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# PERSPECTIVES THAT DRIVE ENTERPRISE SUCCESS

PERIOD ENDING: MARCH 31, 2016

Investment Performance Review for

San Mateo County Employees' Retirement Association

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• Historically, emerging market performance has been closely linked with the U.S. dollar and commodities. With a collapsing dollar and rebounding commodity prices, therefore, it comes as no surprise that emerging markets enjoyed a significant rally in Q1. The MSCI EM index rose 5.7% in Q1, led by Latin America as a leveraged play on commodities. EM Europe and Middle East followed suit, rising 12.6% in the quarter, while Asia lagged the benchmark, rising only 1.9%.

• EM FX also stabilized on the back of a dovish Fed, prompting an inflection in the monetary policy stance of a number of EM central banks. Indonesia, Hungary and Taiwan all cut rates in Q1. Importantly, inflation rates across the region either moved lower or fell within central bank targets, with only a handful of countries continuing to struggle with high inflation. This trend, in turn, drove a compression in bond yields and a multiple expansion in equities, boding well for a sustained bullish view on the asset class.

• With the U.K. referendum on EU membership drawing close, investor nervousness is reflected in the decline of the Pound. Opinion polls ended the quarter quite tight, as the lead of "Remain" significantly diminished. The currency lost 2.5% in Q1, and will likely remain weak into the June EU referendum.

• All U.S. corporate bonds finished Q1 on a positive note, led by BAA-rated bonds. Treasury and Agency debt also rose and closed the quarter 3.2% and 2% higher, respectively.

• The State Street Investor Confidence Index® (ICI) measures risk appetite by analyzing the buying and selling patterns of the institutional investors. The Global ICI rose to 114.8 in March, up from February's revised reading of 106.6. The increase in sentiment was driven by an improvement in the North American ICI from 109.4 to 123.7. The European ICI rose by 5.6 points to 95.8 while the Asian ICI rose only marginally, from 111.5 to 112.

• For the period ending 3/31/16, the one quarter returns for, respectively, the NAREIT Equity index and the NCREIF Property index (one quarter lag), were 6.0% and 2.9%; one year, 4.4% and 13.3%; three years, 10.5% and 12.0%; and five years, 11.9% and 12.2%.

• Elevated volatility in world markets have resulted from concerns about global economic growth and the on-going weakness of commodity prices, emerging market currencies and the widening of credit spreads. REITs were down over 4% in the first two months of the year as the equity markets sold off. A large recovery in March had REITs up over 10% for the month of March.

• REIT dividend yields decreased by eight bps in the first quarter to 3.8% while the ten-year US Treasury decreased by 49 bps to 1.8%, both as of March 31, 2015. As a result, the REIT dividend yield spread to Treasuries increased by 41 bps to 206 bps, well above the historical average of 111 bps.



# **U.S. Equity Market**

### Equity Markets

	<u>QTR</u>	<u>1 Year</u>	<u>3 Year</u>
S&P 500	1.3	1.8	11.8
Dow Jones Industrial Average	2.2	2.1	9.3
NASDAQ	-2.7	-0.6	14.2
Russell 1000	1.2	0.5	11.5
Russell 2000	-1.5	-9.8	6.8
Russell 3000	1.0	-0.3	11.1
MSCI EAFE (Net)	-3.0	-8.3	2.2
MSCI Emerging Markets (Net)	5.7	-12.0	-4.5
MSCI All Country World ex US (Net)	-0.4	-9.2	0.3

#### Bond Markets

	<u>QTR</u>	<u>1 Year</u>	<u>3 Year</u>
Barclays Capital Aggregate	3.0	2.0	2.5
Barclays Capital Gov/Credit	3.5	1.7	2.4
Barclays Capital Universal	3.1	1.8	2.5
Barclays Capital Corp. High Yield	3.4	-3.7	1.8
CG Non-US World Govt.	9.1	7.7	-0.2

QTR

2.9

1 Year

13.3

3 Year

12.0

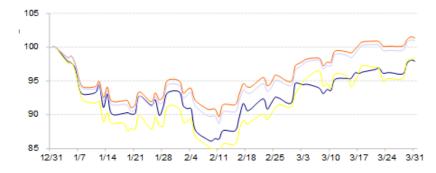
#### Non-Public Markets

lagged quarterly

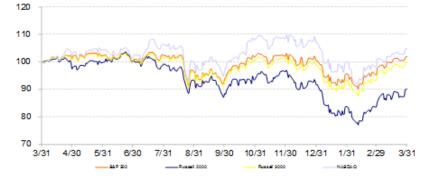
NCREIF	Property

- The first half of the quarter saw falling risk assets in response to softer economic data and worsening tail risk fears of a US recession and Chinese currency devaluation. Immediate tail risks faded into the second half of the quarter, however, prompting significant reversals.
- While the S&P 500 recovered all losses from earlier this year, small capitalization stocks continued to lag, finishing the quarter down 1.5%.
- Bond markets rallied, supported by Fed Chair Yellen reiterating her dovish message in March.

### Equity Index – Quarterly Growth Rate



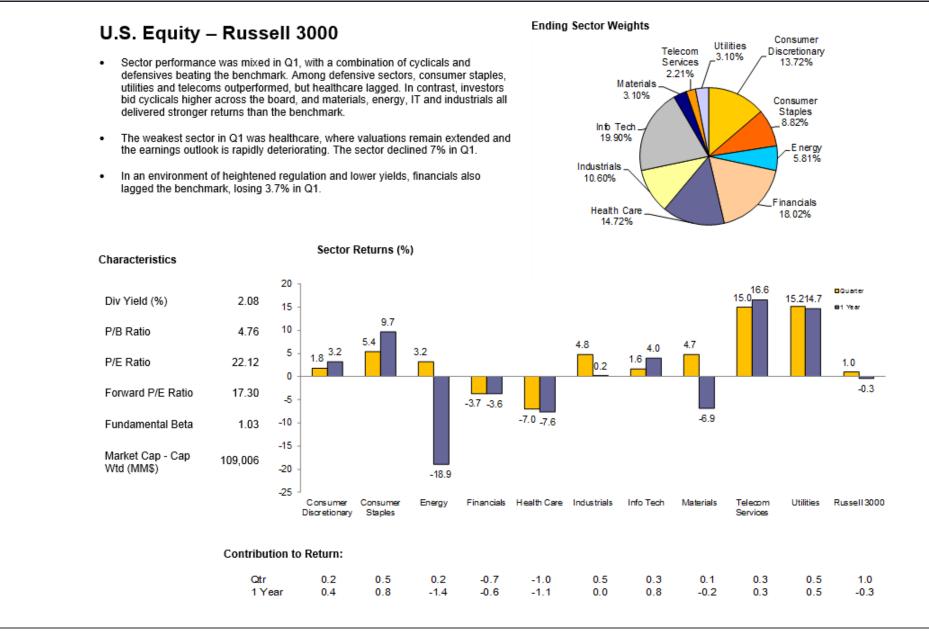
### Equity Index - 1-Year Growth Rate





# Market Environment US Markets

# Period Ending: March 31, 2016

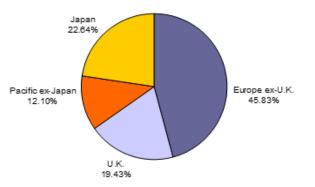


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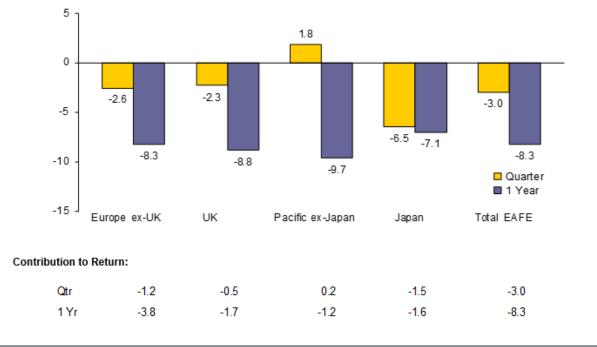
# Developed Equity – MSCI EAFE (Net)

- So far, there is little evidence that global accommodative policy has helped developed equities. All key markets lost ground in Q1, with the exception of Asia Pacific ex-Japan which rose 1.8%.
- Earnings momentum in Japan slowed down and domestic activity showed no signs of acceleration in Q1. The market lost 6.5% YTD.
- Overall, the MSCI EAFE Net Return index was down 3% in Q1.





Regional Returns (%)

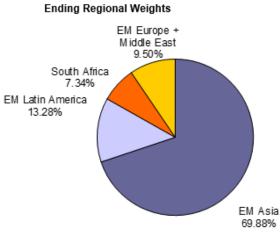




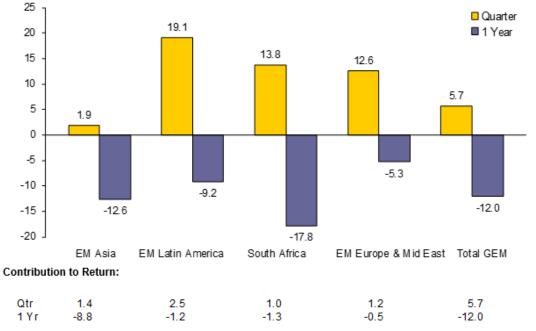
### San Mateo County Employees' Retirement Association 4

# Emerging Markets Equity – MSCI EM (Net)

- Historically, emerging market performance has been strongly influenced by the U.S. dollar and commodities. A dovish Fed resulting in U.S. dollar weakness and a rebound in commodities helped the asset class in Q1.
- The MSCI EM index rose 5.7% in Q1, led by Latin America as a leveraged play on commodities. EM Europe and Middle East followed suit, rising 12.6% in the quarter, while Asia lagged.
- On a 1-year basis, South Africa lost the most, down 17.8% despite the significant rally in Q1. Following the sharp decline of the rand over the past year, inflation remains rampant in the country, tying the hands of policy makers. The SARB hiked rates twice already this year, in an effort to stabilize prices.



Regional Returns (%)





# **Currency Markets**

### Period Ending: March 31, 2016

# **Currency Markets**

- In Q1, the U.S. dollar lost 4.9% and 6.9% against the euro and the yen, respectively.
- With the U.K. referendum on EU membership drawing close, investor nervousness is reflected in the decline of the Pound. Opinion polls ended the quarter quite tight, as the lead of "Remain" significantly diminished. The currency lost 2.5% in Q1, and will likely remain weak into the June EU referendum.

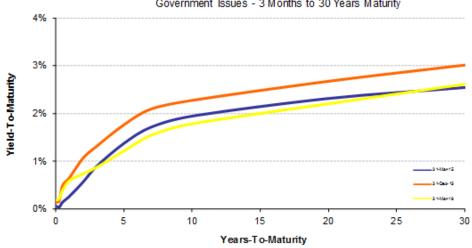




INTEREST RATE TERM STRUCTURE Government Issues - 3 Months to 30 Years Maturity

# **Yield Curve**

- The Treasury yield curve shifted lower last quarter, driven by decreases across the longer maturities.
- 10-year yields fell 49 bps during Q1, while 30-year yields fell by 40 bps.
- The yields on the 1-month and 3-month Treasuries rose by 4 bps and 5 bps, respectively.





# Period Ending: March 31, 2016

Municipal

0.10%

U.S. Treasury

37.42%

CMO 1.13%

Sector Weights Yankees

Corporate

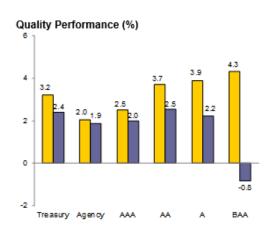
23.92%

Asset

Backed 0.54%\_

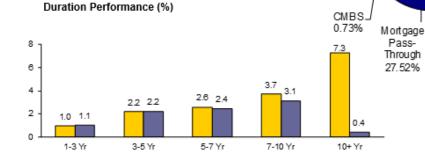
> Agency 2.94%

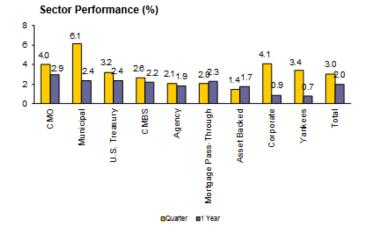
5.70% .



# U.S. Bond Market Returns – Barclays Capital Aggregate

- U.S. Treasuries rose 3.2% in Q1, supported by the dovish Fed message delivered in March.
- Longer-duration US Government bonds led the gains and bonds with durations over 10 years rose 7.3% in Q1.
- Among sectors, municipal debt rose the most again, up 6.1%, while CMBS, agency and asset-backed debt underperformed the benchmark.

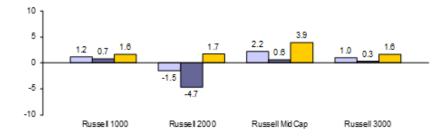






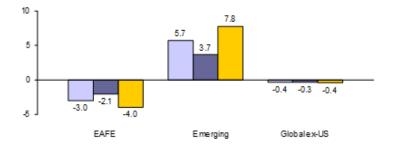
# **Style & Capitalization Returns**

- · Value led the Q1 gains across US indices. The rally in emerging markets was also supported by a preference for value over growth.
- · In terms of size, mid caps strongly outperformed in Q1, recouping some of their losses over the past year.
- · Reversing trend from Q4 last year, emerging markets were the best performer across styles in Q1, while EAFE lost the most.

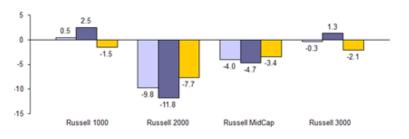


Russell US Style Returns (%) – Quarter

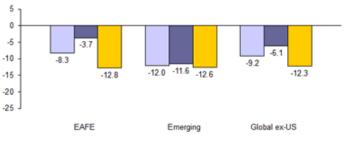
MSCI Non-US Style Returns (%) – Quarter







MSCI Non-US Style Returns (%) - 1 Year



□ Neutral ■ Growth □ Value



- The Total Fund, net of manager fees, returned 1.3% in the first quarter of 2016 and ranked 25<sup>th</sup> among other public plans great than \$1 billion (median of 0.9%). It lagged the policy index return of 1.5%. The Total Fund w/o Overlay was 1.1% for the quarter. The Parametric Minneapolis Overlay strategy was funded August 2013. The Total Fund one year return of -0.8% was behind its policy index return of -0.7% and ranked in 33<sup>rd</sup> percentile of its peer universe. The three-year return of 6.1% (24<sup>th</sup> percentile) was above median among large public plans (5.4%).
- First quarter results were enhanced by the following factors:
  - 1. The Private Real Asset composite out-performed its benchmark, the CPI +5% (14.7% vs. 1.2%).
  - Risk parity manager PanAgora beat its benchmark, the blended 60% Russell 3000/ 40% Barclays Aggregate Index (8.2% vs. 1.9%). Exposure to nominal fixed income (non-US and US government debt) and inflation protected assets (commodities) added to the quarter.
  - 3. During the first quarter, Parametric Core beat the MSCI Emerging Markets Index (8.8% vs. 5.8%) by 300 basis points. An underweight to China and overweight to Turkey, while carrying sector diversification in Korea contributed to relative performance.
  - 4. AQR Global Risk Premium, 10% Volatility Fund was up 4.6% while the blended 60% Russell 3000/ 40% Barclays Aggregate Index returned 1.9%. First quarter gross return attribution is as follows: equity (-0.4%), nominal interest rates (3.3%), inflation (1.1%) and credit/currency (0.8%) risk.
  - 5. The Boston Company returned 4.1%, versus 1.7% for the Russell 2000 Value Index, and ranked in the 24<sup>th</sup> percentile among its small cap value peers (median 2.2%). Performance alpha was mainly derived from its Consumer Discretionary and Financials stock selection and intra-quarter trading.
  - 6. Mondrian returned 1.6%, beat the MSCI ACWI ex US Value (-0.3%) and ranked in the 26<sup>th</sup> percentile among its ACWI ex US Value equity peers (0.3% median). Performance results were enhanced by stock selection in the UK, Japan and Switzerland equity markets.



# Total Fund Executive Summary

- 7. Baillie Gifford led its benchmark, the MSCI ACWI ex US (0.3% vs. -0.3%). It ranked in the top quartile among ACWI ex US growth equity managers (median of -2.2%). Australian Cochlear, Japanese Shiseido and Chinese (Hong Kong) Jardine Matheson were contributors during the quarter.
- 8. The Treasury and LAIF account was up, 0.7%, during the quarter. The 91-Day T-Bill returned 0.1% during the same time period.
- 9. Chartwell lost less value, -4.4%, than the Russell 2000 Growth Index, -4.7%. Chartwell ranked in 56<sup>th</sup> percentile among small cap growth managers (median of -4.1%). Positive attributes include stock selection the Healthcare (Bruker) and Consumer Discretionary (Burlington Stores, Express, Steve Madden) sectors.
- 10. The FIAM Broad Market Duration Fund added 3.2% to its value and ranked in the 15<sup>th</sup> percentile among core bond managers (median of 2.9%). The Barclays Aggregate Index was up 3.0% for the quarter. Corporate security selection, overweight to CMBS and US TIPS and an underweight to agency MBS were contributors to relative performance.
- 11. The BlackRock S&P 500 Index Fund, 1.4%, was in line with its benchmark (1.3%) and ranked above the large cap core median of 0.2%.
- 12. The BlackRock EAFE Index Fund, -2.9%, slightly led its benchmark (-3.0%) but ranked below the EAFE core equity median of -2.5%.
- 13. The FIAM Select International Small Cap Plus quarterly portfolio result of 0.9% was slightly ahead of the MSCI ACWI ex US Small Cap (0.8%), and ranked in the 16<sup>th</sup> percentile among ACWI ex US small cap managers. Holdings in the Switzerland and China aided performance. Consumer Staples (Sundrug) and Financials (Bolsa Mexicana de Valores) were two of the primary sector contributors.
- First quarter results were hindered by the following factors:
  - Franklin Templeton appreciated, 0.1% and ranked in the bottom quartile among global bond managers (median of 3.4%). The Barclays Multiverse Index return was 5.9%. Franklin's currency positions (underweight to the euro, Japanese yen and Australian dollar), interest rate strategies (underweight duration exposure in the US and Japan) and overall credit exposures (overweight high yield) flattened results.



- 2. The Angelo Gordon STAR Fund depreciated, -2.2%, (preliminary quarterly return) while the Barclays Aggregate Index return was 3.0%.
- 3. In its first full quarter, Standard Life GARS fell behind its benchmark, the Libor +4% Index (-3.2% vs. 1.0%). It ranked in the bottom quartile among other multi-strategy hedge funds (0.4% median). The following strategies were factors to negative attribution: short US duration, long USD vs. Singapore dollar and US banks vs. US Consumer Staples.
- 4. Barrow Hanley's return of -1.6% was behind the Russell 1000 Value Index, 1.6%, and ranked in the bottom quartile among large cap value equity managers (median of 0.7%). Performance was hurt by its lack of Utilities exposure and select Consumer Discretionary (Royal Caribbean Cruises) and Financials (Bank of America, Citigroup, E\*Trade Financial) investments.
- 5. The SSARIS Multisource Active Commodity Fund was behind the Bloomberg Commodity Index (-2.8% vs. 0.4%). Underperformance was driven by the Core and Tactical pools.
- 6. In its first full quarter, Invesco US Val IV was not on par with the NCREIF ODCE (-0.2% vs. 2.2%). Current property levels in the fund total \$210.6 million, with \$1.8 million distributed to date.
- 7. The Angelo Gordon Opportunistic strategy returned 0.7% (preliminary quarterly return). The Barclays Aggregate Index return was 3.0%. Effective Q2 2015, the fund is no longer valued at one-quarter lag.
- 8. Private Equity investments depreciated, -0.3%, for the quarter. The Russell 3000 +3% Index was up 1.8%.
- 9. Hedge fund strategy AQR DELTA XN lagged the Libor +4% Index (-1.1% vs. 1.0%). It ranked in the third quartile among other hedge fund multi-strategy accounts (median of 0.4%). The long/short equity (-2.2%), fixed income relative value (-0.3%) and global macro (-0.3%) strategies were AQR's largest detractors.
- 10. Brown Advisory was outpaced by the Russell 1000 Growth Index (-1.4% vs. 0.7%) and ranked in the second quartile among large cap growth managers (median of -1.9%). Select Consumer Discretionary (Amazon.com, TripAdvisor) and Financials (Charles Schwab) stocks dampened performance.



- 11. Brown Brothers Harriman was below par, 3.4%, was outpaced by the Barclays US TIPS Index (4.5%) and ranked in the bottom quartile among inflation linked bond accounts (median of 4.2%). During the quarter, the portfolio held shorter maturity TIPS and long break-even positions.
- 12. Beach Point Select trailed the Barclays BAA Intermediate High Yield Index (2.4% vs. 3.4%). It ranked in the second quartile among other high yield managers. Its greatest negative factor was its public equities strategy. Its leading detractors were Freedom Group and Valeant Pharmaceutical.
- 13. The Invesco Core Real Estate-USA Fund returned 1.4% for the quarter and below par with the NCREIF ODCE Index (2.2%). During the quarter, the fund produced a return comprised of 1.0% income and 0.5% appreciation, gross of fees. ICRE incurred \$40m (50 bps) in write-downs.
- 14. Western TRU was behind its benchmark, the 3-Month Libor Total Return Index (-0.7% vs. 0.1%) and ranked in the bottom quartile among core fixed managers (median of 2.9%). Its structure product and high yield energy exposure impacted performance.
- 15. DE Shaw's 130/30 strategy return of 0.6% ranked in the second quartile among large cap core equity managers (0.2% median), and was behind its benchmark, the Russell 1000 Index (1.2%). Its event driven and fundamental forecasts were the largest contributors to underperformance.
- 16. The opportunistic credit high yield manager, Brigade Capital, lagged its benchmark, the Barclays BAA Intermediate High Yield Index (3.1% vs. 3.4%). The median high yield quarterly return was 2.3%. Its bank loans and CLO positions were the primary detractors of performance.



	3 Mo (%)	Rank*	YTD (%)	Rank	1 Yr (%)	Rank	2 Yrs (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Total Fund <sup>**</sup>	1.3	25	-1.4	31	-0.8	33	2.9	29	6.1	24	6.5	30	4.6	75
Policy Index <sup>1</sup>	1.5	11	-1.2	27	-0.7	31	2.6	42	6.2	23	6.7	24	5.6	24
Allocation Index	1.5	13	-1.2	27	-0.8	31	2.5	43	6.2	23				
InvestorForce Public DB > \$1B Net Median	0.9		-2.1		-1.6		2.1		5.4		5.9		5.0	
Total Fund ex Overlay	1.1	38	-1.5	40	-1.0	34	2.8	37	6.0	31	6.4	31	4.6	75
Policy Index 1	1.5	11	-1.2	27	-0.7	31	2.6	42	6.2	23	6.7	24	5.6	24
Allocation Index	1.5	13	-1.2	27	-0.8	31	2.5	43	6.2	23				
InvestorForce Public DB > \$1B Net Median	0.9		-2.1		-1.6		2.1		5.4		5.9		5.0	
Total Equity	0.6	39	-3.3	30	-2.8	29	1.7	41	7.5	42	7.1	42	4.2	70
Blended Equity Index <sup>2</sup>	0.4	45	-4.5	47	-3.9	44	1.2	51	7.0	50	7.0	45	5.1	37
InvestorForce All DB Total Eq Net Median	0.2		-4.7		-4.2		1.3		7.0		6.8		4.8	
US Equity	0.4	57	-1.3	39	-0.9	36	4.8	47	10.6	42	10.0	52	5.6	85
Blended US Equity Index <sup>2</sup>	0.8	45	-1.6	43	-1.4	45	5.0	40	10.7	37	10.6	28	6.8	29
Russell 3000	1.0	36	-0.5	24	-0.3	25	5.8	20	11.1	19	11.0	13	6.9	20
InvestorForce All DB US Eq Net Median	0.6		-2.1		-1.8		4.6		10.4		10.0		6.4	
Large Cap Equity	0.6		0.4		1.0		6.6		11.6		10.7		6.0	
Russell 1000	1.2		0.4		0.5		6.4		11.5		11.4		7.1	
Barrow Hanley	-1.6	87	-5.6	72	-3.3	52	2.5	58	10.0	39	9.9	41		
Russell 1000 Value	1.6	37	-1.6	35	-1.5	31	3.8	35	9.4	52	10.2	34	5.7	69
eA US Large Cap Value Equity Net Median	0.7		-3.8		-3.1		2.9		9.4		9.6		6.2	
BlackRock S&P 500 Index	1.4	30	1.5	22	1.8	21	7.2	23	11.9	26				
S&P 500	1.3	30	1.5	23	1.8	21	7.1	24	11.8	26	11.6	28	7.0	48
eA US Large Cap Core Equity Net Median	0.2		-1.7		-1.3		5.1		10.9		10.7		6.9	

Fiscal

\* 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 1/1/16, Policy Index is 24% Russell 1000/ 4% Russell 2000/ 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%

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	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	2 Yrs (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Brown Advisory	-1.4	42	0.8	23	1.5	19	6.0	52						
Russell 1000 Growth	0.7	19	2.4	11	2.5	13	9.1	12	13.6	20	12.4	17	8.3	21
eA US Large Cap Growth Equity Net Median	-1.9		-2.0		-1.8		6.1		12.0		10.7		7.3	
DE Shaw	0.6	39	0.0	33	0.3	32	7.5	17	11.9	25	12.3	15		
Russell 1000	1.2	33	0.4	30	0.5	32	6.4	32	11.5	34	11.4	32	7.1	46
eA US Large Cap Core Equity Net Median	0.2		-1.7		-1.3		5.1		10.9		10.7		6.9	
Small Cap Equity	-0.2	51	-8.6	57	-9.2	66	-2.7	73	6.1	69	7.2	63	3.6	96
Russell 2000	-1.5	65	-10.1	66	-9.8	70	-1.2	61	6.8	61	7.2	63	5.3	69
eA US Small Cap Equity Net Median	-0.2		-7.7		-7.2		-0.2		7.6		8.0		6.0	
The Boston Co	4.1	24	-4.1	37	-3.6	28	-0.7	64	7.1	57	8.3	43		
Russell 2000 Value	1.7	58	-6.6	61	-7.7	71	-1.8	75	5.7	74	6.7	72	4.4	89
eA US Small Cap Value Equity Net Median	2.2		-5.5		-5.8		0.2		7.6		8.1		6.1	
Chartwell	-4.4	56	-13.1	52	-14.6	74	-4.7	74	5.1	79	6.8	67	5.1	65
Russell 2000 Growth	-4.7	58	-13.6	57	-11.8	58	-0.6	41	7.9	42	7.7	53	6.0	45
eA US Small Cap Growth Equity Net Median	-4.1		-12.4		-10.5		-1.8		7.1		7.8		5.6	
International Equity	0.9	18	-6.7	16	-6.0	20	-3.4	26	2.0	33	1.6	42	1.7	61
MSCI ACWI ex US IMI <sup>2</sup>	-0.1	38	-8.8	43	-7.7	42	-4.4	46	1.2	55	1.0	59	2.5	36
MSCI EAFE Gross	-2.9	88	-8.6	41	-7.9	44	-4.2	43	2.7	22	2.8	19	2.3	44
InvestorForce All DB ex-US Eq Net Median	-0.5		-9.2		-8.2		-4.5		1.3		1.3		2.1	
Developed Markets	0.1	18	-6.5	18	-5.7	19	-3.0	30	2.8	39	2.1	54	2.0	57
MSCI ACWI ex USA Gross	-0.3	18	-9.4	51	-8.8	55	-4.8	59	0.8	78	0.8	80	2.4	39
InvestorForce All DB Dev Mkt ex-US Eq Net Median	-1.9		-9.4		-8.5		-4.1		2.2		2.3		2.2	
Baillie Gifford	0.3	18	-4.8	42	-4.4	59	-1.5	56	4.1	51				
MSCI ACWI ex US <sup>2</sup>	-0.3	22	-9.4	85	-8.8	87	-4.8	86	2.3	80				



	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	2 Yrs (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
MSCI ACWI ex US Growth <sup>2</sup>	-0.2	22	-6.4	58	-5.8	65	-1.9	65	3.6	60				
eA ACWI ex-US Growth Equity Net Median	-2.2		-5.8		-3.0		-1.0		4.2		3.6		4.7	
BlackRock EAFE Index	-2.9	60	-8.7	67	-8.0	71	-4.4	74						
MSCI EAFE	-3.0	61	-8.8	68	-8.3	72	-4.7	80	2.2	72	2.3	75	1.8	81
MSCI EAFE Gross	-2.9	59	-8.6	66	-7.9	70	-4.2	74	2.7	69	2.8	72	2.3	64
eA EAFE Core Equity Net Median	-2.5		-7.6		-6.4		-2.8		4.0		3.7		2.9	
FIAM Equity <sup>+</sup>	0.9	16	-4.3	61	-0.4	73	-0.8	54	3.6	91				
MSCI ACWI ex US Small Cap Gross	0.8	16	-4.4	62	-0.3	71	-1.8	69	4.0	85	2.8	99	4.2	92
eA ACWI ex-US Small Cap Equity Net Median	-1.1		-3.4		0.5		-0.7		5.5		5.9		6.4	
Mondrian	1.6	26	-7.4	51	-7.3	62	-4.2	60	1.9	61	2.3	62	2.7	40
MSCI ACWI ex USA Value Gross	-0.3	56	-12.5	91	-11.8	93	-7.6	81	-0.8	84	-0.5	84	1.7	83
MSCI ACWI ex USA Gross	-0.3	56	-9.4	69	-8.8	71	-4.8	65	0.8	78	0.8	72	2.4	51
eA ACWI ex-US Value Equity Net Median	0.3		-7.3		-4.4		-3.7		3.4	_	2.9		2.4	
Emerging Markets	8.8	11	-8.7	13	-8.0	9	-6.7	76	-3.8	27				
MSCI Emerging Markets Gross	5.8	46	-12.4	71	-11.7	78	-5.7	50	-4.2	30	-3.8	46	3.3	27
InvestorForce All DB Emg Mkt Eq Net Median	5.5		-11.2		-10.5		-5.8		-4.8		-4.1		2.6	
Parametric Core	8.8	9												
MSCI Emerging Markets Gross	5.8	27	-12.4	62	-11.7	60	-5.7	58	-4.2	56	-3.8	70	3.3	67
eA Emg Mkts Equity Net Median	4.0		-11.6		-10.8		-5.3		-3.7		-2.4		3.9	
Total Fixed Income	1.7	90	-0.5	89	-1.1	86	1.6	76	1.4	70	4.1	37	5.0	61
Blended Fixed Index <sup>2</sup>	3.7	27	3.0	33	1.9	20	2.7	46	1.7	57	3.5	64	4.8	66
InvestorForce All DB Total Fix Inc Net Median	2.8		2.4	-	0.7		2.6		1.8		3.7		5.3	
US Fixed Income	2.0	79	0.2	87	-0.5	82	2.2	78	1.8	66	4.2	43	5.1	53
Blended US Fixed Index <sup>2</sup>	3.3	30	2.6	52	1.4	34	3.2	42	1.8	67	3.9	56	5.0	57
InvestorForce All DB US Fix Inc Net Median	2.6		2.7		0.9		3.0		2.2		4.0		5.2	

+ Name change from Pyramis Equity in September 2015.

\* Funded July 2015. (Parametric closed September 2015.)

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	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	2 Yrs (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Core Fixed	2.0		2.0		0.3		3.1		2.3		4.1			
Barclays Aggregate	3.0		3.7		2.0		3.8		2.5		3.8		4.9	
FIAM Bond <sup>+</sup>	3.2	15	3.3	55	1.6	62	3.7	42	2.7	31	4.2	32	5.2	42
Western TRU*	-0.7	99												
3-Month Libor Total Return USD	0.1	99	0.3	99	0.4	97	0.3	99	0.3	99	0.3	99	1.6	99
Barclays Aggregate	3.0	40	3.7	32	2.0	35	3.8	39	2.5	47	3.8	69	4.9	73
eA US Core Fixed Inc Net Median	2.9		3.3		1.8		3.7		2.5		4.0		5.1	
TIPS	3.4		1.2		1.2		1.0		-1.8		2.6			
Barclays US TIPS	4.5		2.6		1.5		2.3		-0.7		3.0		4.6	
Brown Brothers Harriman	3.4	78	1.2	69	1.2	40	1.0	65	-1.8	83	2.6	59		
Barclays US TIPS	4.5	22	2.6	16	1.5	17	2.3	20	-0.7	39	3.0	34	4.6	48
eA TIPS / Infl Indexed Fixed Inc Net Median	4.2		2.1		1.0		1.5		-0.8		2.7		4.6	
Opportunistic Credit	1.4		-3.8		-2.8		0.8		3.7		6.5			
Barclays BA Intermediate HY	3.4		0.4		0.2		2.1		1.7		4.8			
Angelo Gordon Opportunistic**	0.7		0.4		2.9									
Angelo Gordon STAR ***	-2.2		-1.9		0.2		6.1		9.5					
Barclays Aggregate	3.0		3.7		2.0		3.8		2.5		3.8		4.9	
Beach Point Select	2.4	47	0.1	12	2.2	1								
Barclays BA Intermediate HY <sup>2</sup>	3.4	9	0.4	10	0.2	8	2.1	3	1.7	53	4.8	41		
eA US High Yield Fixed Inc Net Median	2.3		-3.5		-3.2		-0.7		1.9		4.6		6.3	
Brigade Capital	3.1	19	-9.4	97	-10.1	99	-5.1	98	-1.5	98	3.0	93		
Barclays BA Intermediate HY <sup>2</sup>	3.4	9	0.4	10	0.2	8	2.1	3	1.7	53	4.8	41		
50% Barclays HY/ 50% Bank Loan	2.3	49	-2.8	38	-2.4	38	0.0	37	2.1	45	4.2	63		
eA US High Yield Fixed Inc Net Median	2.3		-3.5		-3.2		-0.7		1.9		4.6		6.3	

Fiscal

+ Name change from Pyramis Bond in September 2015.

\* Funded August 2015.

\*\* Preliminary return as of 3/31/2016. Changed from one-quarter lag to quarterly in June 2015.

\*\*\* Preliminary return as of 3/31/2016.

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	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	2 Yrs (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Global Fixed Income	0.1	91	-4.4	87	-4.3	87	-2.0	90	-1.1	86	2.9	63		
Barclays Multi-verse	5.9	16	5.5	3	4.4	2	0.2	48	0.9	43	1.9	94	4.4	79
InvestorForce All DB GlbI Fix Inc Net Median	3.0		0.1		-0.6		0.0		0.7		3.5		5.5	
Franklin Templeton	0.1	91	-4.5	91	-4.4	93	-2.1	84	-1.1	89	2.9	53		
Barclays Multi-verse	5.9	18	5.5	11	4.4	5	0.2	48	0.9	54	1.9	70	4.4	73
eA All Global Fixed Inc Net Median	3.4		1.4		0.2		0.1		1.1		3.0		4.9	
Alternatives	-0.7		-0.5		2.8		4.8		3.6		4.8			
Alternatives Allocation Index <sup>2</sup>	1.4		-2.4		-1.0									
Blended Alternatives Index	1.3		-2.3		-0.9		0.7		5.0		5.9			
Private Equity	-0.3	73	4.4	40	13.4	16	16.6	13	16.4	9	8.0	72		
Russell 3000 +3%	1.8	18	2.4	62	2.7	80	8.8	55	14.2	26	14.0	16	10.0	39
InvestorForce All DB Private Eq Net Median	0.3		3.6		6.8		9.0		11.1		10.4		8.7	
Hedge Fund/Absolute Return	-1.5	20	8.3	1	5.7	1	9.7	1	8.1	1				
Libor 1 month +4%	1.0	6	3.2	2	4.3	1	4.2	5	4.2	12	4.2	11		
InvestorForce All DB Hedge Funds Net Median	-2.8		-6.4		-6.0		-1.0		2.3		2.8		2.9	
AQR DELTA XN	-1.1	66	9.2	9	6.6	14	10.1	17	8.4	24				
Libor 1 month +4%	1.0	42	3.2	23	4.3	24	4.2	40	4.2	48	4.2	45		
eV Alt All Multi-Strategy Median	0.4		-0.8		-1.6		2.2		3.9		3.8		6.2	
Standard Life GARS <sup>*</sup>	-3.2	79												
Libor 1 month +4%	1.0	42	3.2	23	4.3	24	4.2	40	4.2	48	4.2	45		
eV Alt All Multi-Strategy Median	0.4		-0.8		-1.6		2.2		3.9		3.8		6.2	
Commodity	-2.8		-24.3		-22.4		-20.9		-15.2					
Bloomberg Commodity Index TR USD	0.4		-23.1		-19.6		-23.4		-16.9		-14.1		-6.2	
SSARIS Multisource Active Commodity	-2.8		-24.3		-22.4		-20.9		-15.2					
Bloomberg Commodity Index TR USD	0.4		-23.1		-19.6		-23.4		-16.9		-14.1		-6.2	

\* Funded October 2015.

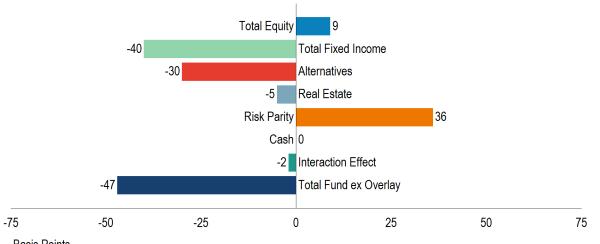
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	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	2 Yrs (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
S&P Goldman Sachs Commodity	-2.5		-34.4		-28.7		-34.8		-24.5		-17.4			
Private Real Asset <sup>**</sup>	14.7		9.5		10.1									
CPI +5%	1.2		3.6		5.0		4.9							
Real Estate	1.3	76	7.2	80	12.8	26	13.3	19	12.9	18	12.5	28	5.9	32
NCREIF ODCE	2.2	38	9.5	23	13.7	15	13.6	13	13.6	8	13.3	5	6.8	7
InvestorForce All DB Real Estate Pub Net Median	2.0		8.6		11.8		12.2		12.2		11.5		5.1	
Invesco	1.4		6.9		12.4		13.1		12.8		12.4		5.8	
NCREIF ODCE	2.2		9.5		13.7		13.6		13.6		13.3		6.8	
Invesco US Val IV *	-0.2													
NCREIF ODCE	2.2		9.5		13.7		13.6		13.6		13.3		6.8	
NCREIF CEVA 1Q Lag - NET	5.8		14.3		18.7		17.8							
Risk Parity	6.5		-1.2		-5.2		2.6		1.2		5.2			
60/40 Russell 3000/Barclays Aggregate	1.9		1.4		0.8		5.2		7.8		8.3		6.4	
AQR GRP, 10% Volatility	4.6		-6.2		-8.6		-1.6		-1.5		3.5			
PanAgora	8.2		3.6		-1.9									
60/40 Russell 3000/Barclays Aggregate	1.9		1.4		0.8		5.2		7.8		8.3		6.4	
60/40 MSCI World/Barclays Global Aggregate	1.2		-0.2		-0.9		2.8		5.7		6.0			
Cash	0.2		1.2		1.3		0.9		0.7		0.7		1.2	
91 Day T-Bills	0.1		0.1		0.1		0.1		0.1		0.1		1.0	
General Account	0.2		1.7		1.9		1.3		0.9		0.7		1.6	
Treasury & LAIF	0.7		0.8		0.9		1.0		0.9		0.9		1.1	
91 Day T-Bills	0.1		0.1		0.1		0.1		0.1		0.1		1.0	

\* Funded December 2015.

\*\* Preliminary return as of 3/31/2016.

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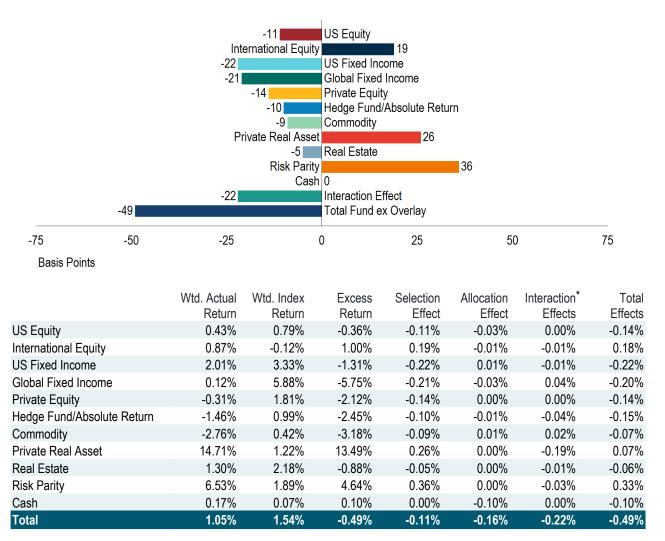
Basis	Points	

	Wtd. Actual	Wtd. Index	Excess	Selection	Allocation	Interaction*	Total
	Return	Return	Return	Effect	Effect	Effects	Effects
Total Equity	0.61%	0.41%	0.19%	0.09%	-0.05%	0.01%	0.05%
Total Fixed Income	1.73%	3.71%	-1.98%	-0.40%	-0.01%	0.01%	-0.40%
Alternatives	-0.69%	1.33%	-2.02%	-0.30%	0.00%	0.01%	-0.29%
Real Estate	1.30%	2.18%	-0.88%	-0.05%	0.00%	-0.01%	-0.06%
Risk Parity	6.53%	1.89%	4.64%	0.36%	0.00%	-0.03%	0.33%
Cash	0.17%	0.07%	0.10%	0.00%	-0.10%	0.00%	-0.10%
Total	1.04%	1.51%	-0.47%	-0.30%	-0.15%	-0.02%	-0.47%

Attribution does not include the impact of the Parametric Minneapolis strategy.

\* Interaction Effects include Residual Effects

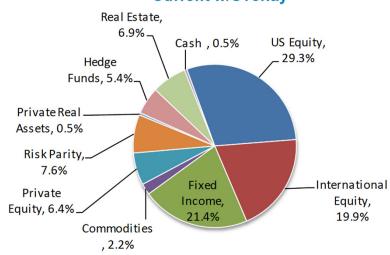




Attribution does not include the impact of the Parametric Minneapolis strategy.

\* Interaction Effects include Residual Effects

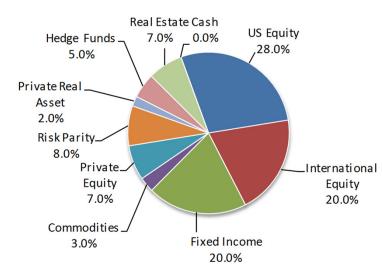




### **Current w/Overlay**

ASSET ALLOCATION	MARKET VALUE	W/OVERLAY	W/O OVERLAY
US Equity	1,047,839,059	29.3%	30.3%
International Equity	672,727,724	19.9%	19.5%
Fixed Income	665,968,684	21.4%	19.3%
Commodities	76,362,485	2.2%	2.2%
Private Equity	221,248,743	6.4%	6.4%
Risk Parity	262,036,190	7.6%	7.6%
Private Real Assets	16,533,230	0.5%	0.5%
Hedge Funds	186,300,204	5.4%	5.4%
Real Estate	238,047,447	6.9%	6.9%
Cash	69,094,658	0.5%	2.0%
TOTAL	3,456,158,423	100.0%	100.0%

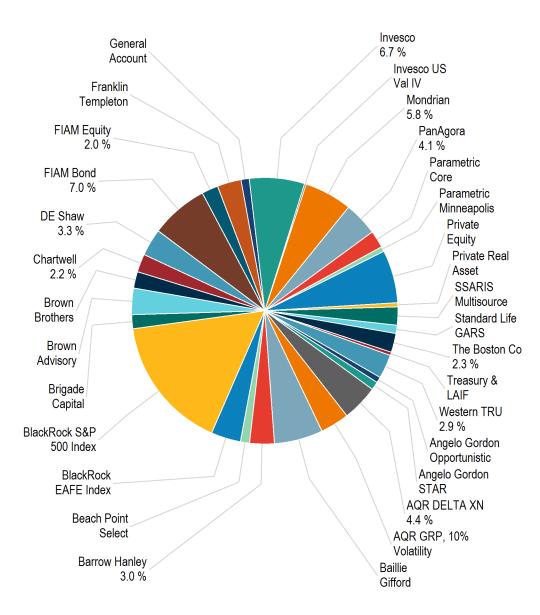
### Target



ASSET ALLOCATION	W/OVERLAY	TARGET	DIFF
US Equity	29.3%	28.0%	1.3%
International Equity	19.9%	20.0%	-0.1%
Fixed Income	21.4%	20.0%	1.4%
Commodities	2.2%	3.0%	-0.8%
Private Equity	6.4%	7.0%	-0.6%
Risk Parity	7.6%	8.0%	-0.4%
Private Real Asset	0.5%	2.0%	-1.5%
Hedge Funds	5.4%	5.0%	0.4%
Real Estate	6.9%	7.0%	-0.1%
Cash	0.5%	0.0%	0.5%
TOTAL	100.0%	100.0%	0.0%



# Total Fund Manager Allocation Analysis



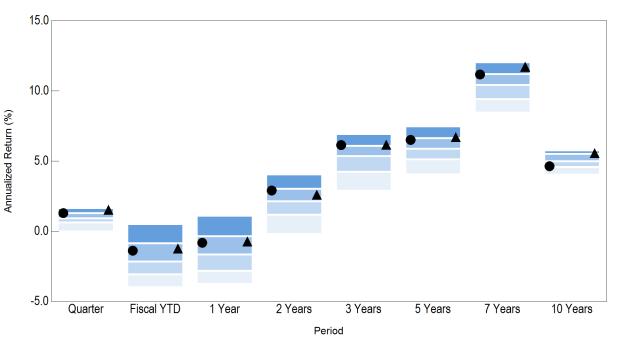
	Actual \$	Actual %
Angelo Gordon Opportunistic	\$24,045,000	1%
Angelo Gordon STAR	\$33,756,000	1%
AQR DELTA XN	\$152,577,660	4%
AQR GRP, 10% Volatility	\$121,571,865	4%
Baillie Gifford	\$203,704,253	6%
Barrow Hanley	\$104,746,480	3%
Beach Point Select	\$39,374,363	1%
BlackRock EAFE Index	\$125,939,642	4%
BlackRock S&P 500 Index	\$561,918,463	16%
Brigade Capital	\$58,775,083	2%
Brown Advisory	\$109,830,625	3%
Brown Brothers Harriman	\$69,431,137	2%
Chartwell	\$76,655,870	2%
DE Shaw	\$114,193,869	3%
FIAM Bond	\$240,572,666	7%
FIAM Equity	\$69,217,310	2%
Franklin Templeton	\$98,904,372	3%
General Account	\$35,886,561	1%
Invesco	\$229,923,478	7%
Invesco US Val IV	\$8,123,969	0%
Mondrian	\$202,181,119	6%
PanAgora	\$140,464,325	4%
Parametric Core	\$71,685,400	2%
Parametric Minneapolis Overlay	\$20,080,486	1%
Private Equity	\$221,248,743	6%
Private Real Asset	\$16,533,230	0%
SSARIS Multisource Active Commodity	\$76,362,485	2%
Standard Life GARS	\$33,722,544	1%
The Boston Co	\$80,493,752	2%
Treasury & LAIF	\$13,127,611	0%
Western TRU	\$101,110,062	3%
Total	\$3,456,158,423	100%

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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	6.1%	24	7.3%	67	0.8	44	0.0	24	1.0%	3
Policy Index	6.2%	23	7.7%	80	0.8	49			0.0%	1
InvestorForce Public DB > \$1B Net Median	5.4%		6.8%		0.8		-0.3		1.6%	

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	6.5%	30	8.4%	76	0.8	49	-0.2	42	1.0%	6	
Policy Index	6.7%	24	8.8%	86	0.8	52			0.0%	1	
InvestorForce Public DB > \$1B Net Median	5.9%		7.6%		0.8		-0.4		1.9%		

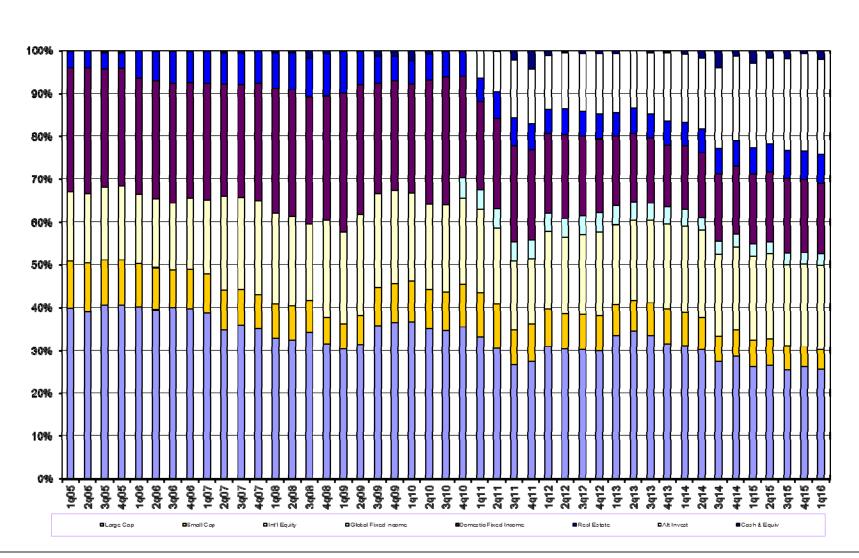




### InvestorForce Public DB > \$1B Net Accounts

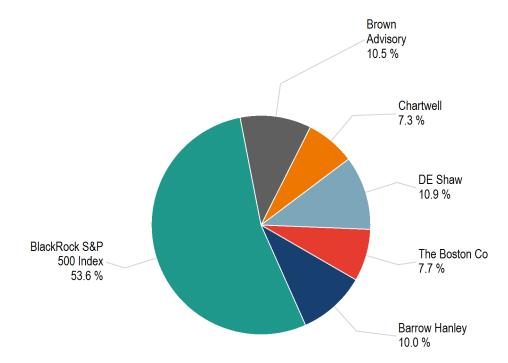
	Return	(Rank)												
5th Percentile	1.6	(	.5	1.1		4.0	6.9		7.5		12.0		5.8	
25th Percentile	1.3	-(	.8	-0.3		3.0	6.1		6.6		11.2		5.5	
Median	0.9	-2	.1	-1.6		2.1	5.4		5.9		10.4		5.0	
75th Percentile	0.6	-3	.1	-2.8		1.2	4.2		5.1		9.4		4.6	
95th Percentile	0.0	-4	.0	-3.8		-0.2	2.9	)	4.1		8.5		4.0	
# of Portfolios	50		50	50		50	50	)	50		49		45	
Total Fund	1.3	(25) -	.4 (31)	-0.8	(33)	2.9 (	29) 6.1	(24)	6.5	(30)	11.2	(30)	4.6	(75)
Policy Index	1.5	(11) - 1	.2 (27)	-0.7	(31)	2.6 (	42) 6.2	(23)	6.7	(24)	11.7	(9)	5.6	(24)

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# US Equity Manager Allocation Analysis



	Actual \$	Actual %	Manager Contribution to Excess Return %
Barrow Hanley	\$104,746,480	10.0%	-0.3%
BlackRock S&P 500 Index	\$561,918,463	53.6%	0.0%
Brown Advisory	\$109,830,625	10.5%	-0.2%
Chartwell	\$76,655,870	7.3%	0.0%
DE Shaw	\$114,193,869	10.9%	-0.1%
The Boston Co	\$80,493,752	7.7%	0.2%
Actual vs. Policy Weight Difference			0.1%
Total	\$1,047,839,059	100.0%	-0.4%



<b>Statistics</b>	Summary
-------------------	---------

## 3 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
US Equity	10.6%	11.6%	0.9	-0.1	0.8%
Blended US Equity Index	10.7%	11.8%	0.9		0.0%
Russell 3000	11.1%	11.6%	1.0	0.5	1.0%



Statistics Summary								
3 Years								
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error			
Large Cap Equity	11.6%	11.3%	1.0	0.1	0.8%			
Russell 1000	11.5%	11.4%	1.0		0.0%			
Barrow Hanley	10.0%	12.0%	0.8	0.2	3.0%			
Russell 1000 Value	9.4%	11.4%	0.8		0.0%			
DE Shaw	11.9%	11.8%	1.0	0.2	2.2%			
Russell 1000	11.5%	11.4%	1.0		0.0%			
Small Cap Equity	6.1%	14.8%	0.4	-0.3	2.5%			
Russell 2000	6.8%	15.3%	0.4		0.0%			
The Boston Co	7.1%	14.0%	0.5	0.5	3.0%			
Russell 2000 Value	5.7%	14.5%	0.4		0.0%			
Chartwell	5.1%	16.1%	0.3	-0.7	4.2%			
Russell 2000 Growth	7.9%	16.7%	0.5		0.0%			

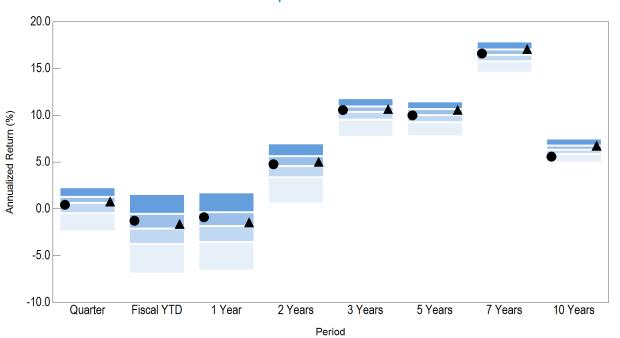
	Stat	istics Summary					
5 Years							
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error		
US Equity	10.0%	13.2%	0.8	-0.6	1.0%		
Blended US Equity Index	10.6%	13.0%	0.8		0.0%		
Russell 3000	11.0%	12.7%	0.9	0.5	0.9%		



		,, ,							
	5 Years								
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error				
Large Cap Equity	10.7%	12.7%	0.8	-0.7	0.9%				
Russell 1000	11.4%	12.4%	0.9		0.0%				
Barrow Hanley	9.9%	13.2%	0.7	-0.1	2.7%				
Russell 1000 Value	10.2%	12.7%	0.8		0.0%				
DE Shaw	12.3%	13.0%	0.9	0.5	2.0%				
Russell 1000	11.4%	12.4%	0.9		0.0%				
Small Cap Equity	7.2%	16.3%	0.4	0.0	2.9%				
Russell 2000	7.2%	16.7%	0.4		0.0%				
The Boston Co	8.3%	15.8%	0.5	0.6	2.9%				
Russell 2000 Value	6.7%	15.9%	0.4		0.0%				
Chartwell	6.8%	17.7%	0.4	-0.2	4.4%				
Russell 2000 Growth	7.7%	17.8%	0.4		0.0%				

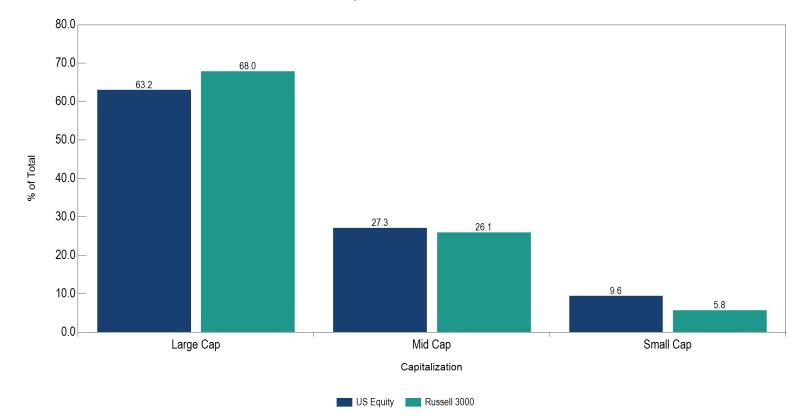






InvestorForce All DB US Eq Net Accounts

	Return (	Rank)						
5th Percentile	2.3	1.6	1.7	7.0	11.8	11.5	17.9	7.5
25th Percentile	1.3	-0.5	-0.4	5.6	11.0	10.7	17.1	6.8
Median	0.6	-2.1	-1.8	4.6	10.4	10.0	16.5	6.4
75th Percentile	-0.4	-3.7	-3.5	3.4	9.6	9.3	15.8	5.9
95th Percentile	-2.4	-6.9	-6.6	0.6	7.7	7.8	14.6	5.0
# of Portfolios	671	666	664	646	605	510	434	345
US Equity	0.4	(57) -1.3	(39) -0.9	(36) 4.8	(47) 10.6	(42) 10.0	(52) 16.6	(45) 5.6 (85)
Blended US Equity Index	0.8	(45) -1.6	(43) -1.4	(45) 5.0	(40) 10.7	(37) 10.6	(28) 17.1	(25) 6.8 (29)



### Market Capitalization as of March 31, 2016

See appendix for the market capitalization breakpoints.



	Portfolio	Russell 3000
Number of Holdings	2,333	2,973
Weighted Avg. Market Cap. (\$B)	94.0	107.4
Median Market Cap. (\$B)	2.2	1.4
Price To Earnings	24.8	23.0
Price To Book	4.6	3.6
Price To Sales	3.5	3.1
Return on Equity (%)	17.4	16.2
Yield (%)	1.9	2.0
Beta (holdings; domestic)	1.0	1.0

### **Top Holdings**

APPLE	2.3%
MICROSOFT	1.5%
AMAZON.COM	1.4%
JOHNSON & JOHNSON	1.3%
FACEBOOK CLASS A	1.2%
VISA 'A'	1.1%
EXXON MOBIL	1.0%
ALPHABET 'A'	1.0%
WELLS FARGO & CO	1.0%
ALPHABET 'C'	0.9%

Best Performers				
	Return %			
ULTRAPETROL BAHAMAS (ULTR)	157.1%			
TOWN SPORTS INTL.HDG. (CLUB)	141.2%			
COEUR MINING (CDE)	126.6%			
ENERNOC (ENOC)	94.3%			
SUNCOKE ENERGY (SXC)	87.3%			
KINROSS GOLD (NYS) (KGC)	86.8%			
CONTANGO OIL & GAS (MCF)	83.9%			
VIRNETX HOLDING (VHC)	78.6%			
MCEWEN MINING (MUX)	78.0%			
LSB INDUSTRIES (LXU)	75.9%			

### Worst Performers

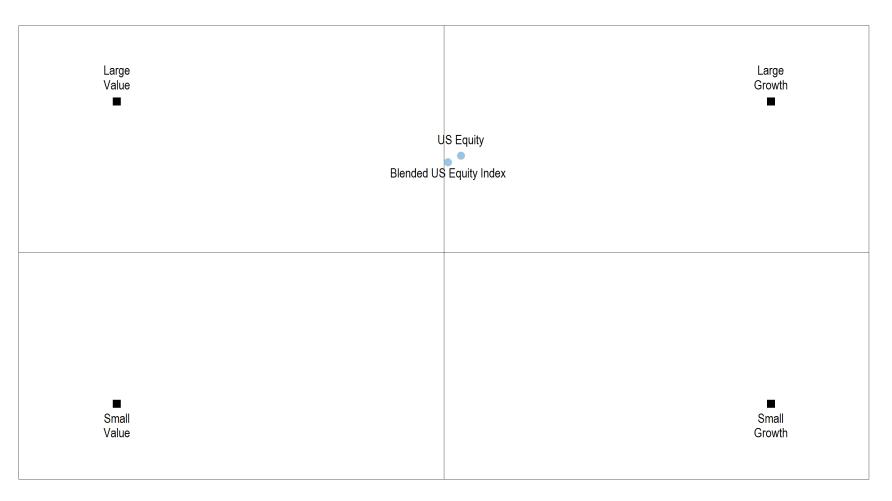
	Return %
EAGLE BULK SHIPPING (EGLE)	-89.8%
NORANDA ALUMINUM HLDG. (NORNQ)	-82.8%
MIDSTATES PETROLEUM (MPOYQ)	-82.4%
CARBYLAN THERAPEUTICS (CBYL)	-82.2%
STONE ENERGY (SGY)	-81.6%
PTC THERAPEUTICS (PTCT)	-80.1%
CELLDEX THERAPEUTICS (CLDX)	-75.9%
VALEANT PHARMS. (NYS) INTL. (VRX)	-74.1%
BIOCRYST PHARMS. (BCRX)	-72.6%
BONANZA CREEK ENERGY (BCEI)	-69.8%

			Attribution Effects	i	Retu	Returns		Sector Weights	
	Total	Selection	Allocation	Interaction					
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark	
Energy	0.0%	0.0%	0.0%	0.0%	2.8%	3.2%	5.9%	5.9%	
Materials	-0.2%	-0.2%	0.0%	0.0%	-1.9%	4.8%	3.1%	3.1%	
Industrials	0.0%	-0.2%	0.1%	0.0%	3.3%	4.8%	11.8%	10.7%	
Cons. Disc.	0.0%	0.0%	0.0%	0.0%	1.6%	1.8%	14.6%	13.5%	
Cons. Staples	0.2%	0.3%	0.0%	-0.1%	9.0%	5.4%	8.0%	8.8%	
Health Care	0.2%	0.1%	0.0%	0.0%	-6.0%	-7.0%	15.2%	14.8%	
Financials	0.0%	-0.1%	0.1%	0.0%	-4.5%	-3.7%	15.8%	18.1%	
Info. Tech	-0.3%	-0.2%	0.0%	0.0%	0.7%	1.9%	20.7%	19.9%	
Telecomm.	-0.1%	-0.1%	-0.1%	0.1%	10.6%	15.0%	1.8%	2.2%	
Utilities	-0.2%	-0.1%	-0.1%	0.1%	11.0%	15.3%	2.3%	3.1%	
Cash	-0.1%	0.0%	-0.1%	0.0%	0.1%		0.8%	0.0%	
Unclassified	0.0%	0.0%	0.0%	0.0%	-5.0%		0.1%	0.0%	
Portfolio	-0.6%	= -0.6%	+ 0.0%	+ 0.0%	0.5%	1.0%	100.0%	100.0%	

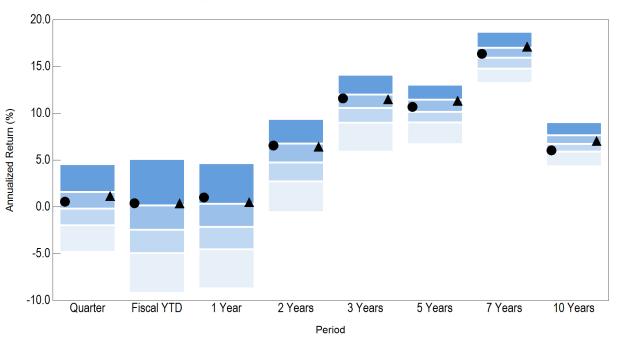
# US Equity Performance Attribution vs. Pussell 3000











eA US Large Cap Equity Net Accounts

	Return	(Rank)														
5th Percentile	4.5		5.1		4.6		9.4		14.1		13.1		18.7		9.0	
25th Percentile	1.6		0.2		0.4		6.8		12.0		11.5		17.0		7.7	
Median	-0.2		-2.4		-2.1		4.8		10.6		10.2		16.0		6.8	
75th Percentile	-2.0		-5.0		-4.5		2.8		9.0		9.1		14.8		5.9	
95th Percentile	-4.8		-9.2		-8.7		-0.5		5.9		6.7		13.3		4.4	
# of Portfolios	527		522		519		504		491		443		417		353	
<ul> <li>Large Cap Equity</li> <li>Russell 1000</li> </ul>	0.6 1.2	(38) (32)	0.4 0.4	(25) (25)	1.0 0.5	(20) (25)	6.6 6.4	(28) (29)	11.6 11.5	(30) (32)	10.7 11.4	(41) (27)	16.4 17.2	(41) (23)	6.0 7.1	(72) (43)

Characteristics	Portfolio	Russell 1000
Number of Holdings	2,260	1,020
Weighted Avg. Market Cap. (\$B)	110.5	115.9
Median Market Cap. (\$B)	2.3	7.5
Price To Earnings	24.9	23.0
Price To Book	4.9	4.1
Price To Sales	3.7	3.1
Return on Equity (%)	18.0	17.5
Yield (%)	2.0	2.1
Beta (holdings; domestic)	1.0	1.0

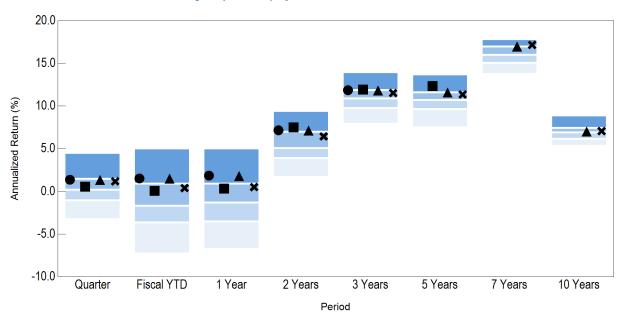
Top Holdings		Best Performers		Worst Performers				
APPLE	2.7%		Return %		Return %			
MICROSOFT	1.7%	ULTRAPETROL BAHAMAS (ULTR)	157.1%	EAGLE BULK SHIPPING (EGLE)	-89.8%			
AMAZON.COM	1.7%	TOWN SPORTS INTL.HDG. (CLUB)	141.2%	NORANDA ALUMINUM HLDG. (NORNQ)	-82.8%			
JOHNSON & JOHNSON	1.5%	COEUR MINING (CDE)	126.6%	MIDSTATES PETROLEUM (MPOYQ)	-82.4%			
		ENERNOC (ENOC)	94.3%	CARBYLAN THERAPEUTICS (CBYL)	-82.2%			
FACEBOOK CLASS A	1.5%	SUNCOKE ENERGY (SXC)	87.3%	STONE ENERGY (SGY)	-81.6%			
VISA 'A'	1.3%	KINROSS GOLD (NYS) (KGC)	86.8%	PTC THERAPEUTICS (PTCT)	-80.1%			
EXXON MOBIL	1.2%	CONTANGO OIL & GAS (MCF)	83.9%	CELLDEX THERAPEUTICS (CLDX)	-75.9%			
ALPHABET 'A'	1.2%	VIRNETX HOLDING (VHC)	78.6%	VALEANT PHARMS. (NYS) INTL. (VRX)	-74.1%			
WELLS FARGO & CO	1.2%	MCEWEN MINING (MUX)	78.0%	BIOCRYST PHARMS. (BCRX)	-72.6%			
ALPHABET 'C'	1.2%	LSB INDUSTRIES (LXU)	75.9%	BONANZA CREEK ENERGY (BCEI)	-69.8%			



		A	Attribution Effects		Retu	irns	Sector V	Veights
	Total	Selection	Allocation	Interaction				
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	-0.1%	-0.1%	0.0%	0.0%	2.5%	3.6%	6.3%	6.2%
Materials	0.0%	0.0%	0.0%	0.0%	3.3%	4.7%	3.3%	3.1%
Industrials	0.0%	0.0%	0.0%	0.0%	4.5%	4.7%	11.2%	10.4%
Cons. Disc.	-0.3%	-0.3%	0.0%	0.0%	-0.5%	1.8%	13.6%	13.6%
Cons. Staples	0.0%	0.0%	0.0%	0.0%	5.6%	5.5%	9.2%	9.2%
Health Care	0.0%	0.1%	-0.1%	0.0%	-5.7%	-6.1%	15.4%	14.7%
Financials	-0.3%	-0.5%	0.2%	0.1%	-7.1%	-4.3%	14.7%	17.5%
Info. Tech	0.1%	0.0%	0.0%	0.0%	2.0%	1.8%	21.2%	20.0%
Telecomm.	0.0%	0.0%	0.0%	0.0%	14.8%	15.2%	2.2%	2.3%
Utilities	-0.1%	0.0%	-0.1%	0.0%	15.7%	15.7%	2.0%	3.0%
Cash	0.0%	0.0%	0.0%	0.0%	0.1%		0.8%	0.0%
Unclassified	0.0%	0.0%	0.0%	0.0%	1.3%		0.1%	0.0%
Portfolio	-0.8%	= -0.8%	+ 0.0%	+ 0.1%	0.4%	1.1%	100.0%	100.0%

## Large Cap Equity Performance Attribution vs. Russell 1000





### eA US Large Cap Core Equity Net Accounts

	Return	(Rank)														
5th Percentile	4.5		5.0		5.0		9.4		14.0		13.7		17.8		8.9	
25th Percentile	1.5		0.9		0.9		7.0		11.9		11.6		17.0		7.5	
Median	0.2		-1.7		-1.3		5.1		10.9		10.7		16.0		6.9	
75th Percentile	-1.0		-3.6		-3.5		3.9		9.8		9.7		15.1		6.2	
95th Percentile	-3.2		-7.2		-6.7		1.7		7.9		7.5		13.8		5.4	
# of Portfolios	137		135		134		131		125		114		104		94	
BlackRock S&P 500 Index	1.4	(30)	1.5	(22)	1.8	(21)	7.2	(23)	11.9	(26)		()		()		()
DE Shaw	0.6	(39)	0.0	(33)	0.3	(32)	7.5	(17)	11.9	(25)	12.3	(15)		()		()
S&P 500	1.3	(30)	1.5	(23)	1.8	(21)	7.1	(24)	11.8	(26)	11.6	(28)	17.0	(26)	7.0	(48)
Kussell 1000	1.2	(33)	0.4	(30)	0.5	(32)	6.4	(32)	11.5	(34)	11.4	(32)	17.2	(19)	7.1	(46)

Characteristics									
		Portfolio	S&P 500						
Number of Holdings		503	504						
Weighted Avg. Market Cap. (\$B)		128.7	128.9						
Median Market Cap. (\$B)		18.2	18.3						
Price To Earnings		24.4	22.7						
Price To Book		5.0	4.2						
Price To Sales		3.5	3.0						
Return on Equity (%)		19.0	17.8						
Yield (%)		2.2	2.2						
Beta (holdings; domestic)		1.0	1.0						

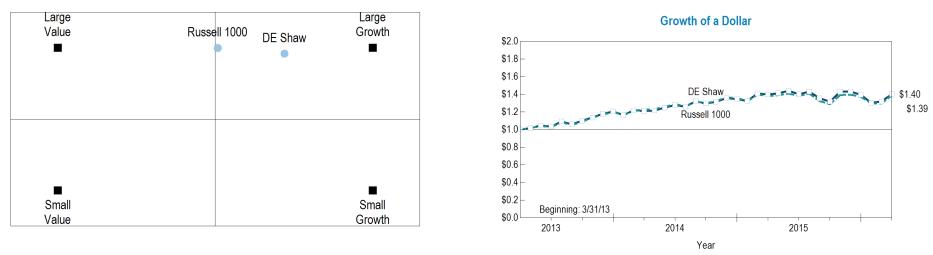
Top Holdings	oldings
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APPLE	3.4%
MICROSOFT	2.5%
EXXON MOBIL	2.0%
JOHNSON & JOHNSON	1.7%
GENERAL ELECTRIC	1.7%
FACEBOOK CLASS A	1.5%
AT&T	1.4%
AMAZON.COM	1.3%
WELLS FARGO & CO	1.3%
ALPHABET 'A'	1.3%

Best Performers								
	Return %							
FREEPORT-MCMORAN (FCX)	52.7%							
NEWMONT MINING (NEM)	47.9%							
URBAN OUTFITTERS (URBN)	45.5%							
CONSOL EN. (CNX)	43.1%							
MICHAEL KORS HOLDINGS (KORS)	42.2%							
WYNN RESORTS (WYNN)	35.9%							
PVH (PVH)	34.6%							
RANGE RES. (RRC)	31.7%							
EXELON (EXC)	30.4%							
SPECTRA ENERGY (SE)	29.7%							

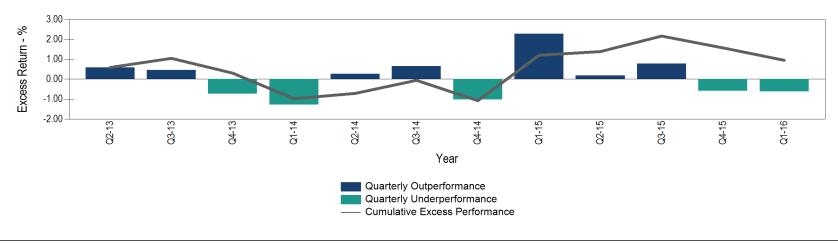
### Worst Performers

	Return %
ENDO INTERNATIONAL (ENDP)	-54.0%
VERTEX PHARMS. (VRTX)	-36.8%
WILLIAMS (WMB)	-35.0%
REGENERON PHARMS. (REGN)	-33.6%
ENSCO CLASS A (ESV)	-32.6%
MARATHON PETROLEUM (MPC)	-27.6%
ALEXION PHARMS. (ALXN)	-27.0%
TRANSOCEAN (RIG)	-26.2%
MICRON TECHNOLOGY (MU)	-26.1%
CF INDUSTRIES HDG. (CF)	-22.4%

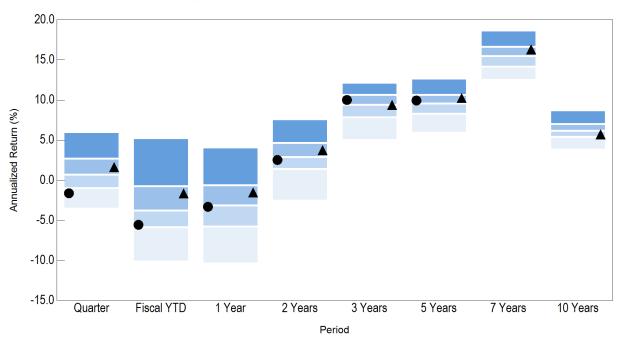


### US Effective Style Map





Verus<sup>777</sup>



### eA US Large Cap Value Equity Net Accounts

	Return	(Rank)														
5th Percentile	6.0		5.2		4.0		7.6		12.1		12.7		18.6		8.7	
25th Percentile	2.7		-0.7		-0.6		4.7		10.6		10.7		16.7		7.0	
Median	0.7		-3.8		-3.1		2.9		9.4		9.6		15.5		6.2	
75th Percentile	-1.0		-5.8		-5.8		1.4		7.9		8.3		14.2		5.4	
95th Percentile	-3.5		-10.1		-10.4		-2.5		5.0		5.9		12.6		3.8	
# of Portfolios	209		209		208		200		197		176		167		140	
<ul> <li>Barrow Hanley</li> </ul>	-1.6	(87)	-5.6	(72)	-3.3	(52)	2.5	(58)	10.0	(39)	9.9	(41)		()		()
Russell 1000 Value	1.6	(37)	-1.6	(35)	-1.5	(31)	3.8	(35)	9.4	(52)	10.2	(34)	16.3	(33)	5.7	(69)

Characteristics									
	Portfolio	Russell 1000 Value							
Number of Holdings	75	684							
Weighted Avg. Market Cap. (\$B)	74.3	105.3							
Median Market Cap. (\$B)	36.7	6.9							
Price To Earnings	19.5	20.0							
Price To Book	2.6	2.3							
Price To Sales	2.4	2.5							
Return on Equity (%)	15.4	11.5							
Yield (%)	2.7	2.6							
Beta (holdings; domestic)	1.1	1.0							

### **Top Holdings**

CAPITAL ONE FINL.	2.3%
ALTRIA GROUP	2.1%
CITIGROUP	2.1%
WELLS FARGO & CO	1.9%
JP MORGAN CHASE & CO.	1.9%
TEXAS INSTRUMENTS	1.8%
NORWEGIAN CRUISE LINE HDG.	1.8%
CRH ADR 1:1	1.8%
NIELSEN	1.8%
CARNIVAL	1.8%

Best Performers	Best Performers								
	Return %								
EATON (ETN)	21.4%								
VERIZON COMMUNICATIONS (VZ)	18.5%								
TYCO INTERNATIONAL (TYC)	15.9%								
TARGET (TGT)	14.2%								
NIELSEN (NLSN)	13.6%								
PHILIP MORRIS INTL. (PM)	12.8%								
ORACLE (ORCL)	12.5%								
AIR PRDS.& CHEMS. (APD)	11.4%								
UNITEDHEALTH GROUP (UNH)	10.0%								
REYNOLDS AMERICAN (RAI)	9.9%								

### Worst Performers

	Return %
BANK OF AMERICA (BAC)	-19.4%
CITIGROUP (C)	-19.2%
ROYAL CARIBBEAN CRUISES (RCL)	-18.4%
TEVA PHARM.INDS.ADR 1:1 (TEVA)	-18.0%
E*TRADE FINANCIAL (ETFC)	-17.4%
FIFTH THIRD BANCORP (FITB)	-16.3%
CONOCOPHILLIPS (COP)	-13.1%
AMERICAN INTL.GP. (AIG)	-12.2%
DELPHI AUTOMOTIVE (DLPH)	-12.1%
AMERICAN EXPRESS (AXP)	-11.3%

				ce Attribution v			Center			
			Attribution Effects			eturns	Sector	Sector Weights		
	Total	Selection	Allocation	Interaction						
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark		
Energy	-0.4%	-0.5%	-0.1%	0.2%	0.2%	4.1%	6.9%	12.2%		
Materials	0.0%	-0.1%	0.2%	-0.1%	4.8%	7.7%	4.2%	2.6%		
Industrials	-0.3%	-0.3%	0.2%	-0.2%	2.1%	5.1%	15.6%	10.4%		
Cons. Disc.	-0.5%	-0.3%	0.1%	-0.4%	-2.0%	3.6%	13.4%	5.2%		
Cons. Staples	0.2%	0.3%	0.0%	0.0%	9.4%	5.1%	6.3%	7.0%		
Health Care	-0.3%	-0.2%	-0.1%	0.0%	-3.3%	-1.7%	14.2%	11.9%		
Financials	-0.9%	-1.3%	0.2%	0.2%	-9.8%	-5.3%	26.7%	30.4%		
Info. Tech	0.0%	0.1%	0.0%	0.0%	4.1%	2.8%	8.1%	11.5%		
Telecomm.	-0.1%	0.0%	0.0%	0.0%	12.1%	14.0%	2.2%	2.5%		
Utilities	-0.8%		-0.8%			15.7%	0.0%	6.2%		
Cash	0.0%	0.0%	0.0%	0.0%	0.1%		2.4%	0.0%		
Portfolio	-3.2%	= -2.4%	+ -0.4%	+ -0.5%	-1.6%	1.6%	100.0%	100.0%		

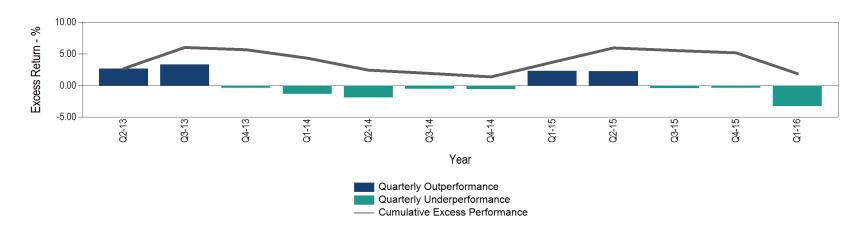
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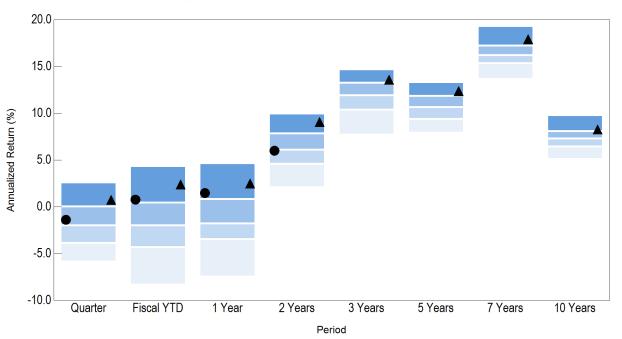


### **US Effective Style Map**









### eA US Large Cap Growth Equity Net Accounts

	Return (Rank	)						
5th Percentile	2.6	4.4	4.7	10.0	14.7	13.3	19.3	9.8
25th Percentile	0.1	0.5	0.9	7.9	13.3	11.9	17.3	8.1
Median	-1.9	-2.0	-1.8	6.1	12.0	10.7	16.2	7.3
75th Percentile	-3.8	-4.3	-3.4	4.6	10.4	9.4	15.4	6.5
95th Percentile	-5.8	-8.3	-7.4	2.1	7.8	7.9	13.7	5.2
# of Portfolios	181	178	177	173	169	153	146	119
Brown Advisory	-1.4 (42)	0.8 (23)	1.5 (19)	6.0 (52)	()	()	()	()
Russell 1000 Growth	0.7 (19)	2.4 (11)	2.5 (13)	9.1 (12)	13.6 (20)	12.4 (17)	17.9 (16)	8.3 (21)

Characteristics								
	Portfolio	Russell 1000 Growth						
Number of Holdings	36	635						
Weighted Avg. Market Cap. (\$B)	80.9	125.8						
Median Market Cap. (\$B)	25.3	8.5						
Price To Earnings	36.8	25.3						
Price To Book	6.7	6.6						
Price To Sales	5.8	3.7						
Return on Equity (%)	17.0	24.2						
Yield (%)	0.6	1.6						
Beta (holdings; domestic)	1.0	0.9						

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AMAZON.COM	4.9%
VISA 'A'	4.7%
FACEBOOK CLASS A	4.5%
STARBUCKS	4.2%
ESTEE LAUDER COS.'A'	3.9%
DANAHER	3.8%
INTUITIVE SURGICAL	3.6%
COSTCO WHOLESALE	3.5%
SALESFORCE.COM	3.5%
ECOLAB	3.4%

Best Performers								
	Return %							
COLFAX (CFX)	22.4%							
FASTENAL (FAST)	21.0%							
WABTEC (WAB)	11.6%							
AMPHENOL 'A' (APH)	11.0%							
INTUITIVE SURGICAL (ISRG)	10.1%							
FACEBOOK CLASS A (FB)	9.0%							
GENPACT (G)	8.8%							
MEAD JOHNSON NUTRITION (MJN)	8.2%							
ESTEE LAUDER COS.'A' (EL)	7.4%							
NATIONAL INSTS. (NATI)	5.7%							

### Worst Performers

	Return %
ALEXION PHARMS. (ALXN)	-27.0%
TRIPADVISOR 'A' (TRIP)	-22.0%
EXPRESS SCRIPTS HOLDING (ESRX)	-21.4%
NETSUITE (N)	-19.1%
CHARLES SCHWAB (SCHW)	-14.7%
AMAZON.COM (AMZN)	-12.2%
BRISTOL MYERS SQUIBB (BMY)	-6.6%
SALESFORCE.COM (CRM)	-5.8%
FMC TECHNOLOGIES (FTI)	-5.7%
NXP SEMICONDUCTORS (NXPI)	-3.8%



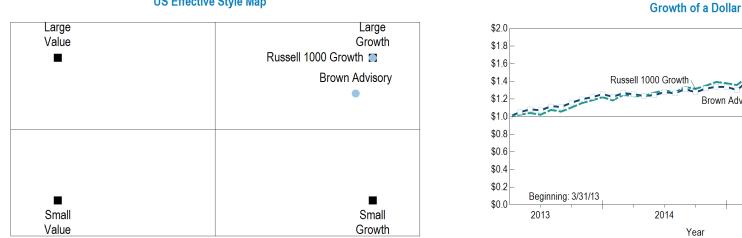
		A	ttribution Effects		Retu	rns	Sector Weights		
	Total	Selection	Allocation	Interaction					
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark	
Energy	-0.1%	0.0%	0.0%	-0.1%	-15.4%	-8.1%	1.5%	0.5%	
Materials	-0.2%	-0.2%	0.0%	0.0%	-2.2%	2.5%	3.0%	3.4%	
Industrials	0.4%	0.4%	0.0%	0.0%	8.8%	4.5%	10.3%	10.8%	
Cons. Disc.	-1.6%	-2.3%	0.0%	0.8%	-8.9%	1.4%	14.3%	21.2%	
Cons. Staples	-0.2%	-0.1%	-0.1%	0.0%	4.3%	5.7%	9.8%	11.3%	
Health Care	0.3%	0.1%	0.2%	0.0%	-8.3%	-9.0%	15.0%	17.1%	
Financials	-0.5%	-0.8%	0.0%	0.3%	-14.7%	1.3%	3.4%	5.5%	
Info. Tech	-0.1%	-0.2%	0.1%	-0.1%	1.5%	2.1%	38.8%	28.1%	
Telecomm.	-0.4%	-0.2%	-0.3%	0.1%	0.9%	16.7%	0.0%	2.1%	
Utilities	0.0%		0.0%			10.6%	0.0%	0.0%	
Cash	-0.1%	0.0%	-0.1%	0.0%	0.1%		3.9%	0.0%	
Portfolio	-2.3%	= -3.1%	+ -0.2%	+ 1.0%	-1.4%	0.9%	100.0%	100.0%	

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



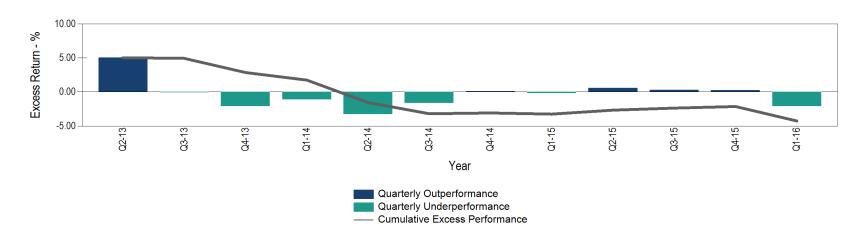
\$1.47

\$1.41



### **US Effective Style Map**



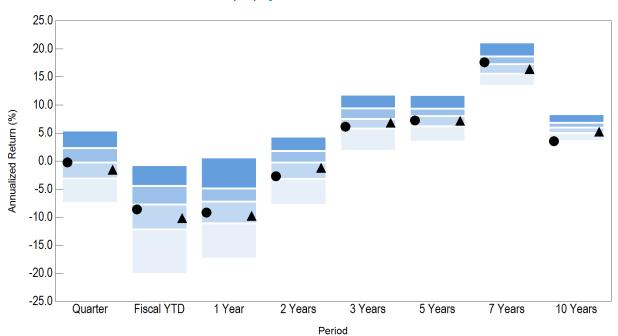




Year

Brown Advisory

2015



eA US Small Cap Equity Net Accounts

	Return	(Rank)														
5th Percentile	5.4		-0.8		0.6		4.4		11.8		11.8		21.2		8.4	
25th Percentile	2.4		-4.4		-4.8		1.8		9.4		9.4		18.7		6.8	
Median	-0.2		-7.7		-7.2		-0.2		7.6		8.0		17.3		6.0	
75th Percentile	-3.1		-12.1		-11.1		-3.2		5.8		6.3		15.6		5.0	
95th Percentile	-7.4		-20.1		-17.4		-7.7		1.8		3.5		13.4		3.6	
# of Portfolios	330		325		322		315		304		284		265		219	
Small Cap Equity	-0.2	(51)	- <mark>8</mark> .6	(57)	-9.2	(66)	-2.7	(73)	6.1	(69)	7.2	(63)	17.6	(44)	3.6	(96)
Russell 2000	-1.5	(65)	-10.1	(66)	-9.8	(70)	-1.2	(61)	6.8	(61)	7.2	(63)	16.4	(65)	5.3	(69)

Characteristics		
	Portfolio	Russell 2000
Number of Holdings	207	1,959
Weighted Avg. Market Cap. (\$B)	2.2	1.9
Median Market Cap. (\$B)	1.7	0.6
Price To Earnings	24.4	24.1
Price To Book	3.1	2.7
Price To Sales	2.6	2.8
Return on Equity (%)	14.3	10.6
Yield (%)	1.2	1.4
Beta (holdings; domestic)	1.3	1.2

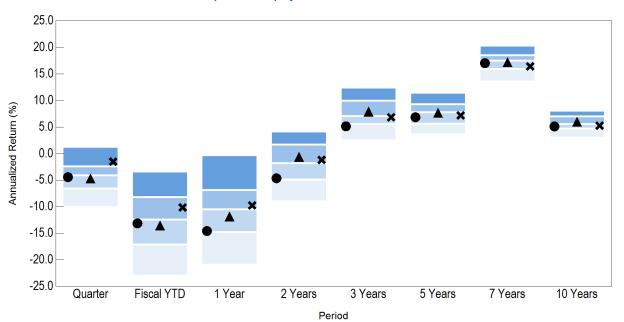
Top Holdings		Best Performers		Worst Performers		
MDC PARTNERS 'A' (NAS)	2.5%		Return %		Return %	
H&E EQUIPMENT SERVICES	2.4%	CHILDRENS PLACE (PLCE)	51.2%	EVERI HOLDINGS (EVRI)	-47.8%	
BRUNSWICK	2.2%	URBAN OUTFITTERS (URBN)	45.5%	CHIMERIX (CMRX)	-42.9%	
MGIC INVESTMENT	2.0%	MSC INDL.DIRECT 'A' (MSM)	36.6%	SPS COMMERCE (SPSC)	-38.8%	
ON ASSIGNMENT	2.0%	ZUMIEZ (ZUMZ)	31.7%	AKORN (AKRX)	-36.9%	
ON ASSIGNMENT		<b>BURLINGTON STORES (BURL)</b>	31.1%	PHARMERICA (PMC)	-36.8%	
MARINEMAX	1.8%	VERA BRADLEY (VRA)	29.1%	ADVISORY BOARD (ABCO)	-35.0%	
TRUEBLUE	1.5%	BELDEN (BDC)	28.8%	ISIS PHARMACEUTICALS (IONS)	-34.6%	
SONIC	1.5%	COHEN & STEERS (CNS)	28.7%	NXSTAGE MEDICAL (NXTM)	-31.6%	
FIRST BANCORP PRICO.	1.5%	DECKERS OUTDOOR (DECK)	26.9%	OSI SYSTEMS (OSIS)	-26.1%	
		CSG SYS.INTL. (CSGS)	26.1%	GULF ISLAND FABRICATION (GIFI)	-24.9%	
ELTN.FOR IMAG.	1.5%					



			Attribution Effects		Retu	irns	Sector Weights	
	Total	Selection	Allocation	Interaction				
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	0.4%	0.3%	-0.1%	0.2%	4.6%	-7.9%	4.1%	2.7%
Materials	-0.3%	-0.4%	-0.2%	0.3%	-6.7%	5.1%	1.5%	3.6%
Industrials	-0.4%	-0.4%	0.1%	-0.1%	0.2%	4.5%	15.1%	12.1%
Cons. Disc.	1.5%	0.8%	0.3%	0.4%	8.0%	2.3%	21.0%	13.5%
Cons. Staples	0.0%	0.1%	-0.1%	0.0%	4.7%	3.3%	1.6%	3.4%
Health Care	1.6%	1.3%	0.6%	-0.3%	-8.5%	-16.8%	11.7%	16.5%
Financials	-0.3%	-0.3%	-0.1%	0.0%	-1.2%	0.3%	21.9%	25.6%
Info. Tech	-0.2%	-0.1%	0.0%	0.0%	-2.5%	-1.5%	18.2%	18.0%
Telecomm.	-0.1%		-0.1%			5.9%	0.0%	0.8%
Utilities	0.0%	-0.1%	0.0%	0.0%	10.8%	12.3%	4.0%	3.7%
Cash	0.0%	0.0%	0.0%	0.0%	0.1%		0.8%	0.0%
Portfolio	2.1%	= 1.1%	+ 0.6%	+ 0.4%	0.6%	-1.5%	100.0%	100.0%







### eA US Small Cap Growth Equity Net Accounts

	Return	(Rank)						
5th Percentile	1.2	-3.4	-0.3	4.1	12.4	11.5	20.3	8.1
25th Percentile	-2.3	-8.2	-6.8	1.7	10.0	9.3	18.5	7.0
Median	-4.1	-12.4	-10.5	-1.8	7.1	7.8	17.5	5.6
75th Percentile	-6.6	-17.1	-14.7	-4.8	5.6	5.7	16.0	4.7
95th Percentile	-10.0	-22.9	-20.9	-8.9	2.5	3.6	13.6	3.1
# of Portfolios	103	99	99	97	93	88	83	72
Chartwell	-4.4	(56) -13.1	(52) -14.6	(74) -4.7	(74) 5.1	(79) 6.8	(67) 17.0	(64) 5.1 (65)
Russell 2000 Growth	-4.7	(58) -13.6	(57) -11.8	(58) -0.6	(41) 7.9	(42) 7.7	(53) 17.2	(60) 6.0 (45)
× Russell 2000	-1.5	(21) -10.1	(39) -9.8	(47) -1.2	(44) 6.8	(58) 7.2	(59) 16.4	(68) 5.3 (59)

Characteristics		
	Portfolio	Russell 2000 Growth
Number of Holdings	70	1,181
Weighted Avg. Market Cap. (\$B)	2.4	2.0
Median Market Cap. (\$B)	2.0	0.7
Price To Earnings	24.6	27.4
Price To Book	4.1	4.2
Price To Sales	2.6	3.2
Return on Equity (%)	20.3	16.6
Yield (%)	0.8	0.6
Beta (holdings; domestic)	1.5	1.3

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MDC PARTNERS 'A' (NAS)	5.1%
H&E EQUIPMENT SERVICES	5.0%
BRUNSWICK	4.5%
MGIC INVESTMENT	4.2%
ON ASSIGNMENT	4.2%
MARINEMAX	3.8%
TRUEBLUE	3.2%
SONIC	3.2%
FIRST BANCORP PRICO.	3.2%
SS&C TECHNOLOGIES HDG.	3.1%

Best Performers						
	Return %					
BURLINGTON STORES (BURL)	31.1%					
BELDEN (BDC)	28.8%					
EXPRESS (EXPR)	23.9%					
STEVEN MADDEN (SHOO)	22.6%					
DIAMONDBACK ENERGY (FANG)	15.4%					
DORMAN PRODUCTS (DORM)	14.6%					
WAGEWORKS (WAGE)	11.5%					
MDC PARTNERS 'A' (NAS) (MDCA)	9.7%					
SONIC (SONC)	9.3%					
POOL (POOL)	9.0%					

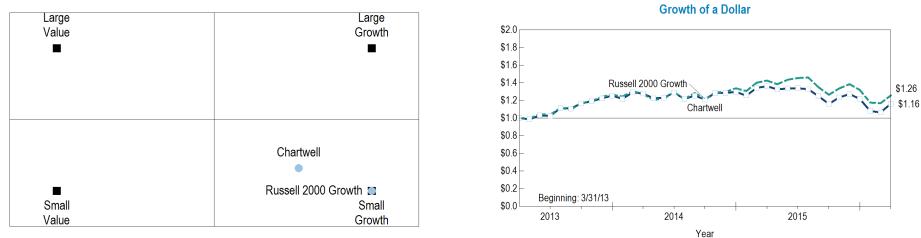
#### Worst Performers

	Return %
EVERI HOLDINGS (EVRI)	-47.8%
CHIMERIX (CMRX)	-42.9%
SPS COMMERCE (SPSC)	-38.8%
AKORN (AKRX)	-36.9%
PHARMERICA (PMC)	-36.8%
ADVISORY BOARD (ABCO)	-35.0%
ISIS PHARMACEUTICALS (IONS)	-34.6%
NXSTAGE MEDICAL (NXTM)	-31.6%
HORIZON PHARMA (HZNP)	-23.5%
INTEGRATED DEVICE TECH. (IDTI)	-22.4%

			Attribution Effects		Retu	rns	Sector Weights	
	Total	Selection	Allocation	Interaction				
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	0.4%	0.2%	-0.1%	0.3%	7.5%	-12.1%	2.8%	1.1%
Materials	-0.2%		-0.2%			0.7%	0.0%	4.1%
Industrials	-1.4%	-1.4%	0.4%	-0.5%	-5.1%	5.5%	17.0%	12.8%
Cons. Disc.	1.5%	0.7%	0.6%	0.3%	7.0%	3.1%	24.4%	17.0%
Cons. Staples	-0.2%		-0.2%			0.4%	0.0%	3.4%
Health Care	2.7%	2.0%	1.5%	-0.7%	-11.8%	-18.9%	17.2%	27.7%
Financials	-1.1%	-0.8%	0.4%	-0.7%	-8.8%	1.4%	14.3%	7.9%
Info. Tech	-0.8%	-0.8%	0.0%	0.1%	-7.1%	-3.9%	23.1%	25.1%
Telecomm.	-0.1%		-0.1%			11.4%	0.0%	0.8%
Utilities	0.0%		0.0%			-3.0%	0.0%	0.1%
Cash	0.1%	0.0%	0.1%	0.0%	0.1%		1.2%	0.0%
Portfolio	1.0%	= -0.1%	+ 2.3%	+ -1.2%	-3.9%	-4.9%	100.0%	100.0%

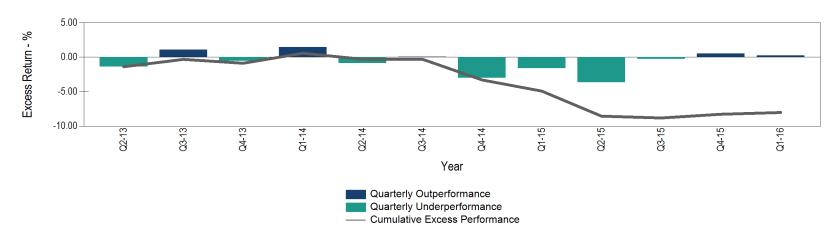
## Chartwell Performance Attribution vs. Bussell 2000 Growth



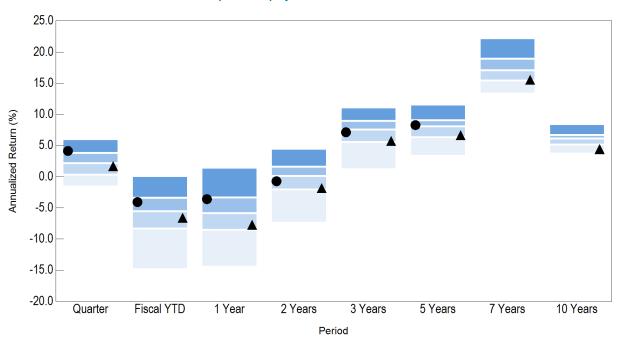


### US Effective Style Map









### eA US Small Cap Value Equity Net Accounts

	Return (R	lank)							
5th Percentile	6.0	0.1	1.4	4.5	11.1	11.6	22.2	8.4	
25th Percentile	3.9	-3.3	-3.3	1.7	9.0	9.1	19.0	6.7	
Median	2.2	-5.5	-5.8	0.2	7.6	8.1	17.1	6.1	
75th Percentile	0.4	-8.3	-8.5	-2.0	5.6	6.4	15.4	5.2	
95th Percentile	-1.6	-14.8	-14.4	-7.4	1.2	3.4	13.3	3.7	
# of Portfolios	142	141	139	135	129	123	117	97	
● The Boston Co ▲ Russell 2000 Value	· · · · · · · · · · · · · · · · · · ·	24) -4.1 58) -6.6	(37) -3.6 (61) -7.7	(28) -0.7 (71) -1.8	(64) 7.1 (75) 5.7	(57) 8.3 (74) 6.7	(43) (72) 15.5	() (· (75) 4.4 (8	) 9)

Characteristics		
	Portfolio	Russell 2000 Value
Number of Holdings	145	1,325
Weighted Avg. Market Cap. (\$B)	2.1	1.7
Median Market Cap. (\$B)	1.6	0.6
Price To Earnings	24.2	20.4
Price To Book	2.3	1.6
Price To Sales	2.6	2.5
Return on Equity (%)	9.3	7.1
Yield (%)	1.6	2.0
Beta (holdings; domestic)	1.1	1.1

### **Top Holdings**

SYNOVUS FINANCIAL	1.9%
UMB FINANCIAL	1.5%
PEBBLEBROOK HOTEL TRUST	1.5%
URBAN OUTFITTERS	1.5%
WEBSTER FINANCIAL	1.4%
CHEESECAKE FACTORY	1.4%
HEALTHCARE TRUST OF AM. CL.A	1.3%
PORTLAND GEN.ELEC.	1.3%
HAWAIIAN ELECTRIC INDS.	1.3%
SCRIPPS E W 'A'	1.2%

Best Performers					
	Return %				
CHILDRENS PLACE (PLCE)	51.2%				
URBAN OUTFITTERS (URBN)	45.5%				
MSC INDL.DIRECT 'A' (MSM)	36.6%				
ZUMIEZ (ZUMZ)	31.7%				
VERA BRADLEY (VRA)	29.1%				
COHEN & STEERS (CNS)	28.7%				
DECKERS OUTDOOR (DECK)	26.9%				
CSG SYS.INTL. (CSGS)	26.1%				
SCANSOURCE (SCSC)	25.3%				
STILLWATER MINING (SWC)	24.3%				

### **Worst Performers**

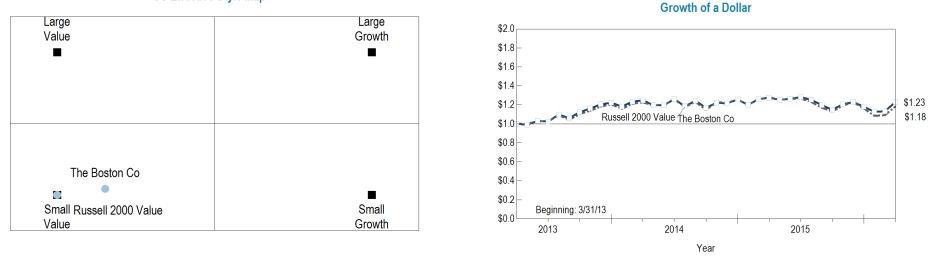
	Return %
ADVISORY BOARD (ABCO)	-35.0%
OSI SYSTEMS (OSIS)	-26.1%
GULF ISLAND FABRICATION (GIFI)	-24.9%
INVACARE (IVC)	-24.3%
FREIGHTCAR AMERICA (RAIL)	-19.4%
CALGON CARBON (CCC)	-18.4%
SCRIPPS E W 'A' (SSP)	-17.9%
WCI COMMUNITIES (WCIC)	-16.6%
GLOBUS MEDICAL CL.A (GMED)	-14.6%
AIR METHODS (AIRM)	-13.6%



		Attribution Effects				irns	Sector Weights	
	Total	Selection	Allocation	Interaction				
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	0.5%	0.5%	-0.1%	0.1%	5.2%	-6.9%	5.4%	4.4%
Materials	-0.5%	-0.6%	-0.1%	0.2%	-6.7%	10.6%	3.2%	3.1%
Industrials	0.4%	0.3%	0.0%	0.0%	6.0%	3.3%	13.2%	11.6%
Cons. Disc.	1.4%	0.8%	-0.1%	0.6%	9.3%	1.0%	17.5%	10.1%
Cons. Staples	0.0%	0.0%	0.0%	0.0%	4.7%	6.2%	3.2%	3.3%
Health Care	0.0%	0.2%	-0.2%	0.0%	-5.1%	-8.5%	6.1%	4.6%
Financials	0.9%	0.9%	0.2%	-0.3%	2.2%	0.1%	29.8%	43.8%
Info. Tech	0.5%	0.3%	0.0%	0.1%	6.9%	3.9%	13.0%	10.7%
Telecomm.	0.0%		0.0%			0.8%	0.0%	0.9%
Utilities	0.0%	-0.1%	0.1%	0.0%	10.8%	12.5%	8.2%	7.4%
Cash	-0.1%	0.0%	-0.1%	0.0%	0.1%		0.4%	0.0%
Portfolio	3.1%	= 2.3%	+ -0.1%	+ 0.8%	4.8%	1.7%	100.0%	100.0%

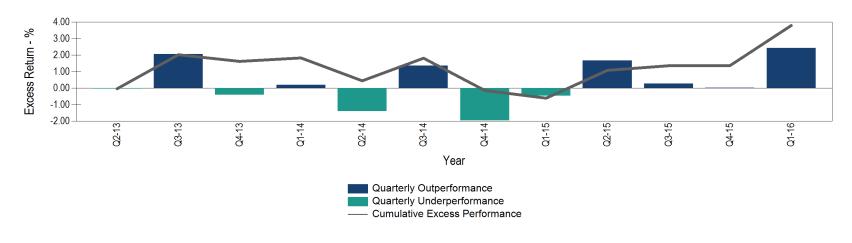
### The Poston Co Porformance Attribution vs. Puscell 2000 Value



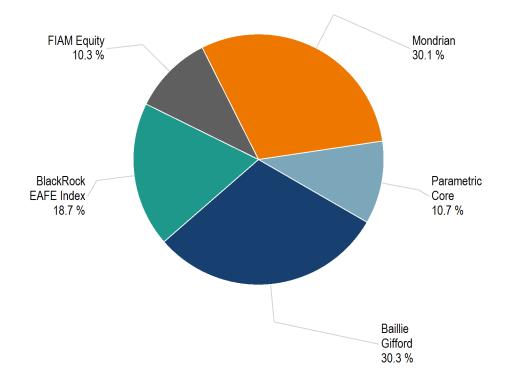


### US Effective Style Map





Verus<sup>77</sup>



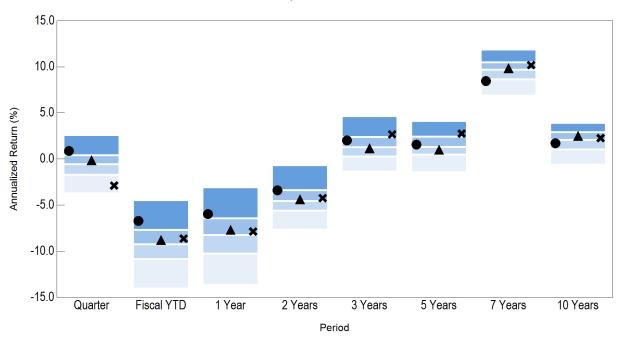
			Manager Contribution to
	Actual \$	Actual %	Excess Return %
Baillie Gifford	\$203,704,253	30.3%	0.2%
BlackRock EAFE Index	\$125,939,642	18.7%	0.0%
FIAM Equity	\$69,217,310	10.3%	0.0%
Mondrian	\$202,181,119	30.1%	0.6%
Parametric Core	\$71,685,400	10.7%	0.3%
Actual vs. Policy Weight Difference			-0.1%
Total	\$672,727,724	100.0%	1.0%



	Stat	istics Summary			
		3 Years			
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
International Equity	2.0%	13.1%	0.1	0.5	1.6%
MSCI ACWI ex US IMI	1.2%	13.4%	0.1		0.0%
Baillie Gifford	4.1%	14.1%	0.3	0.5	3.7%
MSCI ACWI ex US	2.3%	13.9%	0.2		0.0%
FIAM Equity	3.6%	12.6%	0.3	-0.2	2.4%
MSCI ACWI ex US Small Cap Gross	4.0%	13.1%	0.3		0.0%
Mondrian	1.9%	13.0%	0.1	0.6	4.2%
MSCI ACWI ex USA Value Gross	-0.8%	14.6%	-0.1		0.0%

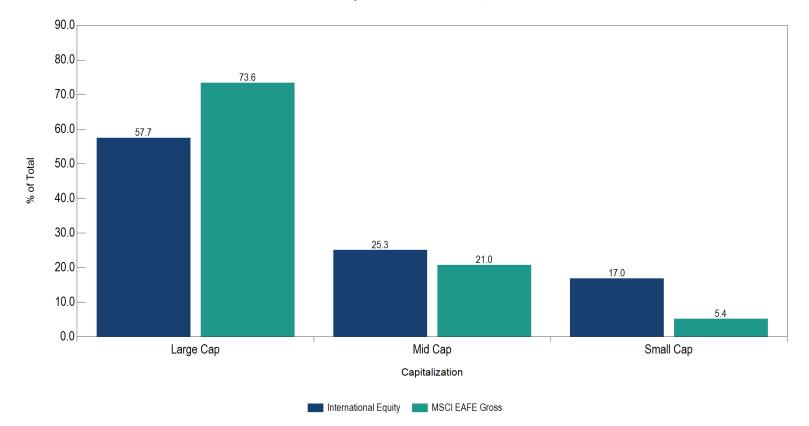
	Stat	istics Summary			
		5 Years			
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
International Equity	1.6%	14.8%	0.1	0.3	2.0%
MSCI ACWI ex US IMI	1.0%	15.6%	0.1		0.0%
Mondrian	2.3%	14.0%	0.2	0.6	4.6%
MSCI ACWI ex USA Value Gross	-0.5%	16.3%	0.0		0.0%





InvestorForce All DB ex-US Eq Net Accounts

	Return (Ra	ınk)							
5th Percentile	2.6	-4.5	-3.1	-0.7	4.6	4.1	11.9	3.9	
25th Percentile	0.4	-7.7	-6.4	-3.4	2.4	2.5	10.5	2.9	
Median	-0.5	-9.2	- <mark>8</mark> .2	-4.5	1.3	1.3	9.7	2.1	
75th Percentile	-1.7	-10.8	-10.3	-5.6	0.3	0.5	8.7	1.1	
95th Percentile	-3.7	-14.0	-13.6	-7.6	-1.3	-1.4	6.9	-0.6	
# of Portfolios	464	458	456	442	405	344	292	216	
International Equity	0.9 (1	8) -6.7 (1	6) -6.0	(20) -3.4	(26) 2.0	(33) 1.6	(42) 8.5	(79) 1.7	(61)
MSCI ACWI ex US IMI	-0.1 (3	8) -8.8 (4	3) -7.7	(42) -4.4	(46) 1.2	(55) 1.0	(59) 9.9	(46) 2.5	(36)
✗ MSCI EAFE Gross	-2.9 (8	8) -8.6 (4	1) -7.9	(44) -4.2	(43) 2.7	(22) 2.8	(19) 10.2	(34) 2.3	(44)



### Market Capitalization as of March 31, 2016

Excludes FIAM Equity holdings.

See appendix for the market capitalization breakpoints.

# Verus<sup>777</sup>

Characteristics						
	Portfolio	MSCI ACWI ex USA IMI Gross				
Number of Holdings	1,774	6,110				
Weighted Avg. Market Cap. (\$B)	37.6	40.6				
Median Market Cap. (\$B)	4.5	1.2				
Price To Earnings	22.0	17.8				
Price To Book	3.5	2.4				
Price To Sales	2.9	2.2				
Return on Equity (%)	16.3	14.2				
Yield (%)	3.0	3.1				
Beta (holdings; global)	1.0	1.0				

Return % 258.1% 191.2% 176.4% 165.5% 130.4% 105.9%

> 105.7% 103.4% 102.9% 102.8%

Top Holdings		Best Performers
UNILEVER (UK)	1.7%	
NESTLE 'R'	1.4%	HARMONY GOLD MNG. (R:HARJ)
UNITED OVERSEAS BANK	1.3%	VOLCAN COMPANIA MINERA B PREF. (PE:VLB)
KAO	1.2%	ASSORE (R:ASRJ)
NOVO NORDISK 'B'	1.1%	SIBANYE GOLD (R:SGLJ)
GLAXOSMITHKLINE	1.0%	AFN.RAINBOW MRLS. (R:ARIJ)
SYNGENTA	1.0%	KCE ELECTRONIC FB (Q:KCNF)
TAKEDA PHARMACEUTICAL	1.0%	ANGLO AMERICAN PLATINUM (R:AMSJ)
		KUMBA IRON ORE (R:KIOJ)
COCHLEAR	1.0%	MINSUR 'I' (PE:MIN)
ABB LTD N	1.0%	ANGLOGOLD ASHANTI (R:ANGJ)

### **Worst Performers**

	Return %
PTT EXPLORATION & PRDN. FB (Q:PTTF)	-59.5%
NANTKWEST (NK)	-52.6%
PETROSONIC ENERGY (PSON)	-47.5%
DRYSHIPS (DRYS)	-45.9%
NAVIOS MARITIME ACQ. (NNA)	-45.6%
SEVENTY SEVEN ENERGY (SSE)	-44.8%
RESTAURANT GROUP (UKIR:RTN)	-44.2%
JAPAN AIRPORT TERM.(OTC) (JAIRF)	-41.7%
RESOLUTE ENERGY (REN)	-41.4%
RUMO LOG.OPD.MULTIMODAL (BR:P3M)	-40.2%



		Attribution Effects				irns	Sector Weights	
	Total	Selection	Allocation	Interaction				
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	-0.3%	-0.1%	-0.1%	-0.1%	4.6%	8.6%	4.6%	5.3%
Materials	-0.3%	0.0%	-0.1%	-0.2%	5.2%	7.1%	4.5%	6.8%
Industrials	0.1%	0.2%	0.0%	-0.1%	2.4%	2.1%	13.0%	12.3%
Cons. Disc.	0.0%	0.1%	0.0%	-0.1%	-2.9%	-2.5%	14.9%	12.9%
Cons. Staples	0.4%	0.1%	0.1%	0.1%	5.1%	4.2%	13.3%	10.2%
Health Care	0.5%	0.4%	0.0%	0.0%	-1.8%	-6.7%	9.7%	9.3%
Financials	0.4%	0.6%	0.3%	-0.6%	-2.5%	-4.4%	17.9%	26.1%
Info. Tech	0.3%	0.3%	0.0%	0.0%	3.0%	0.5%	10.5%	9.2%
Telecomm.	0.3%	0.1%	0.0%	0.1%	5.9%	2.4%	5.8%	4.6%
Utilities	0.1%	0.1%	0.0%	0.0%	3.6%	2.4%	4.3%	3.3%
Cash	0.0%	0.0%	0.0%	0.0%	0.1%		1.5%	0.0%
Portfolio	1.4%	= 1.9%	+ 0.3%	+ -0.8%	1.2%	-0.2%	100.0%	100.0%

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



	Returns and Weights Attribution Effects									
	Manager	Index	Manager	Index	Selection	Allocation	Currency	Interaction	Total	
	Return	Return	Weight	Weight	Effect	Effect	Effect	Effect	Effects	
Europe										
Austria	-15.2%	-0.2%	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	
Belgium	-19.9%	-2.2%	0.1%	1.1%	-0.2%	0.0%	0.0%	0.2%	0.0%	
Czech Republic*	5.9%	5.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Denmark	1.2%	-0.4%	2.3%	1.4%	0.0%	0.0%	0.0%	0.0%	0.1%	
Finland	12.1%	-1.1%	0.6%	0.7%	0.1%	0.0%	0.0%	0.0%	0.1%	
France	-3.5%	0.1%	3.0%	6.6%	-0.2%	0.0%	-0.2%	0.1%	-0.2%	
Germany	0.4%	-2.1%	4.8%	6.4%	0.2%	0.0%	-0.1%	0.0%	0.1%	
Greece*	-2.8%	-10.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	
Hungary*	16.8%	17.3%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	
Ireland	1.1%	0.0%	0.1%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	
Italy	-3.4%	-10.6%	0.9%	1.9%	0.1%	0.1%	0.0%	-0.1%	0.1%	
Luxembourg	4.9%	-0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Netherlands	7.0%	3.0%	1.9%	2.1%	0.1%	0.0%	0.0%	0.0%	0.1%	
Norway	4.6%	2.6%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	
Poland*	11.7%	12.7%	0.4%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	
Portugal	25.8%	1.3%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	
Russia*	14.1%	16.2%	0.8%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	
Spain	-4.4%	-3.7%	3.9%	2.3%	0.0%	-0.1%	0.0%	0.0%	0.0%	
Sweden	-0.5%	0.5%	4.1%	2.3%	0.0%	0.0%	0.1%	0.0%	0.0%	
Switzerland	-0.2%	-4.5%	6.9%	6.4%	0.3%	0.0%	0.0%	0.0%	0.3%	
United Kingdom	-0.8%	-3.0%	15.9%	14.1%	0.3%	0.1%	0.0%	0.0%	0.4%	

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



	Int requity Performance Attribution vs. Mocraciwi ex USA Imi Gross												
		Returns and	Weights			Attri	bution Effects	5					
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	Total Effects				
AsiaPacific													
Australia	11.0%	2.8%	3.1%	4.9%	0.4%	0.0%	-0.1%	-0.1%	0.1%				
China*	-5.7%	-5.3%	2.7%	5.8%	0.0%	0.0%	0.0%	0.0%	0.0%				
Hong Kong	-1.2%	-1.4%	2.8%	2.4%	0.0%	0.0%	0.0%	0.0%	0.0%				
India*	-3.5%	-3.8%	1.8%	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%				
Indonesia*	9.5%	11.4%	0.7%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%				
Japan	-4.1%	-5.7%	18.8%	17.7%	0.5%	-0.1%	-0.1%	0.0%	0.3%				
Korea*	2.9%	4.2%	3.0%	3.3%	0.0%	0.0%	0.0%	0.0%	-0.1%				
Malaysia*	12.0%	12.5%	0.8%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%				
New Zealand		9.6%	0.0%	0.2%		0.0%	0.0%		0.0%				
Philippines*	7.3%	7.6%	0.6%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%				
Singapore	6.6%	5.7%	2.5%	1.0%	0.0%	0.1%	0.0%	0.0%	0.2%				
Taiwan*	8.7%	7.1%	2.8%	2.6%	0.1%	0.0%	0.0%	0.0%	0.1%				
Thailand*	11.9%	14.8%	0.5%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%				
Americas													
Brazil*	27.2%	28.2%	1.3%	1.0%	0.0%	0.0%	0.0%	0.0%	0.1%				
Canada	20.2%	12.0%	0.5%	5.9%	0.6%	-0.4%	-0.4%	-0.6%	-0.8%				
Chile*	11.8%	13.6%	0.6%	0.2%	0.0%	0.0%	0.0%	0.0%	0.1%				
Colombia*	23.4%	22.8%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%				
Mexico*	5.4%	8.2%	1.4%	0.9%	0.0%	0.1%	0.0%	0.0%	0.0%				
Peru*	23.8%	26.9%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%				
United States	1.7%	0.8%	4.7%	0.0%	0.0%	0.2%	0.0%	0.0%	0.3%				

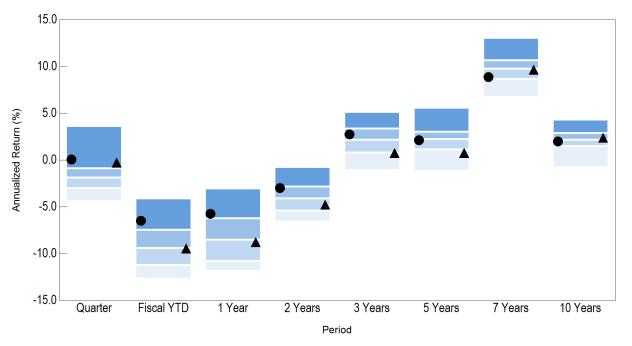
### Int'I Equity Performance Attribution vs. MSCI ACWI ex USA IMI Gross



	Int requity Performance Attribution vs. Mocraciwi ex USA initi Gross												
		Returns and	Weights			Attri	bution Effects	;					
	Manager	Index	Manager	Index	Selection	Allocation	Currency	Interaction	Total				
	Return	Return	Weight	Weight	Effect	Effect	Effect	Effect	Effects				
Other													
Egypt*		-5.7%	0.0%	0.1%		0.0%	0.0%		0.0%				
Israel	-5.5%	-7.1%	0.1%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%				
Kazakhstan**	-10.6%	-11.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%				
Kuwait**	-8.6%	-10.3%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%				
Qatar*	-9.8%	3.4%	0.4%	0.2%	0.0%	0.0%	0.0%	0.0%	-0.1%				
Romania**	-12.1%	-11.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%				
South Africa*	9.6%	15.6%	1.9%	1.3%	-0.1%	0.1%	0.0%	0.0%	0.0%				
Turkey*	1.4%	19.4%	0.5%	0.3%	0.0%	0.0%	0.0%	0.0%	-0.1%				
United Arab Emirates*	-9.3%	7.3%	0.3%	0.2%	0.0%	-0.1%	0.0%	0.0%	-0.1%				
Totals													
Americas	4.7%	13.4%	8.8%	8.1%	-0.3%	-0.3%	-0.6%	0.0%	-1.3%				
Europe	-0.5%	-1.8%	47.1%	47.6%	0.9%	-0.1%	0.2%	0.0%	1.1%				
Asia/Pacific	1.1%	-1.6%	39.8%	41.5%	0.7%	0.1%	0.0%	-0.1%	0.8%				
Other	8.9%	10.1%	3.3%	2.7%	-0.1%	-0.1%	0.0%	0.1%	-0.2%				
Cash	0.1%		1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%				
Total	0.3%	-0.2%	100.0%	100.0%	1.2%	-0.4%	-0.4%	-0.1%	0.4%				
Totals													
Developed	-0.5%	-1.5%	77.9%	79.2%	1.2%	-0.2%	0.2%	0.1%	1.3%				
Emerging*	6.1%	4.7%	20.8%	20.8%	0.8%	-0.8%	-0.6%	-0.3%	-0.9%				
Frontier**	-9.2%		0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%				
Cash	0.1%		1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%				

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





### InvestorForce All DB Dev Mkt ex-US Eq Net Accounts

	Return	(Rank)														
5th Percentile	3.6		-4.1		-3.0		-0.8		5.1		5.6		13.1		4.3	
25th Percentile	-0.9		-7.4		-6.2		-2.8		3.4		3.1		10.7		2.9	
Median	-1.9		-9.4		-8.5		-4.1		2.2		2.3		9.8		2.2	
75th Percentile	-3.0		-11.2		-10.7		-5.4		0.8		1.2		8.7		1.5	
95th Percentile	-4.4		-12.6		-11.8		-6.6		-1.0		-1.2		6.8		-0.8	
# of Portfolios	154		154		152		145		139		113		91		61	
Developed Markets	0.1	(18)	-6.5	(18)	-5.7	(19)	-3.0	(30)	2.8	(39)	2.1	(54)	8.9	(68)	2.0	(57)
MSCI ACWI ex USA Gross	-0.3	(18)	-9.4	(51)	-8.8	(55)	-4.8	(59)	0.8	(78)	0.8	(80)	9.7	(52)	2.4	(39)



Characteristics		
	Portfolio	MSCI ACWI ex USA Gross
Number of Holdings	817	1,856
Weighted Avg. Market Cap. (\$B)	40.8	46.7
Median Market Cap. (\$B)	7.4	6.6
Price To Earnings	22.5	17.6
Price To Book	3.6	2.4
Price To Sales	3.0	2.3
Return on Equity (%)	16.4	14.5
Yield (%)	3.0	3.2
Beta (holdings; global)	1.0	1.0

Top Holdings	Тор	Holding	JS
--------------	-----	---------	----

UNILEVER (UK)	2.0%
NESTLE 'R'	1.7%
UNITED OVERSEAS BANK	1.5%
KAO	1.3%
NOVO NORDISK 'B'	1.2%
GLAXOSMITHKLINE	1.2%
SYNGENTA	1.1%
TAKEDA PHARMACEUTICAL	1.1%
COCHLEAR	1.1%
ABB LTD N	1.1%

Best Performers							
	Return %						
MINERAL DEPOSITS (A:MDLX)	70.2%						
ANDREA ELECTRONICS (ANDR)	57.4%						
IAMGOLD (NYS) (IAG)	55.6%						
MESOBLAST (A:MSBX)	46.9%						
CPFL EN.ON SPN.ADR.1:2 (CPL)	46.8%						
MEDA 'A' (W:MEDA)	46.7%						
CHRISTOPHER & BKS. (CBK)	44.8%						
CPFL ENERGIA ON (BR:CPL)	44.1%						
ARCELORMITTAL ADR 1:1 (MT)	42.7%						
TELEFONICA BRASIL PN ADR 1:1 (VIV)	39.5%						

	Return %
NANTKWEST (NK)	-52.6%
PETROSONIC ENERGY (PSON)	-47.5%
SEVENTY SEVEN ENERGY (SSE)	-44.8%
RESTAURANT GROUP (UKIR:RTN)	-44.2%
JAPAN AIRPORT TERM.(OTC) (JAIRF)	-41.7%
RESOLUTE ENERGY (REN)	-41.4%
BANCA PPO.EMILIA ROMAGNA (I:BPE)	-37.7%
HIROSHIMA BANK (J:HRBK)	-35.7%
CREDIT SUISSE GROUP SPN. ADR 1:1 (CS)	-34.9%
ZUMTOBEL (O:ZUS)	-33.6%



	Dev	eloped Markets	s Performance	Attribution vs. N	ISCI ACWI ex	USA Gross			
		А	ttribution Effects		Retu	irns	Sector Weights		
	Total	Selection	Allocation	Interaction					
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark	
Energy	-0.5%	-0.3%	-0.1%	-0.1%	1.7%	9.3%	5.0%	5.9%	
Materials	-0.5%	-0.2%	-0.2%	-0.1%	1.8%	6.5%	3.8%	6.4%	
Industrials	0.1%	0.1%	0.0%	-0.1%	2.6%	2.1%	13.1%	11.0%	
Cons. Disc.	-0.1%	0.0%	-0.1%	0.0%	-3.2%	-2.7%	15.2%	12.2%	
Cons. Staples	0.6%	0.1%	0.1%	0.4%	5.6%	4.2%	13.6%	10.7%	
Health Care	0.5%	0.4%	-0.2%	0.3%	-2.4%	-7.4%	10.1%	9.5%	
Financials	0.0%	0.0%	0.4%	-0.4%	-4.5%	-4.4%	17.7%	26.9%	
Info. Tech	0.3%	0.3%	0.0%	0.0%	2.5%	0.0%	10.6%	8.8%	
Telecomm.	0.1%	0.0%	0.0%	0.1%	5.4%	3.3%	5.3%	5.1%	
Utilities	-0.2%	-0.2%	0.0%	0.0%	-2.3%	2.3%	3.9%	3.5%	
Cash	0.0%	0.0%	0.0%	0.0%	0.1%		1.1%	0.0%	
Unclassified	0.0%	0.0%	0.0%	0.0%	-10.6%		0.5%	0.0%	
Portfolio	0.3%	= 0.3%	+ 0.0%	+ 0.1%	0.1%	-0.3%	100.0%	100.0%	

. .... 



Developed Markets Performance Attribution vs. MSCI ACWI ex USA Gross									
		Returns and \	Neights		Attribution Effects				
	Manager	Index	Manager	Index	Selection	Allocation	Currency	Interaction	Total
	Return	Return	Weight	Weight	Effect	Effect	Effect	Effect	Effects
Europe									
Austria	-18.0%	0.0%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Belgium	-15.0%	-3.0%	0.1%	1.1%	-0.1%	0.1%	0.0%	0.1%	0.0%
Czech Republic*		6.0%	0.0%	0.0%		0.0%	0.0%		0.0%
Denmark	0.9%	-0.5%	2.6%	1.4%	0.0%	0.0%	0.1%	0.0%	0.1%
Finland	13.6%	-4.3%	0.7%	0.7%	0.1%	0.0%	0.0%	0.0%	0.1%
France	-6.3%	0.2%	3.3%	7.1%	-0.5%	0.0%	-0.2%	0.3%	-0.4%
Germany	-1.5%	-2.1%	5.3%	6.6%	0.1%	0.0%	0.0%	-0.1%	0.0%
Greece*		-12.3%	0.0%	0.1%		0.0%	0.0%		0.0%
Hungary*		18.0%	0.0%	0.1%		0.0%	0.0%		0.0%
Ireland	-7.3%	-3.0%	0.1%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Italy	-1.8%	-11.1%	1.0%	1.7%	0.2%	0.1%	0.0%	-0.1%	0.2%
Luxembourg	-10.8%	-6.8%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Netherlands	4.8%	2.3%	2.0%	2.2%	0.1%	0.0%	0.0%	0.0%	0.1%
Norway	-8.6%	2.5%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Poland*		13.7%	0.0%	0.3%		0.0%	0.0%		-0.1%
Portugal	25.8%	4.6%	0.4%	0.1%	0.0%	0.0%	0.0%	0.1%	0.1%
Russia*	-2.2%	17.1%	0.1%	0.7%	0.0%	-0.1%	-0.1%	0.0%	-0.2%
Spain	-5.5%	-4.4%	4.3%	2.3%	0.0%	-0.1%	0.1%	0.0%	-0.1%
Sweden	-1.1%	0.0%	4.5%	2.1%	0.0%	0.0%	0.2%	0.0%	0.2%
Switzerland	-0.6%	-4.9%	7.6%	6.9%	0.3%	-0.2%	0.2%	0.1%	0.4%
United Kingdom	0.1%	-2.4%	18.6%	14.3%	0.4%	0.3%	-0.1%	0.1%	0.7%

Developed Markets Performance Attribution vs. MSCI ACWI ex USA Gross



	Developed Markets Performance Attribution vs. MSCI ACWI ex USA Gross									
		Returns and	Weights		Attribution Effects					
	Manager	Index	Manager	Index	Selection	Allocation	Currency	Interaction	Total	
	Return	Return	Weight	Weight	Effect	Effect	Effect	Effect	Effects	
AsiaPacific										
Australia	11.0%	2.1%	3.5%	5.0%	0.4%	0.0%	-0.1%	-0.1%	0.2%	
China*	-6.5%	-4.8%	2.4%	5.9%	-0.1%	0.0%	0.0%	0.1%	0.0%	
Hong Kong	-0.7%	-0.4%	2.5%	2.4%	0.0%	0.0%	0.0%	0.0%	0.0%	
India*	-3.5%	-2.6%	1.3%	1.8%	0.0%	0.0%	0.0%	0.0%	0.0%	
Indonesia*	8.2%	11.3%	0.3%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	
Japan	-4.1%	-6.5%	21.0%	17.0%	0.6%	-0.3%	0.0%	0.1%	0.4%	
Korea*	1.0%	4.9%	2.4%	3.2%	-0.1%	0.0%	0.0%	0.0%	-0.2%	
Malaysia*	15.1%	13.2%	0.4%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	
New Zealand		12.1%	0.0%	0.1%		0.0%	0.0%		0.0%	
Philippines*	6.5%	7.3%	0.3%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	
Singapore	6.6%	5.1%	2.8%	0.9%	0.0%	0.1%	0.1%	0.1%	0.2%	
Taiwan*	9.5%	7.7%	2.2%	2.4%	0.1%	0.0%	0.0%	0.0%	0.0%	
Thailand*	19.5%	17.2%	0.1%	0.4%	0.0%	-0.1%	0.0%	0.0%	-0.1%	
Americas										
Brazil*	30.0%	28.6%	0.6%	1.1%	0.1%	-0.1%	-0.1%	0.0%	-0.2%	
Canada	20.2%	11.4%	0.6%	5.9%	0.6%	-0.4%	-0.4%	-0.6%	-0.8%	
Chile*	11.1%	13.3%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	
Colombia*	28.9%	22.5%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	
Mexico*	2.4%	8.5%	0.7%	0.9%	-0.1%	0.0%	0.0%	0.0%	-0.1%	
Peru*		26.9%	0.0%	0.1%		0.0%	0.0%		0.0%	
United States	1.5%	0.8%	5.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.3%	

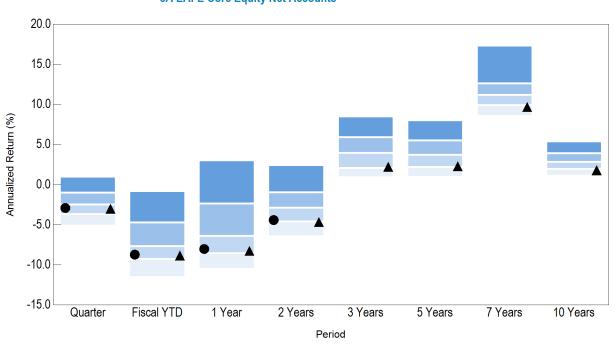
# Developed Markets Performance Attribution vs. MSCI ACWI ex USA Gross



	Developed markets Pyramis Performance Attribution vs. MSCI ACWI ex USA Gross								
	Returns and Weights Attribution Effects								
	Manager	Index	Manager	Index	Selection	Allocation	Currency	Interaction	Total
	Return	Return	Weight	Weight	Effect	Effect	Effect	Effect	Effects
Other									
Egypt*		-6.1%	0.0%	0.0%		0.0%	0.0%		0.0%
Israel	-5.5%	-9.3%	0.1%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%
Kazakhstan**	-10.6%	-11.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Qatar*	-10.7%	3.4%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Romania**	-12.1%	-11.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
South Africa*	7.8%	14.6%	1.3%	1.4%	-0.1%	0.0%	0.0%	0.0%	-0.1%
Turkey*	-0.1%	22.4%	0.1%	0.3%	0.0%	-0.1%	0.0%	0.0%	-0.1%
United Arab Emirates*	-10.3%	7.7%	0.1%	0.2%	0.0%	-0.1%	0.0%	0.0%	-0.1%
Totals									
Americas	3.9%	13.2%	7.2%	8.3%	-0.4%	-0.4%	-0.6%	0.0%	-1.4%
Europe	-0.5%	-2.0%	50.9%	48.5%	1.0%	-0.1%	0.1%	0.1%	1.1%
Asia/Pacific	0.9%	-1.7%	38.8%	40.5%	0.7%	0.1%	0.1%	-0.1%	0.8%
Other	7.1%	10.0%	1.9%	2.7%	-0.2%	-0.1%	0.0%	0.1%	-0.2%
Cash	0.1%		1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	0.1%	-0.3%	100.0%	100.0%	1.1%	-0.5%	-0.4%	0.1%	0.3%
Totals									
Developed	-0.4%	-1.8%	86.1%	79.3%	1.5%	-0.3%	0.1%	0.2%	1.6%
Emerging*	4.8%	5.4%	12.8%	20.7%	0.4%	-0.9%	-0.5%	-0.3%	-1.3%
Frontier**	-11.4%		0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cash	0.1%		1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

## Developed Markets Pyramis Performance Attribution vs. MSCI ACWI ex USA Gross





#### eA EAFE Core Equity Net Accounts

	Return	(Rank)							
5th Percentile	1.0	-0.8	3.0	2.4	8.5	8.0	17.3	5.4	
25th Percentile	-1.0	-4.7	-2.3	-0.9	5.9	5.5	12.7	3.9	
Median	-2.5	-7.6	-6.4	-2.8	4.0	3.7	11.2	2.9	
75th Percentile	-3.6	-9.2	-8.5	-4.6	2.1	2.2	9.9	2.0	
95th Percentile	-5.1	-11.5	-10.5	-6.4	1.0	1.0	8.6	1.2	
# of Portfolios	91	91	89	87	80	<mark>6</mark> 9	61	45	
BlackRock EAFE Index	-2.9	(60) -8.7	(67) -8.0	(71) -4.4	(74)	()	()	() ()	
MSCI EAFE	-3.0	(61) -8.8	(68) -8.3	(72) -4.7	(80) 2.2	(72) 2.3	(75) 9.7	(77) 1.8 (81)	

619	928
	520
30.2	50.3
5.9	8.7
18.5	17.6
2.2	2.3
2.2	2.2
11.1	13.4
3.1	3.4
1.2	1.0
	5.9 18.5 2.2 2.2 11.1 3.1

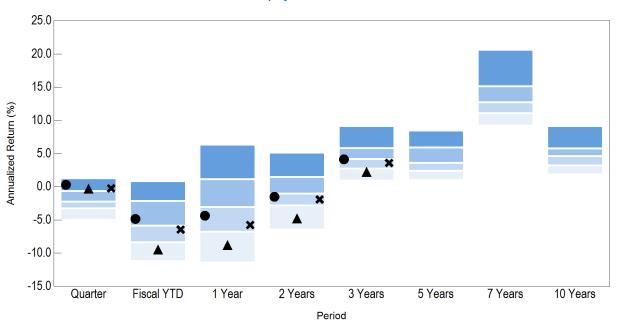
Return % 57.4% 55.6% 44.8% 42.7% 39.5% 32.9% 30.1% 29.7% 27.2% 25.1%

Top Holdings		Best Performers
ROGERS	2.5%	
NOVEN PHARMS.	2.3%	ANDREA ELECTRONICS (ANDR)
BANCO SANTANDER SA ADR 1:1	2.3%	IAMGOLD (NYS) (IAG)
BANCO SANTANDER SA ADR 1.1	2.070	CHRISTOPHER & BKS. (CBK)
TOYOTA MOTOR	2.1%	ARCELORMITTAL ADR 1:1 (MT)
CLEARBRIDGE AMER.EN.MLP FD.	1.4%	TELEFONICA BRASIL PN ADR 1:1 (VIV)
GLAXOSMITHKLINE SPN.ADR 1:2	1.4%	HOSHIZAKI ELECTRIC (J:HSZK)
BAY NATIONAL	1.4%	SCHNITZER STL.INDS. (SCHN)
DATINATIONAL	1.470	WH GROUP (K:HHPL)
ROYAL DUTCH SHELL B ADR 1:2	1.4%	SUBURBAN PROPANE PTNS. (SPH)
ROYAL DUTCH SHELL A ADR 1:2	1.4%	SANDSTORM GOLD (ASE) (SAND)
VODAFONE GP.SPN.ADR 1:10	1.2%	

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	Return %
NANTKWEST (NK)	-52.6%
PETROSONIC ENERGY (PSON)	-47.5%
SEVENTY SEVEN ENERGY (SSE)	-44.8%
JAPAN AIRPORT TERM.(OTC) (JAIRF)	-41.7%
RESOLUTE ENERGY (REN)	-41.4%
HIROSHIMA BANK (J:HRBK)	-35.7%
CREDIT SUISSE GROUP SPN. ADR 1:1 (CS)	-34.9%
ISA INTERNATIONALE (ISAT)	-33.3%
IYO BANK (J:IYOT)	-32.9%
RARE ELEMENT RES. (ASE) (REEMF)	-29.8%





eA ACWI ex-US Growth Equity Net Accounts

	Return	(Rank)						
5th Percentile	1.3	0.8	6.3	5.1	9.1	8.4	20.6	9.1
25th Percentile	-0.6	-2.1	1.2	1.5	5.8	5.9	15.2	5.8
Median	-2.2	-5.8	-3.0	-1.0	4.2	3.6	12.8	4.7
75th Percentile	-3.2	-8.3	-6.8	-2.8	2.7	2.4	11.1	3.2
95th Percentile	-5.0	-11.2	-11.4	-6.4	1.0	1.0	9.3	1.9
# of Portfolios	49	49	49	44	41	38	34	27
Baillie Gifford	0.3	(18) -4.8	(42) -4.4	(59) -1.5	(56) 4.1	(51)	()	() ()
MSCI ACWI ex US	-0.3	(22) -9.4	(85) -8.8	(87) -4.8	(86) 2.3	(80)	()	() ()
✗ MSCI ACWI ex US Growth	-0.2	(22) -6.4	(58) -5.8	(65) -1.9	(65) 3.6	(60)	()	() ()

Characteristics		
	Portfolio	MSCI ACWI ex USA Gross
Number of Holdings	87	1,856
Weighted Avg. Market Cap. (\$B)	33.6	46.7
Median Market Cap. (\$B)	11.5	6.6
Price To Earnings	27.0	17.6
Price To Book	5.3	2.4
Price To Sales	4.2	2.3
Return on Equity (%)	23.0	14.5
Yield (%)	1.9	3.2
Beta (holdings; global)	1.1	1.0

Top Holdings	
NOVO NORDISK 'B'	2.9%
KAO	2.7%
COCHLEAR	2.6%
SHIMANO	2.5%
TAIWAN SEMICON.SPN.ADR 1:5	2.3%
KINNEVIK 'B'	2.2%
ARM HOLDINGS	2.2%
NASPERS	2.2%
HARGREAVES LANSDOWN	2.2%
MS&AD INSURANCE GP.HDG.	2.1%

Dest Feriorners	
	Return %
MESOBLAST (A:MSBX)	46.9%
IMAGINATION TECHNOLOGIES (UKIR:IMG)	38.2%
ITAU UNIBANCO BANCO HLDG.ADR 1:1 (ITUB)	35.8%
JERONIMO MARTINS (P:JMT)	25.8%
TREASURY WINE ESTATES (A:TWEX)	23.8%
ADIDAS (D:ADS)	19.9%
JARDINE MATHESON HDG. (T:JMTS)	19.5%
CLICKS GROUP (R:CLSJ)	17.5%
KONE 'B' (M:KNEBV)	17.4%
TAIWAN SEMICON.SPN.ADR 1:5 (TSM)	15.2%

**Best Performers** 

#### Worst Performers

	Return %
MITCHELLS & BUTLERS (UKIR:MAB)	-21.5%
JD.COM 'A' ADR 1:2 (JD)	-17.9%
PROTALIX BIOTH. (PLX)	-17.6%
RAKUTEN (J:RAKT)	-17.2%
ZALANDO (D:ZAL)	-16.5%
TSINGTAO BREWERY 'H' (K:TSIN)	-16.2%
CAPITA (UKIR:CPI)	-15.9%
DENSO (J:DE@N)	-15.7%
AUTO TRADER GROUP (UKIR:AUTO)	-14.2%
LI & FUNG (K:FUNG)	-13.0%

		A	Attribution Effects		Retu	irns	Sector Weights	
	Total	Selection	Allocation	Interaction				
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	-0.7%	-0.2%	-0.4%	-0.1%	2.0%	9.3%	1.8%	5.9%
Materials	-0.6%	-0.2%	-0.2%	-0.2%	-0.7%	6.5%	2.8%	6.4%
Industrials	0.6%	0.4%	0.1%	0.1%	4.9%	2.1%	13.8%	11.0%
Cons. Disc.	-0.2%	-0.1%	-0.2%	0.1%	-4.3%	-2.7%	21.3%	12.2%
Cons. Staples	0.7%	-0.1%	0.3%	0.4%	4.8%	4.2%	17.9%	10.7%
Health Care	0.9%	0.7%	-0.1%	0.3%	1.1%	-7.4%	10.3%	9.5%
Financials	0.1%	0.2%	0.3%	-0.5%	-4.2%	-4.4%	17.8%	26.9%
Info. Tech	0.5%	0.4%	0.1%	0.0%	1.8%	0.0%	11.9%	8.8%
Telecomm.	-0.4%		-0.2%			3.3%	0.0%	5.1%
Utilities	-0.2%		-0.1%			2.3%	0.0%	3.5%
Cash	0.1%	0.0%	0.1%	0.0%	0.1%		2.5%	0.0%
Portfolio	0.7%	= 1.2%	+ -0.4%	+ -0.2%	0.4%	-0.3%	100.0%	100.0%

# Baillie Gifford Performance Attribution vs. MSCLACWLex USA Gross



					I VS. WIGCI ACM				
		Returns and	Weights		Attribution Effects				
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	Total Effects
Europe									
Austria		0.0%	0.0%	0.1%		0.0%	0.0%		0.0%
Belgium		-3.0%	0.0%	1.1%		0.1%	-0.1%		0.0%
Czech Republic*		6.0%	0.0%	0.0%		0.0%	0.0%		0.0%
Denmark	-0.6%	-0.5%	5.6%	1.4%	0.0%	-0.1%	0.2%	0.0%	0.1%
Finland	17.4%	-4.3%	1.2%	0.7%	0.1%	0.0%	0.0%	0.1%	0.3%
France	-1.0%	0.2%	0.8%	7.1%	0.0%	0.1%	-0.3%	0.0%	-0.3%
Germany	1.7%	-2.1%	2.6%	6.6%	0.2%	0.1%	-0.2%	-0.1%	0.0%
Greece*		-12.3%	0.0%	0.1%		0.0%	0.0%		0.0%
Hungary*		18.0%	0.0%	0.1%		0.0%	0.0%		0.0%
Ireland		-3.0%	0.0%	0.3%		0.0%	0.0%		0.0%
Italy		-11.1%	0.0%	1.7%		0.2%	-0.1%		0.1%
Netherlands		2.3%	0.0%	2.2%		0.0%	-0.1%		-0.1%
Norway		2.5%	0.0%	0.4%		0.0%	0.0%		0.0%
Poland*		13.7%	0.0%	0.3%		0.0%	0.0%		-0.1%
Portugal	25.8%	4.6%	0.9%	0.1%	0.0%	0.0%	0.1%	0.2%	0.3%
Russia*		17.1%	0.0%	0.7%		-0.1%	-0.1%		-0.2%
Spain	-7.4%	-4.4%	3.7%	2.3%	-0.1%	-0.1%	0.1%	0.0%	-0.1%
Sweden	-3.0%	0.0%	7.6%	2.1%	0.0%	0.0%	0.2%	-0.1%	0.0%
Switzerland	-1.2%	-4.9%	5.6%	6.9%	0.2%	0.0%	0.0%	0.0%	0.2%
United Kingdom	-2.2%	-2.4%	20.3%	14.3%	0.1%	0.4%	-0.2%	-0.1%	0.2%

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



	Baillie Gifford Performance Attribution vs. MSCI ACWI ex USA Gross									
		Returns and	Weights			Attri	bution Effects	i		
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	Total Effects	
AsiaPacific										
Australia	15.8%	2.2%	5.7%	5.0%	0.5%	0.0%	0.1%	0.2%	0.8%	
China*	-6.8%	-4.7%	5.6%	5.9%	0.0%	0.0%	0.0%	-0.1%	-0.1%	
Hong Kong	-1.9%	0.6%	1.7%	2.4%	-0.1%	-0.1%	0.0%	0.0%	-0.1%	
India*	-6.5%	-2.9%	1.4%	1.8%	0.1%	0.1%	0.0%	-0.1%	0.0%	
Indonesia*		12.8%	0.0%	0.5%		-0.1%	0.0%		-0.1%	
Japan	-2.4%	-6.3%	18.9%	17.0%	0.6%	-0.3%	0.3%	0.1%	0.7%	
Korea*	2.6%	4.6%	3.3%	3.2%	0.0%	0.0%	0.0%	0.0%	-0.1%	
Malaysia*		13.5%	0.0%	0.7%		-0.1%	-0.1%		-0.1%	
New Zealand		11.9%	0.0%	0.1%		0.0%	0.0%		0.0%	
Philippines*	8.2%	7.5%	0.4%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	
Singapore	8.3%	5.6%	3.5%	0.9%	0.0%	0.1%	0.0%	0.1%	0.3%	
Taiwan*	11.1%	7.7%	3.1%	2.4%	0.2%	0.1%	-0.1%	0.0%	0.2%	
Thailand*		17.0%	0.0%	0.4%		-0.1%	0.0%		-0.1%	
Americas										
Brazil*	35.8%	27.2%	0.4%	1.1%	0.2%	-0.2%	-0.2%	-0.2%	-0.2%	
Canada		11.3%	0.0%	5.9%		-0.4%	-0.4%		-0.8%	
Chile*		12.5%	0.0%	0.2%		0.0%	0.0%		0.0%	
Colombia*		24.1%	0.0%	0.1%		0.0%	0.0%		0.0%	
Mexico*	-4.7%	8.6%	0.7%	0.9%	-0.1%	0.0%	0.0%	0.0%	-0.1%	
Peru*		17.2%	0.0%	0.1%		0.0%	0.0%		0.0%	
United States	0.5%	0.8%	1.6%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	

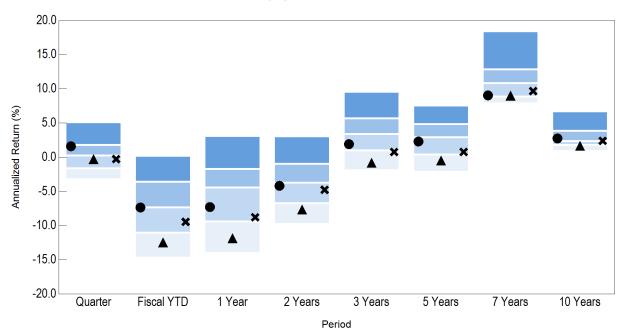
## Baillie Gifford Performance Attribution vs. MSCI ACWI ex USA Gross



	Returns and Weights					Attribution Effects			
	Manager	Index	Manager	Index	Selection	Allocation	Currency	Interaction	Total
	Return	Return	Weight	Weight	Effect	Effect	Effect	Effect	Effects
Other									
Egypt*		-6.1%	0.0%	0.0%		0.0%	0.0%		0.0%
Israel		-9.3%	0.0%	0.6%		0.0%	0.0%		0.0%
Qatar*		3.4%	0.0%	0.2%		0.0%	0.0%		0.0%
South Africa*	6.4%	14.6%	2.9%	1.4%	-0.1%	0.2%	0.1%	-0.1%	0.1%
Turkey*		22.4%	0.0%	0.3%		-0.1%	0.0%		-0.1%
United Arab Emirates*		7.7%	0.0%	0.2%		-0.1%	0.0%		-0.1%
Totals									
Americas	4.2%	13.2%	2.7%	8.3%	-0.1%	-0.6%	-0.6%	0.1%	-1.2%
Europe	-1.2%	-2.0%	48.4%	48.5%	0.9%	0.1%	-0.5%	0.0%	0.5%
Asia/Pacific	1.4%	-1.7%	43.5%	40.5%	1.2%	0.1%	0.2%	0.0%	1.4%
Other	6.4%	10.0%	2.9%	2.7%	-0.2%	0.0%	0.1%	0.0%	-0.1%
Cash	0.1%		2.5%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%
Total	0.4%	-0.3%	100.0%	100.0%	1.8%	-0.3%	-0.8%	0.0%	0.7%
Totals									
Developed	0.1%	-1.8%	79.8%	79.3%	2.0%	-0.1%	-0.4%	0.2%	1.7%
Emerging*	1.6%	5.4%	17.7%	20.7%	-0.3%	-0.4%	-0.4%	-0.1%	-1.1%
Cash	0.1%		2.5%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%

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





#### eA ACWI ex-US Value Equity Net Accounts

	Return	(Rank	)													
5th Percentile	5.1		0.2		3.1		3.0		9.5		7.5		18.4		6.7	
25th Percentile	1.8		-3.5		-1.7		-0.9		5.7		4.9		12.9		3.9	
Median	0.3		-7.3		-4.4		-3.7		3.4		2.9		10.8		2.4	
75th Percentile	-1.6		-11.0		-9.4		-6.7		1.0		0.4		8.9		1.8	
95th Percentile	-3.2		-14.6		-14.0		-9.7		-1.9		-2.1		7.9		0.9	
# of Portfolios	33		31		31		29		27		23		20		18	
Mondrian	1.6	(26)	-7.4	(51)	-7.3	(62)	-4.2	(60)	1.9	(61)	2.3	(62)	9.0	(68)	2.7	(40)
MSCI ACWI ex USA Value Gross	-0.3	(56)	-12.5	(91)	-11.8	(93)	-7.6	(81)	-0.8	(84)	-0.5	(84)	9.0	(69)	1.7	(83)
× MSCI ACWI ex USA Gross	-0.3	(56)	-9.4	(69)	-8.8	(71)	-4.8	(65)	0.8	(78)	0.8	(72)	9.7	(63)	2.4	(51)



Characteristics		
	Portfolio	MSCI ACWI ex USA Value Gross
Number of Holdings	148	1,007
Weighted Avg. Market Cap. (\$B)	51.7	45.2
Median Market Cap. (\$B)	16.0	6.2
Price To Earnings	19.5	12.8
Price To Book	2.4	1.4
Price To Sales	1.8	1.6
Return on Equity (%)	11.9	10.5
Yield (%)	4.0	4.2
Beta (holdings; global)	0.9	1.0

_		 	
То	nН	din	ac
10	P 1	uiii	y9

UNILEVER (UK)	2.9%
GLAXOSMITHKLINE	2.8%
SYNGENTA	2.7%
ABB LTD N	2.7%
IBERDROLA	2.5%
AHOLD KON.	2.5%
TAKEDA PHARMACEUTICAL	2.5%
HONDA MOTOR	2.4%
NESTLE 'R'	2.4%
TELIASONERA	2.3%

	Return %
CPFL EN.ON SPN.ADR.1:2 (CPL)	46.8%
CPFL ENERGIA ON (BR:CPL)	44.1%
CREDICORP (BAP)	34.6%
TSMS.ALIANCA ENELA. UTS. (BR:TDC)	34.5%
ECOD.INFU.E LOG.ON (BR:EON)	31.6%
REDEFINE PROPERTIES (R:RDFJ)	30.1%
WH GROUP (K:HHPL)	29.7%
BANCOLOMBIA PF.SPN.ADR 1:4 (CIB)	28.9%
VALE ON ADR 1:1 (VALE)	28.0%
CMPH.COCS. RODOVIARIAS ON (BR:CCR)	27.4%

**Best Performers** 

#### Worst Performers

	Return %
VALLOUREC (F:VLR)	-29.9%
BELLE INTERNATIONAL HDG. (K:BIHL)	-22.9%
RURAL ELECFN.CORP. (IN:RUR)	-21.3%
SOCIETE GENERALE (F:SGE)	-20.0%
G4S (UKIR:GFS)	-17.6%
HONDA MOTOR (J:HO@N)	-14.9%
NOVARTIS 'R' (S:NOVN)	-12.9%
TOKIO MARINE HOLDINGS (J:MIHO)	-12.5%
HOUSING DEVELOPMENT FIN. (IN:HDF)	-12.4%
ZURICH INSURANCE GROUP (S:ZURN)	-9.7%



		A	Attribution Effects		Retu	irns	Sector V	Veights
	Total	Selection	Allocation	Interaction				
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	-0.6%	-0.3%	-0.2%	-0.1%	3.6%	7.9%	7.2%	9.5%
Materials	-0.7%	-0.3%	-0.4%	0.0%	6.7%	11.1%	3.2%	6.9%
Industrials	-0.2%	-0.2%	0.0%	-0.1%	1.4%	3.6%	9.2%	9.7%
Cons. Disc.	0.2%	0.4%	0.0%	-0.2%	-1.6%	-4.2%	8.6%	8.9%
Cons. Staples	1.3%	0.1%	0.6%	0.6%	6.7%	4.1%	14.9%	3.5%
Health Care	0.0%	0.0%	-0.2%	0.2%	-5.3%	-6.6%	10.7%	6.0%
Financials	0.6%	0.6%	1.2%	-1.2%	-3.8%	-5.3%	15.0%	39.1%
Info. Tech	0.4%	0.0%	0.1%	0.3%	3.5%	1.4%	9.2%	4.5%
Telecomm.	0.6%	0.0%	0.3%	0.3%	5.0%	4.1%	12.9%	6.4%
Utilities	0.1%	0.0%	0.1%	0.0%	1.2%	1.9%	9.1%	5.5%
Cash	0.0%						0.0%	0.0%
Portfolio	1.8%	= 0.4%	+ 1.5%	+ 0.0%	1.4%	-0.4%	100.0%	100.0%

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



	М	ondrian Per	formance At	tribution vs.	MSCI ACWI ex l	JSA Value G	iross					
		Returns and \	Veights		Attribution Effects							
	Manager	Index	Manager	Index	Selection	Allocation	Currency	Interaction	Total			
	Return	Return	Weight	Weight	Effect	Effect	Effect	Effect	Effects			
Europe												
Austria		-3.2%	0.0%	0.2%		0.0%	0.0%		0.0%			
Belgium		-5.9%	0.0%	0.7%		0.0%	0.0%		0.0%			
Czech Republic*		-1.1%	0.0%	0.0%		0.0%	0.0%		0.0%			
Denmark	11.1%	1.8%	0.7%	0.3%	0.0%	0.0%	0.0%	0.0%	0.1%			
Finland		-1.5%	0.0%	0.8%		0.0%	0.0%		0.0%			
France	-7.3%	-1.3%	5.5%	8.4%	-0.5%	0.1%	-0.1%	0.2%	-0.4%			
Germany	-2.5%	-4.3%	8.4%	6.4%	0.1%	-0.1%	0.2%	-0.1%	0.2%			
Greece*		-18.0%	0.0%	0.1%		0.0%	0.0%		0.0%			
Hungary*		18.7%	0.0%	0.1%		0.0%	0.0%		0.0%			
Italy	1.1%	-5.9%	1.9%	2.1%	0.1%	0.0%	0.0%	0.0%	0.2%			
Netherlands	7.2%	-5.0%	4.0%	1.2%	0.2%	-0.2%	0.2%	0.3%	0.5%			
Norway		2.1%	0.0%	0.8%		0.0%	-0.1%		0.0%			
Poland*		14.7%	0.0%	0.3%		0.0%	0.0%		-0.1%			
Portugal		0.1%	0.0%	0.2%		0.0%	0.0%		0.0%			
Russia*	-2.2%	21.3%	0.3%	0.7%	-0.1%	-0.1%	-0.1%	0.0%	-0.2%			
Spain	-1.8%	-5.0%	5.3%	2.9%	0.1%	-0.2%	0.1%	0.1%	0.1%			
Sweden	3.5%	0.9%	3.5%	2.0%	0.1%	0.0%	0.1%	0.1%	0.2%			
Switzerland	-0.2%	-5.6%	11.4%	4.9%	0.3%	-0.5%	0.4%	0.4%	0.6%			
United Kingdom	4.5%	-2.9%	20.0%	16.4%	1.3%	0.1%	-0.1%	0.3%	1.6%			



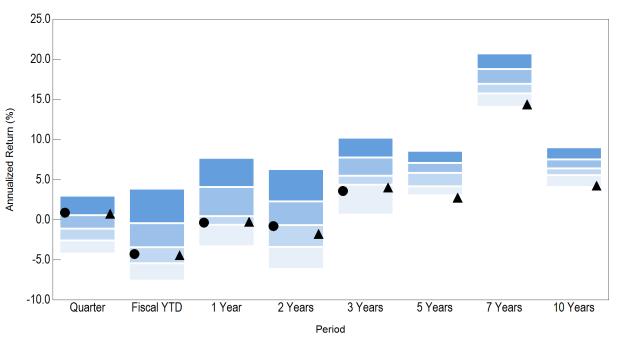
	IVIO	ondrian Pe	rformance A	ttribution vs.	MSCI ACWI ex (	JSA value G	iross					
		Returns and	Weights		Attribution Effects							
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	Total Effects			
AsiaPacific												
Australia	-5.8%	0.1%	0.9%	4.9%	-0.3%	0.1%	-0.2%	0.2%	-0.2%			
China*	-8.3%	-3.9%	0.8%	5.6%	0.2%	-0.1%	0.0%	-0.2%	0.0%			
Hong Kong	-7.7%	0.9%	2.7%	2.5%	0.0%	-0.2%	0.0%	0.0%	-0.2%			
India*	-8.1%	-0.5%	2.1%	1.8%	0.0%	0.0%	0.0%	0.0%	-0.1%			
Indonesia*	-1.7%	12.0%	0.7%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%			
Japan	-4.6%	-8.5%	15.6%	17.3%	0.7%	-0.1%	0.1%	0.0%	0.7%			
Korea*	-3.6%	8.9%	1.6%	3.1%	0.1%	-0.3%	-0.1%	0.0%	-0.4%			
Malaysia*	4.3%	16.6%	1.2%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%			
New Zealand		12.2%	0.0%	0.1%		0.0%	0.0%		0.0%			
Philippines*	9.8%	8.3%	0.4%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%			
Singapore	4.9%	6.7%	3.9%	0.9%	0.0%	0.2%	0.2%	-0.1%	0.3%			
Taiwan*	-3.4%	6.0%	2.7%	2.4%	0.1%	-0.2%	-0.1%	0.0%	-0.2%			
Thailand*	-1.7%	20.3%	0.3%	0.4%	0.0%	-0.1%	0.0%	0.0%	-0.1%			
Americas												
Brazil*	-3.6%	41.5%	0.9%	1.1%	0.1%	-0.4%	-0.2%	0.0%	-0.5%			
Canada	20.3%	14.7%	1.0%	6.1%	0.3%	-0.5%	-0.4%	-0.3%	-0.9%			
Chile*	-1.5%	13.6%	0.4%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%			
Colombia*	10.3%	22.5%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%			
Mexico*	-7.0%	8.6%	1.2%	0.9%	0.0%	0.0%	-0.1%	0.0%	-0.1%			
Peru*		32.6%	0.0%	0.1%		0.0%	0.0%		0.0%			
United States	1.6%	-5.3%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			





	M	ondrian Per	rformance A	ttribution vs.	MSCI ACWI ex l	JSA Value G	Bross						
		Returns and V	Weights			Attribution Effects							
	Manager	Index	Manager	Index	Selection	Allocation	Currency	Interaction	Total				
	Return	Return	Weight	Weight	Effect	Effect	Effect	Effect	Effects				
Other													
Egypt*		-10.3%	0.0%	0.0%		0.0%	0.0%		0.0%				
Israel		-9.7%	0.0%	0.6%		0.1%	0.0%		0.0%				
Kazakhstan**	-10.6%	-7.4%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%				
Qatar*	-10.7%	2.2%	0.6%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%				
Romania**	-12.1%	-7.4%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%				
South Africa*	0.5%	21.9%	0.6%	1.3%	0.0%	-0.2%	-0.1%	0.0%	-0.3%				
Turkey*	-0.1%	22.1%	0.3%	0.3%	0.0%	0.0%	0.0%	0.0%	-0.1%				
United Arab Emirates*	-10.3%	10.2%	0.3%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%				
Totals													
Americas	13.5%	17.7%	4.2%	8.5%	-0.3%	-0.9%	-0.6%	0.3%	-1.5%				
Europe	1.2%	-2.7%	61.1%	48.4%	2.0%	-0.3%	0.7%	0.5%	2.9%				
Asia/Pacific	-1.7%	-2.2%	32.9%	40.5%	-0.6%	0.2%	-0.3%	0.5%	-0.2%				
Other	-5.1%	11.8%	1.9%	2.6%	-0.1%	-0.2%	-0.1%	0.0%	-0.4%				
Cash	0.0%	0.0%	0.0%		0.0%	-0.1%	0.0%	0.0%	-0.1%				
Total	0.3%	-0.4%	100.0%	100.0%	1.0%	-1.2%	-0.3%	1.3%	0.7%				
Totals													
Developed	0.3%	-2.6%	85.4%	79.6%	2.7%	-0.4%	0.5%	0.1%	2.9%				
Emerging*	-3.7%	7.8%	14.4%	20.4%	0.5%	-1.7%	-0.8%	-0.2%	-2.1%				
Frontier**	-11.4%		0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%				





#### eA ACWI ex-US Small Cap Equity Net Accounts

F	Return	(Rank)														
5th Percentile	3.0		3.9		7.7		6.3		10.2		8.6		20.8		9.0	
25th Percentile	0.6		-0.4		4.1		2.3		7.8		7.1		18.8		7.5	
Median	-1.1		-3.4		0.5		-0.7		5.5		5.9		17.0		6.4	
75th Percentile	-2.6		-5.4		-0.6		-3.4		4.4		4.2		15.8		5.6	
95th Percentile	-4.2		-7.6		-3.3		-6.1		0.7		3.1		14.1		4.1	
# of Portfolios	32		31		30		25		22		16		16		12	
FIAM Equity	0.9	(16)	-4.3	(61)	-0.4	(73)	-0.8	(54)	3.6	(91)		()		()		()
MSCI ACWI ex US Small Cap Gross	0.8	(16)	-4.4	(62)	-0.3	(71)	-1.8	(69)	4.0	(85)	2.8	(99)	14.4	(93)	4.2	(92)

	Characteristics	
	Portfolio	MSCI ACWI ex-US Small Cap
No. of Securities	226	4,244
Wgtd. Avg. Market Cap (000's)	2,766	1,928
Price to Book Ratio	1.8	1.5
Return on Equity	12.8%	10.9%

# Ten Holdings

TECHTRONIC INDUSTRIES CO LTD	1.7
OBIC CO LTD	1.6
REGUS PLC	1.4
HIKMA PHARMACEUT ICALS PLC	1.4
NIHON PARKERIZING CO LTD	1.3
GRAND CITY PROPERTIES SA	1.0
QUEBECOR INC CL B SUB VT G	0.9
PART NERS GROUP HOLDING AG	0.9
JUNGHEINRICH AG NON-VTG PFD	0.9
FRUTAROM INDS LTD	0.9

# Best Performers (Absolute Return %)

TRICAN WELL SERVICE LTD	141.7
T4F ENTRETENIMENTO SA	129.0
MINERAL DEPOSITS LTD	70.2
ALAMOS GOLD INC A	62.4
DET OUR GOLD CORP	52.4
Т ІМАН Т ВК РТ	52.4
MEDA AB A	46.7
AWELTD	42.7
JEAN COUTU GRP INC A SUB VT G	33.1
MIURACO LTD	31.1

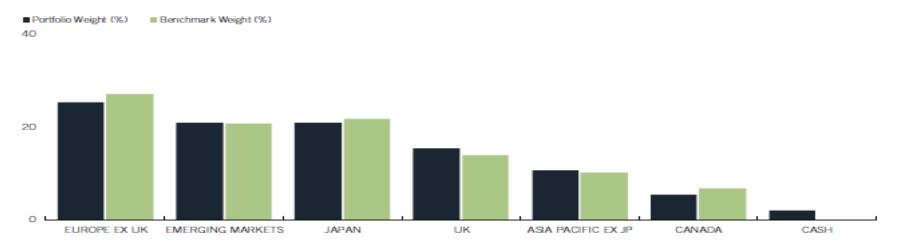
# Worst Performers (Absolute Return %)

THE RESTAURANT GROUP PLC	(44.2)
BANCA POP DELL'EMILIA ROMAGNA	(37.7)
ZUMT OBEL GROUP AG	(32.9)
PREMIER OIL PLC	(31.5)
WESTERN ENERGY SERVICES CORP	(30.4)
EURONAVNV	(25.8)
NIPPON SHOKUBAI CO LT D	(25.7)
KEPCO PLANT SER & ENG CO LT D	(25.7)
KINTETSU WORLD EXPRESS INC	(24.5)
DE LONGHI SPA	(24.2)

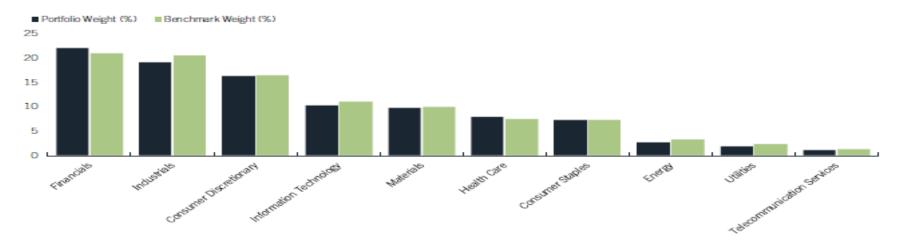


# FIAM Equity Regional and Sector Weights

#### **Regional Weights**



#### Sector Weights

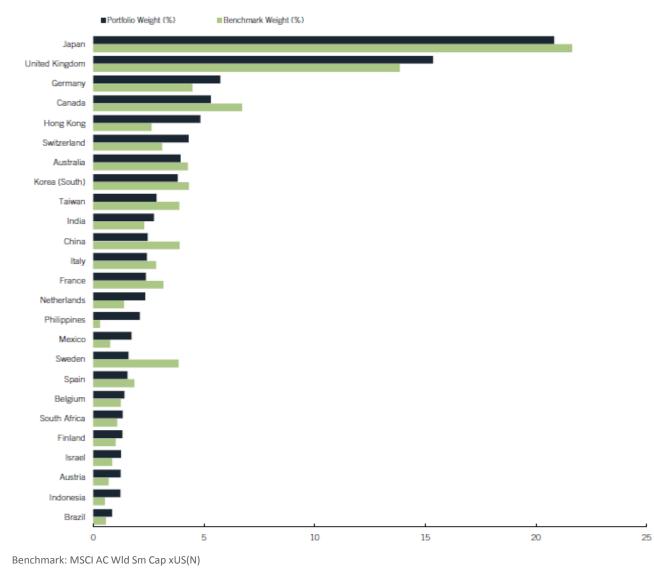


Sector breakdowns are only applied to equities and convertibles and the allocation percentages may not add to 100%. Benchmark: MSCI AC Wld Sm Cap xUS(N)

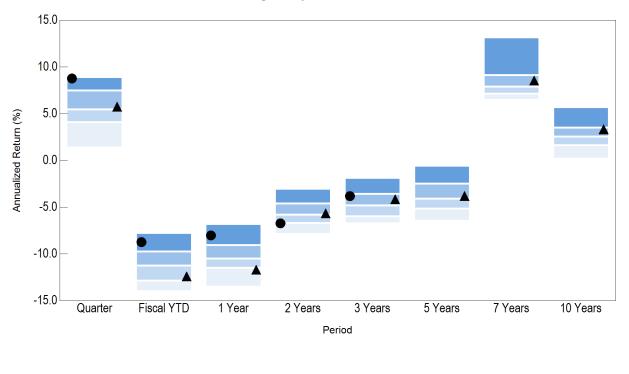


# FIAM Equity Country Weights

#### **Top 25 Country Weights**

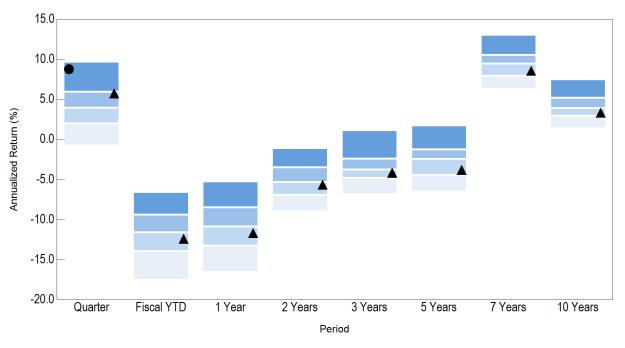






#### InvestorForce All DB Emg Mkt Eq Net Accounts

	Return	(Rank)	)													
5th Percentile	8.9		-7.8		-6.8		-3.0		-1.9		-0.6		13.2		5.7	
25th Percentile	7.5		-9.7		-9.1		-4.6		-3.6		-2.5		9.1		3.5	
Median	5.5		-11.2		-10.5		-5.8		-4.8		-4.1		7.9		2.6	
75th Percentile	4.1		-12.9		-11.5		-6.7		-6.0		-5.1		7.2		1.7	
95th Percentile	1.4		-14.0		-13.5		-7.9		-6.7		-6.4		6.5		0.2	
# of Portfolios	87		85		85		75		68		45		20		14	
Emerging Markets	8.8	(11)	-8.7	(13)	-8.0	(9)	-6.7	(76)	-3.8	(27)		()		()		()
MSCI Emerging Markets Gross	5.8	(46)	-12.4	(71)	-11.7	(78)	-5.7	(50)	-4.2	(30)	-3.8	(46)	8.6	(37)	3.3	(27)



#### eA Emg Mkts Equity Net Accounts

	Return	(Rank)													
5th Percentile	9.7	-6.6		-5.2		-1.1		1.1		1.7		13.0		7.5	
25th Percentile	6.0	-9.4		-8.5		-3.5		-2.4		-1.2		10.6		5.2	
Median	4.0	-11.6		-10.8		-5.3		-3.7		-2.4		9.5		3.9	
75th Percentile	2.0	-13.9		-13.2		-6.9		-4.8		-4.4		8.0		3.0	
95th Percentile	-0.8	-17.5		-16.5		-9.0		-6.8		-6.5		6.3		1.4	
# of Portfolios	150	147		146		140		129		91		68		42	
Parametric Core	8.8	(9)	()		()		()		()		()		()		()
MSCI Emerging Markets Gross	5.8	(27) -12.4	(62)	-11.7	(60)	-5.7	(58)	-4.2	(56)	-3.8	(70)	8.6	(73)	3.3	(67)

Characteristics		
	Portfolio	MSCI Emerging Markets Gross
Number of Holdings	1,019	835
Weighted Avg. Market Cap. (\$B)	16.5	39.0
Median Market Cap. (\$B)	3.1	4.6
Price To Earnings	18.9	17.1
Price To Book	2.9	2.9
Price To Sales	2.5	2.5
Return on Equity (%)	15.5	16.9
Yield (%)	2.9	2.7
Beta (holdings; global)	1.0	1.0

## **Top Holdings**

· · · · · · · · · · · · · · · · · · ·	
AMERICA MOVIL SAB DE CV SPN.ADR 'L' 1:20	1.0%
SBERBANK OF RUSSIA	0.9%
TAIWAN SEMICON.MNFG.	0.9%
OAO GAZPROM SPN.ADR 1:2	0.8%
CHINA MOBILE	0.8%
SASOL	0.8%
CIELO ON	0.7%
TELEFONICA BRASIL PN	0.7%
KOREA ELECTRIC POWER	0.6%
PTRO.BRAO.ADR 1:2	0.6%

Best Performers	
	Return %
HARMONY GOLD MNG. (R:HARJ)	258.1%
VOLCAN COMPANIA MINERA B PREF. (PE:VLB)	191.2%
ASSORE (R:ASRJ)	176.4%
SIBANYE GOLD (R:SGLJ)	165.5%
AFN.RAINBOW MRLS. (R:ARIJ)	130.4%
KCE ELECTRONIC FB (Q:KCNF)	105.9%
ANGLO AMERICAN PLATINUM (R:AMSJ)	105.7%
KUMBA IRON ORE (R:KIOJ)	103.4%
MINSUR 'I' (PE:MIN)	102.9%
ANGLOGOLD ASHANTI (R:ANGJ)	102.8%

### Worst Performers

	Return %
PTT EXPLORATION & PRDN. FB (Q:PTTF)	-59.5%
DRYSHIPS (DRYS)	-45.9%
NAVIOS MARITIME ACQ. (NNA)	-45.6%
RUMO LOG.OPD.MULTIMODAL (BR:P3M)	-40.2%
ADVD.INFO.SER.FB (OTC) (AVIKF)	-38.8%
DIANA SHIPPING (DSX)	-38.6%
SUZLON ENERGY GDR (UKIR:SUEL)	-35.8%
NAVIOS MARITIME HDG. (NM)	-35.4%
FIBRIA CELULOSE ON (BR:PS3)	-34.7%
OI PN (BR:LR4)	-34.2%



		A	Attribution Effects		Retu	irns	Sector V	Veights
	Total	Selection	Allocation	Interaction				
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	0.3%	0.1%	0.2%	0.0%	14.6%	14.9%	10.0%	7.1%
Materials	0.7%	0.1%	0.4%	0.2%	16.3%	14.9%	11.0%	6.1%
Industrials	0.3%	0.2%	-0.1%	0.2%	6.4%	3.6%	10.1%	6.6%
Cons. Disc.	0.3%	0.3%	0.0%	0.1%	6.1%	3.0%	10.4%	10.0%
Cons. Staples	0.3%	0.2%	0.0%	0.2%	9.0%	6.3%	10.4%	8.3%
Health Care	0.0%	0.0%	-0.2%	0.2%	1.6%	-1.0%	5.9%	2.8%
Financials	1.0%	1.6%	0.3%	-0.8%	9.8%	3.4%	17.4%	28.0%
Info. Tech	-0.2%	-0.1%	0.0%	0.0%	5.4%	4.8%	8.6%	21.1%
Telecomm.	0.4%	0.1%	0.0%	0.3%	10.6%	6.9%	9.0%	6.8%
Utilities	0.2%	0.0%	0.1%	0.2%	9.2%	8.8%	6.8%	3.2%
Cash	0.0%	0.0%	0.0%	0.0%	0.1%		0.4%	0.0%
Unclassified	0.0%						0.0%	0.0%
Portfolio	3.6%	= 2.4%	+ 0.6%	+ 0.5%	9.3%	5.7%	100.0%	100.0%

# Parametric Core Performance Attribution vs. MSCI Emerging Markets Gross



	Para	metric Core	e Performano	ce Attribution	vs. MSCI Emerg	ging Market	s Gross		
		Returns and	Weights			Attri	bution Effects	;	
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	Total Effects
Europe			reigin						
Czech Republic*	5.9%	5.1%	0.7%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Greece*	-2.8%	-12.3%	1.4%	0.5%	0.0%	-0.2%	0.0%	0.1%	0.0%
Hungary*	16.8%	17.2%	1.3%	0.3%	0.0%	0.1%	0.1%	0.0%	0.1%
Luxembourg	19.5%	5.8%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Netherlands	27.8%	3.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Poland*	11.7%	13.9%	3.3%	1.3%	0.0%	0.1%	0.1%	0.0%	0.2%
Russia*	13.7%	16.0%	6.6%	3.4%	0.0%	0.2%	0.0%	0.0%	0.3%
United Kingdom	14.1%	-2.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
AsiaPacific									
China*	-3.0%	-4.8%	5.7%	26.2%	0.5%	1.6%	0.0%	-0.4%	1.7%
Hong Kong	-3.3%	-3.4%	5.4%	0.0%	0.0%	-0.3%	0.0%	0.0%	-0.3%
India*	-3.5%	-2.6%	5.7%	8.7%	-0.1%	0.2%	0.0%	0.0%	0.1%
Indonesia*	10.1%	11.3%	4.3%	2.6%	0.0%	0.1%	0.1%	0.0%	0.1%
Korea*	7.8%	4.9%	7.9%	15.7%	0.5%	0.0%	-0.2%	-0.2%	0.1%
Malaysia*	9.2%	13.2%	4.1%	3.3%	-0.1%	0.0%	0.1%	0.0%	-0.1%
Philippines*	7.8%	7.3%	3.7%	1.4%	0.0%	0.0%	0.1%	0.0%	0.1%
Singapore	2.5%	5.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Taiwan*	6.5%	7.7%	7.6%	12.1%	-0.2%	-0.1%	-0.1%	0.1%	-0.3%
Thailand*	9.6%	17.2%	3.3%	2.0%	-0.1%	0.1%	0.0%	-0.1%	-0.1%
Americas									
Brazil*	25.4%	28.6%	7.3%	5.5%	0.0%	0.2%	0.1%	0.0%	0.2%
Chile*	12.1%	13.3%	3.7%	1.2%	0.0%	0.1%	0.1%	0.0%	0.2%
Colombia*	23.0%	22.5%	1.8%	0.4%	0.0%	0.2%	0.1%	0.0%	0.3%
Mexico*	8.0%	8.5%	7.4%	4.5%	0.0%	0.1%	0.0%	0.0%	0.1%
Peru*	23.8%	26.9%	0.8%	0.3%	0.0%	0.1%	0.0%	0.0%	0.1%
United States	5.6%	0.8%	2.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%

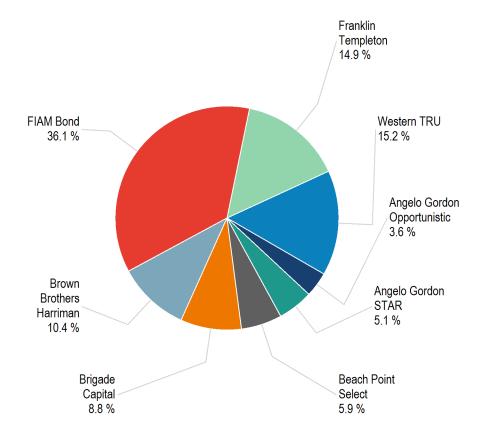
Parametric Core Performance Attribution vs. MSCI Emerging Markets Gross



ReturnReturnWeightWeightOtherEgypt*5.8%0.0%0.2%	lection Allo		on Effects					
Return         Return         Weight         Weight           Other         Egypt*          -5.8%         0.0%         0.2%		ant's a d	Attribution Effects					
Egypt*5.8% 0.0% 0.2%	Effect	Effect	Currency Effect	Interaction Effect	Total Effects			
••••								
		0.0%	0.0%		0.0%			
Kuwait** -0.1% -2.5% 1.8% 0.0%	0.0%	-0.1%	0.0%	0.0%	-0.1%			
Qatar* 2.3% 3.7% 1.7% 1.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
South Africa* 18.6% 13.9% 6.3% 6.7%	0.3%	0.0%	0.0%	0.0%	0.2%			
Turkey* 23.5% 21.7% 3.7% 1.4%	0.0%	0.3%	0.1%	0.0%	0.5%			
United Arab 7.2% 8.7% 1.7% 0.9%	0.0%	0.0%	0.0%	0.0%	0.0%			
Totals								
Americas 15.7% 19.2% 22.9% 11.9%	-0.2%	1.0%	0.3%	-0.1%	1.0%			
Europe 11.5% 12.8% 13.5% 5.7%	0.0%	0.2%	0.3%	0.1%	0.6%			
Asia/Pacific 4.1% 1.9% 48.0% 72.1%	1.1%	0.6%	0.0%	-0.4%	1.3%			
Other 14.5% 13.1% 15.2% 10.3%	0.2%	0.3%	0.1%	0.1%	0.7%			
Cash 0.1% 0.4% 0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
Total 9.3% 5.8% 100.0% 100.0%	1.1%	2.1%	0.7%	-0.3%	3.6%			
Totals								
Developed -0.2% 7.9% 0.0%	0.0%	0.0%	0.0%	-0.3%	-0.2%			
Emerging* 10.4% 5.8% 89.9% 100.0%	3.6%	0.0%	0.7%	-0.4%	3.9%			
Frontier** -0.1% 1.8% 0.0%	0.0%	0.0%	0.0%	-0.1%	-0.1%			
Cash 0.1% 0.4% 0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			







			Manager Contribution to
	Actual \$	Actual %	Excess Return %
Angelo Gordon Opportunistic	\$24,045,000	3.6%	-0.1%
Angelo Gordon STAR	\$33,756,000	5.1%	-0.3%
Beach Point Select	\$39,374,363	5.9%	-0.1%
Brigade Capital	\$58,775,083	8.8%	-0.0%
Brown Brother Harriman	\$69,431,137	10.4%	-0.1%
FIAM Bond	\$240,572,666	36.1%	1.1%
Franklin Templeton	\$98,904,372	14.9%	-0.9%
Western Asset TRU	\$101,110,062	15.2%	-0.1%
Actual vs. Policy Weight Difference			0.4%
Total	\$665,968,684	100.0%	-0.1%

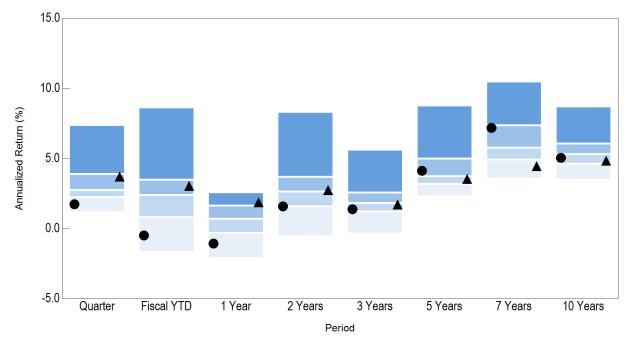


	Stat	istics Summary			
		3 Years			
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Total Fixed Income	1.4%	3.6%	0.4	-0.2	1.8%
Blended Fixed Index	1.7%	3.6%	0.5		0.0%
US Fixed Income	1.8%	3.2%	0.5	0.0	1.3%
Blended US Fixed Index	1.8%	3.6%	0.5		0.0%
FIAM Bond	2.7%	3.3%	0.8	0.2	0.8%
Barclays Aggregate	2.5%	3.0%	0.8		0.0%
Brown Brothers Harriman	-1.8%	4.7%	-0.4	-0.8	1.3%
Barclays US TIPS	-0.7%	5.3%	-0.1		0.0%
Angelo Gordon STAR	9.5%	5.9%	1.6	0.9	7.5%
Barclays Aggregate	2.5%	3.0%	0.8		0.0%
Brigade Capital	-1.5%	6.4%	-0.2	-0.7	4.3%
Barclays BA Intermediate HY	1.7%	5.6%	0.3		0.0%
Franklin Templeton	-1.1%	6.8%	-0.2	-0.3	6.5%
Barclays Multi-verse	0.9%	4.5%	0.2		0.0%



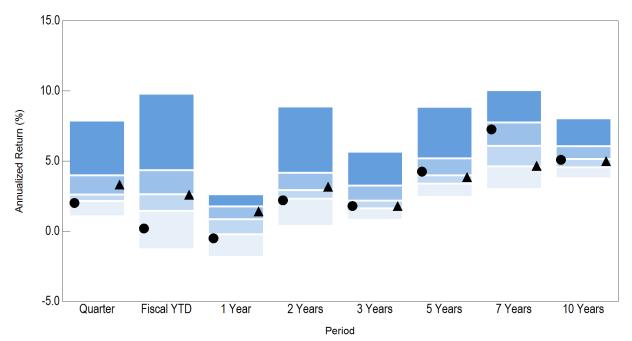
	Stat	istics Summary			
		5 Years			
	AnIzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Total Fixed Income	4.1%	3.7%	1.1	0.2	2.3%
Blended Fixed Index	3.5%	3.3%	1.1		0.0%
US Fixed Income	4.2%	3.0%	1.4	0.2	1.6%
Blended US Fixed Index	3.9%	3.3%	1.2		0.0%
FIAM Bond	4.2%	3.0%	1.4	0.6	0.8%
Barclays Aggregate	3.8%	2.8%	1.3		0.0%
Brown Brothers Harriman	2.6%	4.7%	0.5	-0.4	1.1%
Barclays US TIPS	3.0%	5.0%	0.6		0.0%
Brigade Capital	3.0%	5.9%	0.5	-0.4	4.3%
Barclays BA Intermediate HY	4.8%	5.2%	0.9		0.0%
Franklin Templeton	2.9%	9.6%	0.3	0.1	8.0%
Barclays Multi-verse	1.9%	4.4%	0.4		0.0%





#### InvestorForce All DB Total Fix Inc Net Accounts

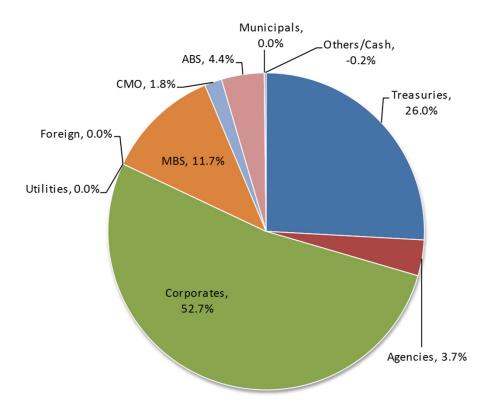
	Return	(Rank)														
5th Percentile	7.4		8.6		2.6		8.3		5.6		8.8		10.5		8.7	
25th Percentile	3.9		3.5		1.6		3.7		2.6		5.0		7.4		6.1	
Median	2.8		2.4		0.7		2.6		1.8		3.7		5.8		5.3	
75th Percentile	2.3		0.8		-0.3		1.6		1.2		3.2		4.9		4.6	
95th Percentile	1.2		-1.7		<del>-</del> 2.1		-0.6		-0.3		2.3		3.6		3.5	
# of Portfolios	344		343		341		335		316		269		225		186	
Total Fixed Income	1.7	(90)	-0.5	(89)	-1.1	(86)	1.6	(76)	1.4	(70)	4.1	(37)	7.2	(28)	5.0	(61)
Blended Fixed Index	3.7	(27)	3.0	(33)	1.9	(20)	2.7	(46)	1.7	(57)	3.5	(64)	4.4	(83)	4.8	(66)



#### InvestorForce All DB US Fix Inc Net Accounts

	Return	(Rank)														
5th Percentile	7.9		9.8		2.6		8.9		5.7		8.9		10.0		8.0	
25th Percentile	4.0		4.4		1.8		4.2		3.3		5.2		7.8		6.1	
Median	2.6		2.7		0.9		3.0		2.2		4.0		6.1		5.2	
75th Percentile	2.2		1.5		-0.2		2.3		1.6		3.4		4.6		4.6	
95th Percentile	1.1		-1.3		-1.8		0.4		0.8		2.5		3.0		3.8	
# of Portfolios	435		433		432		422		392		331		272		201	
<ul> <li>US Fixed Income</li> <li>Blended US Fixed Index</li> </ul>	2.0 3.3	(79) (30)	0.2 2.6	(87) (52)	-0.5 1.4	(82) (34)	2.2 3.2	(78) (42)	1.8 1.8	(66) (67)	4.2 3.9	(43) (56)	7.3 4.7	(32) (75)	5.1 5.0	(53) (57)

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Sector*	Account Weight	BC Aggregate Weight	Difference
Treasuries	26.0%	36.7%	-10.7%
Agencies	3.7%	8.2%	-4.5%
Corporates	52.7%	24.2%	28.4%
Utilities	0.0%	0.0%	0.0%
Foreign	0.0%	0.0%	0.0%
MBS	11.7%	28.6%	-16.9%
СМО	1.8%	0.0%	1.8%
ABS	4.4%	2.3%	2.1%
Municipals	0.0%	0.0%	0.0%
Others/Cash	-0.2%	0.0%	-0.2%
TOTAL	100.0%	100.0%	0.0%

\* Sector Allocation excludes Opportunistic Credit Managers.



# US Fixed Income Bond Summary Statistics

# Period Ending: March 31, 2016

Portfolio Characteristics*	
	Portfolio
Total Number of Securities	
Total Market Value	\$ 411,113,865
Current Coupon	3.26
Yield to Maturity	9.45
Average Life	7.43
Duration	4.67
Quality	AA-

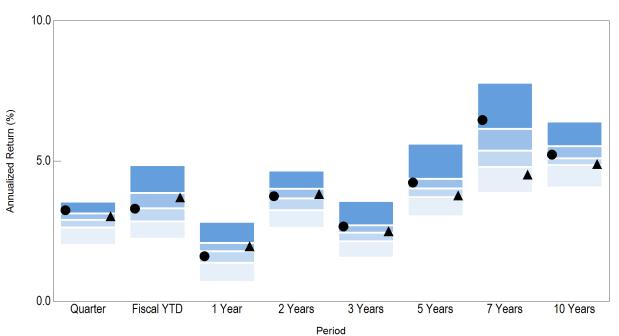
BC Aggregate
3.25
12.64
7.49
5.41
AA+

Yield to Maturity		Average Life		Duration	
Range	% Held	Range	% Held	Range	% Held
0.0 - 5.0	n/a	0.0 - 1.0	2.9	0.0 - 1.0	7.4
5.0 - 7.0	n/a	1.0 - 3.0	12.7	1.0 - 3.0	43.0
7.0 - 9.0	n/a	3.0 - 5.0	23.6	3.0 - 5.0	25.3
9.0 - 11.0	n/a	5.0 - 10.0	50.8	5.0 - 7.0	9.3
11.0 - 13.0	n/a	10.0 - 20.0	3.6	7.0 - 10.0	6.9
13.0+	n/a	20.0+	6.5	10.0+	8.1
Unclassified	n/a	Unclassified	0.0	Unclassified	0.0

Quality		Coupon	
Range	% Held	Range	% He
Govt (10)	42.7	0.0 - 5.0	8
Aaa (10)	2.1	5.0 - 7.0	1
Aa (9)	1.8	7.0 - 9.0	
A (8)	14.8	9.0 - 11.0	
Baa (7)	39.1	11.0 - 13.0	
elow Baa (6-1)	1.8	13.0+	
Other	-2.2	Unclassified	

\* Characteristics excludes Opportunistic Credit Managers.



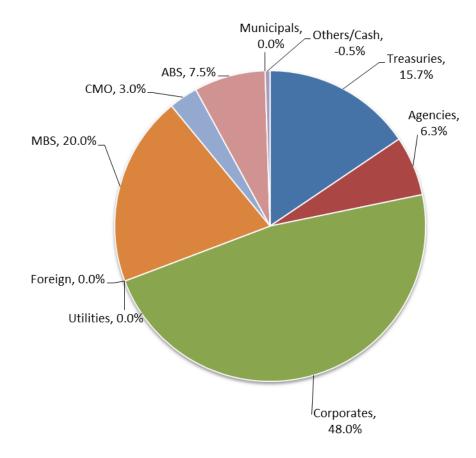


eA US Core Fixed Inc Net Accounts

	Return (Ran	k)						
5th Percentile	3.5	4.9	2.8	4.7	3.6	5.6	7.8	6.4
25th Percentile	3.1	3.9	2.1	4.0	2.7	4.4	6.2	5.5
Median	2.9	3.3	1.8	3.7	2.5	4.0	5.4	5.1
75th Percentile	2.6	2.9	1.4	3.2	2.1	3.7	4.8	4.9
95th Percentile	2.0	2.2	0.7	2.6	1.6	3.0	3.9	4.1
# of Portfolios	106	105	103	102	101	93	87	77
FIAM Bond	3.2 (15)	3.3 (55)	1.6 (62)	3.7 (42)	2.7 (31)	4.2 (32)	6.5 (20)	5.2 (42)
<ul> <li>Barclays Aggregate</li> </ul>	3.0 (40)	3.7 (32)	2.0 (35)	3.8 (39)	2.5 (47)	3.8 (69)	4.5 (82)	4.9 (73)

Verus<sup>777</sup>

# FIAM Bond Market Duration Pool Bond Sector Allocation



Sector	Account Weight	BC Aggregate Weight	Difference
Treasuries	15.7%	36.7%	-21.0%
Agencies	6.3%	8.2%	-1.9%
Corporates	48.0%	24.2%	23.8%
Utilities	0.0%	0.0%	0.0%
Foreign	0.0%	0.0%	0.0%
MBS	20.0%	28.6%	-8.6%
CMO	3.0%	0.0%	3.0%
ABS	7.5%	2.3%	5.2%
Municipals	0.0%	0.0%	0.0%
Others/Cash	-0.5%	0.0%	-0.5%
TOTAL	100.0%	100.0%	0.0%



### FIAM Bond Market Duration Pool

### Bond Summary Statistics

	Portfolio
Total Number of Securities	951
Total Market Value	\$ 240,572,666
Current Coupon	3.80
Yield to Maturity	13.65
Average Life	8.6
Duration	5.60
Quality	A+

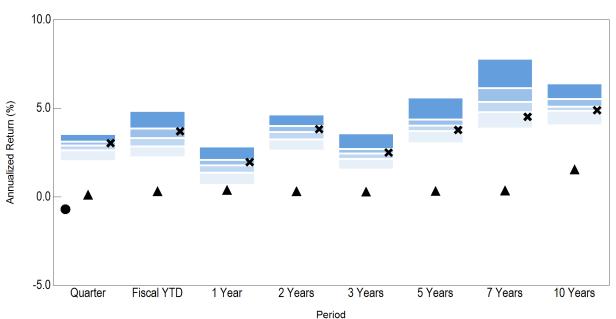
### Period Ending: March 31, 2016

BC Aggregate
3.25
12.64
7.49
5.41
AA+

Yield to Maturity		Average Life		Duration	
Range	% Held	Range	% Held	Range	% Held
0.0 - 5.0	89.5	0.0 - 1.0	4.5	0.0 - 1.0	5.5
5.0 - 7.0	7.7	1.0 - 3.0	14.6	1.0 - 3.0	25.7
7.0 - 9.0	1.1	3.0 - 5.0	24.3	3.0 - 5.0	30.1
9.0 - 11.0	1.3	5.0 - 10.0	42.0	5.0 - 7.0	14.5
11.0 - 13.0	0.3	10.0 - 20.0	3.7	7.0 - 10.0	10.5
13.0+	0.1	20.0+	11.1	10.0+	13.8
Unclassified	0.0	Unclassified	0.0	Unclassified	0.0

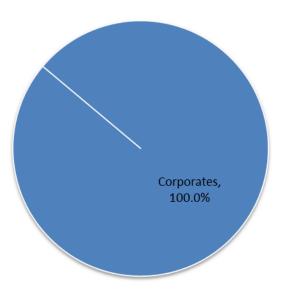
Quality		Coupon	
Range	% Held	Range	
Govt (10)	44.4	0.0 - 5.0	
vaa (10)	3.5	5.0 - 7.0	
Aa (9)	3.1	7.0 - 9.0	
A (8)	25.3	9.0 - 11.0	
Baa (7)	24.8	11.0 - 13.0	
ow Baa (6-1)	3.1	13.0+	
Other	-4.0	Unclassified	





eA US Core Fixed Inc Net Accounts

	Return (Ra	nk)						
5th Percentile	3.5	4.9	2.8	4.7	3.6	5.6	7.8	6.4
25th Percentile	3.1	3.9	2.1	4.0	2.7	4.4	6.2	5.5
Median	2.9	3.3	1.8	3.7	2.5	4.0	5.4	5.1
75th Percentile	2.6	2.9	1.4	3.2	2.1	3.7	4.8	4.9
95th Percentile	2.0	2.2	0.7	2.6	1.6	3.0	3.9	4.1
# of Portfolios	106	105	103	102	101	93	87	77
<ul> <li>Western TRU</li> </ul>	-0.7 (99	) (	) ()	) ()	()	()	()	()
▲ 3-Month Libor Total Return USD	0.1 (99	0) 0.3 (99	) 0.4 (97)	0.3 (99)	0.3 (99)	0.3 (99)	0.4 (99)	1.6 (99)
× Barclays Aggregate	3.0 (40	) 3.7 (32	) 2.0 (35)	3.8 (39)	2.5 (47)	3.8 (69)	4.5 (82)	4.9 (73)



Sector	Account Weight	BC Aggregate Weight	Difference
Treasuries	0.0%	36.7%	-36.7%
Agencies	0.0%	8.2%	-8.2%
Corporates	100.0%	24.2%	75.8%
Utilities	0.0%	0.0%	0.0%
Foreign	0.0%	0.0%	0.0%
MBS	0.0%	28.6%	-28.6%
СМО	0.0%	0.0%	0.0%
ABS	0.0%	2.3%	-2.3%
Municipals	0.0%	0.0%	0.0%
Others/Cash	0.0%	0.0%	0.0%
TOTAL	100.0%	100.0%	0.0%



# Western TRU Bond Summary Statistics

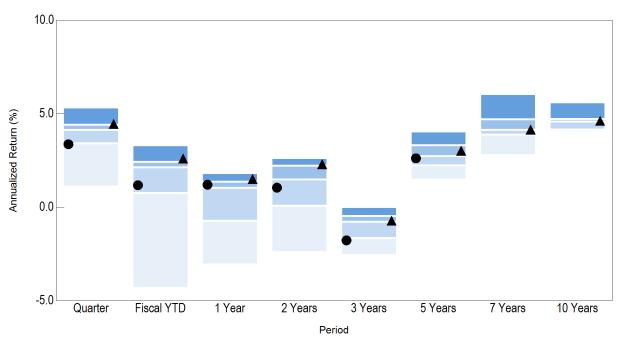
Portfolio Characteristics	
	Portfolio
Total Number of Securities	2
Total Market Value	\$ 101,110,062
Current Coupon	3.67
Yield to Maturity	5.97
Average Life	9.73
Duration	1.89
Quality	BBB+

BC Aggregate
3.25
12.64
7.49
5.41
AA+

Yield to Maturity		Average Life		Duration	
Range	% Held	Range	% Held	Range	% Held
0.0 - 5.0	n/a	0.0 - 1.0	0.0	0.0 - 1.0	0.0
5.0 - 7.0	n/a	1.0 - 3.0	0.0	1.0 - 3.0	100.0
7.0 - 9.0	n/a	3.0 - 5.0	0.0	3.0 - 5.0	0.0
9.0 - 11.0	n/a	5.0 - 10.0	100.0	5.0 - 7.0	0.0
11.0 - 13.0	n/a	10.0 - 20.0	0.0	7.0 - 10.0	0.0
13.0+	n/a	20.0+	0.0	10.0+	0.0
Unclassified	n/a	Unclassified	0.0	Unclassified	0.0

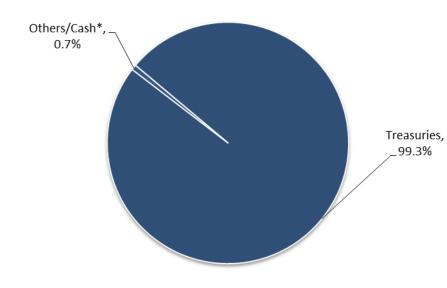
Quality		Coupon
Range	% Held	Range
Govt (10)	0.0	0.0 - 5.0
Aaa (10)	0.0	5.0 - 7.0
Aa (9)	0.0	7.0 - 9.0
A (8)	0.0	9.0 - 10.0
Baa (7)	100.0	10.0+
Below Baa (6-1)	0.0	
Other	0.0	Unclassified





#### eA TIPS / Infl Indexed Fixed Inc Net Accounts

	Return (Ra	ank)						
5th Percentile	5.3	3.3	1.8	2.6	0.0	4.0	6.0	5.6
25th Percentile	4.4	2.4	1.4	2.2	-0.5	3.3	4.7	4.7
Median	4.2	2.1	1.0	1.5	-0.8	2.7	4.1	4.6
75th Percentile	3.4	0.8	-0.7	0.1	-1.6	2.2	3.9	4.2
95th Percentile	1.1	-4.3	-3.1	-2.4	-2.6	1.5	2.8	4.0
# of Portfolios	20	20	19	16	15	12	9	6
<ul> <li>Brown Brothers Harriman</li> <li>Barclays US TIPS</li> </ul>	3.4 (7 4.5 (2	(8) 1.2 (69) (2) 2.6 (16)	1.2 (40 1.5 (17	, , , ,		2.6 (59) 3.0 (34)	() 4.2 (50)	() 4.6 (48)



		Barclays TIPS	
Sector	Account Weight	Index	Difference
Treasuries	99.3%	100.0%	-0.7%
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%
СМО	0.0%	0.0%	0.0%
ABS	0.0%	0.0%	0.0%
Municipals	0.0%	0.0%	0.0%
Others/Cash*	0.7%	0.0%	0.7%
TOTAL	100.0%	100.0%	0.0%

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



# Brown Brothers Harriman

### Bond Summary Statistics

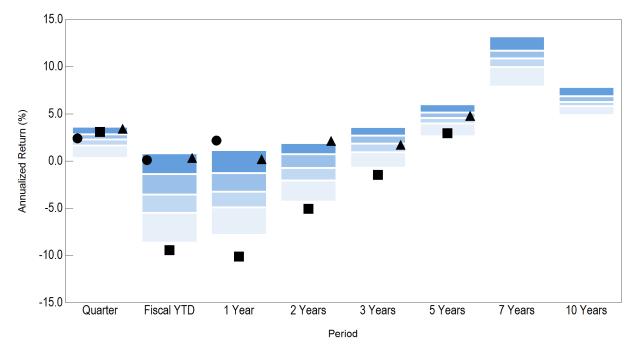
### Period Ending: March 31, 2016

	Portfolio	Barclays TIF
Total Number of Securities	11	
otal Market Value	\$ 69,431,137	١
urrent Coupon	0.80	0.
field to Maturity	-0.06	-0.
verage Life		
Duration	5.49	7.
Quality	GOV	A

Yield to Maturity		Average Life		Duration	
Range	% Held	Range	% Held	Range	% Held
0.0 - 5.0	100.0	0.0 - 3.0	1.7	0.0 - 3.0	25.0
5.0 - 7.0	n/a	3.0 - 5.0	24.5	3.0 - 5.0	20.3
7.0 - 9.0	n/a	5.0 - 10.0	55.6	5.0 - 10.0	45.4
9.0 - 11.0	n/a	10.0- 15.0	9.9	10.0- 15.0	4.7
11.0 - 13.0	n/a	15.0+	8.3	15.0+	4.6
13.0+	n/a				
Unclassified	n/a	Unclassified	0.0	Unclassified	0.0

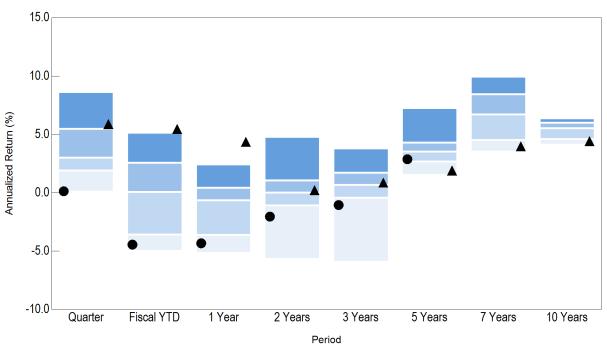
Quality		Coupon	
Range	% Held	Range	%
Govt (10)	99.3	0.0 - 5.0	ŕ
Aaa (10)	0.0	5.0 - 7.0	
Aa (9)	0.0	7.0 - 9.0	
A (8)	0.0	9.0 - 11.0	
Baa (7)	0.0	11.0 - 13.0	
Below Baa (6-1)	0.0	13.0+	
Other	0.7	Unclassified	





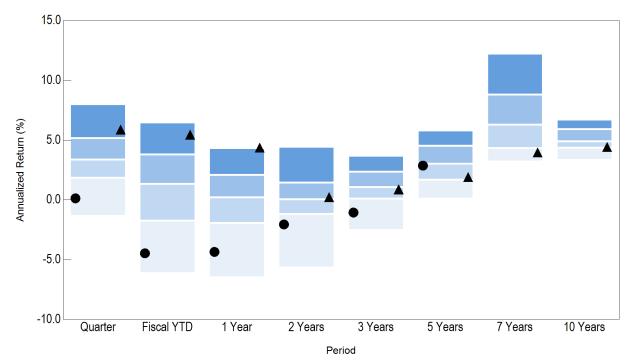
eA US High Yield Fixed Inc Net Accounts

	Return (I	Rank)													
5th Percentile	3.6	0.8		1.2		1.9		3.6		6.0		13.2		7.8	
25th Percentile	2.9	-1.3		-1.2		0.7		2.7		5.2		11.7		6.9	
Median	2.3	-3.5		-3.2		-0.7		1.9		4.6		10.9		6.3	
75th Percentile	1.7	-5.5		-4.9		-2.0		0.9		4.0		10.0		5.9	
95th Percentile	0.3	-8.6		-7.8		-4.3		-0.7		2.7		7.9		4.9	
# of Portfolios	91	91		87		84		82		74		60		54	
Beach Point Select	2.4	(47) 0.1	(12)	2.2	(1)		()		()		()		()		()
Brigade Capital	3.1	(19) -9.4	(97) -	10.1	(99)	-5.1	(98)	-1.5	(98)	3.0	(93)		()		()
▲ Barclays BA Intermediate HY	3.4	(9) 0.4	(10)	0.2	(8)	2.1	(3)	1.7	(53)	4.8	(41)		()		()



### InvestorForce All DB Glbl Fix Inc Net Accounts

	Return (Rank	)						
5th Percentile	8.6	5.1	2.4	4.8	3.8	7.3	9.9	6.4
25th Percentile	5.5	2.6	0.4	1.1	1.7	4.3	8.5	6.0
Median	3.0	0.1	-0.6	0.0	0.7	3.5	6.7	5.5
75th Percentile	1.9	-3.6	-3.6	-1.1	-0.4	2.7	4.5	4.6
95th Percentile	0.1	-5.0	-5.1	-5.7	-5.9	1.5	3.5	4.2
# of Portfolios	44	44	44	39	36	28	21	14
<ul> <li>Global Fixed Income</li> <li>Barclays Multi-verse</li> </ul>	0.1 (91) 5.9 (16)	-4.4 (87) 5.5 (3)	-4.3 (87) 4.4 (2)	-2.0 (90) 0.2 (48)	-1.1 (86) 0.9 (43)	2.9 (63) 1.9 (94)	() 4.0 (88)	() 4.4 (79)



#### eA All Global Fixed Inc Net Accounts

	Return (Ran	k)						
5th Percentile	8.0	6.5	4.3	4.4	3.7	5.8	12.2	6.7
25th Percentile	5.2	3.8	2.1	1.5	2.4	4.5	8.8	5.9
Median	3.4	1.4	0.2	0.1	1.1	3.0	6.3	4.9
75th Percentile	1.9	-1.7	-1.9	-1.2	0.1	1.7	4.3	4.4
95th Percentile	-1.3	-6.1	-6.5	-5.6	-2.5	0.1	3.2	3.3
# of Portfolios	200	189	185	181	169	138	111	77
Franklin Templeton	0.1 (91)	-4.5 (91)	-4.4 (93)	-2.1 (84)	-1.1 (89)	2.9 (53)	()	()
Barclays Multi-verse	5.9 (18)	5.5 (11)	4.4 (5)	0.2 (48)	0.9 (54)	1.9 (70)	4.0 (81)	4.4 (73)

Verus<sup>777</sup>

+15.4%

-30.7%

+3.7%

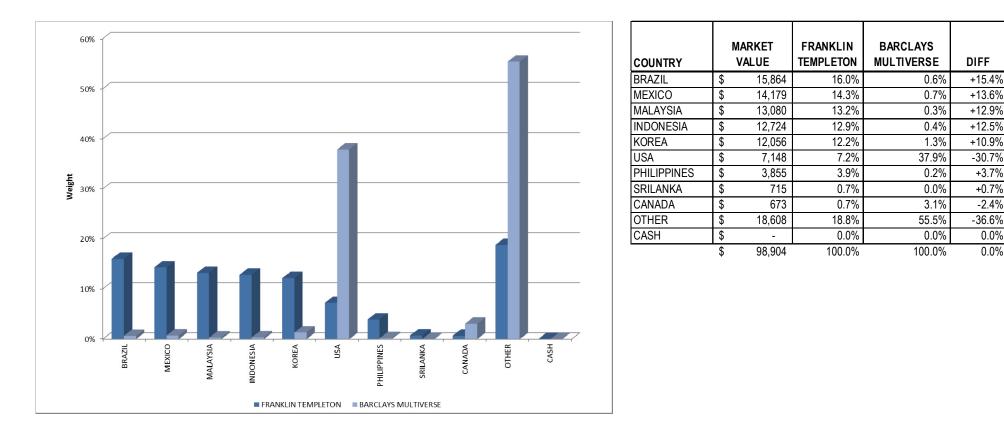
+0.7%

-2.4%

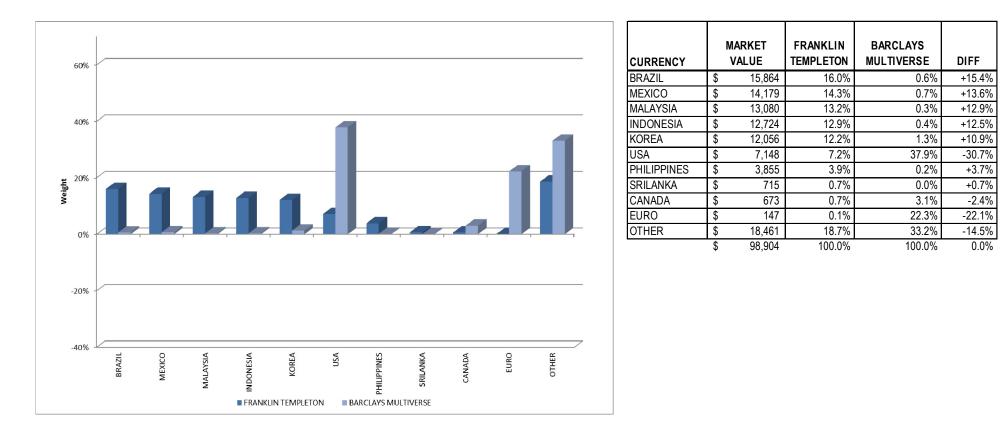
-36.6%

0.0%

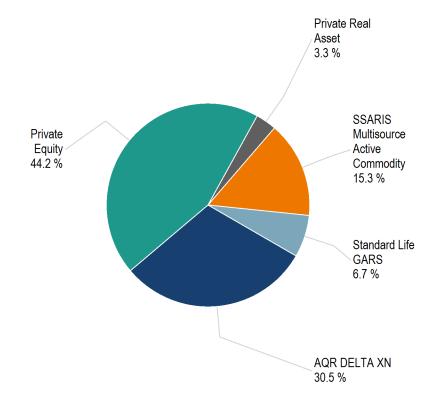
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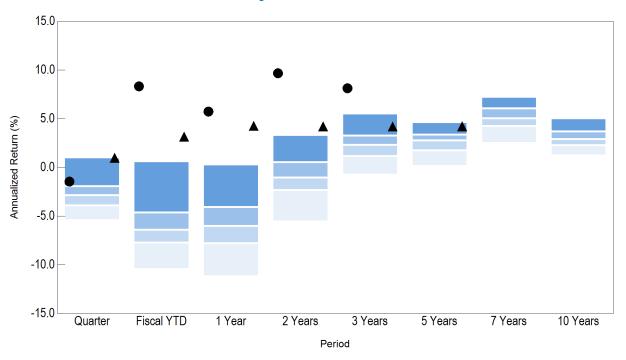






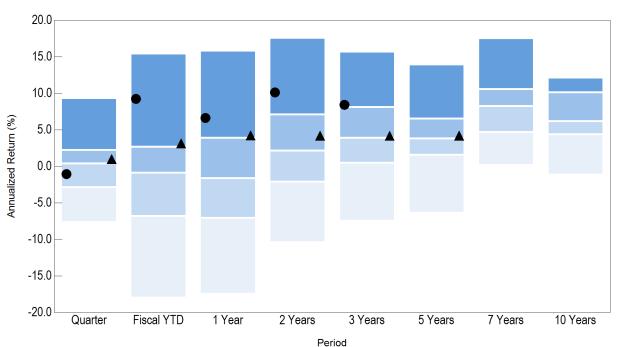


			Manager Contribution to
	Actual \$	Actual %	Excess Return %
AQR DELTA XN	\$152,577,660	30.5%	-0.6%
Private Equity	\$221,248,743	44.2%	-0.9%
Private Real Asset	\$16,533,230	3.3%	0.5%
SSARIS Multisource Active Commodity	\$76,362,485	15.3%	-0.5%
Standard Life GARS	\$33,722,544	6.7%	-0.3%
Actual vs. Policy Weight Difference			
Total	\$500,444,662	100.0%	-1.8%



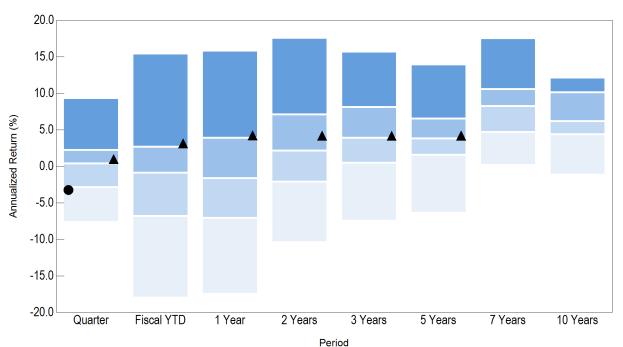
#### InvestorForce All DB Hedge Funds Net Accounts

	Return	(Rank)							
5th Percentile	1.0	0.6	0.3	3.3	5.5	5 4.	6 7.2	2 5.0	
25th Percentile	-1.9	-4.6	-4.1	0.5	3.3	3.3.	4 6.1	1 3.7	
Median	-2.8	-6.4	-6.0	-1.0	2.3	3 2.	8 5.1	1 2.9	
75th Percentile	-3.9	-7.7	-7.8	-2.3	1.2	2 1.	8 4.3	3 2.3	
95th Percentile	-5.4	-10.4	-11.2	-5.5	-0.7	<b>'</b> 0.	2 2.5	5 1.3	
# of Portfolios	248	246	245	241	221	18	5 134	4 73	
Hedge Fund/Absolute Return	-1.5	(20) 8.3	(1) 5.7	(1) 9.7	(1) 8.1	(1)	() -	- ()	()
Libor 1 month +4%	1.0	(6) 3.2	(2) 4.3	(1) 4.2	(5) 4.2	2 (12) 4.	2 (11) -	- ()	()



eV Alt All Multi-Strategy Accounts

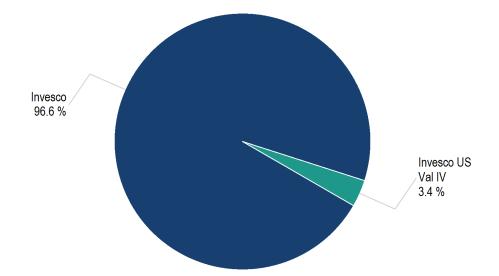
	Return	(Rank)															
5th Percentile	9.3		15.4		15.8		17.6		15.7		14.0		17.5		12.1		
25th Percentile	2.3		2.7		3.9		7.2		8.2		6.6		10.6		10.2		
Median	0.4		-0.8		-1.6		2.2		3.9		3.8		8.3		6.2		
75th Percentile	-2.8		-6.8		-7.0		-2.1		0.5		1.6		4.7		4.4		
95th Percentile	-7.6		-17.9		-17.4		-10.4		-7.4		-6.3		0.2		-1.1		
# of Portfolios	231		227		225		208		182		137		109		67		
AQR DELTA XN	-1.1	(66)	9.2	(9)	6.6	(14)	10.1	(17)	8.4	(24)		()		()		()	
Libor 1 month +4%	1.0	(42)	3.2	(23)	4.3	(24)	4.2	(40)	4.2	(48)	4.2	(45)		()		()	



eV Alt All Multi-Strategy Accounts

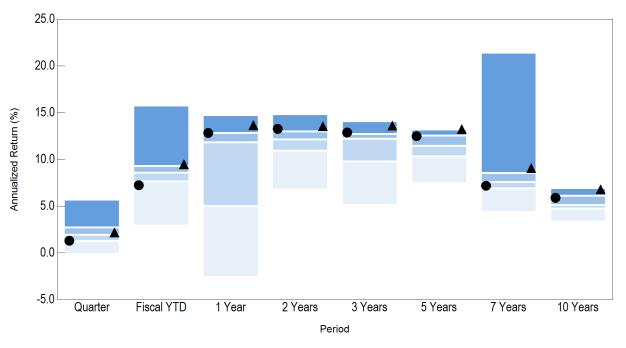
	Return	(Rank)														
5th Percentile	9.3		15.4		15.8		17.6		15.7		14.0		17.5		12.1	
25th Percentile	2.3		2.7		3.9		7.2		8.2		6.6		10.6		10.2	
Median	0.4		-0.8		-1.6		2.2		3.9		3.8		8.3		6.2	
75th Percentile	-2.8		-6.8		-7.0		-2.1		0.5		1.6		4.7		4.4	
95th Percentile	-7.6		-17.9		-17.4		-10.4		-7.4		-6.3		0.2		-1.1	
# of Portfolios	231		227		225		208		182		137		109		67	
Standard Life GARS	-3.2	(79)		()		()		()		()		()		()		<b>()</b>
Libor 1 month +4%	1.0	(42)	3.2	(23)	4.3	(24)	4.2	(40)	4.2	(48)	4.2	<b>(</b> 45)		()		()

Verus<sup>777</sup>



Total	\$238,047,447	100.0%	-0.9%
Actual vs. Policy Weight Difference			-0.1%
Invesco US Val IV	\$8,123,969	3.4%	-0.1%
Invesco	\$229,923,478	96.6%	-0.8%
	Actual \$	Actual %	Manager Contribution to Excess Return %

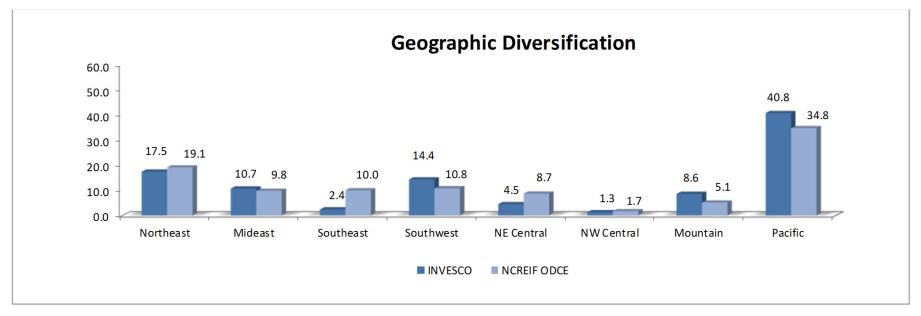


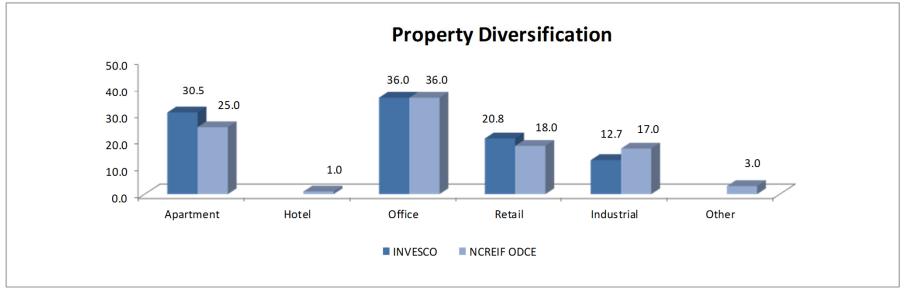


#### InvestorForce All DB Real Estate Pub Net Accounts

	Return (I	Rank)							
5th Percentile	5.7	15.7	14.7	14.8	14.1	13.2	21.4	6.9	
25th Percentile	2.7	9.3	12.8	13.0	12.8	12.6	8.6	6.1	
Median	2.0	8.6	11.8	12.2	12.2	11.5	7.6	5.1	
75th Percentile	1.3	7.7	5.0	11.0	9.8	10.3	6.9	4.7	
95th Percentile	-0.1	2.9	-2.6	6.8	5.1	7.5	4.4	3.4	
# of Portfolios	87	86	86	83	81	70	57	35	
<ul> <li>Real Estate</li> <li>NCREIF ODCE</li> </ul>	1.3 2.2	( )	(80) 12.8 (23) 13.7	(26) 13.3 (15) 13.6	(19) 12.9 (13) 13.6	(18) 12.5 (8) 13.3	(28) 7.2 (5) 9.1	(68) 5.9 (18) 6.8	(32) (7)

### INVESCO Core Real Estate Real Estate Diversification Analysis







# INVESCO Core Real Estate Real Estate Valuation Analysis

### Period Ending: March 31, 2016

					Date Added to	Last Valuation	SamCERA ownership as o
Property Name	MSA	Prior Quarter Carry Value	Current Quarter Carry Value	Net Market Value	Fund	Date	03/31/2016 2.94%
APARTMENTS							
Milestone Apt Portfolio	Various States - South	\$32.926.875	\$1.990.912	\$1.990.912	2006	March-16	\$58,528
Stoneridge Apartments	Pleasanton, CA	\$209.000.000	\$213.000.000	\$213.000.000	4006	March-16	\$6,261,699
Sterling Parc Apartments	Cedar Knolls, NJ	\$89.000.000	\$89,300,000	\$89,300,000	2007	March-16	\$2.625.210
Instrata Pentagon City	Arlington, VA	\$150,000,000	\$149,000,000	\$88,857,133	3010	March-16	\$2,612,191
Ladd Tower	Portland, OR	\$132,000,000	\$135,000,000	\$78,123,195	4Q10	March-16	\$2,296,638
Legacy Fountain Plaza	San Jose, CA	\$139,956,139	\$141,957,508	\$141,957,508	1011	March-16	\$4,173,217
Instrata Gramercy (fka The Elektra)	New York, NY	\$157,000,000	\$153,000,000	\$80,377,103	1011	March-16	\$2,362,898
Instrata Brooklyn Heights (fka 75 Clinton Stree	/	\$64,400,000	\$64,400,000	\$64,400,000	1012	March-16	\$1,893,208
Club Laguna	Orange County, CA	\$159,000,000	\$158,000,000	\$96,447,539	3012	March-16	\$2,835,331
The GoodWynn	Atlanta. GA	\$99.100.000	\$99,200,000	\$62.223.640	4012	March-16	\$1.829.229
Instrata at Mercedes House	New York, NY	\$207.000.000	\$207.000.000	\$132.000.000	1013	March-16	\$3,880,489
Sunset Vine Tower	Los Angeles. CA	\$95,500,000	\$97.800.000	\$97.800.000	2013	March-16	\$2.875.090
The Ashton	Dallas, TX	\$95,500,000	\$115,000,000	\$57,822,023	4013	March-16	\$2,875,090
The Ashton The Pointe at Westchester	West Chester, PA	\$114,700,000 \$66,700,000	\$115,000,000 \$67,500,000	\$57,822,023	4013	March-16 March-16	\$1,699,831 \$1,984,341
206 Bell	Seattle. WA	\$66,700,000	\$44,600,000	. , ,	4013	March-16 March-16	\$1,984,341 \$1.311.135
	Seattle, WA Denver, CO	\$44,100,000	\$44,600,000 \$85,100,000	\$44,600,000 \$47,977,415	4Q13 1014	March-16 March-16	\$1,311,135
Cadence Union Station			111/11/11	1 1- 1 -			1 / 5/ 5
Joseph Arnold Lofts	Seattle, WA	\$69,300,000	\$69,300,000	\$35,058,052	2Q14	March-16	\$1,030,624
Verve	Denver, CO	\$108,000,000	\$108,000,000	\$108,000,000	3Q14	March-16	\$3,174,946
Broadstone Little Italy	San Diego CA	\$117,000,000	\$117,000,000	\$63,801,284	3Q14	March-16	\$1,875,608
33 Tehama	San Francisco, CA	\$78,900,018	\$94,388,745	\$94,387,828	3Q14	March-16	\$2,774,780
The Parker	Portland, OR	\$64,300,000	\$65,200,000	\$32,179,667	1Q15	March-16	\$946,007
Legacy West Apartments	Plano, TX	\$22,197,010	\$30,689,399	\$30,689,399	1Q15	March-16	\$902,196
Village at Park Place	Irvine, CA	\$57,566,321	\$61,695,139	\$61,695,139	2Q15	March-16	\$1,813,692
Wheaton 121	Wheaton, IL	\$96,700,000	\$91,500,000	\$91,500,000	2Q15	March-16	\$2,689,885
Jefferson Marketplace	Washington, DC	\$140,660,389	\$142,000,000	\$71,422,191	4Q15	March-16	\$2,099,644
Retreat at Park Meadows	Littleton,CO	\$125,014,884	\$126,000,000	\$126,000,000	4Q15	March-16	\$3,704,104
North Water	Chicago, IL	\$0	\$246,000,000	\$246,000,000	1Q16	Acq 1Q16	\$7,231,821
2270 Broadway	Oakland, CA	\$0	\$18,935,211	\$18,935,211	1Q16	Acq 1Q16	\$556,651
Runway at Playa Vista -Apartments	Playa Vista, CA	\$0	\$130,525,926	\$67,058,426	1Q16	Acq 1Q16	\$1,971,360
		\$2,724,621,636	\$3,123,082,840	\$2,411,103,665			\$70,880,775
INDUSTRIAL	1	-	-		•		
Arjons	San Diego CA	\$37,500,000	\$38,400,000	\$38,400,000	2Q04	March-16	\$1,128,870
Gateway Business Park	Dallas TX	\$12,900,000	\$13,000,000	\$13,000,000	2Q04	March-16	\$382,169
Hayward Industrial	Oakland CA	\$141,700,000	\$142,100,000	\$142,100,000	3Q04-3Q07	March-16	\$4,177,406
Lackman Park	Kansas City MO-KS	\$24,500,000	\$24,500,000	\$24,500,000	2Q04	March-16	\$720,242
Crossroads Industrial	Kansas City MO-KS	\$7,900,000	\$8,100,000	\$8,100,000	1Q06	March-16	\$238,121
Oakesdale Commerce Center	Seattle - Belle - Eve WA	\$45,900,000	\$46,800,000	\$46,800,000	1Q06	March-16	\$1,375,810
South Bay Industrial	Los Angeles, CA	\$74,525,000	\$43,700,000	\$43,700,000	4Q06	March-16	\$1,284,677
VIP Holdings I	Chicago, IL	\$75,496,504	\$73,894,809	\$31,394,931	2Q06	March-16	\$922,937
Tempe Commerce Park	Phoenix - Mesa AZ	\$60,300,000	\$60,300,000	\$60,300,000	4Q07	March-16	\$1,772,678
Steeplechase 95 International Business Park	Capitol Heights, MD	\$91,300,000	\$91,600,000	\$91,600,000	1Q11	March-16	\$2,692,825
Airport Trade Center Portfolio	Dallas, TX	\$118,200,000	\$119,800,000	\$119,800,000	1011	March-16	\$3,521,838
IE Logistics	San Bernardino, CA	\$126,900,000	\$128,400,000	\$128,400,000	3Q11	March-16	\$3,774,658
Railhead Drive Industrial	Dallas, TX	\$61.800.000	\$62.000.000	\$62.000.000	4011	March-16	\$1.822.654
lannea'a prive maasanat		\$227.000.000	\$232,000,000	\$232,000,000	4012	March-16	\$6,820,254
Empire Gateway aka Chino South Logistics Con		JZZ/,000,000	7232,000,000	7232,000,000	7412	March-10	
		\$129,900,000	\$130,000,000	\$130,000,000	4013	March-16	\$3,821,604
Empire Gateway aka Chino South Logistics Cen SFF Logistics Center Easton Industrial Portfolio	San Francisco, CA Various ,FL	\$129,900,000 \$0	\$130,000,000 \$87,638,765	\$130,000,000 \$50,839,901	4Q13 1Q16	March-16 Acq 1Q16	\$3,821,694 \$1,494,573



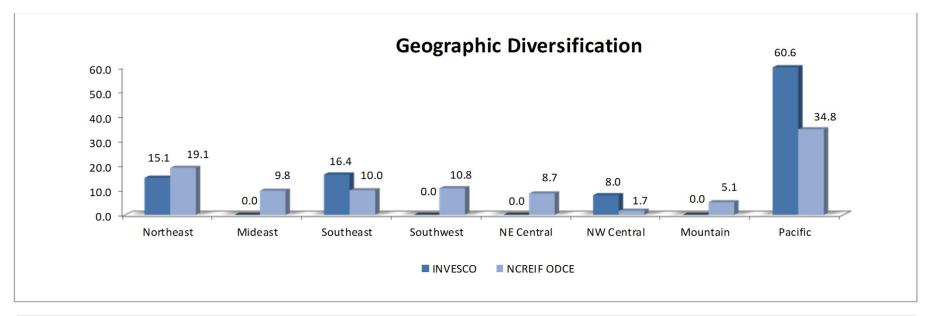
# INVESCO Core Real Estate Real Estate Valuation Analysis

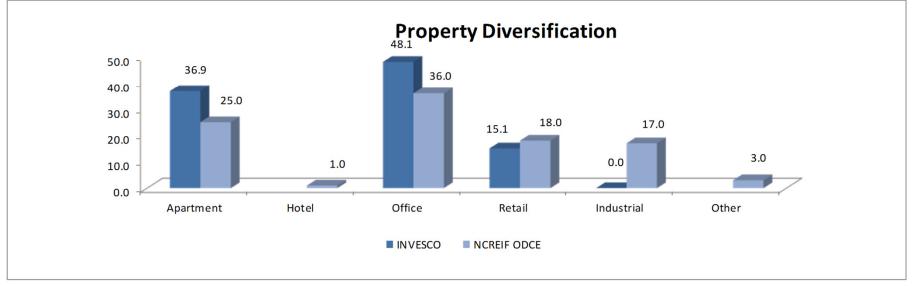
### Period Ending: March 31, 2016

OFFICE							
55 Cambridge Parkway	Boston MA - NH	\$249,000,000	\$260,000,000	\$260,000,000	4Q06	March-16	\$7,643,388
Gainey Center II	Scottsdale - AZ	\$35,200,000	\$0	\$0	3Q07	Sold 1Q16	\$0
/alencia Town Center	Valencia, CA	\$129,000,000	\$130,000,000	\$130,000,000	3Q07	March-16	\$3,821,694
he Executive Building	Washington, D.C.	\$230,000,000	\$231,000,000	\$231,000,000	2Q08	March-16	\$6,790,857
111 Pennsylvania Avenue	Washington, D.C.	\$293,000,000	\$307,000,000	\$307,000,000	4Q10	March-16	\$9,025,078
800 Larimer	Denver, CO	\$308,000,000	\$309,000,000	\$309,000,000	1Q11	March-16	\$9,083,873
450 & 3460 Hillview Ave.	San Jose, CA	\$76,700,000	\$77,000,000	\$77,000,000	3Q12	March-16	\$2,263,619
Villiams Tower	Houston, TX	\$591,000,000	\$590,000,000	\$405,257,812	1Q13	March-16	\$11,913,626
Westlake Park Place	Westlake Village, CA	\$110,000,000	\$111,000,000	\$111,000,000	4Q13	March-16	\$3,263,139
.01 Second	San Francisco, CA	\$360,000,000	\$366,000,000	\$366,000,000	1Q14	March-16	\$10,759,539
nergy Crossing II	Houston, TX	\$113,000,000	\$113,000,000	\$113,000,000	2Q14	March-16	\$3,321,934
776 Wilson Blvd.	Arlington, VA	\$94,200,000	\$94,700,000	\$94,700,000	3Q14	March-16	\$2,783,957
31 Howard	San Francisco, CA	\$89,900,000	\$90,200,000	\$90,200,000	3014	March-16	\$2,651,668
arton Oaks	Austin, TX	\$82,400,000	\$83,100,000	\$83,100,000	3Q14	March-16	\$2,442,944
Iercules East and South Campus	Los Angeles, CA	\$144,030,524	\$147,758,313	\$147,758,313	3Q14	March-16	\$4,343,747
he Reserve	Playa Vista, CA	\$326,100,555	\$331,628,621	\$331,628,621	1Q15	March-16	\$9,749,101
ort Point Portfolio	Boston, MA	\$197,325,884	\$206,752,386	\$116,839,633	2Q15	March-16	\$3,434,810
egacy West Office	Plano, TX	\$34,220,391	\$47,312,824	\$47,312,824	1Q15	March-16	\$1,390,886
Summit IV	Aliso Viejo, CA	\$110,000,000	\$109,000,000	\$70,514,248	2Q15	March-16	\$2,072,953
101 Westlake	Seattle, WA	\$83,800,000	\$85,300,000	\$85,300,000	3Q15	December-15	\$2,507,619
		\$3,656,877,354	\$3,689,752,144	\$3,376,611,451			\$99,264,433
RETAIL		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, , , , , , , , , , , , , , , , , , ,			
roadway at Surf	Chicago IL	\$36.200.000	\$32,600,000	\$32,600,000	2004	March-16	\$958,363
arriagetown Marketplace	Boston MA - NH	\$22.085.460	\$0	\$0	2004	March-16	\$0
handler Pavilion	Phoenix - Mesa AZ	\$21.800.000	\$22,100,000	\$22,100,000	2Q04	March-16	\$649.688
Aatthews Township	Charlotte - G - RH NC-SC	\$24,200,000	\$25,500,000	\$25,500,000	2004	March-16	\$749.640
Vindward Commons	Atlanta GA	\$24,400,000	\$24,400,000	\$24,400,000	2004	March-16	\$717,303
ityline at Tenley	Washington, D.C.	\$54,900,000	\$55,200,000	\$55,200,000	4005	March-16	\$1.622.750
lidgehaven Shopping Center	Minnetonka, MN	\$42,400,000	\$42,400,000	\$42,400,000	4Q05	March-16	\$1,246,460
The Beacon Retail	San Francisco, CA	\$66,000,000	\$66,000,000	\$66,000,000	1006	March-16	\$1,940,245
he Beacon Garage (units)	San Francisco, CA	\$30,700,000	\$30,700,000	\$30,700,000	1Q06	March-16	\$902,508
The Beacon Office (210 King)	San Francisco, CA	\$13,300,000	\$14,400,000	\$14,400,000	1015	March-16	\$423,326
Dak Brook Court	Chicago, IL	\$20,300,000	\$14,400,000	\$0	4Q07	Sold 1Q16	\$0
lawthorne Plaza	Overland Park, KS	\$53,800,000	\$54,300,000	\$54,300,000	4Q07	March-16	\$1,596,292
The Loop	Boston MA - NH	\$96,400,000	\$96,400,000	\$96,400,000	1008	March-16	\$2,833,933
Vestbank Market	Austin, TX	\$59,200,000	\$59,600,000	\$59,600,000	3Q10	March-16	\$1,752,100
10 Lincoln Road	Miami, FL	\$35,600,000	\$36,100,000	\$36,100,000	4Q10	March-16	\$1,061,255
ake Pointe Village	Houston, TX	\$75,650,000	\$76,050,000	\$76,050,000	4Q10 4Q11	March-16	\$2,235,691
afeway Kapahulu	Hawaii	\$85,100,000	\$85,200,000	\$48,896,141	4Q11 4Q11	March-16	\$1,437,432
afeway Burlingame	San Francisco, CA	\$54,600,000	\$54,800,000	\$31,969,010	4011	March-16	\$939.814
Shamrock Plaza	Oakland, CA	\$37,800,000	\$37,900,000	\$21,617,320	4Q11 4Q11	March-16	\$635,498
avilions Marketplace	West Hollywood, CA	\$58,200,000	\$58,300,000	\$33,551,331	1Q12	March-16	\$986,330
.30 Prince	New York, NY	\$221,000,000	\$218,000,000	\$218.000.000	2012	March-16	\$6,408,687
afeway Pleasanton	Pleasanton, CA	\$221,000,000	\$218,000,000	\$218,000,000	4Q12	March-16 March-16	\$2,357,691
iberty Wharf	Boston, MA	\$86,400,000	\$89,400,000	\$55,366,249	4Q12 4Q12	March-16 March-16	\$2,357,691 \$1,627,637
hops at Legacy	Plano, TX	\$109,710,916	\$109,710,916	\$109,710,916	4Q12 3Q13	March-16 March-16	\$1,627,637 \$3,225,243
nops at Legacy asadena Commons	Plano, IX Pasadena, CA	\$109,710,916 \$47,000,000	\$109,710,916 \$50,900,000	\$109,710,916	3Q13 4Q14	March-16 March-16	\$3,225,243 \$1,496,340
		\$47,000,000	\$15,300,000	\$15,300,000	4Q14 4Q14	March-16 March-16	\$1,496,340
003 N. Rush Street	Chicago, IL Plano. TX	\$14,600,000 \$36.070.142	\$15,300,000 \$49,870,274	\$15,300,000 \$49,869,372	4Q14 1Q15	March-16 March-16	\$449,784 \$1.466.042
egacy West Retail	New York, NY	\$36,070,142 \$224,000,000	\$49,870,274 \$224,800.000	\$49,869,372	1Q15 3Q15	March-16 March-16	\$1,466,042 \$3,292,537
31-137 Spring Street			\$224,800,000 \$128,345,953	\$112,000,000 \$65,938,453	3Q15 1Q16		1 - 1 - 1
unway at Playa Vista - Retail	Playa Vista, CA	\$0 \$0	1 2/2 2/2 22	1		Acq 1Q16	\$1,938,435
39 Spring	New York, NY	\$0	\$111,059,200	\$111,059,200	1Q16	Acq 1Q16	\$3,264,879
Clayton Lane	Denver, CO	\$0	\$168,062,319	\$120,595,240	1Q16	Acq 1Q16	\$3,545,216
Ith & Colorado	Santa Monica, CA	\$0	\$12,597,554	\$12,597,554	1Q16	Acq 1Q16	\$370,338
		\$1,731,516,518	\$2,130,196,216	\$1,773,320,786		<u> </u>	\$52,131,459
	Portfolio Total	\$9,348,837,012	\$10,245,264,774	\$8,783,970,734			\$258,228,074



# INVESCO US Val IV Real Estate Diversification Analysis

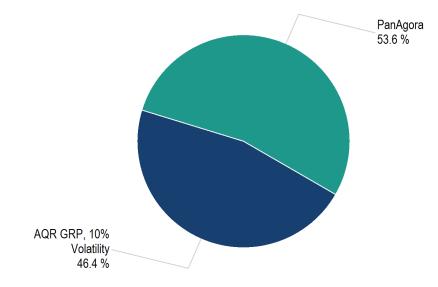






				Prior Quarter Carry	Current Quarter		Date Added to	
Property Name	Region Classification	Geographic Classification	MSA	Value	Carry Value	Net Market Value	Fund	Last Valuation Date
APARTMENTS								
Brookwood	West	Southeast	Atlanta, GA	\$31,788,755	\$42,840,948	\$20,378,078	3Q14	March-16
Broadstone Harbor Beach	East	Southeast	Ft. Lauderdale, FL	\$46,494,654	\$53,681,509	\$37,090,542	1Q15	March-16
Downtown East	MidWest	West North Central	Minneapolis, MN	\$34,218,793	\$47,169,752	\$22,019,925	2Q15	March-16
Wyndham Park	West	Pacific	Portland, OR	\$68,700,000	\$73,500,000	\$30,783,347	2Q15	March-16
				\$181,202,202	\$217,192,209	\$110,271,892		
INDUSTRIAL							-	
	_		ſ					
OFFICE								
55 Hawthorne	East	Pacific	San Francisco, CA	\$124,000,000	\$126,100,000	\$64,963,654	3Q14	March-16
Silicon Valley Towers	East	Pacific	San Jose, CA	\$65,900,000	\$80,000,000	\$35,124,117	2Q15	March-16
Post 3rd	West	Pacific	Los Angeles, CA	\$0	\$77,200,000	\$30,668,790	1Q16	March-16
				\$189,900,000	\$283,300,000	\$130,756,561		
RETAIL								
Ledgewood Mall	East	Northeast	Roxbury, NJ	\$30,000,000	\$30,000,000	\$15,546,942	3Q15	March-16
Paramus Retail Portfolio	East	Northeast	Paramus, NJ	\$57,324,791	\$58,800,000	\$20,137,841	4Q15	March-16
				\$87,324,791	\$88,800,000	\$35,684,783		
			_					
			Portfolio Total	\$458,426,993	\$589,292,209	\$276,713,236		





	Actual \$	Actual %	Manager Contribution to Excess Return %
AQR GRP, 10% Volatility	\$121,571,865	46.4%	1.3%
	. , ,		
PanAgora	\$140,464,325	53.6%	3.3%
Actual vs. Policy Weight Difference			-9.8%
Total	\$262,036,190	100.0%	-5.2%



	3 Mo (%)	Fiscal YTD (%)	1 Yr (%)	2 Yrs (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Total Fund	1.4	-1.2	-0.5	3.2	6.4	6.8	5.0
Policy Index	1.5	-1.2	-0.7	2.6	6.2	6.7	5.6
Allocation Index	1.5	-1.2	-0.8	2.5	6.2		
Total Fund ex Overlay	1.2	-1.3	-0.7	3.0	6.3	6.8	4.9
Policy Index	1.5	-1.2	-0.7	2.6	6.2	6.7	5.6
Allocation Index	1.5	-1.2	-0.8	2.5	6.2		
Total Equity	0.7	-3.1	-2.5	2.1	7.9	7.5	4.6
Blended Equity Index	0.4	-4.5	-3.9	1.2	7.0	7.0	5.1
US Equity	0.5	-1.0	-0.5	5.1	10.9	10.4	5.9
Blended US Equity Index	0.8	-1.6	-1.4	5.0	10.7	10.6	6.8
Russell 3000	1.0	-0.5	-0.3	5.8	11.1	11.0	6.9
Large Cap Equity	0.6	0.6	1.3	6.8	11.8	11.0	6.3
Russell 1000	1.2	0.4	0.5	6.4	11.5	11.4	7.1
Barrow Hanley	-1.5	-5.2	-2.8	3.0	10.5	10.4	
Russell 1000 Value	1.6	-1.6	-1.5	3.8	9.4	10.2	5.7
BlackRock S&P 500 Index	1.4	1.5	1.9	7.2	11.9		
S&P 500	1.3	1.5	1.8	7.1	11.8	11.6	7.0
Brown Advisory	-1.3	1.1	2.1	6.5			
Russell 1000 Growth	0.7	2.4	2.5	9.1	13.6	12.4	8.3
DE Shaw	0.7	0.6	1.1	8.1	12.5	12.9	
Russell 1000	1.2	0.4	0.5	6.4	11.5	11.4	7.1
Small Cap Equity	0.0	-8.0	-8.4	-2.0	6.9	8.1	4.3
Russell 2000	-1.5	-10.1	-9.8	-1.2	6.8	7.2	5.3
The Boston Co	4.4	-3.4	-2.7	0.0	7.9	9.1	
Russell 2000 Value	1.7	-6.6	-7.7	-1.8	5.7	6.7	4.4
Chartwell	-4.2	-12.6	-13.9	-4.0	5.9	7.6	5.9
Russell 2000 Growth	-4.7	-13.6	-11.8	-0.6	7.9	7.7	6.0



	3 Mo (%)	Fiscal YTD (%)	1 Yr (%)	2 Yrs (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
International Equity	1.0	-6.4	-5.6	-3.0	2.4	1.9	2.1
MSCI ACWI ex US IMI	-0.1	-8.8	-7.7	-4.4	1.2	1.0	2.5
MSCI EAFE Gross	-2.9	-8.6	-7.9	-4.2	2.7	2.8	2.3
Developed Markets	0.2	-6.2	-5.4	-2.7	3.1	2.5	2.4
MSCI ACWI ex USA Gross	-0.3	-9.4	-8.8	-4.8	0.8	0.8	2.4
Baillie Gifford	0.4	-4.5	-3.9	-1.1	4.6		
MSCI ACWI ex US	-0.3	-9.4	-8.8	-4.8	2.3		
MSCI ACWI ex US Growth	-0.2	-6.4	-5.8	-1.9	3.6		
BlackRock EAFE Index	-2.9	-8.7	-8.0	-4.4			
MSCI EAFE	-3.0	-8.8	-8.3	-4.7	2.2	2.3	1.8
MSCI EAFE Gross	-2.9	-8.6	-7.9	-4.2	2.7	2.8	2.3
FIAM Equity	1.1	-3.6	0.6	0.0	4.4		
MSCI ACWI ex US Small Cap Gross	0.8	-4.4	-0.3	-1.8	4.0	2.8	4.2
Mondrian	1.7	-7.1	-6.9	-3.9	2.2	2.5	3.0
MSCI ACWI ex USA Value Gross	-0.3	-12.5	-11.8	-7.6	-0.8	-0.5	1.7
MSCI ACWI ex USA Gross	-0.3	-9.4	-8.8	-4.8	0.8	0.8	2.4
Emerging Markets	8.9	-8.3	-7.4	-6.1	-3.1		
MSCI Emerging Markets Gross	5.8	-12.4	-11.7	-5.7	-4.2	-3.8	3.3
Parametric Core	8.9						
MSCI Emerging Markets Gross	5.8	-12.4	-11.7	-5.7	-4.2	-3.8	3.3
Total Fixed Income	1.8	-0.3	-0.7	1.9	1.7	4.4	5.3
Blended Fixed Index	3.7	3.0	1.9	2.7	1.7	3.5	4.8
US Fixed Income	2.1	0.5	-0.1	2.6	2.1	4.6	5.4
Blended US Fixed Index	3.3	2.6	1.4	3.2	1.8	3.9	5.0
Core Fixed	2.1	2.2	0.5	3.3	2.4	4.4	
Barclays Aggregate	3.0	3.7	2.0	3.8	2.5	3.8	4.9
FIAM Bond	3.3	3.4	1.7	3.9	2.8	4.4	5.4



	3 Mo (%)	Fiscal YTD (%)	1 Yr (%)	2 Yrs (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Western TRU	-0.6						
3-Month Libor Total Return USD	0.1	0.3	0.4	0.3	0.3	0.3	1.6
Barclays Aggregate	3.0	3.7	2.0	3.8	2.5	3.8	4.9
TIPS	3.4	1.3	1.4	1.2	-1.6	2.8	
Barclays US TIPS	4.5	2.6	1.5	2.3	-0.7	3.0	4.6
Brown Brothers Harriman	3.4	1.3	1.4	1.2	-1.6	2.8	
Barclays US TIPS	4.5	2.6	1.5	2.3	-0.7	3.0	4.6
Opportunistic Credit	1.5	-3.2	-1.9	1.7	4.5	7.2	
Barclays BA Intermediate HY	3.4	0.4	0.2	2.1	1.7	4.8	
Angelo Gordon Opportunistic	0.7	1.0	3.8				
Angelo Gordon STAR	-2.2	-1.3	1.1	7.3	10.9		
Barclays Aggregate	3.0	3.7	2.0	3.8	2.5	3.8	4.9
Beach Point Select	2.7	0.9	3.2				
Barclays BA Intermediate HY	3.4	0.4	0.2	2.1	1.7	4.8	
Brigade Capital	3.3	-8.9	-9.4	-4.3	-0.8	3.5	
Barclays BA Intermediate HY	3.4	0.4	0.2	2.1	1.7	4.8	
50% Barclays HY/ 50% Bank Loan	2.3	-2.8	-2.4	0.0	2.1	4.2	
Global Fixed Income	0.1	-4.4	-4.3	-2.0	-0.9	3.1	
Barclays Multi-verse	5.9	5.5	4.4	0.2	0.9	1.9	4.4
Franklin Templeton	0.1	-4.5	-4.4	-2.0	-0.9	3.1	
Barclays Multi-verse	5.9	5.5	4.4	0.2	0.9	1.9	4.4
Alternatives	-0.7	-0.5	2.8	4.9	3.7	5.1	
Alternatives Allocation Index	1.4	-2.4	-1.0				
Blended Alternatives Index	1.3	-2.3	-0.9	0.7	5.0	5.9	
Private Equity	-0.3	4.4	13.4	16.6	16.4	8.0	
Russell 3000 +3%	1.8	2.4	2.7	8.8	14.2	14.0	10.0
Hedge Fund/Absolute Return	-1.5	8.3	5.7	9.7	8.2		
Libor 1 month +4%	1.0	3.2	4.3	4.2	4.2	4.2	



	3 Mo (%)	Fiscal YTD (%)	1 Yr (%)	2 Yrs (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
AQR DELTA XN	-1.1	9.2	6.6	10.1	8.4		
Libor 1 month +4%	1.0	3.2	4.3	4.2	4.2	4.2	
Standard Life GARS	-3.2						
Libor 1 month +4%	1.0	3.2	4.3	4.2	4.2	4.2	
Commodity	-2.8	-24.3	-22.4	-20.7	-15.0		
Bloomberg Commodity Index TR USD	0.4	-23.1	-19.6	-23.4	-16.9	-14.1	-6.2
SSARIS Multisource Active Commodity	-2.8	-24.3	-22.4	-20.7	-15.0		
Bloomberg Commodity Index TR USD	0.4	-23.1	-19.6	-23.4	-16.9	-14.1	-6.2
S&P Goldman Sachs Commodity	-2.5	-34.4	-28.7	-34.8	-24.5	-17.4	
Private Real Asset	14.7	12.2	14.7				
CPI +5%	1.2	3.6	5.0	4.9			
Real Estate	1.4	7.4	13.1	13.6	13.3	12.9	6.3
NCREIF ODCE	2.2	9.5	13.7	13.6	13.6	13.3	6.8
Invesco	1.5	7.0	12.7	13.4	13.1	12.8	6.3
NCREIF ODCE	2.2	9.5	13.7	13.6	13.6	13.3	6.8
Invesco US Val IV	-0.2						
NCREIF ODCE	2.2	9.5	13.7	13.6	13.6	13.3	6.8
NCREIF CEVA 1Q Lag - NET	5.8	14.3	18.7	17.8			
Risk Parity	6.5	-1.2	-5.2	2.6	1.3	5.4	
60/40 Russell 3000/Barclays Aggregate	1.9	1.4	0.8	5.2	7.8	8.3	6.4
AQR GRP, 10% Volatility	4.6	-6.2	-8.6	-1.6	-1.4	3.7	
PanAgora	8.2	3.6	-1.9				
60/40 Russell 3000/Barclays Aggregate	1.9	1.4	0.8	5.2	7.8	8.3	6.4
60/40 MSCI World/Barclays Global Aggregate	1.2	-0.2	-0.9	2.8	5.7	6.0	
Cash	0.2	1.2	1.3	0.9	0.7	0.7	1.2
91 Day T-Bills	0.1	0.1	0.1	0.1	0.1	0.1	1.0
General Account	0.2	1.7	1.9	1.3	0.9	0.7	1.6
Treasury & LAIF	0.0	0.0	0.0	0.0	0.0	0.2	0.8
91 Day T-Bills	0.1	0.1	0.1	0.1	0.1	0.1	1.0



### **Investment Strategy Summaries**

#### 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.



### **Investment Strategy Summaries**

#### **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.

#### **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.



#### **Blue Road Capital**

Blue Road Capital was formed in 2013 by John Duryea, Luis Paz-Galindo, David Blue and Daniel Fabian. The Blue Road team has been working together for seven years while they ran the Ospraie Special Opportunities pool ("OSO"), which was established in 2006. OSO had a fairly broad mandate to invest in natural resource industries ranging from liquid publicly traded securities to illiquid private equity style investments. The Blue Road team, led by John Duryea, seeks to make similar investments in agricultural industries that they executed within the OSO pool. Specifically, the team looks to identify supply and/or demand imbalances in the agricultural value chain and capitalize on that opportunity by bringing institutional capital and management to the industry identified. Blue Road aims to achieve private equity style returns by building enterprise value beyond just the intrinsic value of a real asset (e.g. farmland). While owning farmland will be a significant component of the Fund's invested capital, Blue Road's aim is to drive value creation by executing on a business plan whether that is building a vertically integrated production company or by exploiting supply chain inefficiencies within agriculture.

#### The Boston Company – Small Cap Value

The Boston Company's approach to small cap value investing is to conduct bottom-up fundamental research in an effort to add value through security selection. The investment process seeks to identify the stocks of companies which have compelling valuations and business fundamentals, as well as a catalyst for positive change. The appropriate valuation metrics for an individual company can vary depending on industry. Ideas are generated from company meetings, industry contacts and team's internal research. The universe of domestic small-cap equity securities is quantitatively screened for valuation, business health and earnings revisions. In addition, they also screen/track operating income and EBITDA estimate revisions. Once candidates for investment are identified, individual stock weights are determined by portfolio risk, liquidity, and analyst conviction. Normally, portfolios will contain between 120-150 holdings (from a short list of 500 securities), with a maximum individual security weighting of 5%, though most are less than 3%. Securities will typically be in the \$100 million - \$2 billion market cap range at time of purchase. Generally, sector exposure is limited to no more than 2X the index weight with a maximum overweight of 10 percentage points and a maximum underweight of half that of the index. The goal is for portfolios to be close to fully invested at all times, with cash typically below 5%. Any stock down 20% from the purchase price is reviewed. In addition, portfolios are reviewed on a regular basis for unintended risk. Positions are sold when any one of the three investment criteria (valuation, fundamentals, catalyst) breaks down.

#### **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).

#### **Chartwell Investment Partners – Small Cap Growth**

Chartwell's Small Cap Growth product strives to hold stocks with strong fundamentals that are best positioned for rapid growth. These businesses typically demonstrate strong increases in earnings per share. Chartwell invests in these securities with an intermediate time horizon in mind. They initiate investments opportunistically and when stocks are attractively valued. Chartwell focuses on high growth companies that lie in the middle of the momentum and growth at a reasonable price continuum, and construct Small Cap Growth portfolios with fairly low tracking errors. Portfolios contain 50-70 stocks with market capitalizations between \$200 million and \$2.5 billion at purchase. Meetings with management are an important part of the investment process. This product is closed to new investors.

#### 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%.



#### **EverStream Solar Infrastructure I – Private Real Assets**

EverStream Solar Infrastructure I's principal objective is to acquire a high-quality diversified portfolio of Solar PV and Wind assets and projects. EverStream will seek to invest in high-quality solar and wind project opportunities developed by experienced solar/wind project developers, including SunEdison and First Wind. The objective of the Fund is to generate long-term capital appreciation and cash yield with a focus on Solar PV projects and the opportunistic investment in attractive wind projects already in the development phase. It is expected that each investment will be privately negotiated and may be structured in the form of equity, equity-linked securities, debt or some combination thereof. The Fund expects to make investments ranging from \$5 million to \$20 million over the life of the Investment in a portfolio asset. The Investment Team believes that this is an area of the market underserved by most energy and infrastructure funds. EverStream will focus on solar infrastructure projects with energy off-take contracts, reliable technology and predictable cash-flows, in sectors where the Investment Team has an edge by virtue of its experience and its relationship with SunEdison, among other developers. The targeted holding period for an investment is generally expected to range from two to five years. The Fund intends to invest (i) a minimum of 50% of the aggregate Capital Commitments in assets, or in securities of issuers whose principal assets or operations are, located in other OECD countries, and (ii) a maximum of 33% of the aggregate Capital Commitments in assets, or in securities of issuers whose principal assets or operations are, located in the rest of the world.

#### 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.



### **Investment Strategy Summaries**

#### **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.



### **Investment Strategy Summaries**

#### SSARIS Global Multisector Plus – Commodities

SSARIS believes that the commodities markets are not fully efficient, and that a disciplined, quantitative investment process can identify and exploit futures contract mispricings. They believe in taking a small number of large active positions in order to capitalize on these mispricings in a timely manner, utilizing a systematic process to evaluate commodity market prices, to process this information objectively, to build investment models, and to construct efficient portfolios. The strategy's three quantitative models each seek to capture distinct inefficiencies prevalent in the commodity markets: mean reversion, structural imbalances and price dislocations. Backwardation: This model establishes a medium-term view on individual commodity price movement by observing the futures prices associated with a particular commodity. Regime Switching: Price cycles for a given commodity market tends to be persistent in duration yet also change from time to time (and often quite abruptly). This model ascertains the most probable regime in which an individual commodity market selection and risk budgeting process to set the universe of commodity markets to be traded. The selection process takes into account liquidity, volatility and prior period drawdowns. The top ranked markets will receive a larger share of risk capital relative to those that are selected, yet not as highly ranked. It then utilizes trend following and momentum algorithms that are based upon price series analysis ranging over time periods from several weeks to months to enter and exit specific markets.

#### 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.

#### Taurus Mining – Private Real Assets

Taurus is forming their first Mining Debt Fund to implement its investment strategy of making loans to late stage mining projects around the globe. The Fund seeks to selectively finance those projects that have completed the multitude of hurdles required to commence construction and subsequently move into production thereby being able to generate sufficient cash flow to repay their loans. In addition, the loans will carry an additional return through an attached structured equity instrument such as a gross revenue royalty, off-take agreement, warrants/options, or some other structure. The investment thesis can be distilled into a fundamental bottom up thesis that "Project Development Creates Value." The Fund will provide late stage mine development finance, investing in the debt of emerging public, and private mining companies used to finance or refinance project development for those companies which have material value-adding projects under development or expansion. Essentially as a project clears each hurdle towards successful development the expected cash flows become more likely and less distant. The curve works because firstly, the risk of a mining project decreases, and the discount (risk) rate applied to the project decreases, as the project progresses through its evaluation phases, and secondly, because the cash flows that will be produced by the project become closer in time. The value creation which occurs through successful project development is therefore a natural NPV effect.

#### 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.



Total Plan Policy Index	As of:											
	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%	8.0%	10.0%	10.0%
60% Russell 3000/40% BC Aggregate (RP)	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%	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%	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%	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Barclays Credit BAA	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%	3.8%	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%	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%	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%	5.0%	9.0%	9.0%
CPI + 5% (RA)	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%	4.0%	4.0%	3.0%	3.0%	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
MSCI ACW ex-US	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%	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%	20.0%	20.0%	20.0%
NCREIF ODCE	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%	6.0%	6.0%	0.0%	0.0%	0.0%
Russell 1000	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%	5.0%	5.0%	0.0%
Russell 2000	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 +3% (PE)	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%	5.0%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%



# Policy Index and Benchmark History

### Period Ending: March 31, 2016

Total Equity Benchmark	As of:		40/4/40	514107	0/4/00	014100	0/4/00	414100
	1/1/16	1/1/14	10/1/10	5/1/07	6/1/00	3/1/99	9/1/98	1/1/96
MSCI ACWI ex-US	0.0%	0.0%	34.0%	31.3%	23.1%	0.0%	0.0%	0.0%
MSCI ACWI ex-US IMI	41.7%	40.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
MSCI EAFE	0.0%	0.0%	0.0%	0.0%	0.0%	32.3%	33.3%	33.3%
Russell 1000	50.0%	48.0%	52.8%	55.2%	61.5%	35.5%	33.3%	33.3%
Russell 1000 Value	0.0%	0.0%	0.0%	0.0%	0.0%	8.0%	8.4%	0.0%
Russell 2000	8.3%	12.0%	13.2%	13.5%	15.4%	24.2%	25.0%	25.0%
S&P 500	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	8.4%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
US Equity Benchmark	As of:							
	1/1/16	6/1/00	3/1/99	9/1/98	7/1/96	1/1/95		
Russell 1000	85.7%	80.0%	52.0%	50.0%	50.0%	69.0%		
Russell 1000 Value	0.0%	0.0%	12.0%	12.5%	0.0%	0.0%		
Russell 2000	14.3%	20.0%	36.0%	37.5%	37.5%	14.0%		
S & P 500	0.0%	0.0%	0.0%	0.0%	12.5%	17.0%		
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		
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%					
	100.0%	100.0%	100.0%					
Total Fixed Income Benchmark	As of:							
	7/1/14	1/1/14	2/1/13	1/1/11	10/1/10	6/1/00	3/1/99	7/1/96
Barclays Aggregate	50.0%	46.3%	50.0%	50.0%	58.6%	100.0%	83.3%	70.0%
Barclays BA Intermediate HY	25.0%	25.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Barclays BBB	0.0%	0.0%	0.0%	0.0%	7.3%	0.0%	0.0%	0.0%
Barclays DDD Barclays Credit BAA	0.0%	0.0%	16.0%	15.0%	0.0%	0.0%	0.0%	0.0%
Barclays Multiverse	15.0%	18.8%	20.0%	20.0%	20.5%	0.0%	0.0%	0.0%
Barclays TIPS	10.0%	10.0%	14.0%	20.0 % 15.0%	13.6%	0.0%	0.0%	0.0%
Darolays III O	10.0 /0	10.070						
Citiaroup pon-LIS WCBI	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	16 7%	30 0%
Citigroup non-US WGBI	0.0% 100.0%	0.0% 100.0%	0.0% 100.0%	0.0% 100.0%	0.0% 100.0%	0.0% 100.0%	16.7% 100.0%	30.0% 100.0%



### Policy Index and Benchmark History

US Fixed Income Benchmark	As of:					
	7/1/14	1/1/14	2/1/13	1/1/11	10/1/10	7/1/96
Barclays Aggregate	58.8%	56.9%	62.5%	62.5%	73.7%	100.0%
Barclays BA Intermediate HY	29.4%	30.8%	0.0%	0.0%	0.0%	0.0%
Barclays BBB	0.0%	0.0%	0.0%	0.0%	9.1%	0.0%
Barclays Credit BAA	0.0%	0.0%	20.0%	18.8%	0.0%	0.0%
Barclays TIPS	11.8%	12.3%	17.5%	18.8%	17.2%	0.0%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Opportunistic Credit Benchmark	As of:				Bool Acco	t Benchma
	1/1/14	12/1/09			Redi Asse	l Dencinna
Barclays BA Intermediate HY	100.0%	0.0%				
Barclays Credit BAA	0.0%	100.0%			CPI + 5%	
	100.0%	100.0%				
Alternatives Benchmark	As of:				Real Estat	e Benchma
	1/1/16	1/1/14	1/1/11			
60% Russell 3000/40% BC Aggregate (RP)	0.0%	0.0%	30.0%		10 Year Tr	easury +2%
Bloomberg Commodity	17.7%	18.8%	15.0%		NCREIF O	DCE
CPI + 5% (RA)	11.8%	12.5%	0.0%		NCREIF P	ropertv
Libor +4% (HF)	29.4%	25.0%	15.0%			
Russell 3000 +3% (PE)	41.2%	43.8%	40.0%			
	100.0%	100.0%	100.0%		Risk Parit	y Benchma
Private Equity Benchmark	As of:				Barclays A	aaroaato
	10/1/10				Russell 300	
Russell 3000 +3%	100.0%				Russell 300	JU
	100.0%					
Hedge Fund Benchmark	As of:					
	10/1/10					
Libor +4%	100.0%					
	100.0%					

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

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



Period	Ending:	March	31,	2016
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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%
	100.0%	100.0%
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%
	100.0%	100.0%
Brigade Secondary Benchmark	As of:	
	8/1/10	
Barclays High Yield	50.0%	
Credit Suisse Leveraged Loans	50.0%	
	100.0%	



<u>Baillie Gifford</u> First \$25 million: Next \$75 million: Next \$300 million: Thereafter:	0.60% per annum 0.50% per annum 0.40% per annum 0.30% per annum	<u>Brown Advisory</u> First \$50 million: Next \$100 million: Next \$300 million: Thereafter:	0.47% per annum 0.45% per annum 0.40% per annum 0.35% per annum	<u>Mondrian Investment Partners</u> First \$50 million: Next \$150 million: Thereafter:	1.00% per annum 0.19% per annum 0.33% per annum
Barrow, Hanley, Mewhinney & Straus	<u>3S</u>	Brown Brothers Harriman		<u>Parametric</u>	
First \$15 million:	0.75% per annum	On All Assets:	0.15% per annum	On All Assets:	0.35% per annum
Next\$10 million:	0.55% per annum				
Next\$75 million:	0.45% per annum				
Next\$100 million:	0.35% per annum	Chartwell Investment Partners		FIAM Bond	
Next\$800 million	0.25% per annum	On All Assets:	0.75% per annum	First \$50 million:	0.20% per annum
Thereafter:	0.15% per annum			Next\$50 million:	0.175% per annum
				Next \$100 million:	0.10% per annum
BlackRock-Russell S&P 500 Fund		<u>Clifton Group</u>		Thereafter:	0.085% per annum
First \$250 million:	0.03% per annum	First \$50 million:	0.12% per annum		
Thereafter:	0.02% per annum	Next\$150 million:	0.10% per annum		
		Thereafter:	0.05% per annum	FIAM Equity	
BlackRock-EAFE Equity Index Fund				On All Assets:	0.90% per annum
First \$100 million:	0.06% per annum				
Thereafter:	0.04% per annum	Franklin Templeton Investment			
		First \$50 million:	0.45% per annum	Western Asset Management	
The Boston Company Asset Manager	nent	Next\$50 million:	0.35% per annum	On All Assets:	0.25% per annum
First \$25 million:	0.90% per annum	Thereafter:	0.30% per annum	Performance Fee:	20%
Thereafter:	0.80% per annum				



### Manager Compliance

Manager*	Primary Benchmark	Rule 1	Rule 2	Rule 3	Rule 4	Rule 5	Rule 6	Rule 13	Rule 9	Rule 10
Barrow Hanley	Russell 1000 Value	$\checkmark$	R	$\checkmark$	B	$\checkmark$	B	R	$\checkmark$	$\checkmark$
Brown Advisory	Russell 1000 Growth							B		
DE Shaw	Russell 1000	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	B	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
The Boston Co	Russell 2000 Value	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	R	R	$\checkmark$
Chartwell	Russell 2000 Growth	R	R	R	R	R	B	R	R	R
Baillie Gifford	MSCI ACWI ex US	$\checkmark$		$\checkmark$		$\checkmark$		R	R	
FIAM Equity	MSCI ACWI ex US Small Cap Gross	R		R		R		R	R	
Mondrian	MSCI ACWI ex USA Value Gross	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	R	R	R
Parametric Core	MSCI Emerging Markets Gross									
FIAM Bond	Barclays Aggregate	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	R	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Western TRU	3-Month Libor Total Return USD									
Brown Brothers Harriman	Barclays US TIPS	R	B	B	B	B	B	B	R	R
Beach Point Select	Barclays BA Intermediate HY									
Brigade Capital	Barclays BA Intermediate HY	B	R	R	R	R	B	R	R	R
Franklin Templeton	Barclays Multi-verse	R	$\checkmark$	R	$\checkmark$	R	R	R	R	R

Rule 1 - 3 Year Performance (net) vs. Benchmark Rule 2 - 5 Year Performance (net) vs. Benchmark Rule 3 - 3 Year Performance (gross) vs. Benchmark Rule 4 - 5 Year Performance (gross) vs. Benchmark Rule 5 - 3 Year Sharpe Ratio (net) vs. Benchmark Rule 6 - 5 Year Sharpe Ratio (net) vs. Benchmark Rule 13 - 2 Year Performance (net) vs. Median Rule 9 - 3 Year Performance (net) vs. Median Rule 10 - 5 Year Performance (net) vs. Median

\* All managers are meeting investment performance expectations except for Chartwell.

Verus<sup>777</sup>

# Manager Performance Comparison (Gross of Fees)

### Period Ending: March 31, 2016

				1st Qtr.		4th Qtr.		3rd Qtr.		2nd Qtr.		1st Qtr.	
	Jan	Feb	Mar	2016	Difference	2015	Difference	2015	Difference	2015	Difference	2015	Difference
Verus	-6.20%	-1.11%	6.18%	-1.50%		5.41%		-8.68%		2.53%	]	1.74%	
Barrow Hanley	-6.20%	-1.08%	6.15%	-1.51%	0.01%	5.40%	0.01%	-8.69%	0.01%	2.51%	-0.01%	1.73%	0.01%
Russell 1000 Value Index	-5.17%	-0.03%	7.20%	1.64%		5.64%		-8.40%		0.11%		-0.72%	
Verus	-4.96%	-0.12%	6.79%	1.36%		7.05%	]	-6.43%		0.34%	7	0.96%	
BlackRock S&P 500 Fund	-4.96%	-0.12%	6.79%	1.37%	-0.01%	7.05%	0.00%	-6.43%	0.00%	0.34%	0.00%	0.96%	0.00%
S&P 500 Index	-4.96%	-0.13%	6.78%	1.34%	0.0.70	7.03%	0.007/0	-6.43%	0.0070	0.28%		0.96%	
							1		1		J 7		l I
Verus	-6.90%	-0.69%	6.79%	-1.26%	0.000/	7.68%	0.040/	-4.87%	0.000/	1.00%	0.040/	3.78%	0.000/
BrownAdvisory	-6.88%	-0.68%	6.76%	-1.26%	0.00%	7.68%	0.01%	-4.89%	0.02%	1.00%	-0.01%	3.80%	-0.02%
Russell 1000 Growth Index	-5.58%	-0.04%	6.74%	0.75%		7.33%		-5.28%		0.12%	1	3.84%	
Verus	-6.36%	1.14%	6.37%	0.75%		6.11%		-5.87%		0.49%	7	4.10%	
D.E. Shaw	-6.35%	1.14%	6.38%	0.76%	-0.01%	6.10%	0.00%	-5.86%	-0.01%	0.50%	0.00%	4.11%	-0.01%
Russell 1000 Index	-5.38%	-0.03%	6.97%	1.18%		6.51%		-6.83%		0.11%		1.59%	1
Verus	-4.59%	0.81%	8.52%	4.38%		3.13%		-10.26%		0.69%	1	1.71%	
The Boston Company	-4.59%	0.81%	8.52%	4.38%	0.00%	3.13%	0.00%	-10.26%	0.00%	0.68%	0.00%	1.68%	0.03%
Russell 2000 Value Index	-6.72%	0.68%	8.29%	1.70%	••	2.88%		-10.73%	· · · · · · · · · · · · · · · · · · ·	-1.20%	· · · · ·	1.98%	· •
Verus	-11.18%	-1.35%	9.33%	-4.21%		5.09%		-13.15%		-1.48%	7	5.39%	
Chartwell	-11.18%	-1.35%	9.34%	-4.20%	-0.01%	5.09%	0.00%	-13.15%	0.00%	-1.48%	0.01%	5.39%	0.00%
Russell 2000 Growth Index	-10.83%	-0.71%	7.66%	-4.67%		4.33%		-13.07%		1.97%		6.64%	
Verus	-7.12%	0.05%	8.07%	0.42%		7.59%		-11.60%		0.62%	1	6.47%	
Baillie Gifford	-7.13%	0.03%	8.10%	0.42%	0.00%	7.57%	0.02%	-11.54%	-0.06%	0.60%	-0.02%	6.47%	0.00%
MSCI ACWI ex US	-6.79%	-1.11%	8.21%	-0.26%		3.29%		-12.11%		0.73%		3.60%	
MSCI ACWI ex US Growth	-6.17%	-1.23%	7.64%	-0.24%		5.05%		-10.73%		0.75%		4.89%	
Verus	-7.23%	-1.80%	6.59%	-2.90%		4.72%		-10.21%		0.78%	-	5.00%	
BlackRock EAFE Equity	-7.23%	-1.80%	6.59%	-2.90%	0.00%	4.72%	0.00%	-10.21%	0.00%	0.79%	0.00%	5.00%	0.00%
MSCI EAFE (Net)	-7.23%	-1.83%	6.51%	-3.01%	<b></b> ]	4.71%		-10.24%		0.62%		4.88%	; <b></b>
MSCI EAFE (Gross)	-7.22%	-1.80%	6.59%	-2.89%		4.75%		-10.19%		0.84%	]	5.00%	



# Manager Performance Comparison (Gross of Fees)

### Period Ending: March 31, 2016

	<u>Jan</u>	Feb	Mar	<u>1st Qtr.</u> 2016	Difference	<u>4th Qtr.</u> 2015	Difference	<u>3rd Qtr.</u> 2015	Difference	<u>2nd Qtr.</u> 2015	Difference	<u>1st Qtr.</u> 2015	Difference
Verus	-6.35%	-0.69%	8.72%	1.12%		5.51%		-9.65%		4.31%	]	4.78%	
FIAM Equity	-6.35%	-0.69%	8.72%	1.11%	0.01%	5.51%	0.00%	-9.65%	0.00%	4.32%	0.00%	4.78%	0.00%
MSCI ACWI -ex US Small Cap Index	-7.66%	0.35%	8.74%	0.76%		5.34%		-9.95%		4.35%		4.01%	
Verus	-4.09%	-1.02%	7.12%	1.70%		2.33%		-10.72%		0.16%	]	3.82%	
Mondrian	-4.09%	-1.02%	7.13%	1.70%	0.00%	2.33%	0.00%	-10.73%	0.01%	0.22%	0.00%	-4.33%	8.14%
MSCI ACWI -ex US Value Index	-7.43%	-0.99%	8.79%	-0.29%		1.50%		-13.49%		0.72%		2.25%	
MSCI ACWI -ex US	-6.79%	-1.11%	8.21%	-0.26%		3.29%		-12.11%		0.73%		3.60%	
Verus	-4.25%	0.80%	12.81%	8.88%		-0.97%		-11.81%					
Parametric Core	-4.24%	0.82%	12.81%	8.91%	-0.03%	-0.97%	0.00%	-11.81%	0.00%				
MSCI EM Market Index	-6.48%	-0.15%	13.26%	5.74%		0.72%		-17.78%					
Verus	0.87%	0.61%	1.77%	3.28%		-0.39%		0.50%		-1.61%	]	1.72%	
FIAM Bond	0.87%	0.61%	1.77%	3.28%	0.00%	-0.39%	0.00%	0.50%	0.00%	-1.60%	-0.01%	1.72%	0.00%
BC Aggregate Index	1.38%	0.71%	0.92%	3.02%		-0.58%		1.24%		-1.68%		1.61%	
Verus	-2.66%	-1.35%	3.48%	-0.64%		0.63%		-1.01%					
Western TRU	-2.66%	-1.35%	3.48%	-0.63%	-0.01%	0.63%	0.00%	-1.00%	-0.01%				
3-Month Libor Total Return USD Index	0.02%	0.05%	0.05%	0.13%	·	0.13%		0.08%					
BC Aggregate Index	1.38%	0.71%	0.92%	3.04%		-0.58%		1.24%					
Verus	0.80%	0.89%	1.68%	3.41%		-0.18%		-1.87%		0.06%	]	0.94%	
Brown Brothers Harriman	0.79%	0.89%	1.80%	3.52%	-0.11%	-0.18%	0.00%	-1.88%	0.01%	0.08%	-0.04%	0.98%	-0.04%
BC U.S Tips	1.48%	1.11%	1.80%	4.46%	<u> </u>	-0.64%		-1.14%	•	-1.07%		1.43%	•
Verus (Net)				0.70%		-0.57%		0.34%		5.90%		-1.22%	
Angelo Gordon Opportunistic				0.70%	0.00%		-0.57%		0.34%	1.28%	0.00%	-1.22%	0.00%
BC Aggregate Index				0.92%		-0.57%		1.24%		-1.68%		1.61%	
Verus (Net)				-2.17%		-0.91%		1.22%		2.14%	1	2.62%	
Angelo Gordon STAR Fund (Net)				-2.17%	0.00%	0.0.70	-0.91%	,,	1.22%	2.14%	0.00%	2.62%	0.00%
BC Aggregate Index				0.92%		-0.57%		1.24%		-1.68%		1.61%	
				L	I		1				<b>_</b>	<u> </u>	L



# Manager Performance Comparison (Gross of Fees)

Period Ending: March 31, 2016

				1st Qtr.		<u>4th Qtr.</u>		3rd Qtr.		2nd Qtr.		1st Qtr.	
, , , , , , , , , , , , , , , , , , ,	Jan	Feb	Mar	<u>2016</u>	Difference	2015	Difference	2015	Difference	2015	Difference	2015	Difference
Verus	-1.41%	0.16%	3.97%	2.67%		-1.35%		-0.41%		2.32%	]	0.00%	
Beach Point Select (Net)	-1.49%	0.07%	3.89%	2.41%	0.26%	-1.35%	0.00%	-0.66%	0.25%	2.06%	0.08%	0.00%	0.00%
Barclays BA Intermediate HY	-0.84%	1.32%	2.94%	3.43%		0.01%		-3.00%	· · · ·	2.61%		0.00%	
Verus	-1.86%	-0.49%	5.77%	3.29%		-6.30%		-5.87%		-0.55%	]	2.95%	
Brigade Capital	-1.86%	-0.49%	5.77%	3.29%	0.00%	-6.30%	-0.01%	-5.87%	0.00%	-0.56%	0.00%	2.82%	0.13%
Barclays BA Intermediate HY	-0.84%	1.32%	2.94%	3.43%		0.01%		-3.00%		2.61%		2.44%	
Verus	-1.21%	-2.58%	4.03%	0.12%		2.22%		-6.66%		0.12%	1	0.47%	
Franklin Templeton Investments	-1.21%	-2.58%	4.03%	0.12%	0.00%	2.22%	0.00%	-6.66%	0.00%	0.11%	0.01%	0.47%	0.00%
BC Multiverse	0.74%	2.15%	2.89%	5.88%		-0.87%		0.49%		-1.04%		-1.89%	
Verus	0.23%	-0.48%	-0.82%	-1.06%		2.54%		7.68%		-2.39%	1	2.55%	
AQR DELTA XN	0.23%	-0.48%	-0.82%	-1.07%	0.01%	2.54%	0.00%	7.68%	0.00%	-2.39%	0.00%	2.55%	0.00%
Libor + 4%	0.27%	0.35%	0.37%	0.99%		1.09%		1.05%		1.06%		0.95%	
Verus	-1.86%	-0.90%	-0.52%	-3.24%		0.00%		0.00%		0.00%	]	0.00%	
Standard Life GARS	-1.86%	-0.90%	-0.52%	-3.25%	-0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Libor + 4%	0.27%	0.35%	0.37%	0.99%		0.00%		0.00%		0.00%		0.00%	
Verus	-2.54%	0.46%	-0.67%	-2.76%		-7.41%		-15.95%		2.55%	1	0.00%	
SSARIS Multisource Commodity	-2.54%	0.46%	-0.67%	-2.75%	-0.01%	-7.41%	0.00%	-15.95%	0.00%	2.55%	0.00%	0.00%	0.00%
Bloomberg Commodity	-1.68%	-1.63%	3.82%	0.42%		-10.52%		-14.47%		4.66%		0.00%	
S&P Goldman Sachs Commodity	-5.17%	-2.01%	4.93%	-2.49%		-16.63%		-19.30%		8.73%	]	0.00%	
Verus				1.47%		2.44%		2.98%		5.31%	1	3.22%	
INVESCO Real Estate				1.47%	0.00%	2.50%	-0.06%	2.96%	0.02%	5.26%	0.00%	3.28%	-0.06%
NCREIF NFI ODCE Index				2.18%		3.34%		3.68%		3.82%		3.40%	
Verus				-0.19%		0.00%		0.00%		0.00%	1	0.00%	
Invesco US Val IV				-0.19%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
NCREIF CEVA 1Q Lag - NET				2.18%		0.00%		0.00%		0.00%		0.00%	
Verus	-0.03%	0.67%	3.98%	4.65%		-2.87%		-7.67%		-2.66%	1	3.94%	
AQR GRP, 10% Volatility (Net)	-0.03%	0.67%	3.98%	4.65%	0.00%	-2.87%	0.00%	-7.67%	0.00%	-2.67%	0.00%	3.84%	0.10%
60% R3000/ 40% BC Agg	-2.84%	0.26%	4.59%	1.89%		3.54%		-3.89%		-0.59%		1.81%	
60% MSCI World/ 40% BC GlobalAgg	-3.00%	-0.06%	4.40%	1.21%		3.37%		-4.60%			-		
Verus	1.79%	2.11%	4.13%	8.22%		-0.50%		-3.78%		-5.34%	1	6.23%	
PanAgora (Net)	1.79%	2.11%	4.13%	8.23%	-0.01%	-0.50%	0.00%	-3.78%	0.00%	-5.33%	-0.01%	6.14%	0.09%
60% R3000/ 40% BC Agg	-2.84%	0.26%	4.59%	1.89%		3.54%		-3.89%		-0.59%		1.81%	
60% MSCI World/ 40% BC GlobalAgg	-3.00%	-0.06%	4.40%	1.21%		3.37%		-4.60%					



#### 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.

		Medium	Medium	Medium	
As Of	Large Cap	Large Cap	Сар	Small Cap	Small Cap
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 - adjustedmarket 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
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.



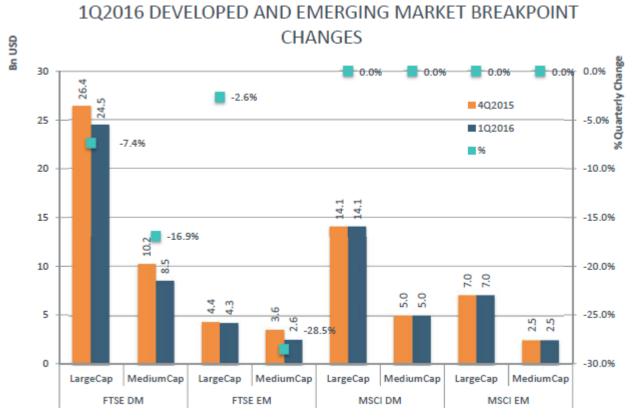
		Medium	Medium	Medium	
As Of	Large Cap	Large Cap	Сар	Small Cap	Small Cap
3/31/2016	83.360	22.414	7.435	2.395	0
12/31/2015	90.075	24.308	8.141	2.936	0
9/30/2015	88.944	23.139	7.993	2.946	0
6/30/2015	92.87	25.07	8.797	3.352	0
3/31/2015	93.082	25.494	8.794	3.384	0
12/31/2014	89.92	25.19	8.51	3.29	0
9/30/2014	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
12/31/2013	77.11	22.27	7.65	3.03	0
9/30/2013	72.4	19.93	7.15	2.71	0

		Medium	Medium	Medium	
As Of	Large Cap	Large Cap	Сар	Small Cap	Small Cap
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

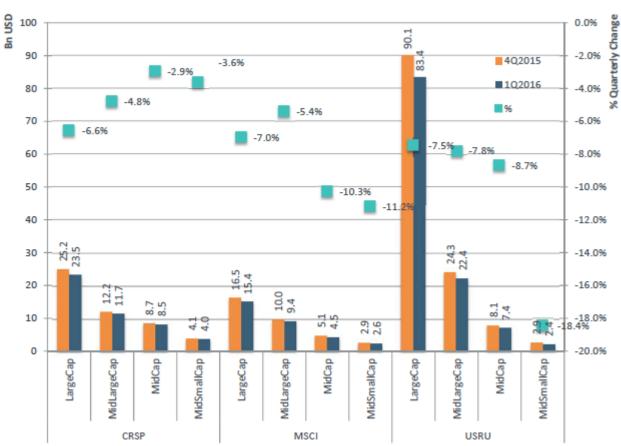


**BREAKPOINT TRENDS** 



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





# 1Q2016 US MARKET BREAKPOINT CHANGES

\*Represents US Market data from MSCI.



#### Glossary

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: Portfolio Return - [Risk-free Rate + Portfolio Beta x (Market Return - 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: Portfolio Excess Return / 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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# Verus<sup>77</sup>