### **ITEM 16**



**Executive Staff** 

Richard Stensrud
Chief Executive Officer

Steve Davis
Chief Investment Officer

Robert L. Gaumer General Counsel

Kathryn T. Regalia Chief Operations Officer

John W. Gobel, Sr. Chief Benefits Officer

For Agenda of: May 11, 2017

May 5, 2017

**TO**: President and Members

**Board of Retirement** 

**FROM**: JR Pearce

**Investment Officer** 

SUBJECT: SCERS' Quarterly Investment Performance Review for the

Period ending March 31, 2017, Presented by Verus

### **Recommendation:**

It is recommended that your Board receive and file the Verus Performance Report for the first quarter of 2017 and consider taking action on any recommendations made therein.

### Introduction:

Each quarter Verus provides a report on investment performance for the most recent quarter, as well as for the trailing calendar year, one-year, three-year, five-year and since inception time periods. Performance is also depicted for the fiscal year-to-date period ('FYTD'). The performance report provides investment return results for the Total Fund ('TF'), each asset class and sub-asset class in SCERS' strategic asset allocation, and for each investment portfolio. In addition, the report includes: (1) A comparison of performance to the appropriate fund, asset class, and individual manager benchmarks; (2) Peer group rankings; (3) Performance attribution; (4) Risk analysis; and (5) Comments and recommendations by Verus to help interpret the results and identify concerns.

Barry Dennis and/or Margaret Jadallah of Verus will present Verus' quarterly performance report. In addition, Staff and Verus will provide qualitative commentary on strategic and tactical considerations related to this report at the Board meeting. The discussion that

SCERS' Quarterly Investment Performance Review for the Period Ending March 31, 2017, Presented by Verus May 5, 2017 Page 2 of 10

follows outlines key sections of this report, and provides a summary of the portfolio performance data.

## Asset Allocation Analysis: Pages 12-13

This section provides visual information on SCERS' historical asset allocation by asset class over time, in addition to its current asset allocation (both with and without overlay) versus the policy target allocation and the median public fund universe asset allocation. Please note SCERS' overlay program is utilized to rebalance asset allocations to the policy targets. It should also be noted that this report is based off of SCERS' prior asset allocation. SCERS approved a new asset allocation during the first quarter of 2017. It is anticipated that the new asset allocation will be included in the second quarter 2017 Verus quarterly performance report, and in Verus reports going forward.

Within the TF performance summary report, two benchmarks are provided at the total fund level. First is the Policy Index, which reflects SCERS' target asset allocation model. Second is an Allocation Index, which reflects SCERS' actual asset allocation as SCERS transitions toward the asset allocation model. The Allocation Index excludes the SSgA Overlay program. Removing the effects of the SSgA Overlay Program from the allocation index provides a better comparison of SCERS' actual allocation performance against the target allocation performance. This is an appropriate approach since the Overlay SCERS uses within the alternative/illiquid asset classes provide less than optimal private market exposures. The Allocation Index will eventually converge to the Policy Index as the implementation of the asset allocation is completed. However, the implementation of both the prior and new asset allocation will take a few more years, especially within the private equity and real assets asset classes.

### Performance Summary and Manager Allocation Analysis: Pages 16-42

The Total Fund ('TF') return for the first quarter, including the impact of the overlay program, was 4.4% gross of fees. All asset class returns and benchmark comparisons discussed in Staff's memo are based on gross of fees, except where noted. The TF return was 0.3% <u>higher</u> than the policy index return of 4.1% and 0.5% <u>higher</u> than the allocation index ex-overlay of 3.9%. The TF return without the impact of the overlay program was 4.3%, which was above the policy index ex-overlay return of 3.9%. Both gross and net of management fees performance are shown within Verus' performance summary report.

On a comparative basis, SCERS' TF return of 4.4% was slightly <u>higher</u> than the Public Funds > \$1 billion median return of 4.3%. Within the InvestorForce Universe, a ranking universe used by Verus, SCERS' TF gross return ranked in the 43rd percentile, while the TF net return ranked in the 50<sup>th</sup> percentile. SCERS' TF gross return including the Overlay was slightly better than SCERS' TF gross return ex-Overlay, so the Overlay Program was a slight contributor to returns, by 10 basis points during the quarter.

SCERS' Quarterly Investment Performance Review for the Period Ending March 31, 2017, Presented by Verus May 5, 2017 Page 3 of 10

For the quarter, most of the major asset classes performed well on an absolute basis, with a majority generating positive returns. Commodities were the only asset classes that generated negative returns. For the quarter, International Equity was the top performing asset class, while Opportunities was the bottom performing asset class. Asset class returns for Domestic Equity, International Equity, Fixed Income, Absolute Return, Private Equity, Real Assets (ex-Overlay) and Opportunities were 5.8%, 8.7%, 2.1%, 1.9%, 2.9%, 2.3% and 0.6%, respectively. Last quarter, Private Equity was the top performing asset class, while International Equity was the bottom performing asset class.

U.S. equities reached record highs as expectations of corporate tax cuts and infrastructure spending would be supportive of corporate profits and growth. The reflation trade dominated the quarter but by late March, confidence began to fade after the defeat of the Trump administration's health care bill. The strong performance of emerging market ("EM") equities supported strong gains in international equities. Currency strength in India, Mexico, and Brazil bolstered EM returns as investors gained confidence in the country's economic prospects and the strength of corporate earnings.

The performance summary section also examines the performance of individual asset classes against their respective policy benchmarks or index. For the quarter, the Verus report recorded SCERS outperformance in the Domestic Equity (slightly), International Equity, Fixed Income, Absolute Return, and Real Assets asset classes. Underperformance occurred in the Private Equity and Opportunities asset classes. Private Equity returned 2.9% versus its benchmark return of 4.5%, and Opportunities returned 0.6% versus its benchmark return of 4.1%.

Please note that the returns of SCERS' private markets investments, including private equity, private real assets and opportunities commingled funds are delayed one-quarter.

## Fiscal Year to Date Returns

For SCERS' fiscal year to date, the TF gross return including the impact of the overlay program is 9.8%. The fiscal year to date TF return without the SSgA Overlay is 9.4%. The fiscal year to date TF return is 1.1% greater the policy index return of 8.7% and 1.4% greater than the allocation index return of 8.4%. On a comparative basis, SCERS' fiscal year to date TF return is 0.6% greater than the Public Funds > \$1 billion median return of 9.2%, and ranks in the 39th percentile in the InvestorForce Universe.

## Long Term Period Returns

The 3-year annualized TF gross return is 5.0%, which is 0.6% <u>less</u> than the policy index return of 5.6% for the same period. The 5-year annualized TF gross return is 7.7%, which is only 0.1% <u>less</u> than the policy index return of 7.8% for the same period. The TF gross since inception return (from June 1986) is 8.3% and 0.3% <u>less</u> than the policy index return of 8.6% for the same period, but above SCERS' actuarial investment return assumption, which has ranged from 8.25% to 7.50% (currently) during the same period.

SCERS' Quarterly Investment Performance Review for the Period Ending March 31, 2017, Presented by Verus May 5, 2017 Page 4 of 10

## Manager Commentary: Pages 14-15

The following discussion summarizes the quarter returns for sub-asset classes and individual investment managers of note, the latter of which are covered in detail in the Verus Executive Performance Summary section. Within SCERS' portfolio, there were varying levels of outperformance and underperformance by SCERS' investment managers.

## **DOMESTIC EQUITY**

The SCERS US Equity portfolio returned 5.8% for the quarter, slightly outperforming the benchmark (Russell 3000) return of 5.7%.

## US Large Cap

SCERS' US large cap equity sub-portfolio returned 6.4%, outperforming the benchmark (Russell 1000) return of 6.0%. More than half of the US large cap portfolio is made up of passive large-cap equity exposure, with active mandates constituting the other half.

All of SCERS' active managers outperformed against their respective benchmarks. JP Morgan (130/30) returned 7.5%, outperforming its benchmark (Russell 1000) return of 6.0%. JP Morgan has been outperforming its benchmark across all long-term reporting periods, with a since inception return of 11.9% versus the benchmark return of 9.9%.

Reversing its poor performance from last quarter, Brown Advisory (US large cap growth) generated a 9.5% return, outperforming its benchmark (Russell 1000 Growth) return of 8.9%. Despite the quarter outperformance, Brown Advisory has significantly underperformed long-term, with a since inception return of 10.3% versus the benchmark return of 13.8%. Eagle Capital Management (US large cap core) returned 7.0%, outperforming its benchmark (Russell 1000) of 6.0%. Huber Capital Management (US large cap value) returned 5.0%, outperforming its benchmark (Russell 1000 Value) return of 3.3%. Despite Huber's' quarter outperformance, it has significantly underperformed long-term, with a since inception return of 11.1% versus the benchmark return of 13.6%.

SCERS' US Large Cap active managers run concentrated and high active share portfolios. Accordingly, individual stock selection may have a greater impact on portfolio performance. These active mandates, combined with SCERS' significant large cap passive allocation, create a barbell structure within SCERS' large cap equity portfolio, and since the implementation of this structure in 2012, the results have been mixed. Eagle, which is the largest of the three allocations, has generally meaningfully outperformed its benchmark across longer reporting periods, with a since inception return of 15.1% versus the benchmark return of 13.7%. Huber Capital is currently on SCERS' Watch List due to its underperformance. Brown Advisory, which is also on SCERS' Watch List, has significantly underperformed across all reporting periods. Overall, the barbell structure has

SCERS' Quarterly Investment Performance Review for the Period Ending March 31, 2017, Presented by Verus May 5, 2017 Page 5 of 10

generated returns slightly in-line with the Russell Index benchmark since it was implemented.

## **US Small Cap**

SCERS' US Small Cap sub-portfolio returned 4.0% for the quarter, outperforming against the benchmark (Russell 2000) return of 2.5%. All of SCERS' small cap managers outperformed against their respective benchmarks, except CenterSquare, which slightly underperformed. UBS Global Asset Management (US small cap growth) and Weatherbie (US small cap growth), returned 6.6% and 9.2%, respectively, compared to the benchmark (Russell 2000 Growth) return of 5.3%. DGHM (US small cap value) and Wedge Capital (US small cap value), returned 0.1% and 0.9%, respectively, compared to the benchmark (Russell 2000 Value) return of -0.1%.

## **US REIT**

SCERS' domestic REIT manager CenterSquare returned 1.1% for the quarter, which slightly underperformed against the NAREIT Equity REIT Index return of 1.2%. Despite the quarter underperformance, CenterSquare has exceeded its benchmark across all long-term reporting periods, with a since inception return of 9.2% versus the index return of 6.8%.

## INTERNATIONAL EQUITY

For the quarter, SCERS' total International Equity portfolio returned 8.7% exceeding the benchmark (MSCI ACWI ex-US) return of 8.0%. The performance of SCERS' international equity managers was mixed. The outperformance was achieved by the developed small cap managers, Mondrian (developed small cap value) and William Blair (developed small cap growth), while the developed large cap managers, Lazard (ACWI ex-US) and LSV (international large-cap developed value) underperformed. Outperformance was also achieved by the majority of the emerging market managers, which contributed to the overall outperformance of SCERS' International Equity portfolio.

### International Large Cap

SCERS' international developed sub-portfolio returned 7.7% for the quarter, outperforming the benchmark (MSCI EAFE) return of 7.4%, primarily due to the outperformance of the international developed small cap managers.

Lazard returned 6.3%, underperforming against its benchmark (MSCI ACWI ex-US Gross) return of 8.0%. Lazard's underperformance was due to its sector allocation with a larger allocation to energy stocks. Despite the quarter underperformance, Lazard has significantly outperformed the benchmark since inception, returning 9.0% versus the index return of 6.8%. LSV returned 6.8%, underperforming against its benchmark (MSCI World

SCERS' Quarterly Investment Performance Review for the Period Ending March 31, 2017, Presented by Verus May 5, 2017 Page 6 of 10

ex-US) return of 7.0%. Despite the quarter underperformance, LSV has outperformed the benchmark since inception, returning 4.5% versus the index return of 4.1%.

SCERS recently hired Walter Scott International (international developed large cap growth) to replace Baring Asset Management, which was terminated in 2014. A transition from SCERS' total return swap on the MSCI World ex-US Index into Walter Scott occurred during the quarter, and Walter Scott's performance will be added next quarter.

## International Small Cap

For the quarter, both of SCERS' international developed small cap managers meaningfully outperformed against their benchmark (MSCI World ex-US Small Cap). Mondrian (developed small cap value) and William Blair (developed small cap growth) returned 9.8% and 8.1%, respectively, compared to the benchmark return of 7.7%.

## **Emerging Markets**

SCERS' Emerging Markets ('EM') Equity sub-portfolio returned a strong 13.3% for the quarter, meaningfully outperforming the benchmark (MSCI Emerging Markets) return of 11.5%. The performance among SCERS' emerging markets managers was mixed, with the small cap managers, Mondrian (EM small cap value) and William Blair (EM small cap growth), underperforming, although the returns were strong on an absolute basis.

Baillie Gifford (EM All Cap) returned 16.4% for the quarter, significantly outperforming, while Mondrian (EM All Cap) returned 11.3%, slightly underperforming the benchmark return of 11.5%. These two managers can often have diverging returns, which is a reason they are included in SCERS' EM manager structure. Baillie's concentrated strategy will tend to have over/underweight to sectors leading to quarter-to-quarter return divergence from the benchmark.

For the quarter, both of SCERS' EM Small Cap managers underperformed against the benchmark (MSCI EM Small Cap). Mondrian (EM small cap) and William Blair (EM small cap) returned 8.1% and 12.8%, respectively, compared to the benchmark return of 13.1%.

## International REIT

SCERS' International REIT manager, CBRE Clarion, returned 4.5%, underperforming the benchmark FTSE EPRA NAREIT Global ex-US return of 4.9%. Despite the quarter underperformance, CBRE Clarion has outperformed the benchmark since inception return of 11.0% versus the index return of 9.6%.

### FIXED INCOME

SCERS' Fixed Income portfolio returned 2.1%, outperforming SCERS' custom benchmark return of 1.2%. For the quarter, Neuberger Berman (enhanced index) returned 0.8%, in

SCERS' Quarterly Investment Performance Review for the Period Ending March 31, 2017, Presented by Verus May 5, 2017 Page 7 of 10

line with the benchmark return (Bloomberg Barclay's US Aggregate) of 0.8%, while Prudential (core plus fixed income) and TCW (core plus fixed income) returned 2.2% and 0.9% respectively, both outperforming the benchmark return of 0.8%.

SCERS' global opportunistic fixed income mandate managed by Brandywine Global Investment Management, returned 5.3%, meaningfully outperforming its custom benchmark (80% Citi WGBI / 20% JPM GBI EM) return of 2.5%. SCERS' strategic credit mandate, managed by Brigade Capital Management returned 3.4%, outperforming against its custom benchmark (50% MLHY Mast II / 50% CS Lev Loans) return of 2.0%.

## **ABSOLUTE RETURN**

SCERS' Absolute Return portfolio returned 1.9% for the quarter; outperforming the benchmark (91-day T-Bill + 5%) return of 1.4%, but underperforming the HFRI Fund of Funds Composite benchmark return of 2.4%. Among SCERS' direct absolute return investments, outperformance occurred in Elliott Associates (3.0%), JANA Partners (5.2%), Lakewood Capital (2.7%), OZ Domestic Partners II (4.4%), and Third Point Offshore (5.9%). Underperformance occurred in Brevan Howard (-2.4%), Laurion Capital (-2.5%), and Winton Diversified Futures (0.9%). As you will recall, SCERS fully redeemed from Claren Road, which returned 1.5% during the quarter, and is receiving proceeds over multiple quarters.

SCERS' diversified absolute return separate account managed by Grosvenor (SCARF) returned 2.5% for the quarter, outperforming the benchmark (91-day T-Bill + 5%) return of 1.4%. Grosvenor (SCARF B), SCERS' interim hedge fund account, returned 1.5%, slightly outperforming the benchmark return of 1.4%.

## **PRIVATE EQUITY**

As you will recall, SCERS' Private Equity portfolio is in the earlier phase/cycle of investments (the J-curve effect) in comparison to the more seasoned benchmark, so returns are below the public market benchmark (Russell 1000 + 3%) overall long-term reporting periods. In addition, the private equity returns listed in the Verus report are time-weighted returns ('TWR'), which is necessary to calculate SCERS' total fund return. Private equity returns are typically reported as an internal rate of return ('IRR'), which accounts for the timing of cash flows. As you will recall, Cliffwater uses an IRR calculation in its quarterly reports for private equity and private real assets. SCERS' three Fund of Fund managers are deeper in the cycle of distributing capital, while SCERS' direct private equity funds in aggregate are still investing capital.

On a TWR basis, SCERS' Private Equity portfolio returned 2.4% for the quarter, underperforming against the benchmark (Russell 1000 + 3.0%) return of 4.5%. The benchmark is a public market index, which does not appropriately measure the performance of an illiquid private asset class. SCERS recently approved the Cambridge Associates private market universe as the policy index recently, which will serve as the

SCERS' Quarterly Investment Performance Review for the Period Ending March 31, 2017, Presented by Verus May 5, 2017 Page 8 of 10

policy index for Private Equity going forward. The Russell 3000 + 3% will still serve as the long-term index for the asset class. During the quarter, SCERS made a \$35 million commitment to New Enterprise Associates 16, LP.

## **REAL ASSETS**

For the quarter, SCERS' total Real Assets portfolio excluding the SSgA Overlay returned 2.6%, outperforming the benchmark (CPI-U Headline Inflation + 5%) return of 1.5%. The Real Assets outperformance was the result of the significant outperformance of the private real assets sub-portfolio due to outsized returns achieved by the energy infrastructure investments. The Real Assets portfolio including the SSgA Overlay returned 2.3% during the quarter.

## Core Real Estate Separate Account

SCERS' core real estate separate account sub-portfolio returned 2.1% for the quarter, outperforming the benchmark (NFI-ODCE) return of 1.8%. The separate account managers, BlackRock and Barings/Cornerstone, returned an unleveraged 2.1% and 1.4%, respectively.

## Core Real Estate Commingled Funds

SCERS' limited partnership core real estate sub-portfolio returned 0.8% for the quarter, underperforming the benchmark (NFI-ODCE) return of 1.8%. The funds that outperformed include Jamestown Premier Property Fund (1.9%), MetLife Core Property Fund (1.9%), Prime Property Fund (2.2%), Principal US Property (1.9%) and Prologis Targeted US Logistics (5.1%). Underperformers included Prologis Targeted Europe Logistics Fund (0.7%), and Townsend Real Estate Fund (0.0%). SCERS did not make any core real estate commitments or investments during the quarter.

### **Private Real Assets**

SCERS' Private Real Assets sub-portfolio returned a strong 8.4%, significantly outperforming against the benchmark (CPI-U Headline Inflation +5.0%) return of 1.5%. Similar to the Private Equity portfolio, the private real assets portfolio is in the earlier investing phase/cycle (the J-curve effect) compared to the more seasoned benchmark. In addition, the private real assets returns listed in the Verus report are time-weighted returns ('TWR'), which is necessary to calculate SCERS' total fund return. Private real assets returns are typically reported as an internal rate of return ('IRR'), which accounts for the timing of cash flows. As mentioned, Cliffwater uses IRR in its quarterly reports for private equity and private real assets. The energy infrastructure investments were notable outperformers including EnCap IX (24.5%), EnCap X (30.8%), EnCap Flatrock Midstream III (6.5%), First Reserve (14.9%), and Quantum Energy VI (10.6%).

SCERS' Quarterly Investment Performance Review for the Period Ending March 31, 2017, Presented by Verus May 5, 2017
Page 9 of 10

## SSGA Real Assets Proxy

The SSGA Real Assets Strategy, which serves as the overlay proxy for the Real Assets asset class, returned 1.7% for the quarter, which slightly outperformed against the benchmark (CPI-U Headline + 5%) return of 1.5%. You will recall that the SSGA Real Assets Strategy includes publicly traded exposures to global REITs, TIPS (Treasury Inflation Protected Securities), commodities, natural resource stocks, global listed infrastructure and midstream energy companies.

## Commodities

For the quarter, SCERS' Commodities sub-portfolio returned -2.3%, equaling the benchmark (Bloomberg Commodity Index) return of -2.3%. Blackstone returned -2.5%, and Gresham returned -1.9%. Both of the managers have produced negative returns across the long-term reporting periods. Despite the negative returns, Blackstone has outperformed the benchmark with a since inception return of -4.4% versus the index return of -9.7%. The commodities sector has and will continue to be heavily influenced by the volatility in commodities prices, particularly those of oil and gas.

### **OPPORTUNITIES**

For the quarter, SCERS' Opportunities portfolio returned 0.6%, meaningfully underperforming SCERS' policy index return of 4.1%. SCERS' opportunistic credit sub-portfolio returned -12.9%, due to the underperformance of DRC European Real Estate Debt Fund II, which returned -21.0% versus its benchmark (NFI-ODCE) return of 1.8%. DRC's significant underperformance is a result of the negative currency effect of the British pound.

SCERS' opportunistic real estate sub-portfolio returned a strong 5.2% net, meaningfully outperforming the benchmark (1 Qtr lag, NFI-ODCE net + 1%) return of 1.8%. The quarter outperformers in SCERS' real estate opportunistic sub-portfolio include KKR Real Estate Partners America (12.2%), NREP Nordic Strategies (2.8%), NREP Nordic Strategies II (3.2%), and Och-Ziff Real Estate (4.2%).

Also outperforming was the value-added real estate sub-portfolio, returning 4.0% versus the index (1 Qtr lag, NFI-ODCE net + 1%) return of 2.1%%. During the quarter, SCERS did not make any additional opportunities commitments.

SCERS' Quarterly Investment Performance Review for the Period Ending March 31, 2017, Presented by Verus May 5, 2017 Page 10 of 10

We hope you find this information helpful. Staff will be happy to answer your questions.

Respectfully submitted, Concur:

JR Pearce Investment Officer Richard Stensrud Chief Executive Officer

Steve Davis Chief Investment Officer

Attachment







PERIOD ENDING: MARCH 31, 2017
Investment Performance Review for

**Sacramento County Employees' Retirement System** 

## Table of Contents



**VERUSINVESTMENTS.COM** 

SEATTLE 206-622-3700 LOS ANGELES 310-297-1777 SAN FRANCISCO 415-362-3484

Market Environment	ТАВ І
Total Fund	TAB II
Policy Index and Benchmark History	TAB III

# 1st quarter summary

#### THE ECONOMIC CLIMATE

- Developed economies continued to experience steady, moderate expansion with fourth quarter real GDP growth in the U.S., the Eurozone, and Japan all between 1.5-2.0%. The base effect of lower oil prices led to higher year-over-year headline inflation in many countries.
- During the first quarter, the global economy exhibited a coordinated pick up in economic activity.
   Data generally exceeded expectations, especially in the U.S. and the Eurozone.

#### MARKET PORTFOLIO IMPACTS

- The U.S. Treasury curve flattened in the first quarter. Short-term rates were driven higher by the Fed, while the long end of the curve remained unchanged. Even with Fed tightening, the U.S. may not be in a typical rising rate environment.
- A better outlook for commodity performance, as well as a flattening of the futures curve in some markets increases the attractiveness of commodities as an inflation hedge.

#### THE INVESTMENT CLIMATE

- While central banks are still accommodative outside of the U.S., most appear to be in later stages of the easing cycle. Developed central banks appear to be broadly entering a period of policy normalization.
- The market is expecting better earnings growth in U.S. equities. According to FactSet, the estimated Q1 earnings growth for the S&P 500 is 9.2% from the previous year. Higher earnings growth may help justify above average valuations.

#### **ASSET ALLOCATION ISSUES**

- Stabilizing currencies and commodity prices, as well as higher growth outlooks, may benefit emerging market equities.
- With U.S. Treasury yields still at historic lows and the expectation of additional tightening from the Fed, investors may not be adequately compensated for taking duration risk in the current environment.

We continue to be neutral towards risk



## U.S. economics summary

- U.S. real GDP grew 2.0% YoY in Q4, up from 1.7% in Q3.
   Moderate increases in consumer spending continued to be the main driver of the economy.
- Inflation moved higher as headline CPI increased 2.8% YoY in February. Core inflation, however, increased only modestly to 2.2%. Most of the rise was caused by the low base effect from falling oil prices last year.
- The Fed continued tighter monetary policy by raising the target federal funds rate 25 bps to 0.75-1.00% at its March meeting. The FOMC dot plot indicates two more rate hikes in 2017, while the market has only priced in one more increase.
- The March Fed meeting minutes revealed that the central bank

- may begin shrinking its balance sheet as early as December, representing a form of monetary tightening. It remains unclear whether the Fed will stop rolling over maturing securities or actively sell in the open market.
- On average, 178,000 jobs were added each month during Q1, and unemployment fell 0.2% to 4.5%. Data continued to indicate a tighter labor market, though wage growth is lackluster. Real hourly earnings fell 0.1% in February from the prior year.
- Soft data (consumer & business sentiment) improved markedly following the U.S. presidential election. We are continuing to monitor the degree to which soft data flows through to actual spending and investment patterns. At this point evidence still is lacking.

	Most Recent	12 Months Prior
GDP (annual YoY)	2.0% 12/31/16	1.9% 12/31/15
Inflation (CPI YoY, Headline)	2.8% 2/28/17	1.0% 2/29/16
Expected Inflation (5yr-5yr forward)	<b>2.2%</b> 3/31/17	1.8% 3/31/16
Fed Funds Rate	0.75% 3/31/17	0.25% 3/31/16
10 Year Rate	2.4% 3/31/17	1.8% 3/31/16
U-3 Unemployment	<b>4.5%</b> 3/31/17	5.0% 3/31/16
U-6 Unemployment	8.9% 3/31/17	9.8% 3/31/16



# International economics summary

- Developed countries once again experienced moderate positive growth in the fourth quarter, in line with the trend of recent years.
   Real GDP in the U.S., Europe, and Japan grew between 1.5-2.0%.
- The low base effect of the drop in energy prices that occurred in Q1 2016 helped boost inflation across the globe. With energy prices stabilizing over recent months, it is possible the jump in inflation is only transitory.
- Developed world unemployment rates declined over the quarter. In the Euro Area, the unemployment rate fell to a nearly eight year low of 9.5%, although this is still well above its pre-crisis level of 7.3%.
- The economic recovery in Europe has also picked up in terms of higher growth and inflation. Much of this recovery can be attributed to the core countries, rather than

- the periphery. However, significant tail risks remain including the French election, ECB tapering, and Brexit negotiations.
- On March 29<sup>th</sup>, the British Prime Minister, Theresa May, filed the official papers to withdraw the U.K. from the European Union. Article 50 of the Treaty of Lisbon outlines a two year timeframe for negotiations to take place.
- As many expected, Emmanuel
   Macron and Marine Le Pen were
   the top two vote getters in the first
   round of the French election.
   Macron and Le Pen will have a
   runoff vote on May 7<sup>th</sup>, where
   Macron is heavily favored,
   according to the most recent polls.
   Equity markets reacted positively
   to the results and the euro
   strengthened.

Area	GDP (Real, YoY)	Inflation (CPI, YoY)	Unemployment
United States	2.0% 12/31/16	2.7% 2/28/17	<b>4.5</b> % <i>3/31/17</i>
Western Europe	1.8% 12/31/16	1.5% 3/31/17	8.6% 12/31/16
Japan	1.6% 12/31/16	0.3% 2/28/17	2.8% 2/28/17
BRIC Nations	<b>5.2</b> % <i>12/31/16</i>	3.1% 12/31/16	5.5% 12/31/16
Brazil	(2.5%) 12/31/16	4.6% 3/31/17	12.9% 3/31/17
Russia	0.3% 12/31/16	4.3% 3/31/17	<b>5.4%</b> 12/31/16
India	7.0% 12/31/16	3.7% 2/28/17	7.1% 12/31/15
China	6.8% 12/31/16	0.8% 2/28/17	<b>4.0%</b> 12/30/16



# Equity environment

- The U.S. economic environment has shifted in a materially more positive direction, post-election. This move was reflected in an upward adjustment to equity prices. We are relatively bullish on U.S. earnings growth in the near term, but remain concerned that investors are paying for this excess growth upfront through higher valuations. We maintain a neutral weight to U.S. equities.
- According to FactSet, the
   estimated Q1 2017 earnings
   growth rate of the S&P 500 was
   9.2% YoY. The estimate was
   revised downward from 12.5%
   on December 31st due to
   negative EPS guidance in the
   Materials and Consumer
   Discretionary sectors.
- Growth equities outperformed value equities in Q1. The Russell

- 1000 Growth Index and Russell 1000 Value Index returned 8.9% and 3.3%, respectively.
- The U.S. dollar fell 3.6% in Q1 on a trade-weighted basis, which has affected the returns of portfolios with unhedged currency exposure.
- As discussed recently in our Sound Thinking research piece, investors should be mindful of their biases in portfolio construction. One particularly prevalent bias is the tendency for investors to hold greater exposure to the markets where they reside (home country bias). As with any portfolio tilt, investors should understand why they hold it, have a solid basis for the exposure, and understand the tracking error the position introduces to the portfolio.

	QTD TOTAL	. RETURN	YTD TOTAL	. RETURN	1 YEAR RETU			
	(unhedged)	(hedged)	(unhedged)	(hedged)	(unhedged)	(hedged)		
US Large Cap (Russell 1000)	6.0	%	6.0	%	17.4%			
US Small Cap (Russell 2000)	2.5	%	2.5	%	26.2	2%		
US Large Value (Russell 1000 Value)	3.3	%	3.3	%	19.2%			
US Large Growth (Russell 1000 Growth)	8.9	%	8.9	%	15.8%			
International Large (MSCI EAFE)	7.2%	5.0%	7.2%	5.0%	11.7%	18.9%		
Eurozone (Euro Stoxx 50)	8.3%	7.2%	8.3%	7.2%	12.9%	21.7%		
U.K. (FTSE 100)	4.9%	3.8%	4.9%	3.8%	7.3%	23.3%		
Japan (NIKKEI 225)	4.3%	0.1%	4.3%	0.1%	15.8%	14.7%		
Emerging Markets (MSCI Emerging Markets)	11.4%	7.3%	11.4%	7.3%	17.2%	12.5%		

Source: Russell Investments, MSCI, STOXX, FTSE, Nikkei, as of 3/31/17



## Domestic equity

The U.S. economic environment has shifted in a materially more positive direction, post-election, as reflected by rising in equity prices. We are relatively bullish on U.S. earnings growth in the near term but remain concerned that investors are paying for this excess growth upfront through higher valuations. We maintain a neutral weight to U.S. equities.

Higher equity prices and earnings expectations have been influenced by corporate tax cuts and deregulation

proposed by the new administration. There have been no further details released on timing of tax cuts, and lofty expectations may leave room for disappointment.

According to FactSet, Q1 2017 S&P 500 earnings are expected to grow 9.2% YoY. The estimate was revised downward from 12.5% on December 31<sup>st</sup> due to negative EPS guidance in the Materials and Consumer Discretionary sectors.

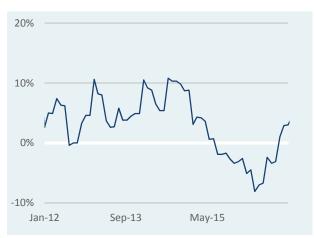
Investors
may be
paying for
higher
earnings
growth
through
elevated
valuations

### **U.S. EQUITIES**



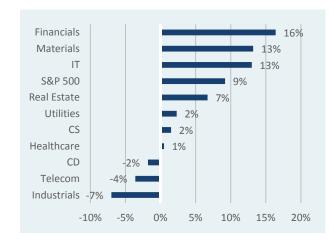
Source: Russell Investments, as of 4/3/17

#### **S&P 500 EPS GROWTH**



Source: Bloomberg, as of 12/31/16

#### Q1 FORECAST EPS GROWTH



Source: FactSet, as of 4/14/17



## Domestic equity size and style

Growth equities outperformed value equities during the quarter. The Russell 1000 Growth Index and Russell 1000 Value Index returned 8.9% and 3.3%, respectively. Financial sector performance had a significant effect on the value premium, affected by uncertainty around the direction of interest rates and deregulation proposals.

U.S. large cap equities outperformed small cap during the quarter, though small caps have delivered strong year-over-year outperformance. Small cap equity valuations remain considerably elevated relative to large cap equities which will likely act as a headwind to future performance. However, if President Trump's deregulation proposals are seen through, this should benefit smaller American companies. Further U.S. dollar appreciation would also benefit smaller companies on a relative basis due to less international currency exposure.

### SMALL CAP VS LARGE CAP (YOY)



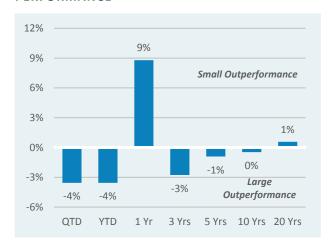
Source: Russell Investments, as of 3/31/17

## **VALUE VS GROWTH (YOY)**



Source: Russell Investments, as of 3/31/17

U.S. LARGE VS. SMALL RELATIVE PERFORMANCE



Source: Morningstar, as of 3/31/17



## International equity

International equity markets outperformed domestic equities over the quarter. The MSCI ACWI ex U.S. returned 7.9% on an unhedged basis while the S&P 500 returned 6.1%.

International and emerging markets continue to trade at lower valuation levels than domestic markets, based on a variety of metrics. Despite our positive outlook for earnings growth in the U.S., the upside for domestic equities appears limited due to the optimism already baked into the price. International markets likely possess greater upside potential through either valuation

expansion or earnings growth surprise, simply due to current valuation levels. However, tail risks are also apparent in these markets. We believe a neutral weight is appropriate.

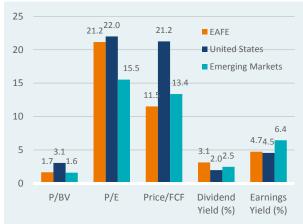
The U.S. dollar fell 3.6% in Q1 on a trade-weighted basis, and continued to contribute volatility to portfolios with unhedged currency exposure. Emerging market currencies exhibited further recovery during the quarter (MSCI EM 11.4% unhedged return vs. 7.3% hedged return) while the yen appreciated (4.3% NIKKEI 225 unhedged return vs. 0.1% hedged).

### **GLOBAL EQUITY PERFORMANCE**



Source: Bloomberg, as of 3/31/17

### **VALUATIONS**



Source: Bloomberg, MSCI, as of 3/31/17 - 3 month average

### **EFFECT OF CURRENCY (1 YEAR ROLLING)**



Source: MSCI, as of 3/31/17



## Emerging market equity

Emerging market equities extended their positive run in the first quarter, as the unhedged MSCI Emerging Markets index returned 11.4% (7.3% hedged). Performance was bolstered by strong global growth and stable commodity prices which have correlated highly with emerging market equities in the past. Steady demand from developed markets encouraged manufacturing in emerging economies as seen by increases in aggregate purchasing managers' indices (PMI).

Valuations increased moderately over the past three years but remain at attractive levels relative to EAFE and U.S equities. Earnings growth estimates were highest in the Technology and Financial sectors, concentrated mainly in Korea and China.

Fundamentals are improving in emerging economies

Positive long-term growth expectations are not without potential disruptions. We remain particularly watchful of U.S. trade policies and upcoming elections in France, Germany, and Turkey.

#### 12-MONTH ROLLING PERFORMANCE



### **COMMODITY PRICES & EM PERFORMANCE**



Source: Bloomberg, as of 3/31/17

### FORWARD P/E RATIOS



Source: Bloomberg as of 3/31/17



Source: MPI, as of 3/31/17

## Interest rate environment

- U.S. Treasuries have an attractive yield relative to other developed sovereign bonds, but remain historically expensive.
- Despite broad agreement that the U.S. has entered an environment of rising interest rates, the broad yield curve rose very little over the past year. However, the short end of the curve has increased in line with Federal Reserve rate rises. Inflation has historically had a significant impact on the yield curve, which indicates investors should keep an eye on inflation trends.
- In March, the Federal Reserve announced a change to the federal funds target rate from 0.50-0.75% to 0.75-1.00%. The move resulted in the U.S. Treasury curve flattening

- moderately as short-term interest rates increased and long-term rates remained materially unchanged. The Fed has indicated two additional rate hikes are expected to occur this year.
- Developed sovereign yields are expected to rise only modestly over the next year, with very little movement expected in longer dated bonds. Central banks of most developed economies are nearing the end of the monetary easing cycle or have begun to pull back, as in the case of the U.S. Federal Reserve.
- Many emerging market governments continue with monetary easing, suggesting these economies may be in an earlier stage of the economic cycle.

Area	Short Term (3M)	10 Year
United States	0.75%	2.39%
Germany	(0.92%)	0.33%
France	(0.57%)	0.97%
Spain	(0.39%)	1.65%
Italy	(0.34%)	2.31%
Greece	2.39%	6.90%
U.K.	0.13%	1.14%
Japan	(0.20%)	0.07%
Australia	1.59%	2.70%
China	2.93%	3.28%
Brazil	10.91%	10.06%
Russia	9.50%	7.87%

Source: Bloomberg, as of 3/31/17

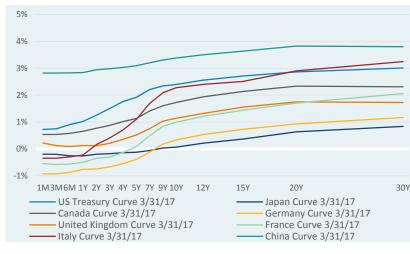


## Yield environment

### **U.S. YIELD CURVE**

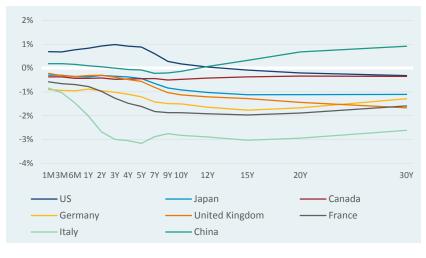


#### **GLOBAL GOVERNMENT YIELD CURVES**



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

### YIELD CURVE CHANGES OVER LAST FIVE YEARS



#### IMPLIED CHANGES OVER NEXT YEAR



Source: Bloomberg, as of 3/31/17



## Currency

In the first quarter, the U.S. dollar reversed part of its gains following the presidential election in November. On a trade weighted basis, the dollar was down 3.6% against a basket of major currencies. Currency movement has been an important influence in unhedged foreign asset exposure. Over the past year, U.S. dollar strength has eroded positive equity returns in developed markets, while dollar weakness against emerging markets has added to returns.

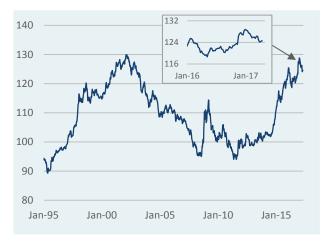
Emerging market currencies rallied in the first quarter following a sharp decline to end last year. The JPM Emerging Market Currency Index was up 2.5%.

While long-term movements in the U.S. are often driven by broad mean reversion to fair value based on purchasing power parity, shorter term moves are still likely to be heavily influenced by developments in foreign trade policy, where much uncertainty remains.

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



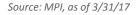
#### LONG-TERM TRADE WEIGHTED DOLLAR



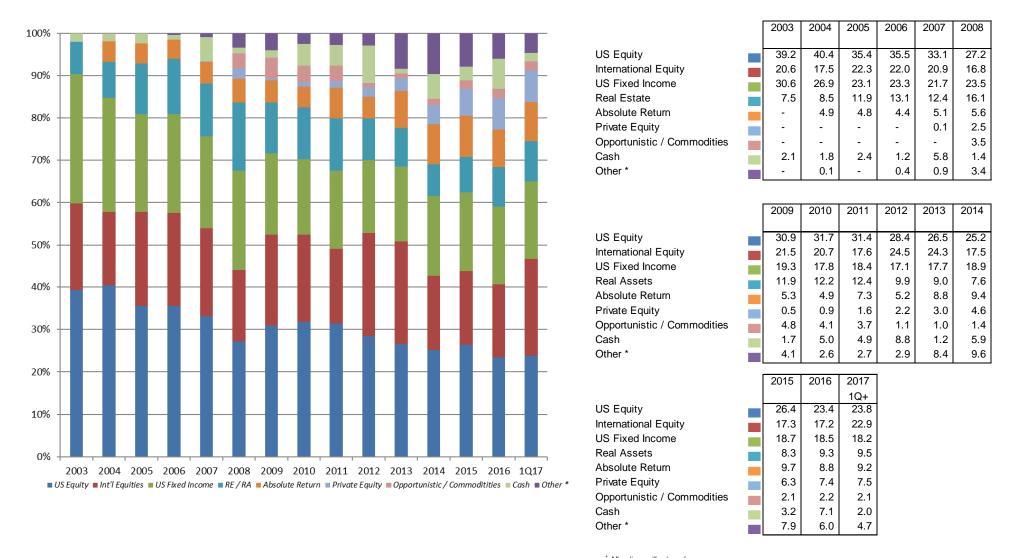
### JPM EM CURRENCY INDEX



Source: FRED, as of 4/7/17 Source: Bloomberg, as of 3/31/17



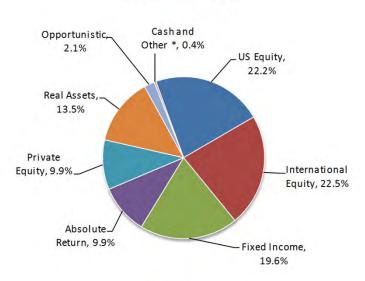




<sup>\*</sup> Allocations without overlay.

 $<sup>^{\</sup>star}$  Other includes SSgA Overlay, SSgA Real Assets and closing accounts.

## **Current w/Overlay**



### **Target** Cash and Other \* **US Equity** 0.0% Opportunistic\_ 22.5% 0.0% Real Assets\_ 15.0% Private Equity. 10.0% International Equity 22.5% Absolute Return 10.0% Fixed Income 20.0%

	MARKET VALUE		
ASSET ALLOCATION	W/OVERLAY	W/OVERLAY	W/O OVERLAY
US Equity	1,854,527,942	22.2%	23.8%
International Equity	1,878,612,835	22.5%	22.9%
Fixed Income	1,642,131,726	19.6%	18.2%
Absolute Return	829,104,184	9.9%	9.2%
Private Equity	827,431,889	9.9%	7.5%
Real Assets	1,124,971,870	13.5%	9.5%
Opportunistic	174,402,562	2.1%	2.1%
Cash and Other *	29,872,320	0.4%	6.7%
TOTAL	8,361,055,329	100.0%	100.0%

ASSET ALLOCATION	ACTUAL	TARGET	DIFF
US Equity	22.2%	22.5%	-0.3%
International Equity	22.5%	22.5%	0.0%
Fixed Income	19.6%	20.0%	-0.4%
Absolute Return	9.9%	10.0%	-0.1%
Private Equity	9.9%	10.0%	-0.1%
Real Assets	13.5%	15.0%	-1.5%
Opportunistic	2.1%	0.0%	2.1%
Cash and Other *	0.4%	0.0%	0.4%

ASSET ALLOCATION	TARGET	MEDIAN	DIFF
US Equity	22.5%	28%	-5.5%
International Equity	22.5%	18%	4.5%
Fixed Income	20.0%	27%	-7.0%
Absolute Return	10.0%	7%	3.0%
Private Equity	10.0%	8%	2.0%
Real Assets	15.0%	8%	7.0%
Opportunistic	0.0%	0%	0.0%
Cash and Other *	0.0%	4%	-4.0%

<sup>\*</sup> Other includes closing accounts (Heitman), SSgA Overlay of \$67 million and SSgA Real Asset of \$328 million, which serve as overlay proxy for Real Assets.

- The Total Plan returned 4.3% net in the first quarter of 2017 and ranked in the 50<sup>th</sup> percentile among other public funds greater than \$1 billion (4.3 % median). The fund exceeded its policy index (4.1%) during this time period. The Total Plan w/o Overlay net returned 4.1% for the quarter. Longer term, the three and five-year returns of 4.7% and 7.4% net ranked below median among large public plans (5.5% and 7.8%, respectively).
- First quarter results (net) were enhanced by the following factors:
  - 1. Baillie Gifford Emerging All Cap returned 16.4%, ranked in the top decile of its peers and topped its index by 4.9%. Outperformance came from the information technology and consumer discretionary sectors, mainly from their China exposure.
  - 2. Weatherbie (9.1%) outperformed the Russell 2000 Growth index (5.3%). Diversified business services, health care, and information technology sectors all contributed to performance. The top contributing position for the quarter was in pharmaceuticals.
  - 3. Brandywine topped their custom index (5.2% vs 2.5%) for a second quarter. Gains were split between currencies and bonds, but the top contributing investment was in Mexican sovereign bonds.
  - Eagle Capital gained 6.5% beating the Russell 1000 Value (3.3%) and ranking in the top decile of its peers. Outperformance came 4. from the energy and consumer discretionary sectors.

- First quarter results (net) were hindered by the following factors:
  - Mondrian Emerging Small Cap underperformed the benchmark (7.4% vs 13.1%) and ranked in the bottom of its peers. 1. Underperformance was predominantly from Asia, where the Fund's defensive holdings underperformed the rising local markets. This was particularly notable in India and Taiwan.
  - 2. Lazard gained 6.2%, trailing the MSCI ACWI ex US (8.0%.) The fund was hurt due to its preference for energy over mining stocks, and from not owning Unilever.

													Incep	tion
	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Return (%)	Since+
Total Fund- Gross*	8,361,055,329	100.0	4.4	43	9.8	39	11.9	42	5.0	67	7.7	58	8.3	Jun-86
Total Fund- Net			4.3	50	9.6	43	11.6	53	4.7	83	7.4	66	8.1	
Policy Index <sup>1</sup>			4.1	68	8.7	73	10.6	79	5.6	50	7.8	53	8.6	Jun-86
InvestorForce Public DB > \$1B Gross Median			4.3		9.2	_	11.6		5.5	_	7.8		8.2	Jun-86
Total Fund ex Overlay- Gross **	7,966,306,565	95.3	4.3	51	9.4	48	11.2	62	5.2	61	7.6	62	8.2	Jun-86
Total Fund ex Overlay- Net			4.1	67	9.1	54	10.8	71	4.9	77	7.3	66	8.0	
Policy Index <sup>1</sup>			4.1	68	8.7	73	10.6	79	5.6	50	7.8	53	8.6	Jun-86
Allocation ex Overlay Index			3.9	84	8.4	81	10.3	83	5.1	63	7.1	70		Jun-86
US Equity- Gross	1,991,766,237	23.8	5.8	43	15.5	47	18.5	42	9.3	48	12.9	47	10.0	Jun-86
US Equity- Net			5.6	53	15.2	56	18.0	58	8.9	60	12.6	62	9.8	
Russell 3000 <sup>1</sup>			5.7	45	15.0	62	18.1	56	9.8	27	13.2	32	10.1	Jun-86
InvestorForce All DB US Eq Gross Median			5.6		15.3		18.2	_	9.2		12.8		10.2	Jun-86
Large Cap- Gross	1,579,246,153	18.9	6.4		15.8		18.3		9.5		13.1		5.7	Mar-98
Large Cap- Net			6.3		15.6		17.9		9.3		12.9		5.6	
Russell 1000			6.0		14.5		17.4		10.0		13.3		6.3	Mar-98
Large Cap - Index- Gross	1,040,567,744	12.4	6.0		14.5		17.4		10.0		13.2		11.2	Sep-08
Large Cap - Index- Net			6.0		14.5		17.4		9.9		13.2		11.2	
Russell 1000			6.0		14.5		17.4		10.0		13.3	-	11.2	Sep-08
AB- Gross	1,040,567,744	12.4	6.0	60	14.5	27	17.4	32	10.0	73	13.2	67	9.9	Apr-89
AB- Net			6.0	61	14.5	28	17.4	35	9.9	74	13.2	70	9.9	
Russell 1000 <sup>1</sup>			6.0	54	14.5	26	17.4	29	10.0	70	13.3	62		Apr-89
eA US Passive Large Cap Equity Gross Median			6.0		14.3		17.2		10.3		13.3		9.9	Apr-89

<sup>1.</sup> See Policy Index and Benchmark History



<sup>\*</sup>Total Fund and asset class composites are ranked against InvestorForce universes. Managers are ranked against eVest manager universes. Net Returns are ranked against gross universe. Ranking of 1 is a top ranking and ranking of 100 is a bottom rating.

<sup>\*\*</sup>Total Fund ex Overlay returns from 2/1/2006-12/31/2010 were calculated using the overlay impact provided by SSgA.

<sup>+</sup> Since inception date denotes last day of the month.

													Incep	tion
	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Return (%)	Since
Equity Active (130/30)- Gross	106,667,905	1.3	7.5		21.0		21.8		11.0		15.1		12.3	Sep-08
Equity Active (130/30)- Net			7.3		20.3		20.8		10.2		14.3		11.6	
Russell 1000			6.0		14.5		17.4		10.0		13.3		11.2	Sep-08
JP Morgan 130/30- Gross	106,667,905	1.3	7.5	10	21.0	8	21.8	14	11.0	50	14.9	37	11.9	Jul-08
JP Morgan 130/30- Net			7.3	14	20.3	16	20.8	19	10.2	66	14.1	71	11.1	
Russell 1000			6.0	33	14.5	75	17.4	48	10.0	68	13.3	95	9.9	Jul-08
eA Extended US 130/30 Equity Gross Median			5.3		17.2	_	17.1		11.0		14.5		10.8	Jul-08
Large Cap Growth- Gross	106,543,173	1.3	9.5		8.5		8.4		7.2		9.7	-	9.7	Sep-08
Large Cap Growth- Net			9.4	-	8.3		8.2		7.0		9.5		9.3	
Russell 1000 Growth			8.9		15.0		15.8		11.3		13.3		12.5	Sep-08
Brown Advisory- Gross	106,543,173	1.3	9.5	38	8.5	99	8.4	99	7.2	93	9.7	97	10.3	Feb-12
Brown Advisory- Net			9.4	41	8.3	99	8.2	99	7.0	94	9.5	99	10.1	
Russell 1000 Growth			8.9	50	15.0	49	15.8	47	11.3	27	13.3	33	13.8	Feb-12
eA US Large Cap Growth Equity Gross Median			8.9		14.9		15.4		10.2		12.6		13.2	Feb-12
Large Cap Value- Gross	325,467,331	3.9	6.3		20.3		22.9		8.4		13.4		10.8	Sep-08
Large Cap Value- Net			5.9		19.4	-	21.7		7.6		12.6		10.2	
Russell 1000 Value			3.3		14.0		19.2		8.7		13.1		9.9	Sep-08
Eagle Capital- Gross	217,648,676	2.6	7.0	5	21.5	9	24.3	11	10.4	10	14.7	9	15.1	Feb-12
Eagle Capital- Net			6.5	7	20.5	11	23.0	15	9.6	25	13.9	23	14.3	
Russell 1000			6.0	10	14.5	55	17.4	53	10.0	17	13.3	38	13.7	Feb-12
Russell 1000 Value			3.3	70	14.0	61	19.2	35	8.7	44	13.1	44	13.6	Feb-12
eA US Large Cap Value Equity Gross Median			3.9		15.0		17.8		8.5		12.8		13.2	Feb-12
Huber Capital- Gross	107,818,655	1.3	5.0	22	17.9	25	20.0	29	4.1	96	10.7	89	11.1	Feb-12
Huber Capital- Net			4.6	30	17.1	33	18.9	38	3.4	98	9.9	95	10.4	
Russell 1000 Value			3.3	70	14.0	61	19.2	35	8.7	44	13.1	44	13.6	Feb-12
eA US Large Cap Value Equity Gross Median			3.9		15.0		17.8		8.5		12.8		13.2	Feb-12



													Incep	tion
	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Return (%)	Since
Small Cap- Gross	317,982,595	3.8	4.0		23.0		26.9		6.8		12.1		12.0	Dec-90
Small Cap- Net			3.8		22.4		26.0		6.1	-	11.3		11.2	
Russell 2000			2.5		21.6		26.2		7.2		12.4	-	10.9	Dec-90
Small Cap - Growth- Gross	152,383,775	1.8	8.1		25.3		30.9		4.6		10.7		10.3	Sep-08
Small Cap - Growth- Net			8.0		25.1		30.5		4.1		10.0		9.6	
Russell 2000 Growth			5.3		19.2		23.0		6.7		12.1	-	11.1	Sep-08
UBS- Gross	64,820,483	0.8	6.6	42	21.6	26	28.8	14					1.6	Jul-15
UBS- Net			6.6	44	21.4	28	28.7	14					1.6	
Russell 2000 Growth			5.3	62	19.2	43	23.0	52	6.7	50	12.1	58	3.5	Jul-15
eA US Small Cap Growth Equity Gross Median			6.3		18.4		23.1		6.6		12.6		4.8	Jul-15
Weatherbie- Gross	87,563,292	1.0	9.2	13	28.2	3	32.5	5	7.5	43	13.2	39	11.8	Dec-02
Weatherbie- Net			9.1	15	28.0	3	31.9	6	6.8	50	12.3	57	10.8	
Russell 2000 Growth			5.3	62	19.2	43	23.0	52	6.7	50	12.1	58	11.1	Dec-02
eA US Small Cap Growth Equity Gross Median			6.3		18.4		23.1		6.6		12.6		12.1	Dec-02
Small Cap - Value- Gross	165,598,820	2.0	0.5		20.9		23.4		9.0		13.5		11.1	Sep-08
Small Cap - Value- Net			0.2	-	20.1		22.2		8.1	-	12.5		10.1	
Russell 2000 Value			-0.1		24.0		29.4		7.6		12.5		9.4	Sep-08
Dalton, Greiner- Gross	78,212,915	0.9	0.1	63	22.0	49	23.1	67	8.0	59	13.3	56	11.0	Dec-00
Dalton, Greiner- Net			-0.2	67	21.2	57	22.1	74	7.3	69	12.5	70	10.2	
Russell 2000 Value			-0.1	67	24.0	25	29.4	17	7.6	64	12.5	70	9.3	Dec-00
eA US Small Cap Value Equity Gross Median			0.7		21.8		24.7		8.6		13.6		11.5	Dec-00
WEDGE Capital- Gross	87,385,905	1.0	0.9	45	19.9	68	23.8	62	10.0	20	14.4	29	10.8	Apr-08
WEDGE Capital- Net			0.4	55	19.0	75	22.3	73	8.9	42	13.3	57	9.8	
Russell 2000 Value			-0.1	67	24.0	25	29.4	17	7.6	64	12.5	70	8.7	Apr-08
eA US Small Cap Value Equity Gross Median			0.7		21.8		24.7		8.6		13.6		10.4	Apr-08



													Incep	tion
	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Return (%)	Since
CenterSquare- Gross	94,367,176	1.1	1.1	42	-3.0	58	4.1	31	11.9	16	11.2	21	9.2	Jan-06
CenterSquare- Net			1.0	47	-3.5	76	3.5	45	11.2	23	10.6	39	8.6	
FTSE NAREIT Equity REIT			1.2	42	-3.2	63	3.6	43	10.3	68	10.0	66	6.8	Jan-06
eA US REIT Gross Median			0.9		-2.7		3.2		10.6		10.3		7.8	Jan-06
Principal Global Inv- Gross*	170,312	0.0												
Principal Global Inv- Net														
International Equity- Gross	1,918,654,490	22.9	8.7	48	13.1	64	12.3	69	1.4	55	5.4	56	6.3	Dec-87
International Equity- Net			8.5	58	12.7	70	11.7	78	1.0	70	5.0	65	6.0	
MSCI ACWI ex US <sup>1</sup>			8.0	75	14.2	43	13.7	47	1.0	69	4.8	71	6.2	Dec-87
InvestorForce All DB ex-US Eq Gross Median			8.6		13.8		13.5		1.5		5.6		6.9	Dec-87
International - Developed- Gross	1,498,857,646	17.9	7.7	71	13.4	52	11.9	61	1.8	43	6.6	43	4.1	Mar-98
International - Developed- Net			7.4	77	12.9	58	11.3	72	1.4	54	6.1	54	3.7	
MSCI EAFE Gross			7.4	78	13.6	47	12.2	57	1.0	62	6.3	50	4.4	Mar-98
InvestorForce All DB Dev Mkt ex-US Eq Gross Median			8.2		13.4		12.6		1.5		6.2		5.1	Mar-98
Lazard- Gross	416,446,716	5.0	6.3	92	7.3	89	7.5	84	1.9	54			9.0	Jun-12
Lazard- Net			6.2	94	7.0	90	7.1	86	1.5	61			8.7	
MSCI ACWI ex USA Gross			8.0	66	14.2	40	13.7	36	1.0	71	4.8	87	6.8	Jun-12
eA All ACWI ex-US Equity Gross Median			8.5		12.9		11.9		2.0		6.6		8.6	Jun-12
LSV- Gross	467,036,267	5.6	6.8	72	19.3	18	16.5	15	2.6	18	8.2	12	4.5	Dec-04
LSV- Net			6.5	74	18.8	19	15.9	17	2.2	33	7.7	15	4.0	
MSCI World ex US <sup>1</sup>			7.0	67	13.4	69	12.5	65	0.8	69	5.9	76	4.1	Dec-04
MSCI EAFE Value Gross			6.2	87	19.6	14	16.7	13	-0.1	86	6.2	70	4.2	Dec-04
eA EAFE Large Cap Value Gross Median			7.4		15.3		13.4		1.4		6.9		5.1	Dec-04

<sup>1.</sup> See Policy Index and Benchmark History.

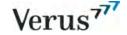


<sup>\*</sup> Liquidating as of April 2013.

													Incep	tion
	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Return (%)	Since
Walter Scott & Partners Limited- Gross* Walter Scott & Partners Limited- Net	413,113,122	4.9	 		 	 			 		 		 	Mar-17
MSCI World ex US eA EAFE Large Cap Growth Gross Median			7.0 8.0	78	13.4 9.5	20	12.5 8.5	18	0.8 1.1	60	5.9 6.5	64		Mar-17 Mar-17
Mondrian Dev Small Cap- Gross Mondrian Dev Small Cap- Net	94,238,266	1.1	9.8 9.5	35 42	10.4 9.7	51 69	7.8 6.7	74 85	2.3 1.6	71 80	7.4 6.7	79 85	9.3 8.7	Aug-10
MSCI World ex US Small Cap GD eA ACWI ex-US Small Cap Equity Gross Median			7.7 8.8	76	13.3 10.6	41	12.0 11.1	39	3.1 3.8	64	8.2 9.6	73	9.2 10.1	Aug-10 Aug-10
William Blair Dev Small Cap- Gross William Blair Dev Small Cap- Net	108,012,022	1.3	8.1 7.6	71 77	9.3 8.4	72 80	7.0 5.8	84 91	2.6 1.7	69 76	8.8 7.9	59 76	9.9 8.9	Sep-08
MSCI World ex US Small Cap GD eA ACWI ex-US Small Cap Equity Gross Median			7.7 8.8	76	13.3 10.6	41	12.0 11.1	39	3.1 3.8	64	8.2 9.6	73	8.9 10.7	Sep-08 Sep-08
Baring- Gross** Baring- Net	11,254	0.0												
International - Emerging- Gross International - Emerging- Net	340,507,475	4.1	13.3 13.1	22 24	15.6 15.1	44 52	16.5 16.0	70 71	0.1 -0.2	92 94	0.0 -0.2	88 88	6.1 5.7	Jan-00
MSCI Emerging Markets Gross InvestorForce All DB Emg Mkt Eq Gross Median			11.5 11.8	65	16.7 15.3	31	17.7 17.7	53	1.5 2.3	66	1.2 1.9	67	6.8 6.8	Jan-00 Jan-00
Baillie Gifford Emg All Cap- Gross Baillie Gifford Emg All Cap- Net	149,289,820	1.8	16.4 16.4	4 4	23.2 23.2	9 9	21.9 21.9	27 27	 	 			21.9 21.9	Mar-16
MSCI Emerging Markets Gross eA Emg Mkts Equity Gross Median			11.5 12.2	70	16.7 16.5	48	17.7 19.0	61	1.5 2.9	73	1.2 2.9	82	17.7 19.0	Mar-16 Mar-16
Mondrian Emg All Cap- Gross Mondrian Emg All Cap- Net	139,444,192	1.7	11.3 10.9	75 81	11.9 11.4	79 81	13.8 13.3	83 85	 	 			13.8 13.3	Mar-16
MSCI Emerging Markets Gross eA Emg Mkts Equity Gross Median			11.5 12.2	70	16.7 16.5	48	17.7 19.0	61	1.5 2.9	73	1.2 2.9	82	17.7 19.0	Mar-16 Mar-16

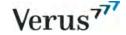
<sup>\*</sup> Funded in March 2017.

<sup>\*\*</sup> Liquidating as of October 2014.



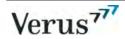
													Incep	tion
	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Return (%)	Since
Mondrian Emg Small Cap- Gross	24,972,310	0.3	8.1	98	5.1	93	7.1	95	0.8	83			3.6	Jan-14
Mondrian Emg Small Cap- Net			7.4	99	3.7	97	5.3	98	-0.5	88			2.3	
MSCI Emerging Markets Small Cap Gross			13.1	61	14.3	61	14.8	71	2.0	74	3.2	96	3.9	Jan-14
eA Emg Mkts Small Cap Equity Gross Median			13.7		16.5		19.4		4.4		5.6		6.3	Jan-14
William Blair Emg Small Cap- Gross	26,801,153	0.3	12.8	64	7.2	84	11.3	81	4.3	55			4.9	Dec-13
William Blair Emg Small Cap- Net			12.2	74	6.0	88	10.4	86	3.4	69			4.1	
MSCI Emerging Markets Small Cap Gross			13.1	61	14.3	61	14.8	71	2.0	74	3.2	96	2.9	Dec-13
eA Emg Mkts Small Cap Equity Gross Median			13.7		16.5		19.4		4.4		5.6		4.5	Dec-13
CBRE Clarion- Gross	79,289,368	0.9	4.5	12	1.2	32	1.9	18	2.8	47	6.9	49	11.0	Oct-08
CBRE Clarion- Net			4.4	21	1.0	46	1.6	31	2.5	53	6.6	54	10.7	
FTSE NAREIT Developed ex US Gross			4.9	3	1.0	46	1.7	28	2.6	50	6.5	63	9.6	Oct-08
eA EAFE REIT Gross Median			3.9		0.8		0.8		2.6		6.8		9.0	Oct-08
Fixed Income- Gross	1,523,798,179	18.2	2.1	28	1.2	45	4.2	42	3.3	37	3.3	55	7.3	Jun-86
Fixed Income- Net			2.0	29	1.1	48	4.0	44	3.1	46	3.2	60	7.1	
Fixed Income Custom <sup>1</sup>			1.2	67	-1.2	81	1.3	78	2.2	81	2.1	93	6.4	Jun-86
InvestorForce All DB Total Fix Inc Gross Median			1.5		0.9		3.6		3.0		3.5		7.1	Jun-86
Neuberger Berman Fixed- Gross	351,742,475	4.2	0.8	79	-1.7	78	0.5	76	2.9	67	2.6	70	6.7	Jun-88
Neuberger Berman Fixed- Net			8.0	83	-1.7	82	0.4	78	2.8	71	2.5	77	6.6	
BBgBarc US Aggregate TR			0.8	76	-1.7	82	0.4	78	2.7	81	2.3	89	6.4	Jun-88
eA US Core Fixed Inc Gross Median			0.9		-1.2		1.1		3.0		2.8		6.7	Jun-88
Prudential- Gross	420,230,528	5.0	2.2	1	1.3	2	4.4	3					4.0	Jul-14
Prudential- Net			2.0	1	1.2	3	4.2	4					3.9	
BBgBarc US Aggregate TR			0.8	76	-1.7	82	0.4	78	2.7	81	2.3	89	2.3	Jul-14
eA US Core Fixed Inc Gross Median			0.9		-1.2		1.1		3.0		2.8		2.7	Jul-14

<sup>1.</sup> See Policy Index and Benchmark History.



													Incep	tion
	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Return (%)	Since
TCW MetWest Fixed- Gross	371,067,599	4.4	0.9	53	-0.5	21	1.8	28	3.0	49	3.6	14	6.1	Dec-01
TCW MetWest Fixed- Net			0.8	74	-0.7	27	1.5	38	2.8	71	3.4	20	5.9	
BBgBarc US Aggregate TR			0.8	76	-1.7	82	0.4	78	2.7	81	2.3	89	4.6	Dec-01
eA US Core Fixed Inc Gross Median			0.9		-1.2		1.1		3.0		2.8		5.0	Dec-01
Brandywine Global- Gross	212,602,057	2.5	5.3	3	0.7	55	2.3	55	1.5	53			1.7	May-13
Brandywine Global- Net			5.2	3	0.4	58	1.9	59	1.2	56		-	1.4	
Brandywine Custom <sup>1</sup>			2.5	35	-5.0	92	-1.9	84	-1.4	85			-0.5	May-13
eA All Global Fixed Inc Gross Median			2.0		1.5		3.0		1.9		3.1		2.2	May-13
Brigade Capital- Gross	168,155,520	2.0	3.4	6	13.3	8	23.0	3	4.2	55			4.6	Nov-13
Brigade Capital- Net			3.4	6	13.3	8	23.0	3	4.2	55		-	4.6	
Brigade Custom 1			2.0	77	8.5	65	13.3	57	4.2	57			4.6	Nov-13
eA US High Yield Fixed Inc Gross Median			2.4		9.4		14.1		4.3		6.6		4.9	Nov-13
Absolute Return- Gross ++	765,678,432	9.2	1.9	47	7.4	39	8.6	38	2.0	51	5.1	35	4.8	Aug-04
Absolute Return- Net			1.9	47	7.4	39	8.6	38	2.0	51	5.1	36	4.3	
91 Day T-Bill +5%			1.4	68	4.0	84	5.4	77	5.2	8	5.1	34	6.3	Aug-04
HFRI Fund of Funds Composite Index			2.4	27	5.6	61	6.2	64	1.8	55	3.2	80	3.1	Aug-04
InvestorForce All DB Hedge Funds Gross Median			1.8		6.7		7.8		2.1		4.5		4.6	Aug-04
AQR DELTA II- Gross	70,320,488	0.8	1.3	70	6.2	46	4.5	67	7.7	26		-	6.5	May-13
AQR DELTA II- Net			1.3	70	6.2	46	4.5	67	7.7	26		-	6.5	
91 Day T-Bill +5%			1.4	68	4.0	63	5.4	61	5.2	43	5.1	53	5.1	May-13
eV Alt All Multi-Strategy Median			2.3		5.6		7.4		4.1		5.4		4.7	May-13
Brevan Howard US - Gross	34,994,899	0.4	-2.4	74	1.7	40	1.4	57	0.1	70			0.0	Feb-14
Brevan Howard US - Net			-2.4	74	1.7	40	1.4	57	0.1	70			0.0	
91 Day T-Bill +5%			1.4	36	4.0	26	5.4	35	5.2	28	5.1	22	5.2	Feb-14

<sup>++</sup> Absolute Return managers are ranked in the eVest net of fee universe.



<sup>1.</sup> See Policy Index and Benchmark History.

													Incep	tion
	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Return (%)	Since
HFRI Fund of Funds Composite Index			2.4	26	5.6	20	6.2	33	1.8	61	3.2	42	1.5	Feb-14
eV Alt All Macro Median			-0.2		-0.4		2.5		2.7		2.3		2.5	Feb-14
Claren Road Credit- Gross	2,570,919	0.0	1.5	70	12.0	25	14.5	34	-5.4	99	-1.0	99	-1.2	Jan-12
Claren Road Credit- Net			1.5	70	12.0	25	14.5	34	-5.4	99	-1.0	99	-1.2	
91 Day T-Bill +5%			1.4	75	4.0	85	5.4	85	5.2	42	5.1	67	5.1	Jan-12
eV Alt Fundamental - Long/Short Credit Median			2.2		7.7		10.4		4.4		6.1		6.5	Jan-12
Elliot Associates- Gross +++	50,281,019	0.6	3.0	-	10.7		13.1		7.1				8.3	Apr-12
Elliot Associates- Net			3.0		10.7		13.1		7.1				8.3	
91 Day T-Bill +5%			1.4		4.0		5.4		5.2		5.1		5.1	Apr-12
Graham Global Inv II - Gross *	33,524,983	0.4											-3.1	Feb-17
Graham Global Inv II - Net													-3.1	
91 Day T-Bill +5%			1.4	33	4.0	20	5.4	32	5.2	38	5.1	32	0.5	Feb-17
eV Alt All Managed Futures Median			0.0		-2.4		-0.2		3.6		2.6		-0.4	Feb-17
Grosvenor- Gross	432,213	0.0	-0.5	98	67.0	1	66.0	1	17.9	1	11.7	4	6.7	Aug-04
Grosvenor- Net			-0.5	98	67.0	1	66.0	1	17.9	1	11.7	4	6.4	
91 Day T-Bill +5%			1.4	71	4.0	79	5.4	68	5.2	14	5.1	38	6.3	Aug-04
eV Alt Fund of Funds - Multi-Strategy Median			2.1		6.3		7.0		2.0		4.5		4.7	Aug-04
Grosvenor SC Abs Return- Gross	256,364,285	3.1	2.5	41	7.9	33	9.7	28	0.9	75	4.7	46	5.3	Nov-11
Grosvenor SC Abs Return- Net			2.5	41	7.9	33	9.7	28	0.9	75	4.7	46	5.2	
91 Day T-Bill +5%			1.4	71	4.0	79	5.4	68	5.2	14	5.1	38	5.1	Nov-11
eV Alt Fund of Funds - Multi-Strategy Median			2.1		6.3		7.0		2.0		4.5		4.9	Nov-11
Grosvenor SC Abs Return B- Gross	69,559,935	0.8	1.5	67	4.7	69	5.3	69	0.6	77			3.4	Jan-13
Grosvenor SC Abs Return B- Net			1.5	67	4.7	69	5.3	69	0.6	77			3.4	
91 Day T-Bill +5%			1.4	71	4.0	79	5.4	68	5.2	14	5.1	38	5.1	Jan-13
eV Alt Fund of Funds - Multi-Strategy Median			2.1		6.3		7.0		2.0		4.5		4.0	Jan-13

<sup>\*</sup> Funded inFebruary 2017.



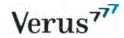
<sup>+++</sup> Preliminary quarterly returns as of 03/31/2017 (Returns are not available at reporting period.)

													Incep	tion
	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Return (%)	Since
JANA Partners- Gross	40,461,193	0.5	5.2	21	14.6	30	15.0	40	1.4	72			3.7	Jul-13
JANA Partners- Net			5.2	21	14.6	30	15.0	40	1.4	72			3.7	
91 Day T-Bill +5%			1.4	53	4.0	72	5.4	70	5.2	32	5.1	59	5.1	Jul-13
eV Alt All Event Driven Median			1.8		9.7		11.9		3.6		6.1		5.0	Jul-13
Lakewood- Gross	43,102,763	0.5	2.7	63	13.8	37	15.2	37	7.6	28			8.0	Jun-13
Lakewood- Net			2.7	63	13.8	37	15.2	37	7.6	28			8.0	
91 Day T-Bill +5%			1.4	73	4.0	78	5.4	74	5.2	41	5.1	69	5.1	Jun-13
eV Alt Fundamental - Long/Short Equity Median			3.7		10.5		11.0		3.7		7.2		6.1	Jun-13
Laurion Capital- Gross	40,867,520	0.5	-2.5	92	8.0	81	2.0	82	5.2	59			5.2	Mar-14
Laurion Capital- Net			-2.5	92	8.0	81	2.0	82	5.2	59			5.2	
91 Day T-Bill +5%			1.4	64	4.0	68	5.4	80	5.2	59	5.1	69	5.2	Mar-14
eV Alt Relative Value - Equity Relative Value Median			2.8		5.1		7.0		7.5		6.9		7.5	Mar-14
OZ Domestic II- Gross	43,557,346	0.5	4.4	21	10.9	23	12.3	28	4.0	51	6.7	41	7.4	Dec-11
OZ Domestic II- Net			4.4	21	10.9	23	12.3	28	4.0	51	6.7	41	7.4	
91 Day T-Bill +5%			1.4	68	4.0	63	5.4	61	5.2	43	5.1	53	5.1	Dec-11
eV Alt All Multi-Strategy Median			2.3		5.6		7.4		4.1		5.4		5.7	Dec-11
Third Point Offshore Fund- Gross	44,316,346	0.5	5.9	13	10.1	47	15.1	40	4.8	36			11.0	Apr-12
Third Point Offshore Fund- Net			5.9	13	10.1	47	15.1	40	4.8	36			11.0	
91 Day T-Bill +5%			1.4	53	4.0	72	5.4	70	5.2	32	5.1	59	5.1	Apr-12
eV Alt All Event Driven Median			1.8		9.7		11.9		3.6		6.1		6.2	Apr-12
Winton Diversified Futures - Gross	35,324,524	0.4	0.9	36									0.9	Dec-16
Winton Diversified Futures - Net			0.9	36									0.9	
91 Day T-Bill +5%			1.4	33	4.0	20	5.4	32	5.2	38	5.1	32	1.4	Dec-16
eV Alt All Managed Futures Median			0.0		-2.4		-0.2		3.6		2.6		0.0	Dec-16



													Incep	tion
	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Return (%)	Since
Private Equity- Gross ++	628,093,812	7.5	2.9	29	9.9	25	10.2	36	10.8	29	11.6	34	-0.8	Dec-07
Private Equity- Net			2.9	29	9.9	25	10.2	36	10.8	29	11.6	34		
Russell 1000 +3% 1Q Lag <sup>1</sup>			4.5	9	12.9	6	15.1	6	11.4	24	17.6	1	9.0	Dec-07
Thomson Reuters C A All PE 1 Qtr Lag			3.6	17	10.5	22	9.9	37	9.5	43	12.7	22	8.6	Dec-07
InvestorForce All DB Private Eq Net Median			1.9		7.5		8.4		8.8		10.1		6.9	Dec-07
Abbott VI- Gross +++	62,084,299	0.7	2.7		12.3		13.3		13.8		12.2		1.6	Jul-08
Abbott VI- Net			2.7		12.3		13.3		13.8		12.2			
Russell 1000 +3% 1Q Lag			4.5		12.9		15.1		11.4		17.6		10.6	Jul-08
Accel-KKR IV- Gross	10,992,165	0.1	1.3		5.5		7.0		4.7				-16.9	Jun-13
Accel-KKR IV- Net			1.3		5.5		7.0		4.7				-16.9	
Russell 1000 +3% 1Q Lag			4.5		12.9		15.1		11.4		17.6		15.0	Jun-13
Accel-KKR V- Gross*	1,262,787	0.0											0.0	Jan-17
Accel-KKR V- Net													0.0	
Russell 1000 +3% 1Q Lag			4.5		12.9		15.1		11.4		17.6		6.3	Jan-17
Accel-KKR Structured II- Gross	3,964,012	0.0	-1.5		-2.9		-0.1						-18.1	Feb-15
Accel-KKR Structured II- Net			-1.5		-2.9		-0.1						-18.1	
Russell 1000 +3% 1Q Lag			4.5		12.9		15.1		11.4		17.6		9.0	Feb-15
Atalaya Special Opp VI- Gross	18,410,278	0.2	2.1		2.8								2.8	Apr-16
Atalaya Special Opp VI- Net			2.1		2.8								2.8	
Russell 1000 +3% 1Q Lag			4.5		12.9		15.1		11.4		17.6		21.2	Apr-16
Athyrium Opp II- Gross	24,156,998	0.3	1.6		11.4		11.7						3.4	Jun-15
Athyrium Opp II- Net			1.6		11.4		11.7			-	-		3.4	
Russell 1000 +3% 1Q Lag			4.5		12.9		15.1		11.4		17.6		9.3	Jun-15

<sup>+++</sup> Preliminary quarterly returns as of 03/31/2017 (Returns are not available at reporting period.)



<sup>1.</sup> See Policy Index and Benchmark History.

<sup>\*</sup> Funded in January 2017.

<sup>++</sup> Returns are one-quarter lag.

1		4!	
inc	ep	tion	l

													шоор	
	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Return (%)	Since
Dyal Capital Partners II- Gross	7,126,408	0.1	-1.4		-2.7		-11.3						-9.1	Dec-14
Dyal Capital Partners II- Net			-1.4		-2.7		-11.3						-9.1	
Russell 1000 +3% 1Q Lag			4.5		12.9		15.1		11.4		17.6		10.7	Dec-14
Dyal Capital Partners III- Gross	8,722,642	0.1	0.0								-		0.0	Dec-16
Dyal Capital Partners III- Net			0.0										0.0	
Russell 1000 +3% 1Q Lag			4.5		12.9		15.1		11.4		17.6		4.5	Dec-16
Garrison Investment Group- Gross	13,821,166	0.2	-2.3		-9.3		-12.6		-5.2		-		-0.3	May-12
Garrison Investment Group- Net			-2.3		-9.3		-12.6		-5.2				-0.3	
Russell 1000 +3% 1Q Lag			4.5		12.9		15.1		11.4		17.6		16.0	May-12
Harbourvest VIII- Gross	25,563,171	0.3	2.8		8.9		9.4		12.5		12.8		8.6	Dec-07
Harbourvest VIII- Net			2.8		8.9		9.4		12.5		12.8			
Russell 1000 +3% 1Q Lag			4.5		12.9		15.1		11.4		17.6	-	9.0	Dec-07
Harbourvest Intl VI- Gross	31,309,380	0.4	0.5		5.6		8.8		11.3		9.4		-12.8	Mar-09
Harbourvest Intl VI- Net			0.5		5.6		8.8		11.3		9.4			
Russell 1000 +3% 1Q Lag			4.5		12.9		15.1		11.4		17.6		17.0	Mar-09
H.I.G. Bayside Loan III- Gross	17,857,198	0.2	4.5		6.6		6.2		10.4		-		4.7	Jan-13
H.I.G. Bayside Loan III- Net			4.5		6.6		6.2		10.4				4.7	
Russell 1000 +3% 1Q Lag			4.5		12.9		15.1		11.4		17.6		17.0	Jan-13
H.I.G. Capital V- Gross	3,758,486	0.0	32.6		28.6		23.2		1.6		-		-2.2	Jul-13
H.I.G. Capital V- Net			32.6		28.6		23.2		1.6		-		-2.2	
Russell 1000 +3% 1Q Lag			4.5		12.9		15.1		11.4		17.6		14.7	Jul-13
H.I.G. Europe Capital II - Gross	-479,885	0.0	-9.4		-77.5									Jan-14
H.I.G. Europe Capital II - Net			-9.4		-77.5									
Russell 1000 +3% 1Q Lag			4.5		12.9		15.1		11.4		17.6		12.8	Jan-14



													Incep	tion
	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Return (%)	Since
Khosla IV- Gross	14,406,178	0.2	-3.7		6.6		5.9		16.7		16.9		13.1	Jul-11
Khosla IV- Net			-3.7		6.6		5.9		16.7		16.9		13.1	
Russell 1000 +3% 1Q Lag			4.5		12.9		15.1		11.4		17.6		14.3	Jul-11
Khosla V- Gross	11,066,699	0.1	11.9		7.9		12.1						5.0	Nov-14
Khosla V- Net			11.9		7.9		12.1						5.0	
Russell 1000 +3% 1Q Lag			4.5		12.9		15.1		11.4		17.6		9.6	Nov-14
Linden Capital- Gross	16,467,715	0.2	10.4		-10.6								-10.6	Jun-16
Linden Capital- Net			10.4	-	-10.6						-		-10.6	
Russell 1000 +3% 1Q Lag			4.5		12.9		15.1		11.4		17.6		12.9	Jun-16
Marlin Equity IV- Gross	12,113,677	0.1	0.6		14.2		12.9		4.3				1.8	Nov-13
Marlin Equity IV- Net			0.6		14.2		12.9		4.3				1.8	
Russell 1000 +3% 1Q Lag			4.5		12.9		15.1		11.4		17.6		14.9	Nov-13
Marlin Heritage- Gross	9,399,487	0.1	16.5		47.5		47.1						10.2	Jul-14
Marlin Heritage- Net			16.5		47.5		47.1						10.2	
Russell 1000 +3% 1Q Lag			4.5		12.9		15.1		11.4		17.6		11.5	Jul-14
New Enterprise- Gross	32,733,137	0.4	2.3		9.1		9.4		17.9				11.9	May-12
New Enterprise- Net			2.3		9.1		9.4		17.9				11.9	
Russell 1000 +3% 1Q Lag			4.5		12.9		15.1		11.4		17.6		16.0	May-12
New Enterprise 15- Gross	20,764,029	0.2	8.0		12.5		9.8						6.8	Apr-15
New Enterprise 15- Net			8.0		12.5		9.8						6.8	
Russell 1000 +3% 1Q Lag			4.5		12.9		15.1		11.4		17.6		11.2	Apr-15
Private Equity X- Gross	49,497,666	0.6	2.9		12.3		14.6		5.5		11.8		-5.3	Jun-08
Private Equity X- Net			2.9	-	12.3		14.6		5.5		11.8			
Russell 1000 +3% 1Q Lag			4.5		12.9		15.1		11.4		17.6		11.1	Jun-08



													Incep	tion
	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Return (%)	Since
RRJ Capital- Gross	25,694,995	0.3	5.3		2.2		-2.1		8.9				13.7	May-13
RRJ Capital- Net			5.3	-	2.2		-2.1		8.9			-	13.7	
Russell 1000 +3% 1Q Lag			4.5		12.9		15.1		11.4		17.6		15.9	May-13
RRJ Capital Masterfund III- Gross	10,805,835	0.1	-1.7		-0.7		2.4						-44.7	Dec-15
RRJ Capital Masterfund III- Net			-1.7		-0.7		2.4						-44.7	
Russell 1000 +3% 1Q Lag			4.5		12.9		15.1		11.4		17.6		18.2	Dec-15
Spectrum Equity- Gross	15,806,179	0.2	6.9		9.9		14.6						-18.3	Dec-14
Spectrum Equity- Net			6.9		9.9		14.6						-18.3	
Russell 1000 +3% 1Q Lag			4.5		12.9		15.1		11.4		17.6		10.7	Dec-14
Summit Credit- Gross	6,096,213	0.1	2.7		10.7		13.9		9.8		21.1		8.0	Oct-11
Summit Credit- Net			2.7		10.7		13.9		9.8		21.1		8.0	
Russell 1000 +3% 1Q Lag			4.5		12.9		15.1		11.4		17.6		16.0	Oct-11
Summit Credit II- Gross	21,650,750	0.3	3.2		11.1		13.2						4.6	Nov-14
Summit Credit II- Net			3.2		11.1		13.2						4.6	
Russell 1000 +3% 1Q Lag			4.5		12.9		15.1		11.4		17.6		9.6	Nov-14
Summit Ventures- Gross	22,189,198	0.3	-3.5		25.5		25.8		17.3				9.1	Jun-12
Summit Ventures- Net			-3.5		25.5		25.8		17.3				9.1	
Russell 1000 +3% 1Q Lag			4.5		12.9		15.1		11.4		17.6		15.5	Jun-12
Summit Ventures IV- Gross	9,199,172	0.1	3.8		20.3								20.3	May-16
Summit Ventures IV- Net			3.8		20.3								20.3	
Russell 1000 +3% 1Q Lag			4.5		12.9		15.1		11.4		17.6		20.9	May-16
Thoma Bravo XI- Gross	35,221,843	0.4	8.0		15.9		15.6						6.4	Jun-14
Thoma Bravo XI- Net			8.0		15.9		15.6						6.4	
Russell 1000 +3% 1Q Lag			4.5		12.9		15.1		11.4		17.6		11.4	Jun-14



	4.5
Inco	ntian
11111.1	ption

													шоор	
	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Return (%)	Since
Thoma Bravo XII- Gross	10,553,107	0.1	-1.1		-16.2								-16.2	May-16
Thoma Bravo XII- Net			-1.1		-16.2								-16.2	
Russell 1000 +3% 1Q Lag			4.5		12.9		15.1		11.4		17.6		20.9	May-16
TPG Opp Partners III- Gross	20,456,689	0.2	1.2		12.1		15.5		-31.5				-31.5	Mar-14
TPG Opp Partners III- Net			1.2		12.1		15.5		-31.5		-		-31.5	
Russell 1000 +3% 1Q Lag			4.5		12.9		15.1		11.4		17.6		11.4	Mar-14
Trinity Ventures XI- Gross	20,163,325	0.2	2.3		-0.9		-4.1		7.2				-2.6	Apr-13
Trinity Ventures XI- Net			2.3		-0.9		-4.1		7.2				-2.6	
Russell 1000 +3% 1Q Lag			4.5		12.9		15.1		11.4		17.6		15.9	Apr-13
Trinity Ventures XII- Gross	3,770,413	0.0	-6.9		-20.7								-20.7	Apr-16
Trinity Ventures XII- Net			-6.9		-20.7								-20.7	
Russell 1000 +3% 1Q Lag			4.5		12.9		15.1		11.4		17.6		21.2	Apr-16
TSG7 A LP- Gross	2,403,614	0.0	-0.7											Mar-16
TSG7 A LP- Net			-0.7								-			
Russell 1000 +3% 1Q Lag			4.5		12.9		15.1		11.4		17.6		15.1	Mar-16
TSG7 B LP- Gross	253,996	0.0	-17.0		-24.5		-34.0						-29.9	Jan-16
TSG7 B LP- Net			-17.0		-24.5		-34.0				-		-29.9	
Russell 1000 +3% 1Q Lag			4.5		12.9		15.1		11.4		17.6		11.9	Jan-16
Waterland V- Gross	13,227,246	0.2	6.6		52.9		58.9		83.1		40.2		20.7	Aug-11
Waterland V- Net			6.6		52.9		58.9		83.1		40.2		20.7	
Russell 1000 +3% 1Q Lag			4.5		12.9		15.1		11.4		17.6		14.8	Aug-11
Waterland VI- Gross	5,719,759	0.1	-3.9		21.5		-2.2				-		-37.2	Jul-15
Waterland VI- Net			-3.9		21.5		-2.2						-37.2	
Russell 1000 +3% 1Q Lag			4.5		12.9		15.1		11.4		17.6		9.1	Jul-15



													Incep	tion
	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Return (%)	Since
Waterland VI Over- Gross	859	0.0	-29.5	-	-45.7		-53.4	-					-84.4	Dec-15
Waterland VI Over- Net			-29.5		-45.7		-53.4						-84.4	
Russell 1000 +3% 1Q Lag			4.5		12.9		15.1		11.4		17.6		18.2	Dec-15
Wayzata Opportunities III- Gross	9,882,926	0.1	5.0		19.3		21.7		-0.6				-6.3	Feb-13
Wayzata Opportunities III- Net			5.0		19.3		21.7		-0.6				-6.3	
Russell 1000 +3% 1Q Lag			4.5		12.9		15.1		11.4		17.6		17.1	Feb-13
Real Assets (with SSgA RA Overlay Proxy)- Gross	1,124,971,870	13.5	2.3		6.6		11.3		3.9		5.3		1.1	May-08
Real Assets (with SSgA RA Overlay Proxy)- Net			2.1		6.2		10.8		3.3		4.7			
CPI-U Headline +5%			1.5		5.0		7.4		5.7		5.9			<i>May-08</i>
Real Assets ex SSgA RA Overlay Proxy- Gross	797,102,738	9.5	2.6		8.5		11.2		8.2		8.6		2.9	May-08
Real Assets ex SSgA RA Overlay Proxy- Net			2.4		8.2		10.6		7.2		7.7			
CPI-U Headline +5%			1.5		5.0		7.4		5.7		5.9			May-08
RE -Separate- Gross	234,408,263	2.8	2.1		8.2		9.6		10.3		11.1		5.3	Sep-08
RE -Separate- Net			1.6		7.3		8.5		8.9		10.0		4.3	
NFI-ODCE <sup>1</sup>			1.8		6.1		8.3		11.8		11.9		7.0	Sep-08
BlackRock RE Leveraged- Gross	166,613,205	2.0	2.3		7.3		10.0		13.0		12.6		9.8	Dec-98
BlackRock RE Leveraged- Net			1.7		6.6		9.1		11.4		11.4			
NFI-ODCE <sup>1</sup>			1.8		6.1		8.3		11.8		11.9		9.5	Dec-98
BlackRock RE II Leveraged- Gross *	1,641,474	0.0												
BlackRock RE II Leveraged- Net														
Cornerstone Leveraged- Gross	66,153,584	0.8	1.8		11.6		16.4		10.1		11.5		7.6	May-04
Cornerstone Leveraged- Net			1.4		11.0		15.4		8.8		10.4			
NFI-ODCE <sup>1</sup>			1.8		6.1		8.3		11.8		11.9		9.7	May-04

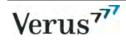
<sup>\*</sup> Liquidating as of January 2017.



<sup>1.</sup> See Policy Index and Benchmark History.

													Incep	tion
	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Return (%)	Since
BlackRock RE Unleveraged- Gross BlackRock RE Unleveraged- Net	-		2.1 1.9		6.8 5.9	 	9.2 7.7		11.6 10.2	 	11.3 10.0		10.2	Oct-95
NFI-ODCE <sup>1</sup>			1.8		6.1		8.3		11.8		11.9		10.0	Oct-95
Cornerstone Unleveraged- Gross Cornerstone Unleveraged- Net			1.4 1.3		8.1 7.8		11.4 11.0		7.6 7.0		8.8 8.3		6.7	Jun-04
NFI-ODCE <sup>1</sup>			1.8		6.1		8.3		11.8		11.9		9.7	Jun-04
RE -Limited Partnership- Gross RE -Limited Partnership- Net	315,351,703	3.8	0.8 0.7		6.5 6.3		8.5 8.2		11.8 11.2		11.6 10.9		3.7 3.0	Sep-08
NFI-ODCE			1.8		6.1		8.3		11.8		12.0		5.1	Sep-08
Jamestown Premier Property - Gross  Jamestown Premier Property - Net	19,250,484	0.2	1.9 1.9		4.5 4.5		6.4 6.4		11.1 11.1		 		11.1 11.1	Dec-13
NFI-ODCE			1.8		6.1		8.3		11.8		12.0		11.7	Dec-13
Metlife Core Property - Gross Metlife Core Property - Net	52,000,268	0.6	1.9 1.8		7.7 7.3		9.3 8.7		12.7 12.2				13.9 13.3	Dec-13
NFI-ODCE			1.8		6.1		8.3		11.8		12.0		11.7	Dec-13
Prime Property- Gross Prime Property- Net	52,320,569	0.6	2.2 1.9		7.6 6.7		10.4 9.3		13.7 12.4				13.6 12.4	Sep-13
NFI-ODCE			1.8		6.1		8.3		11.8		12.0		11.8	Sep-13
Principal US Property- Gross Principal US Property- Net	39,940,709	0.5	1.9 1.9		6.6 6.6	 	9.0 9.0						9.8 9.8	Oct-15
NFI-ODCE			1.8		6.1		8.3		11.8		12.0		10.0	Oct-15
Prologis Targeted Euro Logistics- Gross Prologis Targeted Euro Logistics- Net	29,812,103	0.4	0.7 0.7		0.2		-0.9 -0.9						2.9 2.9	Oct-15
NFI-ODCE			1.8		6.1		8.3		11.8		12.0		10.0	Oct-15

<sup>1.</sup> See Policy Index and Benchmark History.



													Incep	tion
	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Return (%)	Since
Prologis Targeted US Logistics- Gross Prologis Targeted US Logistics- Net	40,023,646	0.5	5.1 5.1		12.8 12.8		16.4 16.4	 	 		 		16.1 16.1	Jul-15
NFI-ODCE			1.8		6.1		8.3		11.8		12.0		10.8	Jul-15
Townsend Real Estate- Gross +++	81,968,575	1.0	0.0		5.0		8.1						8.1	Mar-16
Townsend Real Estate- Net			0.0		5.0		8.1						8.1	
NFI-ODCE			1.8		6.1		8.3		11.8		12.0		8.3	Mar-16
Commodities- Gross	66,788,285	0.8	-2.3		-2.6		9.7		-12.7		-9.0		-6.8	May-08
Commodities- Net			-2.4		-3.1		8.9		-13.4		-9.7			
Bloomberg Commodity Index TR USD			-2.3		-3.6		8.7		-13.9		-9.5		-9.7	May-08
Blackstone- Gross	41,313,982	0.5	-2.5		-3.3		9.3		-12.3		-8.9		-4.4	May-08
Blackstone- Net			-2.5		-3.8		8.5		-13.1		-9.7			
Bloomberg Commodity Index TR USD  eA Commodities Gross Median			-2.3		-3.6 		8.7		-13.9 		-9.5 		-9.7 	May-08 May-08
Gresham- Gross	25,474,303	0.3	-1.9		-1.4		10.3		-13.3		-9.2		-9.2	Apr-08
Gresham- Net	20,474,000	0.0	-2.1		-1.9		9.5		-13.9		-9.8			7101 00
Bloomberg Commodity Index TR USD			-2.3		-3.6		8.7		-13.9		-9.5		-9.3	Apr-08
eA Commodities Gross Median														Apr-08
Private Real Assets - Gross ++	180,554,487	2.2	8.4		18.5		19.1		23.6				1.5	Jan-13
Private Real Assets - Net			8.4		18.5		19.1		23.6				1.5	
CPI-U Headline +5%			1.5		5.0		7.4		5.7		5.9		6.1	Jan-13
ACM II- Gross	4,004,984	0.0	-1.3								_		-4.7	Sep-16
ACM II- Net	, ,		-1.3										-4.7	
CPI-U Headline +5%			1.5		5.0		7.4		5.7		5.9		3.6	Sep-16
ArcLight Energy VI- Gross	22,155,576	0.3	0.9	-	12.3		10.6						1.9	Aug-15
ArcLight Energy VI- Net	,		0.9	-	12.3		10.6						1.9	J
CPI-U Headline +5%			1.5		5.0		7.4		5.7		5.9		6.5	Aug-15

<sup>+++</sup> Preliminary quarterly returns as of 03/31/2017 (Returns are not available at reporting period.)



<sup>++</sup> Returns are one-quarter lag.

													Incep	tion
	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Return (%)	Since
Atalaya SMA- Gross Atalaya SMA- Net	13,294,400	0.2	-2.2 -2.2		5.1 5.1		6.8 6.8		 		 		6.1 6.1	May-15
CPI-U Headline +5%			1.5		5.0		7.4		5.7		5.9		6.4	May-15
Brookfield Infra III- Gross Brookfield Infra III- Net	7,172,039	0.1	-2.2 -2.2	 	14.6 14.6		 	 	 	 	 		14.6 14.6	May-16
CPI-U Headline +5%			1.5		5.0		7.4		5.7		5.9		5.7	May-16
Carlyle Power II- Gross Carlyle Power II- Net	13,834,048	0.2	5.6 5.6		0.1 0.1		-3.2 -3.2				 		-15.7 -15.7	Oct-15
CPI-U Headline +5%			1.5		5.0		7.4		5.7		5.9		6.4	Oct-15
EnCap Energy IX- Gross EnCap Energy IX- Net	24,455,912	0.3	24.5 24.5	 	51.7 51.7		48.1 48.1		19.6 19.6	 	 		-0.8 -0.8	Jan-13
CPI-U Headline +5%			1.5		5.0		7.4		5.7		5.9		6.1	Jan-13
EnCap Energy X- Gross EnCap Energy X- Net	13,150,658	0.2	30.8 30.8		34.7 34.7		30.5 30.5				 		-7.7 -7.7	Apr-15
CPI-U Headline +5%			1.5		5.0		7.4		5.7		5.9		6.4	Apr-15
EnCap Flatrock Midstream III- Gross EnCap Flatrock Midstream III- Net	7,242,178	0.1	6.5 6.5		8.1 8.1		6.5 6.5		 		 		3.1 3.1	Jul-14
CPI-U Headline +5%			1.5		5.0		7.4		5.7		5.9		5.5	Jul-14
First Reserve- Gross First Reserve- Net	14,302,322	0.2	14.9 14.9		24.2 24.2	 	35.0 35.0		 	 	 		-24.1 -24.1	Dec-14
CPI-U Headline +5%			1.5		5.0		7.4		5.7		5.9		5.9	Dec-14
Pantheon Ventures- Gross Pantheon Ventures- Net	41,106,627	0.5	1.2		6.3 6.3		10.7 10.7						33.3 33.3	Jul-14
CPI-U Headline +5%			1.5		5.0		7.4		5.7		5.9		5.5	Jul-14
Quantum Energy VI - Gross Quantum Energy VI - Net	17,094,027	0.2	10.6 10.6		52.2 52.2		49.2 49.2		 		 		23.8 23.8	Nov-14
CPI-U Headline +5%			1.5		5.0		7.4		5.7		5.9		5.4	Nov-14



	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Return (%)	Since
Wastewater Opportunity- Gross	2,741,716	0.0	-4.3	-	-14.1		-31.2		-				-53.1	Dec-15
Wastewater Opportunity- Net			-4.3	-	-14.1		-31.2						-53.1	
CPI-U Headline +5%			1.5		5.0		7.4		5.7		5.9		6.9	Dec-15
SSgA Real Asset Overlay Proxy- Gross	327,869,132	3.9	1.7	-	3.2		11.9		-0.7		1.0		1.0	Jan-08
SSgA Real Asset Overlay Proxy- Net			1.6		2.8		11.5		-0.9		0.8		0.8	
SSgA Real Asset <sup>1</sup>			1.6		3.2		11.9		-1.1		0.9			Jan-08
Opportunities- Gross ++	174,402,562	2.1	0.6		6.3		9.6		15.8		16.2		9.7	Oct-07
Opportunities- Net			0.6		5.7		8.6		14.3		14.8			
Policy Index <sup>1</sup>			4.1		8.7		10.6		5.6		7.8		7.9	Oct-07
Opportunistic Credit - Gross	33,305,982	0.4	-12.9		-14.9		-13.9		-1.0				-0.8	Jul-13
Opportunistic Credit - Net			-12.9		-14.9		-13.9		-1.0				-0.8	
Atalaya Special Opportunities V- Gross	15,008,095	0.2	1.6		5.4		7.5		8.9				6.2	Jul-13
Atalaya Special Opportunities V- Net			1.6		5.4		7.5		8.9				6.2	
Russell 1000 +3% 1Q Lag			4.5		12.9		15.1		11.4		17.6		14.7	Jul-13
European RE Debt II- Gross	18,297,887	0.2	-21.0		-25.4		-25.0		-6.9				-6.4	Nov-13
European RE Debt II- Net			-21.0		-25.4		-25.0		-6.9				-6.4	
NCREIF-ODCE			1.8		6.1		8.3		11.8		12.0		12.4	Nov-13
RE -Opportunistic- Gross	101,309,170	1.2	5.2		14.3		19.4		36.8				35.6	Feb-14
RE -Opportunistic- Net			5.2		13.7		18.3		35.1				34.0	
NFI-ODCE net +1%			1.8		5.7		8.4		11.8				12.3	Feb-14
CIM Opportunity VIII- Gross	25,227,804	0.3	-0.1		5.4		5.1						6.1	Feb-15
CIM Opportunity VIII- Net			-0.1		4.3		3.2						3.4	
NFI-ODCE net +1%			1.8		5.7		8.4		11.8				12.2	Feb-15
Kohlberg Kravis Roberts - Gross	33,509,688	0.4	12.2		31.6		38.4		46.5				45.0	Feb-14
Kohlberg Kravis Roberts - Net			12.2		31.5		38.2		45.8				44.4	
NFI-ODCE net +1%			1.8		5.7		8.4		11.8				12.3	Feb-14

<sup>++</sup> Returns are one-quarter lag.



<sup>1.</sup> See Policy Index and Benchmark History.

													Incep	tion
	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Return (%)	Since
NREP Nordic Strat FCP-FIS- Gross NREP Nordic Strat FCP-FIS- Net	20,699,260	0.2	2.8 2.8		10.5 10.5		18.2 18.2						21.1 21.1	Dec-14
NFI-ODCE net +1%			1.8		5.7		8.4		11.8				11.3	Dec-14
NREP Nordic Strat II- Gross	9,680,411	0.1	3.2	_	-10.2					-			-10.2	Jun-16
NREP Nordic Strat II- Net	-,,		3.2		-10.2								-10.2	
NFI-ODCE net +1%			1.8		5.7		8.4		11.8				5.7	Jun-16
OZ RE III- Gross	12,192,007	0.1	4.2		11.8		17.8						-7.1	Sep-14
OZ RE III- Net			4.2		8.8		12.7						-13.9	
NFI-ODCE net +1%			1.8		5.7		8.4		11.8				11.6	Sep-14
RE -Value Added- Gross ++	39,787,410	0.5	4.0		13.7		17.3		17.9		17.0	-	-2.3	Sep-08
RE -Value Added- Net			4.0		12.4		15.3		15.8		15.2		-4.1	
NFI-ODCE net +1% 1Q Lag <sup>1</sup>			2.1		6.4		9.3		12.8		12.8		8.0	Sep-08
AEW II- Gross	367,767	0.0	-6.8		-18.7		-19.1		7.6		13.6		1.8	May-07
AEW II- Net			-6.8	-	-19.2		-19.8	-	6.5		12.4		0.1	
NFI-ODCE net +1% 1Q Lag			2.1		6.4		9.3		12.8		12.8			May-07
ECE Euro Prime Shopping II- Gross	8,629,896	0.1	1.0		17.0		22.5						20.6	Jul-15
ECE Euro Prime Shopping II- Net			1.0		14.4		18.4						17.6	
NFI-ODCE net +1% 1Q Lag			2.1		6.4		9.3		12.8		12.8		12.1	Jul-15
Hammes II- Gross	14,455,790	0.2	2.1		7.6		12.8						19.8	Jul-15
Hammes II- Net			2.1	-	5.3		8.6				-		13.2	
NFI-ODCE net +1% 1Q Lag			2.1		6.4		9.3		12.8		12.8		12.1	Jul-15
Hines US Office II- Gross*	488,979	0.0												
Hines US Office II- Net														

<sup>1.</sup> See Policy Index and Benchmark History.



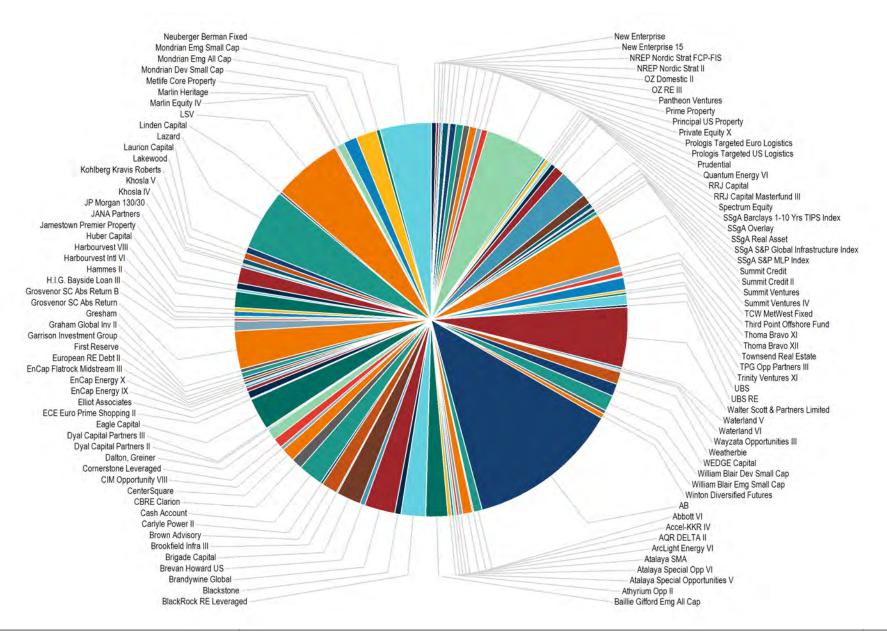
<sup>\*</sup> Liquidating as of December 2016.

<sup>++</sup> Returns are one-quarter lag.

1

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD F (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Return (%)	Since
UBS RE- Gross	15,844,978	0.2	0.2		6.0		10.4		10.0		11.2		0.1	Sep-06
UBS RE- Net			0.2	-	5.7		10.0		9.5		10.5		-1.5	
Russell 1000 +3% 1Q Lag			4.5		12.9		15.1		11.4		17.6			Sep-06
Cash - Gross	166,801,727	2.0	0.4		1.1		1.5		1.2		0.8		3.2	Jun-92
Cash - Net			0.4		1.1		1.5		1.2		0.8			
91 Day T-Bills			0.1		0.3		0.4		0.2		0.1		2.5	Jun-92
Cash Account- Gross	166,801,727	2.0	0.4		1.1		1.5		1.3		8.0		3.3	Jun-92
Cash Account- Net			0.4		1.1		1.5		1.3		8.0			
91 Day T-Bills			0.1		0.3		0.4		0.2		0.1		2.5	Jun-92





	Current	%
AB	\$1,040,567,744	12.4%
JP Morgan 130/30	\$106,667,905	1.3%
Brown Advisory	\$106,543,173	1.3%
Eagle Capital	\$217,648,676	2.6%
Huber Capital	\$107,818,655	1.3%
UBS	\$64,820,483	0.8%
Weatherbie	\$87,563,292	1.0%
Dalton, Greiner	\$78,212,915	0.9%
WEDGE Capital	\$87,385,905	1.0%
CenterSquare	\$94,367,176	1.1%
Principal Global Inv	\$170,312	0.0%
Lazard	\$416,446,716	5.0%
LSV	\$467,036,267	5.6%
Mondrian Dev Small Cap	\$94,238,266	1.1%
Walter Scott & Partners Limited	\$413,113,122	4.9%
William Blair Dev Small Cap	\$108,012,022	1.3%
Baring	\$11,254	0.0%
Baillie Gifford Emg All Cap	\$149,289,820	1.8%
Mondrian Emg All Cap	\$139,444,192	1.7%
Mondrian Emg Small Cap	\$24,972,310	0.3%
William Blair Emg Small Cap	\$26,801,153	0.3%
CBRE Clarion	\$79,289,368	0.9%
Neuberger Berman Fixed	\$351,742,475	4.2%
Prudential	\$420,230,528	5.0%
TCW MetWest Fixed	\$371,067,599	4.4%
Brandywine Global	\$212,602,057	2.5%



	Current	%
Brigade Capital	\$168,155,520	2.0%
AQR DELTA II	\$70,320,488	0.8%
Brevan Howard US	\$34,994,899	0.4%
Claren Road Credit	\$2,570,919	0.0%
Elliot Associates	\$50,281,019	0.6%
Graham Global Inv II	\$33,524,983	0.4%
Grosvenor	\$432,213	0.0%
Grosvenor SC Abs Return	\$256,364,285	3.1%
Grosvenor SC Abs Return B	\$69,559,935	0.8%
JANA Partners	\$40,461,193	0.5%
Lakewood	\$43,102,763	0.5%
Laurion Capital	\$40,867,520	0.5%
OZ Domestic II	\$43,557,346	0.5%
Third Point Offshore Fund	\$44,316,346	0.5%
Winton Diversified Futures	\$35,324,524	0.4%
Abbott VI	\$62,084,299	0.7%
Accel-KKR IV	\$10,992,165	0.1%
Accel-KKR V	\$1,262,787	0.0%
Accel-KKR Structured II	\$3,964,012	0.0%
Atalaya Special Opp VI	\$18,410,278	0.2%
Athyrium Opp II	\$24,156,998	0.3%
Dyal Capital Partners II	\$7,126,408	0.1%
Dyal Capital Partners III	\$8,722,642	0.1%
Garrison Investment Group	\$13,821,166	0.2%
Harbourvest VIII	\$25,563,171	0.3%



		Current	%
ŀ	Harbourvest Intl VI	\$31,309,380	0.4%
H	H.I.G. Bayside Loan III	\$17,857,198	0.2%
ŀ	H.I.G. Capital V	\$3,758,486	0.0%
H	H.I.G. Europe Capital II	-\$479,885	0.0%
ŀ	Khosla IV	\$14,406,178	0.2%
ŀ	Khosla V	\$11,066,699	0.1%
L	Linden Capital	\$16,467,715	0.2%
M	Marlin Equity IV	\$12,113,677	0.1%
N	Marlin Heritage	\$9,399,487	0.1%
1	New Enterprise	\$32,733,137	0.4%
1	New Enterprise 15	\$20,764,029	0.2%
F	Private Equity X	\$49,497,666	0.6%
F	RRJ Capital	\$25,694,995	0.3%
F	RRJ Capital Masterfund III	\$10,805,835	0.1%
	Spectrum Equity	\$15,806,179	0.2%
9	Summit Credit	\$6,096,213	0.1%
	Summit Credit II	\$21,650,750	0.3%
9	Summit Ventures	\$22,189,198	0.3%
9	Summit Ventures IV	\$9,199,172	0.1%
1	Thoma Bravo XI	\$35,221,843	0.4%
٦	Thoma Bravo XII	\$10,553,107	0.1%
1	TPG Opp Partners III	\$20,456,689	0.2%
1	Trinity Ventures XI	\$20,163,325	0.2%
7	Trinity Ventures XII	\$3,770,413	0.0%
٦	TSG7 A LP	\$2,403,614	0.0%
7	TSG7 B LP	\$253,996	0.0%



	Current	%
Waterland V	\$13,227,246	0.2%
Waterland VI	\$5,719,759	0.1%
Waterland VI Over	\$859	0.0%
Wayzata Opportunities III	\$9,882,926	0.1%
BlackRock RE Leveraged	\$166,613,205	2.0%
BlackRock RE II Leveraged	\$1,641,474	0.0%
Cornerstone Leveraged	\$66,153,584	0.8%
Jamestown Premier Property	\$19,250,484	0.2%
Metlife Core Property	\$52,000,268	0.6%
Prime Property	\$52,320,569	0.6%
Principal US Property	\$39,940,709	0.5%
Prologis Targeted Euro Logistics	\$29,812,103	0.4%
Prologis Targeted US Logistics	\$40,023,646	0.5%
Townsend Real Estate	\$81,968,575	1.0%
Transition Account	\$35,349	0.0%
Blackstone	\$41,313,982	0.5%
Gresham	\$25,474,303	0.3%
ACM II	\$4,004,984	0.0%
ArcLight Energy VI	\$22,155,576	0.3%
Atalaya SMA	\$13,294,400	0.2%
Brookfield Infra III	\$7,172,039	0.1%
Carlyle Power II	\$13,834,048	0.2%
EnCap Energy IX	\$24,455,912	0.3%
EnCap Energy X	\$13,150,658	0.2%
EnCap Flatrock Midstream III	\$7,242,178	0.1%



	Current	%
First Reserve	\$14,302,322	0.2%
Pantheon Ventures	\$41,106,627	0.5%
Quantum Energy VI	\$17,094,027	0.2%
Wastewater Opportunity	\$2,741,716	0.0%
Atalaya Special Opportunities V	\$15,008,095	0.2%
European RE Debt II	\$18,297,887	0.2%
CIM Opportunity VIII	\$25,227,804	0.3%
Kohlberg Kravis Roberts	\$33,509,688	0.4%
NREP Nordic Strat FCP-FIS	\$20,699,260	0.2%
NREP Nordic Strat II	\$9,680,411	0.1%
OZ RE III	\$12,192,007	0.1%
AEW II	\$367,767	0.0%
ECE Euro Prime Shopping II	\$8,629,896	0.1%
Hammes II	\$14,455,790	0.2%
Hines US Office II	\$488,979	0.0%
UBS RE	\$15,844,978	0.2%
Cash Account	\$166,801,727	2.0%
Heitman Adv JMB V	\$8,390	0.0%
SSgA Overlay	\$66,879,632	0.8%
SSgA Barclays 1-10 Yrs TIPS Index	\$32,753,967	0.4%
SSgA Real Asset	\$196,534,553	2.4%
SSgA S&P Global Infrastructure Index	\$65,447,580	0.8%
SSgA S&P MLP Index	\$33,133,032	0.4%
Total	\$8,361,055,329	100.0%



# **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	5.0%	67	6.0%	49	0.8	68	-0.3	82	1.9%	93
Policy Index	5.6%	50	5.2%	9	1.0	17			0.0%	1
Total Fund ex Overlay	5.2%	61	5.5%	20	0.9	42	-0.2	80	1.4%	75
Policy Index	5.6%	50	5.2%	9	1.0	17			0.0%	1

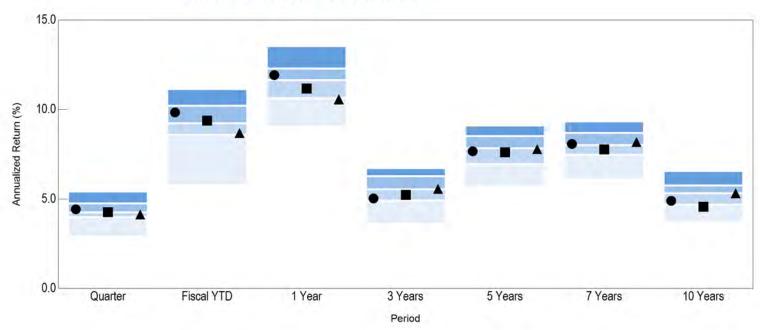
# **Statistics Summary**

### 5 Years

	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Sharpe Ratio	Sharpe Ratio Rank	Information Ratio	Information Ratio Rank	Tracking Error	Tracking Error Rank
Total Fund	7.7%	58	6.3%	58	1.2	52	-0.1	81	2.0%	92
Policy Index	7.8%	53	5.1%	5	1.5	8			0.0%	1
Total Fund ex Overlay	7.6%	62	5.9%	26	1.3	35	-0.1	85	1.6%	85
Policy Index	7.8%	53	5.1%	5	1.5	8			0.0%	1







5th Percentile
25th Percentile
Median
75th Percentile
95th Percentile
# of Portfolios
Total Fund

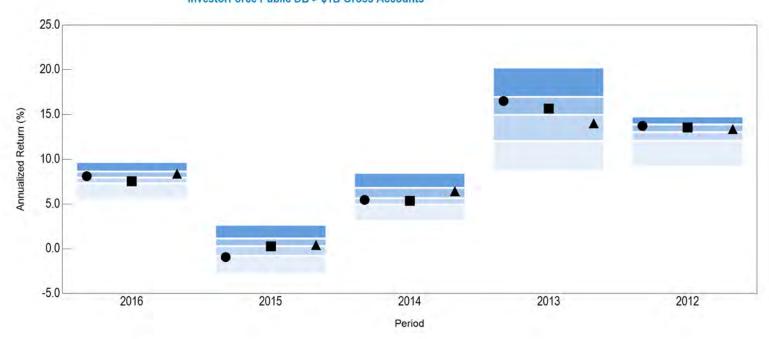
Total Fund

■ Total Fund ex Overlay

A Policy Index

5.4		11.1		13.5		6.7		9.1		9.3		6.6	
4.8		10.2		12.3		6.3		8.5		8.7		5.8	
4.3		9.2		11.6		5.5		7.8		8.0		5.3	
4.0		8.6		10.7		4.9		7.0		7.5		4.7	
2.9		5.8		9.1		3.6		5.7		6.1		3.7	
79		78		72		61		58		50		49	
4.4	(43)	9.8	(39)	11.9	(42)	5.0	(67)	7.7	(58)	8.1	(49)	4.9	(69)
4.3	(51)	9.4	(48)	11.2	(62)	5.2	(61)	7.6	(62)	7.8	(65)	4.6	(85)
4.1	(68)	8.7	(73)	10.6	(79)	5.6	(50)	7.8	(53)	8.2	(48)	5.3	(51)

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

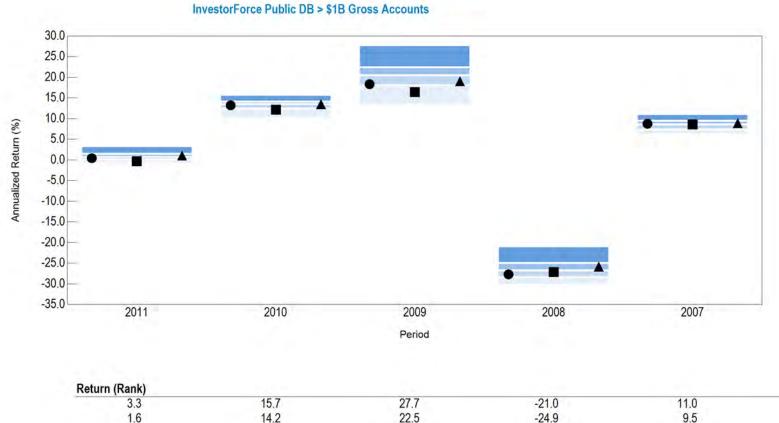


5th Percentile
25th Percentile
Median
75th Percentile
95th Percentile
# of Portfolios

Total Fund

■ Total Fund ex Overlay ▲ Policy Index

Return (Rank)									
9.7		2.7		8.5		20.2		14.7	
8.6		1.1		6.8		17.0		13.9	
8.0		0.3		5.7		15.0		13.0	
7.4		-0.7		4.9		12.0		12.1	
5.5		-2.8		3.1		8.7		9.2	
92		98		79		67		74	
8.1	(43)	-0.9	(83)	5.5	(61)	16.5	(31)	13.7	(36)
7.5	(69)	0.3	(51)	5.3	(65)	15.6	(43)	13.6	(41)
8.4	(34)	0.4	(46)	6.4	(34)	14.0	(64)	13.4	(42)



9	95th Percentile
#	of Portfolios
•	Total Fund
	Total Fund ex Overlay
•	Policy Index

5th Percentile 25th Percentile Median 75th Percentile

3.3		15.7		27.7		-21.0		11.0	
1.6		14.2		22.5		-24.9		9.5	
0.8		13.5		20.5		-26.7		8.6	
0.1		12.5		18.1		-28.3		7.4	
-0.9		10.2		13.4		-30.2		6.2	
68		66		66		65		64	
0.4	(60)	13.2	(62)	18.3	(73)	-27.7	(65)	8.7	(50)
-0.3	(86)	12.2	(81)	16.4	(86)	-27.2	(53)	8.6	(51)
1.0	(38)	13.5	(53)	19.0	(62)	-25.8	(42)	8.9	(42)

Total Plan Policy Index	As of:						
	1/1/14	1/1/12	1/1/08	2/1/06	9/1/04	1/1/00	7/1/86
91-day UST Bill +5% (HF)	10%	10%	5%	5%	5%		
BBgBarc Aggregate	15%	20%	20%	25%	25%	30%	
BofA ML High Yield II	1%						
Bloomberg Commodity			5%				
Citigroup BIG							23%
Citigroup WGBI ex US Unhedged	2.4%						
CPI-U +5% (RA)	15%	15%					
Credit Suisse Leveraged Loans	1%						
JPM GBI EM Diversified	0.6%						
MSCI ACWI ex US	22.5%	22.5%	20%				
MSCI EAFE				15%	15%	15%	15%
MSCI Emerging Markets				5%	5%	5%	
NAREIT			3%	3%			
NCREIF			12%	12%	15%	10%	15%
Russell 1000				30%	30%	35%	
Russell 1000 +3% 1QL (PE)	10%	10%					
Russell 2000				5%	5%	5%	
Russell 3000	22.5%	22.5%	30%				47%
S&P 500 +2% 1QL (PE)			5%				
	100%	100%	100%	100%	100%	100%	100%



US Equity Benchmark	As of:			
	1/1/08	9/1/04	1/1/00	7/1/86
Russell 1000		85.71%	87.5%	
Russell 2000		14.29%	12.5%	
Russell 3000	100%			100%
William Co.	100.0%	100.0%	100.0%	100.0%
International Equity Benchmark	As of:			
	1/1/08	1/1/00	7/1/86	
MSCI ACWI ex US	100%		110043	
MSCI EAFE	3.5.7.9	75%	100%	
MSCI Emerging Markets		25%		
	100.0%	100.0%	100.0%	
Fixed Income Benchmark	As of:			
	1/1/08	1/1/00	7/1/86	
BBgBarc Aggregate	75%	100%		
BofA ML High Yield II	5%			
Citigroup BIG			100%	
Citigroup WGBI ex US Unhedged	12%			
Credit Suisse Leveraged Loans	5%			
JPM GBI EM Diversified	3%			
	100.0%	100.0%	100.0%	
Absolute Return Benchmark	As of:			
	9/1/04			
91-day UST Bill +5%	100%			
A STATE OF THE STA	100.0%			

Private Equity Benchmark	As of:	
	1/1/12	1/1/08
Russell 1000 +3% 1QL	100%	
S&P 500 +2% 1QL		100%
	100.0%	100.0%
Real Assets Benchmark	As of:	
	1/1/12	
CPI-U +5%	100%	
	100.0%	
Real Estate Benchmark	As of:	
Near Estate Benominary	4/1/13	1/1/99
NCREIF	41110	100%
NFI-ODCE	100%	
	100.0%	100.0%
Private Real Assets Benchmark	As of:	
Tivate Real Assets Benominark	2/1/13	
Russell 1000 +3% 1QL	100%	
14656111655 678.1542	100.0%	
Opportunistic Benchmark	As of:	
opportunistic Benominark	1/1/12	11/1/07
BBgBarc Aggregate		100%
SCERS Policy	100%	
	100%	100%
RE-Value Added Benchmark	As of:	
RE-Value Added Delicilliark	7/1/16	10/1/08
NCREIF +2% 1Q Lag	1711/10	100%
	100%	1007
NFI-ODCE net +1% 1Q Lag	1(117/0	

AllianceBernstein Benchmark	As of:		
	1/1/01	1/1/98	5/1/89
Russell 1000	100%		
Russell 3000		100%	
Wilshire 2500			100%
	100.0%	100.0%	100.0%
LSV Benchmark	As of:		
	7/1/12	1/1/05	
MSCI EAFE Value		100.0%	
MSCI World ex US	100.0%		
	100.0%	100.0%	
Brandywine Benchmark	As of:		
	6/1/13		
Citigroup WGBI ex US Unhedged	80%		
JPM GBI EM Diversified	20%		
	100.0%		
Brigade Benchmark	As of: 12/1/13		
BofA ML High Yield II	50%		
Credit Suisse Leveraged Loans	50%		
	100.0%		
SSgA Real Asset Benchmark	As of:		
AND THE PERSON NAMED IN	2/1/08		
BBgBarc US TIPS	20%		
DJ US Select REIT	30%		
MSCI World Natural Resources	25%		
S&P GS Commodities	25%		
	100.0%		



## 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)].

**Beachmark 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.

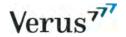
**Sharpe Ratio:** A measure of portfolio efficiency. The Sharpe Ratio indicates excess portfolio return for each unit of risk associated with achieving the excess return. The higher the Sharpe Ratio, the more efficient the portfolio. Sharpe ratio is calculated as: Portfolio Excess Return / Portfolio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



### Disclaimer

This report contains confidential and proprietary information and is subject to the terms and conditions of the Consulting Agreement. It is being provided for use solely by the customer. The report may not be sold or otherwise provided, in whole or in part, to any other person or entity without written permission from Verus Advisory, Inc., (hereinafter Verus) or as required by law or any regulatory authority. The information presented does not constitute a recommendation by Verus and cannot be used for advertising or sales promotion purposes. This does not constitute an offer or a solicitation of an offer to buy or sell securities, commodities or any other financial instruments or products.

The information presented has been prepared using data from third party sources that Verus believes to be reliable. While Verus exercised reasonable professional care in preparing the report, it cannot guarantee the accuracy of the information provided by third party sources. Therefore, Verus makes no representations or warranties as to the accuracy of the information presented. Verus takes no responsibility or liability (including damages) for any error, omission, or inaccuracy in the data supplied by any third party. Nothing contained herein is, or should be relied on as a promise, representation, or guarantee as to future performance or a particular outcome. Even with portfolio diversification, asset allocation, and a long-term approach, investing involves risk of loss that the investor should be prepared to bear.

The information presented may be deemed to contain forward-looking information. Examples of forward looking information include, but are not limited to, (a) projections of or statements regarding return on investment, future earnings, interest income, other income, growth prospects, capital structure and other financial terms, (b) statements of plans or objectives of management, (c) statements of future economic performance, and (d) statements of assumptions, such as economic conditions underlying other statements. Such forward-looking information can be identified by the use of forward looking terminology such as believes, expects, may, will, should, anticipates, or the negative of any of the foregoing or other variations thereon comparable terminology, or by discussion of strategy. No assurance can be given that the future results described by the forward-looking information will be achieved. Such statements are subject to risks, uncertainties, and other factors which could cause the actual results to differ materially from future results expressed or implied by such forward looking information. The findings, rankings, and opinions expressed herein are the intellectual property of Verus and are subject to change without notice. The information presented does not claim to be all-inclusive, nor does it contain all information that clients may desire for their purposes. The information presented should be read in conjunction with any other material provided by Verus, investment managers, and custodians.

Verus will make every reasonable effort to obtain and include accurate market values. However, if managers or custodians are unable to provide the reporting period's market values prior to the report issuance, Verus may use the last reported market value or make estimates based on the manager's stated or estimated returns and other information available at the time. These estimates may differ materially from the actual value. Hedge fund market values presented in this report are provided by the fund manager or custodian. Market values presented for private equity investments reflect the last reported NAV by the custodian or manager net of capital calls and distributions as of the end of the reporting period. These values are estimates and may differ materially from the investments actual value. Private equity managers report performance using an internal rate of return (IRR), which differs from the time-weighted rate of return (TWRR) calculation done by Verus. It is inappropriate to compare IRR and TWRR to each other. IRR figures reported in the illiquid alternative pages are provided by the respective managers, and Verus has not made any attempts to verify these returns. Until a partnership is liquidated (typically over 10-12 years), the IRR is only an interim estimated return. The actual IRR performance of any LP is not known until the final liquidation.

Verus receives universe data from InvestorForce, eVestment Alliance, and Morningstar. We believe this data to be robust and appropriate for peer comparison. Nevertheless, these universes may not be comprehensive of all peer investors/managers but rather of the investors/managers that comprise that database. The resulting universe composition is not static and will change over time. Returns are annualized when they cover more than one year. Investment managers may revise their data after report distribution. Verus will make the appropriate correction to the client account but may or may not disclose the change to the client based on the materiality of the change.