.4
Russell Top 200	0.0	3.8	7.0	15.2	11.3	16.3	7.0
Russell 1000	0.1	4.0	7.9	14.9	10.8	16.4	7.4
Russell 2000	1.1	9.0	11.5	15.5	6.7	15.8	7.1
Russell 3000	0.2	4.4	8.2	15.0	10.4	16.4	7.4
Russell Mid Cap	0.2	4.5	10.3	14.2	9.7	16.7	8.3
<b>Style Index</b>							
Russell 1000 Growth	0.4	4.6	6.0	13.8	11.8	16.6	8.8
Russell 1000 Value	(0.2)	3.5	10.0	16.2	9.7	16.2	5.9
Russell 2000 Growth	1.4	9.2	7.5	12.1	6.6	16.1	8.3
Russell 2000 Value	0.8	8.9	15.5	18.8	6.8	15.4	5.8

## INTERNATIONAL EQUITY

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
<b>Broad Index</b>							
MSCI ACWI	0.6	5.3	6.6	12.0	5.2	10.6	4.3
MSCI ACWI ex US	1.2	6.9	5.8	9.3	0.2	6.0	2.2
MSCI EAFE	1.2	6.4	1.7	6.5	0.5	7.4	1.8
MSCI EM	1.3	9.0	16.0	16.8	(0.6)	3.0	3.9
MSCI EAFE Small Cap	3.0	8.6	5.2	12.3	5.1	11.1	4.4
<b>Style Index</b>							
MSCI EAFE Growth	1.5	5.0	2.6	9.5	2.4	8.7	3.1
MSCI EAFE Value	1.0	8.0	0.8	3.5	(1.5)	6.0	0.4
<b>Regional Index</b>							
MSCI UK	1.0	4.0	0.8	1.5	(1.8)	6.0	1.4
MSCI Japan	1.6	8.6	2.5	12.1	3.3	7.4	1.0
MSCI Euro	0.7	7.3	(0.6)	2.8	(0.9)	7.3	0.2
MSCI EM Asia	1.3	10.5	13.0	16.9	3.5	6.3	5.6
MSCI EM Latin American	(0.8)	5.4	32.2	28.6	(7.9)	(3.9)	2.4

## FIXED INCOME

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
<b>Broad Index</b>							
BC US Treasury US TIPS	0.5	1.0	7.3	6.6	2.4	1.9	4.5
BC US Treasury Bills	0.0	0.1	0.3	0.3	0.2	0.1	1.0
BC US Agg Bond	(0.1)	0.5	5.8	5.2	4.0	3.1	4.8
<b>Duration</b>							
BC US Treasury 1-3 Yr	0.1	(0.1)	1.3	0.9	0.9	0.7	2.3
BC US Treasury Long	(1.6)	(0.4)	14.7	13.1	11.2	5.5	8.1
BC US Treasury	(0.1)	(0.3)	5.1	4.1	3.4	2.2	4.5
<b>Issuer</b>							
BC US MBS	0.3	0.6	3.7	3.6	3.6	2.6	4.7
BC US Corp. High Yield	0.7	5.6	15.1	12.7	5.3	8.3	7.7
BC US Agency Interm	0.2	(0.0)	2.3	1.7	1.8	1.4	3.4
BC US Credit	(0.3)	1.2	8.9	8.3	5.4	4.8	5.8

## OTHER

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
<b>Index</b>							
Bloomberg Commodity	3.1	(3.9)	8.9	(2.6)	(12.3)	(9.4)	(5.3)
Wilshire US REIT	(2.1)	(1.2)	9.7	17.9	14.3	15.8	5.9
<b>Regional Index</b>							
JPM EMBI Global Div	0.4	4.0	14.8	16.2	8.2	7.8	7.7
JPM GBI-EM Global Div	2.0	2.7	17.1	17.1	(2.6)	0.1	5.5
<b>Currency (Spot)</b>							
Euro	0.9	1.2	3.5	0.7	(6.0)	(3.5)	(1.2)
Pound	(0.8)	(2.8)	(11.9)	(14.2)	(7.1)	(3.6)	(3.6)
Yen	2.1	1.3	18.8	18.3	(1.0)	(5.3)	1.5

Source: Morningstar, as of 9/30/16

# Definitions

**Bloomberg US Weekly Consumer Comfort Index** - tracks the public's economic attitudes each week, providing a high-frequency read on consumer sentiment. The index, based on cell and landline telephone interviews with a random, representative national sample of U.S. adults, tracks Americans' ratings of the national economy, their personal finances and the buying climate on a weekly basis, with views of the economy's direction measured separately each month. ([www.langerresearch.com](http://www.langerresearch.com))

**University of Michigan Consumer Sentiment Index** - A survey of consumer attitudes concerning both the present situation as well as expectations regarding economic conditions conducted by the University of Michigan. For the preliminary release approximately three hundred consumers are surveyed while five hundred are interviewed for the final figure. The level of consumer sentiment is related to the strength of consumer spending. ([www.Bloomberg.com](http://www.Bloomberg.com))

**Citi Economic Surprise Index** - objective and quantitative measures of economic news. Defined as weighted historical standard deviations of data surprises (actual releases vs Bloomberg survey median). A positive reading of the Economic Surprise Index suggests that economic releases have on balance been beating consensus. The indices are calculated daily in a rolling three-month window. The weights of economic indicators are derived from relative high-frequency spot FX impacts of 1 standard deviation data surprises. The indices also employ a time decay function to replicate the limited memory of markets. ([www.Bloomberg.com](http://www.Bloomberg.com))

**Merrill Lynch Option Volatility Estimate (MOVE) Index** – a yield curve weighted index comprised of a weighted set of 1-month Treasury options, including 2.5.10 and 30 year tenor contracts. This index is an indicator of the expected (implied) future volatility in the rate markets.

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# Glossary

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**Allocation Effect:** An attribution effect that describes the amount attributable to the managers' asset allocation decisions, relative to the benchmark.

**Alpha:** The excess return of a portfolio after adjusting for market risk. This excess return is attributable to the selection skill of the portfolio manager. Alpha is calculated as:  $\text{Portfolio Return} - [\text{Risk-free Rate} + \text{Portfolio Beta} \times (\text{Market Return} - \text{Risk-free Rate})]$ .

**Benchmark R-squared:** Measures how well the Benchmark return series fits the manager's return series. The higher the Benchmark R-squared, the more appropriate the benchmark is for the manager.

**Beta:** A measure of systematic, or market risk; the part of risk in a portfolio or security that is attributable to general market movements. Beta is calculated by dividing the covariance of a security by the variance of the market.

**Book-to-Market:** The ratio of book value per share to market price per share. Growth managers typically have low book-to-market ratios while value managers typically have high book-to-market ratios.

**Capture Ratio:** A statistical measure of an investment manager's overall performance in up or down markets. The capture ratio is used to evaluate how well an investment manager performed relative to an index during periods when that index has risen (up market) or fallen (down market). The capture ratio is calculated by dividing the manager's returns by the returns of the index during the up/down market, and multiplying that factor by 100.

**Correlation:** A measure of the relative movement of returns of one security or asset class relative to another over time. A correlation of 1 means the returns of two securities move in lock step, a correlation of -1 means the returns of two securities move in the exact opposite direction over time. Correlation is used as a measure to help maximize the benefits of diversification when constructing an investment portfolio.

**Excess Return:** A measure of the difference in appreciation or depreciation in the price of an investment compared to its benchmark, over a given time period. This is usually expressed as a percentage and may be annualized over a number of years or represent a single period.

**Information Ratio:** A measure of a manager's ability to earn excess return without incurring additional risk. Information ratio is calculated as: excess return divided by tracking error.

**Interaction Effect:** An attribution effect that describes the portion of active management that is contributable to the cross interaction between the allocation and selection effect. This can also be explained as an effect that cannot be easily traced to a source.

**Portfolio Turnover:** The percentage of a portfolio that is sold and replaced (turned over) during a given time period. Low portfolio turnover is indicative of a buy and hold strategy while high portfolio turnover implies a more active form of management.

**Price-to-Earnings Ratio (P/E):** Also called the earnings multiplier, it is calculated by dividing the price of a company's stock into earnings per share. Growth managers typically hold stocks with high price-to-earnings ratios whereas value managers hold stocks with low price-to-earnings ratios.

**R-Squared:** Also called the coefficient of determination, it measures the amount of variation in one variable explained by variations in another, i.e., the goodness of fit to a benchmark. In the case of investments, the term is used to explain the amount of variation in a security or portfolio explained by movements in the market or the portfolio's benchmark.

**Selection Effect:** An attribution effect that describes the amount attributable to the managers' stock selection decisions, relative to the benchmark.

**Sharpe Ratio:** A measure of portfolio efficiency. The Sharpe Ratio indicates excess portfolio return for each unit of risk associated with achieving the excess return. The higher the Sharpe Ratio, the more efficient the portfolio. Sharpe ratio is calculated as:  $\text{Portfolio Excess Return} / \text{Portfolio Standard Deviation}$ .

**Sortino Ratio:** Measures the risk-adjusted return of an investment, portfolio, or strategy. It is a modification of the Sharpe Ratio, but penalizes only those returns falling below a specified benchmark. The Sortino Ratio uses downside deviation in the denominator rather than standard deviation, like the Sharpe Ratio.

**Standard Deviation:** A measure of volatility, or risk, inherent in a security or portfolio. The standard deviation of a series is a measure of the extent to which observations in the series differ from the arithmetic mean of the series. For example, if a security has an average annual rate of return of 10% and a standard deviation of 5%, then two-thirds of the time, one would expect to receive an annual rate of return between 5% and 15%.

**Style Analysis:** A return based analysis designed to identify combinations of passive investments to closely replicate the performance of funds

**Style Map:** A specialized form or scatter plot chart typically used to show where a Manager lies in relation to a set of style indices on a two-dimensional plane. This is simply a way of viewing the asset loadings in a different context. The coordinates are calculated by rescaling the asset loadings to range from -1 to 1 on each axis and are dependent on the Style Indices comprising the Map.

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