

Board of Retirement Regular Meeting

Sacramento County Employees' Retirement System

Agenda Item 15

MEETING DATE: August 16, 2017

SUBJECT: Quarterly Total Fund Investment Performance Report

Second Quarter 2017

SUBMITTED FOR: ___ Consent ___ and Action ___ X and File

RECOMMENDATION

Staff and Verus recommend the Board receive and file the SCERS Total Fund Investment Performance Review report, prepared by Verus, for the guarter ending June 30, 2017.

PURPOSE

To comply with SCERS' investment policy statement reporting requirements and provide a summary of SCERS' Total Fund investment returns and market environment discussion as of the quarter ending June 30, 2017.

SCERS TOTAL FUND RETURNS

This item summarizes SCERS' Total Fund investment returns as presented in Verus' Investment Performance Review for the period ending June 30. 2017. Please note that returns for SCERS' private equity, private credit, non-core real estate and real assets portfolios are lagged one-quarter.

SCERS TOTAL FUND PERFORMANCE SUMMARY Quarter Reporting Periods Ending June 30, 2017

	<u> </u>						
SCERS ASSET CLASS	Quarter	Year-to- Date	1-Year	3-Year	5-Year	Since Inception	Since Inception Date
SCERS TOTAL FUND Return w/Overlay	3.5%	8.1%	13.7%	5.0%	8.8%	8.4%	Jun-86
Policy Index	2.7%	7.0%	11.7%	5.3%	8.4%	8.6%	
InvestorForce Public DB > \$1B	3.1%	7.6%	12.8%	5.4%	9.1%	8.3%	
SCERS TOTAL FUND Return w/o Overlay	3.6%	8.0%	13.4%	5.3%	8.7%	8.3%	Jun-86
Policy Index	2.7%	7.0%	11.7%	5.3%	8.4%	8.6%	
GROWTH ASSET CATEGORY	4.6%					4.6%	Mar-17
Custom Benchmark	3.8%					3.8%	
DIVERSIFYING ASSET CATEGORY	1.5%					1.5%	Mar-17
Custom Benchmark	1.3%					1.3%	
REAL RETURN ASSET CATEGORY	2.0%					2.0%	Mar-17
Custom Benchmark	1.1%					1.1%	
OPPORTUNITIES PORTFOLIO	3.6%					3.6%	Mar-17
Custom Benchmark	2.8%					2.8%	

Verus' report has been reformatted to reflect SCERS' new strategic asset allocation, including the Growth, Diversifying, and Real Return asset categories. Please note that new composites were added for the asset categories and several segments of the portfolio, so the performance of these segments include only one quarter of performance for this report, without a historical track record. Verus will attempt to fill in historical performance for some segments in future reports, as is feasible.

SCERS' policy index benchmark includes a blended weighted average of the individual asset class benchmarks, as defined within SCERS' Master IPS, and as shown below. Many of the asset class benchmarks are carry-over benchmarks from the prior policy index benchmark, while some have been changed as part of the implementation of the new asset allocation, including those for Private Equity and Private Credit. Some of the carryover benchmarks are expected to change over the next several months, including those for Real Estate, Real Assets and Absolute Return. A comparison of the new and prior policy benchmarks is shown below.

SCERS BENCHMARK SUMMARY As of June 30, 2017							
Asset Class	Prior Benchmark	New Benchmark					
SCERS Total Fund	10% (91-Day T-Bill + 5%) + 15% (Barclays Agg.) + 1% (BofA High Yield) + 2.4% (Citi WGBI) + 15% (CPI-U Headline + 5%) + 1% (CS Leverage Loan) + 0.6% (JPM GBI EM) + 22.5% (MSCI ACWI exU.S.) + 10% (Russell 1000 + 3%) + 22.5% (Russell 3000)	10% (91-Day T-Bill + 5%) + 10% (Barclays Agg.) + 5% (Barclays U.S. TIPS) + 1% (BofA High Yield) + 2% (Bloomberg Commodity) + 2.4% (Citi WGBI) + 7% (CPI-U Headline + 5%) + 1% (CS Leverage Loan) + 4% (CS Leveraged Loan + 2%) + 0.6% (JPM GBI EM) + 21% (Russell 3000) + 20% (MSCI ACWI exU.S.) + 7% (NCREIF) + 9% (Cambridge All PE)					
Growth Asset Category	NA	5.08% (91 Day T-Bill + 5%) + 1.7% (BofA High Yield) + 1.7% (CS Leveraged Loan) + 6.78% (CS Leveraged Loan + 2%) + 35.59% (Russell 3000) + 33.9% (MSCI ACWI exU.S.) + 15.25% (Cambridge All PE)					
Public Equities	MSCI ACWI	MSCI ACWI					
US Equities	Russell 3000	Russell 3000					
International Equities	MSCI ACWI exU.S.	MSCI ACWI exU.S.					
Private Equity	Russell 1000 + 3%	Cambridge All PE					
Public Credit	50% (BofA High Yield) + 50% (CS Leverage Loan)	50% (BofA High Yield) + 50% (CS High Yield)					
Private Credit	NA	CS Leveraged Loan + 2%					
Growth Absolute Return	91 Day T-Bill + 5%	91 Day T-Bill + 5%					
Diversifying Asset Category	NA	28% (91 Day T-Bill + 5%) + 40% (Barclays U.S. Agg.) + 20% (Barclays U.S. TIPS) + 9.6% (Citi WGBI exU.S.) + 2.4% (JPM GBI EM Diversified)					
U.S. Fixed Income	Barclays U.S. Aggregate	Barclays U.S. Aggregate					
Global Fixed Income	80% Citi WGBI + 20% JPMorgan GBI EM	80% Citi WGBI + 20% JPMorgan GBI EM					
Diversifying Absolute Return	91 Day T-Bill + 5%	91 Day T-Bill + 5%					
Real Return Asset Category	NA	43.75% (NCREIF) + 43.75% (CPI-U Headline + 5%) + 12.5% (Bloomberg Commodity)					
Real Estate	NA	NCREIF					
Core Real Estate	NFI-ODCE	NFI-ODCE					
Non-Core Real Estate	NFI-ODCE + 1%	NFI-ODCE + 1%					
Private Real Assets	CPI-U Headline + 5%	CPI-U Headline + 5%					
Commodities SSgA Real Assets Proxy	· · · · · · · · · · · · · · · · · · ·	Bloomberg Commodity Index 20% (Barclays U.S. TIPS) + 30% (Dow Jones U.S. Select REIT) + 25% (MSCI World Natural Resources) + 25% (S&P Goldman Sachs Commodities)					
Opportunities Portfolio	SCERS Total Fund	SCERS Total Fund					

August 16, 2017 Page 3 of 15 Agenda item 15

SCERS GROWTH ASSET CATEGORY RETURNS

SCERS GROWTH Performance Summary for the periods ending 6/30/17	Quarter	Year-to- Date	1-Year	Since Inception	Since Inception Date
SCERS GROWTH ASSET CATEGORY	4.6%			4.6%	Mar-17
Custom Benchmark	3.8%			3.8%	
Public Equity	5.1%	NA	NA	5.1%	Mar-17
MSCI ACWI	4.3%	11.5%	18.8%	4.3%	
Private Equity (lagged 1 quarter)	3.9%	7.2%	14.5%	-0.4%	Feb-08
Cambridge All PE	3.4%	8.1%	16.7%	9.6%	
Public Credit	1.7%	5.2%	15.3%	4.8%	Nov-13
Custom Benchmark	1.4%	3.4%	10.1%	4.7%	
Private Credit (lagged 1 quarter)	3.5%			3.5%	Mar-17
Credit Suisse Leveraged Loan + 2%	1.1%			1.1%	
Growth Absolute Return	2.2%	NA	NA	NA	Aug-04
91 Day T-Bill + 5%	1.4%	2.8%	5.5%	6.3%	

Public Equity Portfolio Returns

The SCERS Public Equity portfolio is a combination of U.S. and International exposures across large and small cap strategies. Over half of the U.S. Large Cap portfolio is passively managed, with the remaining balance actively managed, while the entire U.S. Small Cap portfolio is actively managed. The SCERS International Equity portfolio is a combination of developed and emerging markets exposure, with the entire portfolio actively managed across large and small cap strategies.

(Remainder of page intentionally left blank)

SCERS PUBLIC EQUITY Performance Summary for the periods ending 6/30/17	Quarter	Year-to- Date	1-Year	Since Inception	Since Inception Date
SCERS PUBLIC EQUITY PORTFOLIO	5.1%			5.1%	Mar-17
MSCI ACWI	4.3%			4.3%	
SCERS U.S. Equity	3.3%	9.2%	19.3%	10.0%	Jun-86
Russell 3000	3.0%	8.9%	18.5%	10.1%	
U.S. Large Cap	3.3%	9.9%	19.6%	5.8%	Mar-98
Russell 1000	3.1%	9.3%	18.0%	6.4%	
U.S. Small Cap	4.1%	8.2%	27.9%	12.0%	Dec-90
Russell 2000	2.5%	5.0%	24.6%	10.9%	
U.S. REIT	1.0%	2.1%	-2.0%	9.1%	Jan-06
FTSE NAREIT Equity REIT	1.5%	2.7%	-1.7%	6.8%	
SCERS International Equity	7.0%	16.3%	21.1%	6.5%	Dec-87
MSCI ACWI exU.S.	6.0%	14.5%	21.0%	6.3%	
International Developed	7.3%	15.5%	21.6%	4.5%	Mar-98
MSCI EAFE	6.4%	14.2%	20.8%	4.6%	
Emerging Markets	6.6%	20.8%	23.2%	6.4%	Jan-00
MSCI Emerging Markets	6.4%	18.6%	24.2%	7.0%	
International REIT	4.8%	9.5%	6.1%	11.2%	Oct-08
FTSE NAREIT Developed exU.S.	5.0%	10.1%	6.0%	10.0%	

Second Quarter 2017:

- SCERS Public Equity portfolio returned +5.1% versus the benchmark return of +4.3%.
- SCERS U.S. Equity portfolio returned +3.3% versus the benchmark return of +3.1%.
 - > SCERS U.S. Large Cap portfolio returned +3.3% versus the benchmark return of 3.1%. Manager returns compared to their respective benchmark:
 - JP Morgan (130/30): +2.1% versus +3.1%.
 - Brown Advisory (growth): +5.7% versus +4.7%.
 - Eagle Capital (core): +4.2% versus +3.1%.
 - Huber Capital (value): +2.5% +1.3%.
 - ➤ SCERS U.S. Small Cap portfolio returned +4.1% versus the benchmark return of +2.5%. Manager returns compared to their respective benchmark:
 - UBS Global (growth): +2.7% versus +4.4%.
 - Weatherbie (growth): +12.6% versus +4.4%.
 - DGHM (value): -0.1% versus +0.7%.
 - Wedge Capital (value): +0.3% versus +0.7%.

- CenterSquare U.S. REIT: +1.0% versus +1.5%.
- SCERS International Equity portfolio returned +7.0% versus the benchmark return of +6.0%.
 - ➤ SCERS International Developed portfolio returned +7.3% versus the benchmark return of +6.4%. Manager returns compared to their respective benchmark:
 - Lazard (all cap): +7.3% versus +6.0%.
 - Walter Scott (large cap growth): +8.1% versus +5.9%.
 - LSV (large cap value): +6.1% versus +5.9%.
 - Mondrian (small cap value): +7.9% versus +7.5%.
 - William Blair (small cap growth): +8.6% versus +7.5%.
 - SCERS Emerging Markets portfolio returned +6.6% versus the benchmark return of +6.4%. Manager returns compared to their respective benchmark:
 - Baillie Gifford (all cap): +9.2% versus +6.4%.
 - Mondrian (all cap): +4.3% versus +6.4%.
 - Mondrian (small cap): +3.9% versus +2.7%.
 - William Blair (small cap): +6.8% versus +2.7%.
 - CBRE Clarion International REIT: +4.8% versus the benchmark of +5.0%.

One-Year:

- SCERS U.S. Equity portfolio returned +19.3% versus the benchmark return of +18.5%.
 - ➤ SCERS U.S. Large Cap portfolio returned +19.6% versus the benchmark return of +18.0%. Manager returns compared to their respective benchmark:
 - JP Morgan (130/30): +23.5% versus +18.0%.
 - Brown Advisory (growth): +14.6% versus +20.4%.
 - Eagle Capital (core): +26.6% versus +18.0%.
 - Huber Capital (value): +20.6% +15.5%.
 - ➤ SCERS U.S. Small Cap portfolio returned +27.9% versus the benchmark return of +24.6%. Manager returns compared to their respective benchmark:
 - UBS Global (growth): +24.8% versus +24.4%.
 - Weatherbie (growth): +44.3% versus +24.4%.
 - DGHM (value): +21.9% versus +24.9%.
 - Wedge Capital (value): +20.2% versus +24.9%.
 - CenterSquare U.S. REIT: -2.0% versus the benchmark of -1.7%.
- SCERS International Equity portfolio returned +21.1% versus the benchmark return of +21.0%.

- ➤ SCERS International Developed portfolio returned +21.6% versus the benchmark return of +20.8%. Manager returns compared to their respective benchmark:
 - Lazard (all cap): +15.1% versus +21.0%.
 - Walter Scott (large cap growth): NA.
 - LSV (large cap value): +26.6% versus +20.1%.
 - Mondrian (small cap value): +19.1% versus +21.7%
 - William Blair (small cap growth): +18.8% versus +21.7%.
- ➤ SCERS Emerging Markets portfolio returned +23.2% versus the benchmark return of +24.2%. Manager returns compared to their respective benchmark:
 - Baillie Gifford (all cap): +34.5% versus +24.2%.
 - Mondrian (all cap): +16.7% versus +24.2%.
 - Mondrian (small cap): +9.2% versus +17.3%.
 - William Blair (small cap): +14.4% versus +17.3%.
- > CBRE Clarion International REIT: +6.1% versus the benchmark of +6.0%.

Private Equity Portfolio Returns

The SCERS Private Equity portfolio remains early in its investments cycle (the J-curve effect) and less seasoned, so returns over the reporting periods are lower than the benchmark period returns. In order to calculate SCERS' Total Fund return, SCERS' private equity returns are time-weighted ('TWR') rather than on a typical internal rate of return ('IRR') basis. However, Cliffwater's Alternative Asset (private equity and real assets) quarterly performance report uses an IRR calculation, which accounts for the timing of investment cash flows. The Private Equity performance will be covered in greater detail in the Cliffwater private equity report at the September Board meeting.

Please note that returns for SCERS' private equity portfolio is lagged one-quarter.

SCERS PRIVATE EQUITY Performance Summary for the periods ending 3/31/17	Quarter	Year-to- Date	1-Year	Since Inception	Since Inception Date
SCERS Private Equity Cambridge All PE	3.9% 3.4%	7.2% 8.1%	14.5% 16.7%	-0.4% 9.6%	Feb-08

First Quarter 2017:

- SCERS Private Equity portfolio returned +3.9% versus the benchmark return of +3.4%. Notable outperformers include:
 - Trinity Ventures XII (venture capital): +30.5%
 - Accel-KKR IV (buyout): +15.3%

- Trinity Ventures XI (venture capital): +11.1%
- SCERS made a €30 million commitment to Summit Partners Europe Growth Equity Fund II during the second quarter of 2017.

One-Year:

- SCERS Private Equity portfolio returned +14.5% versus the benchmark return of +16.7%. Notable outperformers include:
 - Marlin Heritage (buyout): +62.2%.
 - H.I.G. Capital Partners V (buyout): +31.6%.
 - ➤ New Enterprise Associates 15 (venture capital): +23.9%.

Public/Private Credit Portfolio Returns

SCERS PUBLIC / PRIVATE CREDIT Performance Summary for the periods ending 6/30/17	Quarter	Year-to- Date	1-Year	Since Inception	Since Inception Date
SCERS Public Credit (current quarter)	1.7%	5.2%	15.3%	4.8%	Nov-13
Custom Benchmark	1.4%	3.4%	10.1%	4.7%	
SCERS Private Credit (lagged 1 quarter)	3.5%			3.5%	Mar-17
Credit Suisse Leverage Loan + 2%	1.1%			1.1%	

Second Quarter 2017:

- SCERS Public Credit portfolio returned +1.7% versus the benchmark return of +1.4%.
- SCERS Private Credit portfolio returned +3.5% versus the benchmark return of +1.1% lagged one quarter. Notable outperformers include:
 - Summit Partners Credit: +4.2%.
 - Summit Partners Credit II: +4.1%.
- SCERS did not make any Public or Private Credit commitments or investments during the second quarter of 2017.

One-Year:

- SCERS Public Credit portfolio returned +15.3 versus the benchmark return of +10.1%.
- SCERS Private Credit portfolio return was not available.

August 16, 2017 Page 8 of 15 Agenda item 15

Growth Absolute Return Portfolio Returns

SCERS GROWTH ABSOLUTE RETURN Performance Summary for the periods ending 6/30/17	Quarter	Year-to- Date	1-Year	Since Inception	Since Inception Date
SCERS Growth Absolute Return	2.2%	NA	NA	NA	Mar-17
91 Day T-Bill + 5%	1.4%	2.8%	5.5%	5.2%	

Second Quarter 2017:

- SCERS Growth Absolute Return portfolio returned +2.2% versus the benchmark return of +1.4%. Notable outperformers include:
 - Claren Road Credit (global long/short): +5.9%.
 - Third Point (event driven): +4.6%.
 - OZ Domestic Partners II (multi-strategy): +3.6%.
- Grosvenor separate account returns:
 - > SCARF: +2.0%.
 - ➤ Interim SCARF B: +2.5%
- SCERS did not make any Growth Absolute Return commitments or investments during the second quarter of 2017.

One-Year:

- SCERS Growth Absolute Return portfolio return was not available. Notable outperformers versus the benchmark return of +5.5% include:
 - Claren Road Credit (global long/short): +18.6%.
 - > JANA Partners (event driven): +16.3%.
 - Lakewood Capital Partners (equity long/short): +15.4%.
- Grosvenor separate account returns:
 - > SCARF: +12.9%.
 - Interim SCARF B: +11.3%.

SCERS DIVERSIFYING ASSET CATEGORY RETURNS

SCERS DIVERSIFYING Performance Summary for the periods ending 6/30/17	Quarter	Year-to- Date	1-Year	Since Inception	Since Inception Date
SCERS DIVERSIFYING ASSET CATEGORY	1.5%			1.5%	Mar-17
Custom Benchmark	1.3%			1.3%	
Core/Core Plus Fixed Income	1.8%	NA	NA	NA	Jun-88
Barclays US Aggregate TR	1.4%	2.3%	-0.3%	6.4%	
Global Fixed Income	4.4%	10.0%	5.1%	2.7%	May-13
Custom Benchmark	3.0%	5.6%	-2.1%	0.2%	
Diversifying Absolute Return	-1.2%	NA	NA	NA	Nov-11
91 Day T-Bill + 5%	1.4%	2.8%	5.5%	5.2%	

Fixed Income Portfolio Returns

SCERS FIXED INCOME Performance Summary for the periods ending 6/30/17	Quarter	Year-to- Date	1-Year	Since Inception	Since Inception Date
SCERS Core/Core Plus Fixed Income	1.8%	NA	NA	NA	Jun-88
Barclays U.S. Aggregate	1.4%	2.3%	-0.3%	6.4%	
SCERS Global Fixed Income	4.4%	10.0%	5.1%	2.7%	May-13
Custom Benchmark	3.0%	5.6%	-2.1%	0.2%	

Second Quarter 2017:

- SCERS Core/Core Plus Fixed Income portfolio returned +1.8% versus the benchmark return of +1.4%.
 - Neuberger Berman (enhanced index): +1.6%.
 - ➤ Prudential (core plus): +2.3%.
 - TCW MetWest (core plus): +1.5%.
- SCERS Global Fixed Income portfolio returned +4.4% versus benchmark return of +3.0%.
 - Brandywine Global (global opportunistic): +4.4%.
- SCERS did not make any Fixed Income commitments or investments during the second quarter of 2017

One-Year:

 SCERS Core/Core Plus Fixed Income portfolio return was not available versus the benchmark return of -0.3%.

- ➤ Neuberger Berman (enhanced index): -0.2%.
- > Prudential (core plus): +3.6%.
- TCW MetWest (core plus): +1.0%.
- SCERS Global Fixed Income portfolio returned +5.1% versus the benchmark return of -2.1%.
 - Brandywine Global (global opportunistic): +5.1%.

Diversifying Absolute Return Portfolio Returns

SCERS DIVERSIFYING ABSOLUTE RETURN Performance Summary for the periods ending 6/30/17	Quarter	Year-to- Date	1-Year	Since Inception	Since Inception Date
SCERS Diversifying Absolute Return	-1.2%	NA	NA	NA	Mar-17
91 Day T-Bill + 5%	1.4%	2.8%	5.5%	5.2%	

Second Quarter 2017:

- SCERS Diversifying Absolute Return portfolio returned -1.2% versus the benchmark return of +1.4%. Notable underperformers include:
 - ➤ Brevan Howard (global macro-discretion): -2.9%.
 - Winton Diversified Futures (systematic global macro): -2.4%.
 - Graham Global Investment (systematic global macro): -2.1%.
- Grosvenor separate account returns:
 - > SCARF: -0.7%.
 - ➤ Interim SCARF B: -1.7%
- SCERS did not make any Diversifying Absolute Return commitments or investments during the second quarter of 2017.

One-Year:

- SCERS Diversifying Absolute Return portfolio return was not available. Notable underperformer versus the benchmark return of +5.5% include:
 - Brevan Howard (global macro-discretion): -1.2%.
- Grosvenor separate account returns:
 - > SCARF: +2.1%.
 - ➤ Interim SCARF B: -1.5%.

SCERS REAL RETURN ASSET CATEGORY RETURNS

The SCERS Real Return portfolio includes the SSgA Real Assets overlay proxy, which is used to fill the gap between SCERS' private real assets actual and target allocation (3.1% actual versus 7% target). As of June 30, 2017, approximately 5.9% has been committed of which 3.1% has been invested. The SSgA proxy is a mix of publicly traded securities, including global infrastructure stocks, global natural resource stocks, Treasury Inflation Protected Securities ('TIPS'), global REITs, and midstream energy-focused master limited partnerships ('MLPs'). As of June 30, 2017, the SSgA proxy equals \$245.5 million. As additional commitments are made over time, the gap will continue to decrease.

Similar to the Private Equity portfolio, the SCERS Real Assets portfolio, which includes mostly private market investments, remains early in its investments cycle (the J-curve effect) and less seasoned, so returns over the reporting periods are lower than the benchmark period returns. In addition, the real estate and private real asset returns are time-weighted ('TWR') rather than on an internal rate of return ('IRR') basis. Please note that returns for SCERS' real estate and real assets portfolio are lagged one quarter. The Real Assets performance will be covered in greater detail in the Cliffwater real assets report at the September Board meeting.

SCERS REAL RETURN Performance Summary for the periods ending 3/31/17	Quarter	Year-to- Date	1-Year	Since Inception	Since Inception Date
SCERS REAL RETURN ASSET CATEGORY					
SCERS Real Return w/SSgA Proxy	2.0%			2.0%	Mar-17
SCERS Real Return w/o SSgA Proxy	2.7%			2.7%	Mar-17
Custom Benchmark	1.1%			1.1%	
SCERS Real Estate	3.3%	NA	NA	NA	Mar-17
NCREIF	1.8%	3.3%	7.0%	NA	
Core Real Estate					
Separate Account	3.4%	5.5%	11.8%	5.5%	Sep-08
Commingled Funds	1.6%	2.8%	8.7%	3.8%	Sep-08
NFI-ODCE	1.7%	3.5%	7.9%	5.2%	
Non-Core Real Estate					
Opportunistic	3.7%	9.1%	17.9%	32.5%	Feb-14
Value Add	12.0%	5.2%	7.7%	-5.4%	Sep-08
NFI-ODCE net +1%	2.1%	4.0%	7.9%	12.0%	Feb-14
				8.0%	Sep-08
SCERS Real Assets	3.2%	11.9%	22.3%	2.2%	Jan-13
CPI-U Headline + 5%	1.6%	3.1%	6.6%	6.2%	
SCERS Commodities	-4.4%	-6.6%	-6.9%	-7.1%	May-08
Bloomberg Commodity Index	-3.0%	-5.3%	-6.5%	-9.7%	
SSgA Real Assets Proxy	-0.7%	1.0%	2.5%	0.9%	Jan-08
SSgA Real Assets	-0.7%	0.8%	2.4%	NA	

August 16, 2017 Page 12 of 15 Agenda item 15

First Quarter 2017:

- SCERS Real Return portfolio returned +2.0% with the SSgA Proxy overlay and +2.7% without the overlay, versus the benchmark return of +1.1%.
- SCERS Real Estate portfolio returned +3.3% versus the benchmark return of +1.8%.
 - ➤ SCERS Core Real Estate separate account portfolio returned +3.4% versus the benchmark return of +1.7%.
 - BlackRock: +3.9%.
 - Barings/Cornerstone: +3.4%.
 - ➤ SCERS Core Real Estate commingled fund portfolio returned +1.6% versus the benchmark return of +1.7%. Notable outperformers include:
 - Prologis Targeted US Logistics: +3.4%.
 - Prime Property: +2.5%.
 - Principal U.S. Property: +2.1%
 - SCERS Non-Core Real Estate portfolio returned as follows versus the benchmark return of +2.1%:
 - Opportunistic portfolio: +3.7%.
 - Value Add portfolio: +12.0%.
 - Notable outperformers include:
 - ✓ DRC European Real Estate Debt Fund II: +32.5%.
 - ✓ NREP Nordic Strategies I: +5.5%.
 - ✓ CIM Opportunity VIII: +3.5%.
 - ✓ ECE European Prime Shopping Centre II: +3.5%.
- SCERS Real Assets portfolio returned +3.2% versus the benchmark return of +1.6%. Notable outperformers include:
 - First Reserve Energy II: +45.4%.
 - ArcLight Energy Partners VI: +3.9%
 - Brookfield Infrastructure III: +2.5%.
- SCERS Commodities portfolio returned -4.4% versus the benchmark return of -3.0%.
 - Blackstone Resource Select: -5.3%.
 - Strategic Commodities: -3.0%.
- The SSgA Real Assets overlay proxy returned -0.7%.
- SCERS did not make any Real Return commitments or investments during the second quarter of 2017.

August 16, 2017 Page 13 of 15 Agenda item 15

One-Year (as of 3/31/17):

- SCERS Real Return portfolio returns with and without the SSgA Proxy overlay was not available.
- SCERS Real Estate portfolio return was not available versus the benchmark return of +7.0%.
 - ➤ SCERS Core Real Estate separate account portfolio returned +11.8% versus the benchmark return of +7.9%.
 - BlackRock: +10.9%.
 - Barings/Cornerstone: +11.8%.
 - ➤ SCERS Core Real Estate commingled fund portfolio returned +8.7% versus the benchmark return of +7.9%. Notable outperformers include:
 - Prologis Targeted US Logistics: +16.6%.
 - Prime Property: +10.3%.
 - Principal U.S. Property: +8.8%.
 - SCERS Non-Core Real Estate portfolio returned as follows versus the benchmark return of +7.9%:
 - Opportunistic portfolio: +17.9%
 - Value Add portfolio: +7.7%.
 - Notable outperformers include:
 - ✓ KKR Real Estate Partners Americas: +33.8%.
 - ✓ ECE European Prime Shopping Centre II: +21.2%.
 - ✓ Och-Ziff Real Estate III: +20.0%.
- SCERS Real Assets portfolio returned +22.3% versus the benchmark return of +6.6%.
 Notable outperformers include:
 - First Reserve Energy II: +80.6%.
 - EnCap Energy Capital IX: +50.2%.
 - EnCap Energy Capital X: +35.9%.
- SCERS Commodities portfolio returned -6.9% versus the benchmark return of -6.5%.
 - Blackstone Resource Select: -8.5%.
 - Strategic Commodities: -4.3%.
- The SSgA Real Assets overlay proxy returned +2.5%.

August 16, 2017 Page 14 of 15 Agenda item 15

SCERS OPPORTUNITIES PORTFOLIO RETURNS

SCERS OPPORTUNITIES Performance Summary for the periods ending 6/30/17	Quarter	Year-to- Date	1-Year	Since Inception	Since Inception Date
SCERS Opportunities Portfolio	3.6%			3.6%	Mar-17
Policy Index	2.7%			2.7%	

Second Quarter 2017:

- SCERS Opportunities portfolio returned +3.6% versus the benchmark return of +2.8%.
- SCERS did not make any Opportunities commitments or investments during the second quarter of 2017.

One-Year (as of 3/31/17):

SCERS Opportunities portfolio return was not available.

MARKET RECAP

Political events during the second quarter, some positive and some negative, gave forth what is known as a "goldilocks markets" – not too cold and not too hot. What would have been an expected market decrease from the Trump Administration's failure to make progress on its growth initiatives, the market (S&P 500) instead moved to new highs. During the first half of the year, supported by a tight labor market and low inflation, the U.S. Fed followed through with a 25 basis points rate increase in March and June. Typically, the Fed increasing interest rates would have an impact on company borrowing rates, which would typically be a negative; however, the Fed increased rates because it expects strong economic growth, which is a positive outcome for investors. The not too hot, not too cold economy has instilled a notable complacency in the equity markets as measured by the VIX, also known as the fear index. The VIX reached historic lows during the quarter, indicating minimal expected future market volatility, which is encouraging investors to pursue riskier assets, such as stocks. Investor complacency has been cited as a catalyst for the equity markets reaching new highs.

Solid global economic data emanating across Europe and emerging markets pushed the international equity markets upwards, with the MSCI World Index up 4.3% for the second quarter and 11.5% calendar year-to-date (through June 30, 2017). Several macro events

	Total Return (
	Month	QTD	CYTD	FYTD	1 Year			
S&P 500 Index	0.62	3.09	9.34	17.90	17.90			
Russell 2000 Index	3.46	2.46	4.99	24.60	24.60			
Russell 3000 Index	0.90	3.02	8.93	18.51	18.51			
MSCI AC World Index	0.45	4.27	11.48	18.78	18.78			
MSCI AC Asia Pacific Index	1.54	5.81	15.77	22.65	22.65			
MSCI AC Europe Index	-1.07	7.19	14.93	21.02	21.02			
MSCI Emerging Markets Index	1.01	6.27	18.43	23.75	23.75			

in Europe provided upward momentum in the international developed equity markets, while early fears of trade protection, particularly out of the U.S., have since faded with investors finding growth stories in the emerging countries.

August 16, 2017 Page 15 of 15 Agenda item 15

The MSCI Europe index was up a surprising +7.2% for the second quarter and a strong +14.9% calendar year-to-date. The political uncertainty in the Eurozone that weighed on the first quarter returns dissipated, as populist candidates in the Netherlands and France were defeated. Corporate earnings continue to benefit from the European Central Bank maintaining fiscal accommodation, while economic growth indicators are being reported more broadly across the Eurozone. All of these factors supported investor enthusiasm for European equities during the quarter.

The MSCI Emerging Markets index gained 6.3% for the second quarter and an impressive 18.4% calendar year-to-date. The weakening of the U.S. dollar has been a big contributor to the strong Emerging Markets ("EM") returns; however, better than expected corporate earnings growth, particularly in China, India, and South Korea, has delivered the momentum for the EM's first half performance. The equity markets in China and South Korea led the overall EM returns, up 25% and 29% calendar year-to-date, respectively. Notwithstanding the corporate earnings growth, the EM markets are reaping the benefit of investors searching for higher relative returns in riskier assets.

ATTACHMENT

Chief Investment Officer

Prepared by:		
JR Pearce Investment Officer		
Reviewed by:		
/s/ Steve Davis	/s/ Annette St. Urbain	

Interim Chief Executive Officer

Verus' Investment Performance Review for SCERS for the period ending June 30, 2017







PERIOD ENDING: JUNE 30, 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

ТАВ І
TAB II
TAB III

2nd quarter summary

THE ECONOMIC CLIMATE

- Developed and emerging economies have exhibited coordinated positive growth for the first time in this recovery. Absolute growth remains subdued relative to history.
- Economic releases have begun to miss expectations in the U.S. and U.K. after much upside surprise. The Eurozone continued to deliver positive surprises, but by a smaller margin. Heightened expectations help to explain some of the recent data disappointment.
- Despite a healthy economy and longer than average expansion there is little indication of overheating in the U.S. This suggests the current expansion may have more room to run.

MARKET PORTFOLIO IMPACTS

- Treasury yields fell slightly over the quarter.
- Credit spreads are tight, implying limited upside performance potential. U.S. credit markets have stabilized from recent defaults in the energy and metals/mining sectors.

THE INVESTMENT CLIMATE

- Central banks communicated a more hawkish tone across developed markets. The Fed announced plans for balance sheet reduction, the ECB is expected to reduce easing starting next year, and Mark Carney of the BOE indicated he is receptive to tightening under the right conditions. Central bank governors have shown less concern over the recent decline in inflation than in the past.
- U.S. equities are expected to deliver robust earnings growth in Q2 of 6.8% YoY. Energy sector earnings have provided much of this improvement after a challenging period a year ago.

ASSET ALLOCATION ISSUES

- Earnings growth beat expectations in recent quarters leading to a broad fall in equity price-to-earnings multiples, causing equities to become more attractive.
- Realized and implied market volatility is at historic lows across assets classes. This could be a sign of market complacency.

We maintain a neutral to slightly overweight risk stance



U.S. economics summary

- U.S. real GDP grew 2.1% YoY in Q1, on par with the level of economic expansion in recent quarters.
 Consumer spending and business investment were the primary drivers of growth.
- Headline inflation decelerated from 2.4% in February to 1.6% in June. The slowdown was partially influenced by the effect of lower oil prices falling out of the yearover-year calculation, but the fall in price level was not solely due to energy. Lower telecom prices helped lead to a drop in core CPI, which fell from 2.0% to 1.7%.
- For a third consecutive quarter, the Fed raised the target federal funds rate by 25 bps. FOMC members looked past the recent soft patch in inflation and cited improving overall economic conditions.

- The Fed also released details on its balance sheet normalization plan, although timing remains unclear. Once the program begins, \$6 billion in Treasuries and \$4 billion in mortgage-backed securities will roll off the balance sheet each month. These amounts will increase every three months until a total cap of \$50 billion per month is reached.
- The economy added 194,000 jobs per month in the second quarter, on average. This marks the best quarter for job growth since the second quarter of 2010. Many of these jobs have been created in lower paying sectors such as leisure and hospitality, which may be helping to keep overall wage growth subdued.

	Most Recent	12 Months Prior
GDP (annual YoY)	2.1% 3/31/17	1.6% 3/31/16
Inflation (CPI YoY, Headline)	1.6% 6/30/17	0.9% 6/30/16
Expected Inflation (5yr-5yr forward)	1.8% 6/30/17	1.5% 6/30/16
Fed Funds Rate	1.25% 6/30/17	0.50% 6/30/16
10 Year Rate	2.3% 6/30/17	1.5% 6/30/16
U-3 Unemployment	4.4% 6/30/17	4.9% 6/30/16
U-6 Unemployment	8.6% 6/30/17	9.6% 6/30/16



International economics summary

- Developed and emerging economies have exhibited coordinated positive growth momentum from low absolute growth rates relative to history. A continuation of this trend may be self reinforcing, lifting weak and strong economies alike.
- Economic releases have missed expectations in the U.S. and U.K. after extended upside surprise.
 The Eurozone has delivered positive surprise, but by a smaller margin.
- Oil further contributed to commodity underperformance due to oversupply, disagreements within OPEC regarding production cuts, and concerns over the magnitude of U.S. production.
- Developed world inflation remained within a normal range, though slightly below levels targeted by central banks.

- In May, Emmanuel Macron defeated Marine Le Pen in the French presidential election, calming fears over populist politics gaining an increased foothold in Europe.
- On June 8th, the U.K. held a snap election in which the Conservative party surprised polls and gave up their majority in Parliament, potentially weakening their position in the upcoming Brexit negotiations.
- On June 27th, ECB President Mario Draghi surprised markets with comments perceived as hawkish compared to previous comments. In the following two days the Euro appreciated 2.3% against the U.S. dollar and developed global rates moved upward - German bunds in particular.

Area	GDP (Real, YoY)	Inflation (CPI, YoY)	Unemployment
United States	2.1% 3/31/17	1.6% 6/30/17	4.4% 6/30/17
Western Europe	1.8% 3/31/17	1.3% 6/30/17	8.1% 3/31/17
Japan	1.3% 3/31/17	0.4% 5/31/17	3.1% 5/31/17
BRICS Nations	5.4% 3/31/17	2.3% 3/31/17	5.6% 12/31/16
Brazil	(0.4%) 3/31/17	3.0% 6/30/17	13.5% 6/30/17
Russia	0.5% 3/31/17	4.4% 6/30/17	5.5% 3/31/17
India	6.1% 3/31/17	2.2 % 5/31/17	8.4% 12/31/16
China	6.9% 3/31/17	1.5% 5/31/17	4.0% 12/31/16



Equity environment

- We maintain a moderate overweight to equities with a preference for emerging markets due to attractive valuations and better growth prospects relative to developed markets.
- Global equity markets delivered another positive quarter, driven by strong earnings growth across regions. Earnings were strongest in Western Europe and emerging markets. These regions outperformed on a relative basis during the quarter.
- According to FactSet, the
 estimated Q2 earnings growth
 rate of the S&P 500 is 6.8% YoY.
 Energy companies are expected
 to contribute the most to overall
 growth due to stabilizing oil
 prices and a low earnings base
 one year ago.

- Increased uncertainty surrounding the Brexit negotiations following the Conservative party's surprise loss of a majority in Parliament likely helped lead to underperformance in U.K. equities. The FTSE 100 Index returned -4.9% in Q2.
- MSCI approved the inclusion of 222 mainland Chinese companies (China A Shares) into the MSCI Emerging Markets Index. This represents only a small portion of the overall market. Starting in 2018, these domestic shares will represent approximately 0.7% of the index. While initially this decision will have a minimal effect on index performance, it opens the door for additional China A shares to be added. If the entire market was included, it would represent 12.8% of the MSCI index.

	QTD TOTAL	. RETURN	YTD TOTAL	1 YEAR RETU					
	(unhedged)	(hedged)	(unhedged)	(hedged)	(unhedged)	(hedged)			
US Large Cap (Russell 1000)	3.1	%	9.3	%	18.0%				
US Small Cap (Russell 2000)	2.5	%	5.0	%	24.6%				
US Large Value (Russell 1000 Value)	1.3	%	4.7	%	4.7%				
US Large Growth (Russell 1000 Growth)	4.7	%	14.0)%	20.4%				
International Large (MSCI EAFE)	6.1%	3.1%	13.8%	16.1%	20.3%	23.5%			
Eurozone (Euro Stoxx 50)	6.5%	3.8%	19.1%	22.5%	26.6%	28.3%			
U.K. (FTSE 100)	4.9%	1.2%	10.0%	5.0%	13.6%	17.5%			
Japan (NIKKEI 225)	5.1%	6.5%	9.6%	6.6%	19.9%	32.0%			
Emerging Markets (MSCI Emerging Markets)	6.3%	6.1%	18.4%	11.6%	23.8%	19.3%			

Source: Russell Investments, MSCI, STOXX, FTSE, Nikkei, as of 6/30/17



Domestic equity

U.S. equities moved higher on robust earnings growth. According to FactSet, the estimated Q2 earnings growth rate of the S&P 500 is 6.8% YoY. Energy companies are expected to contribute the most to overall growth due to a low earnings base one year ago and stabilizing oil prices. The earnings outlook for the rest of the year is strong, and the expected growth rate for the 2017 calendar year is 9.8%. Positive global growth trends could help lift earnings further since a substantial portion of U.S. corporate revenues come from abroad.

All major U.S. banks passed the Fed's stress test in June, citing strong capital levels and ability to lend during a recession. The news drove financials upward as the positive results allowed banks to increase their future dividends and buybacks.

We maintain a neutral weight to U.S. equities

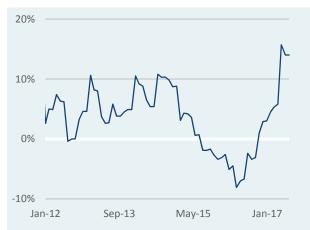
As discussed in recent quarters, we are relatively bullish on U.S. earnings growth in the near term, but investors may be paying for this excess growth upfront through higher valuations. We maintain a neutral weight to U.S. equities.

U.S. EQUITIES



Source: Russell Investments, as of 7/7/17

S&P 500 EPS GROWTH



Source: Bloomberg, as of 6/30/17

Q2 FORECAST EPS GROWTH



Source: FactSet, as of 7/14/17 - excludes energy sector



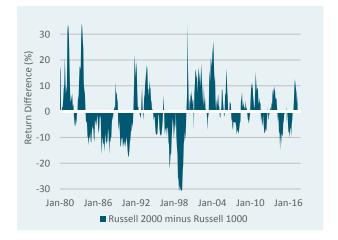
Domestic equity size and style

Despite a short selloff in June, strong returns from the tech sector helped lead to positive relative performance of growth over value during the quarter. Much of the gains were concentrated in the well known mega-cap stocks, including Apple, Amazon, and Microsoft. Momentum in growth stocks has continued to perform well so far this year.

In the second quarter, the Russell 1000 Growth Index and the Russell 1000 Value Index returned 4.7% and 1.3%, respectively. Falling oil prices were a headwind to energy companies, which were the largest detractor from the value index.

Large cap equities narrowly outperformed small cap equities. Much of the optimism surrounding Trump's prosmall business policies after his victory, including deregulation and tax reform, appears to have faded so far this year. If progress on these measures is made, smaller companies could receive another boost in the second half of 2017.

SMALL CAP VS LARGE CAP (YOY)



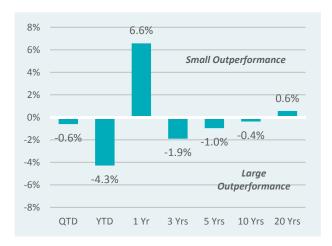
Source: Russell Investments, as of 6/30/17

VALUE VS GROWTH (YOY)



Source: Russell Investments, as of 6/30/17

U.S. LARGE VS. SMALL RELATIVE PERFORMANCE



Source: Morningstar, as of 6/30/17



International equity

International equities outperformed domestic equities over the quarter. The MSCI ACWI ex U.S. returned 5.8% on an unhedged basis while the S&P 500 returned 3.1%.

The U.S. dollar has steadily depreciated in value year-to-date against major currencies, down around 7%. This currency movement has added volatility to investors with unhedged currency exposure, with the MSCI EAFE Index returning 13.8% unhedged vs. 16.1% hedged, and the MSCI Emerging Markets Index returning 18.4% unhedged vs. 11.6% hedged.

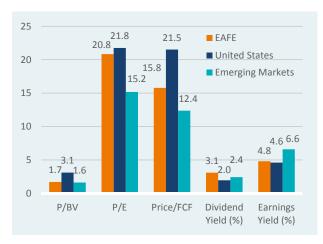
International equities are trading at lower multiples than domestic equities, based on various metrics. Valuations and earnings growth both play an important role in equity return outcomes and risk. Higher equity valuations imply greater optimism surrounding growth expectations, and greater optimism presents investors with more downside risk as the possibility of disappointment rises. Because of lower valuation levels, international markets may possess greater upside potential through either valuation expansion or positive earnings growth surprise. However, due to apparent tail risks in these markets we maintain a neutral weight in portfolios.

GLOBAL EQUITY PERFORMANCE



Source: Bloomberg, as of 6/30/17

VALUATIONS



Source: Bloomberg, MSCI, as of 6/30/17 - 3 month average

EFFECT OF CURRENCY (1 YEAR ROLLING)



Source: MSCI, as of 6/30/17



Emerging market equity

We maintain an overweight to emerging markets due to attractive valuations and better growth prospects relative to developed markets.

Emerging market equities continue to outperform developed markets, delivering 4.8% in Q2 and 17.1% year-to-date. Currency movement has been additive. Emerging market equity earnings are now expected to grow 22% YoY in 2017, which is a material increase from the 13% YoY increase expected at the beginning of 2017.

Interestingly, valuations have come down slightly despite very strong equity returns, as earnings rise faster than price.

If economic growth turns upward across the globe, we would expect major exporting economies to experience a significant tailwind. Emerging markets in particular tend to provide high exposure to global growth. Stabilizing commodities in this type of environment would likely provide an additional tailwind.

Accelerating global growth should have a positive effect on EM economies

12-MONTH ROLLING PERFORMANCE



Source: MPI, as of 6/30/17

EM EARNINGS GROWTH (YOY)



Source: Bloomberg, as of 6/30/17

TRAILING P/E RATIOS



Source: Bloomberg as of 6/30/17



Interest rate environment

- On June 14th, the Federal Reserve raised the federal funds rate by 25 bps to a target range of 1.00% -1.25%.
- The Fed's own forecast indicates one more rate hike this year, and three more hikes in each of the next two years. Rates are expected to normalize at 3% at the end of 2019. We believe the probability that the Fed undershoots its target is significant, given persistent low inflation and a high degree of risk if policy is tightened too quickly.
- The Fed announced plans to begin reducing their balance sheet sometime this year. The initial plan is to runoff \$6 billion of Treasuries and \$4 billion of mortgage-backed securities per month. This will be scaled up commensurately every 3 months to \$50 billion per month.

- Markets expect the ECB to reduce monetary easing gradually throughout 2018, with a tapering plan announcement this fall.
- In May, the Bank of Japan raised its economic forecasts. The central bank implemented a "yield curve control" policy at its September meeting along with a mandate to keep the 10-year yield at 0%. The BoJ plans to maintain an easy stance until inflation hits its 2% target.
- Credit spreads remain broadly tight. Spread levels have historically been a strong predictor of credit performance relative to Treasuries, which at current levels implies muted future performance.
- We favor emerging market debt due to higher yields relative to other bond markets.

Area	Short Term (3M)	10 Year
United States	1.01%	2.30%
Germany	(0.82%)	0.47%
France	(0.60%)	0.82%
Spain	(0.44%)	1.54%
Italy	(0.38%)	2.16%
Greece	2.43%	5.42%
U.K.	0.17%	1.26%
Japan	(0.10%)	0.09%
Australia	1.63%	2.73%
China	2.63%	3.57%
Brazil	9.41%	10.54%
Russia	8.16%	7.90%

Source: Bloomberg, as of 6/30/17

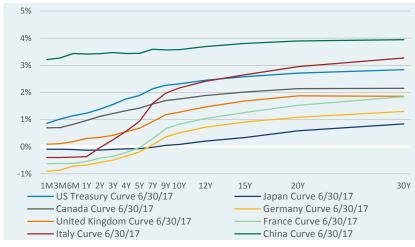


Yield environment



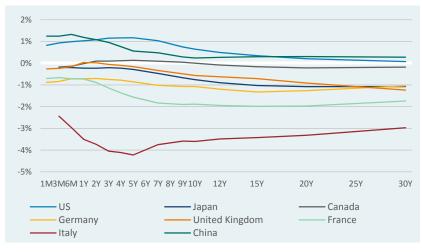


GLOBAL GOVERNMENT YIELD CURVES

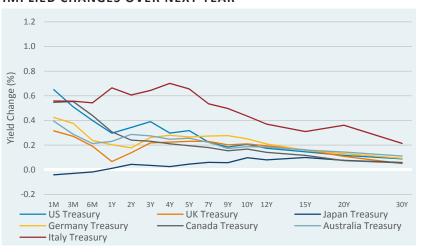


Across developed markets, U.S. **Treasuries** offer higher yields

YIELD CURVE CHANGES OVER LAST FIVE YEARS



IMPLIED CHANGES OVER NEXT YEAR



Source: Bloomberg, as of 6/30/17



Currency

The U.S. dollar has steadily depreciated in value year-to-date against major currencies, down approximately 7% through quarter-end. Global central bank hawkishness, relative interest rate expectations, and improving international growth have likely guided the U.S. dollar lower.

Emerging market currencies exhibited further strength in Q2 and have appreciated 4.8% year-to-date according to

the JP Morgan Emerging Market Currency Index.

Currency movement has recently had a positive impact on the performance of unhedged foreign asset exposure. Dollar weakness has also acted as a tailwind for corporate earnings for those U.S. companies with revenues in foreign currency.

EFFECT OF CURRENCY (1YR ROLLING)



U.S. DOLLAR MAJOR CURRENCY INDEX



Source: Federal Reserve, as of 6/30/17

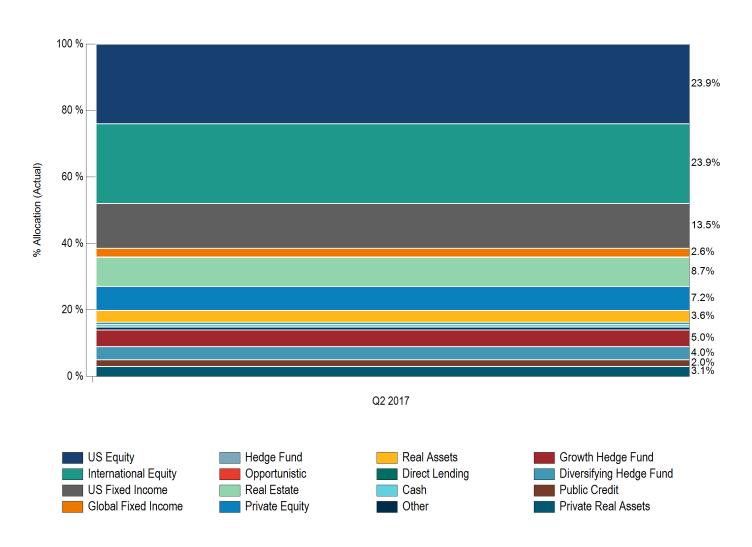
JPM EM CURRENCY INDEX



Source: Bloomberg, as of 6/30/17

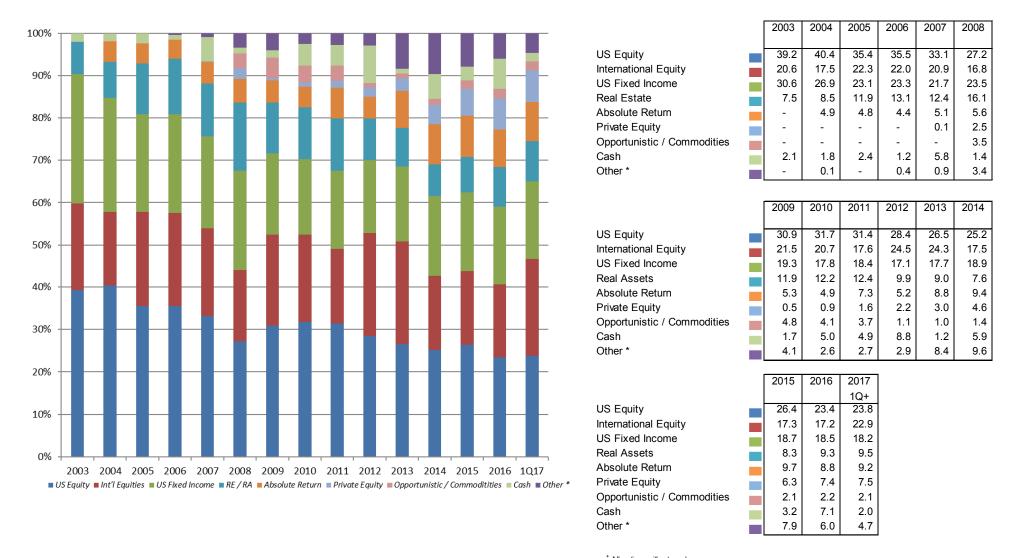


Source: MPI, as of 6/30/17



^{*} Other includes SSgA Overlay and closing accounts.

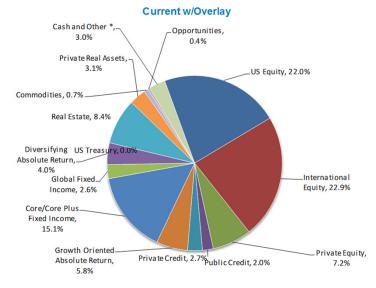




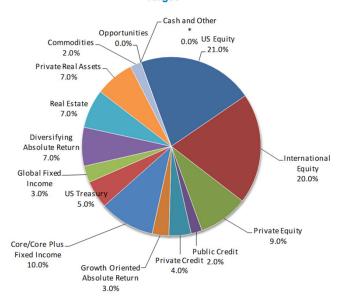
^{*} Allocations without overlay.

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

Asset Allocation Analysis



Target



ASSET ALLOCATION	W/OVERLAY	W/OVERLAY	W/O OVERLAY
US Equity	1,883,727,239	22.0%	23.9%
International Equity	1,964,900,538	22.9%	23.9%
Private Equity	619,904,947	7.2%	7.2%
Public Credit	171,087,002	2.0%	2.0%
Private Credit	233,577,966	2.7%	0.6%
Growth Oriented Absolute Return	496,613,591	5.8%	5.0%
Core/Core Plus Fixed Income	1,291,243,772	15.1%	13.5%
US Treasury	0	0.0%	0.0%
Global Fixed Income	222,029,888	2.6%	2.6%
Diversifying Absolute Return	343,309,244	4.0%	4.0%
Real Estate	723,466,725	8.4%	8.4%
Private Real Assets	263,647,718	3.1%	3.1%
Commodities	63,799,699	0.7%	0.7%
Opportunities	36,282,150	0.4%	0.4%
Cash and Other *	258,138,051	3.0%	4.6%
TOTAL	8,571,728,529	100.0%	100.0%

ASSET ALLOCATION	ACTUAL	TARGET	DIFF
US Equity	22.0%	21.0%	1.0%
International Equity	22.9%	20.0%	2.9%
Private Equity	7.2%	9.0%	-1.8%
Public Credit	2.0%	2.0%	0.0%
Private Credit	2.7%	4.0%	-1.3%
Growth Oriented Absolute Return	5.8%	3.0%	2.8%
Core/Core Plus Fixed Income	15.1%	10.0%	5.1%
US Treasury	0.0%	5.0%	-5.0%
Global Fixed Income	2.6%	3.0%	-0.4%
Diversifying Absolute Return	4.0%	7.0%	-3.0%
Real Estate	8.4%	7.0%	1.4%
Private Real Assets	3.1%	7.0%	-3.9%
Commodities	0.7%	2.0%	-1.3%
Opportunities	0.4%	0.0%	0.4%
Cash and Other *	3.0%	0.0%	3.0%



^{*} Other includes closing accounts (Heitman), SSgA Overlay of \$71 million and SSgA Real Asset of \$245.5 million, which serve as overlay proxy for Real Assets.

- The Total Plan returned 3.5% net in the second quarter of 2017 and ranked in the 28th percentile among other public funds greater than \$1 billion (3.1 % median). The fund exceeded its policy index (2.7%) during this time period. The Total Plan w/o Overlay net returned 3.6% for the quarter. Longer term, the three and five-year returns of 4.7% and 8.5% net ranked below median among large public plans (5.4% and 9.1%, respectively).
- Second quarter results (net) were enhanced by the following factors:
 - 1. Weatherbie continued to outperform gaining 12.5%, ranked in the top percentile of its peers and topped its index by 8.1%. Positive developments in a number of holdings, especially in biotech, drove stock prices higher.
 - 2. William Blair Emerging Small Cap (6.5%) outperformed the MSCI EM Small Cap index (2.7%). Outperformance was driven by positive stock selection across most sectors and regions. Healthcare, consumer discretionary, and real estate stocks were the top performing sectors.
 - 3. Baillie Gifford Emerging All Cap topped the MSCI EM index (9.2% vs 6.4%). The portfolio outperformance was driven by strong operational performance of many of the companies within the portfolio. Investments within China provided a significant boost to this quarter's performance.
 - 4. Walter Scott gained 8.0% beating the MSCI ACWI ex US (5.9%). Stock selection in Denmark, Hong Kong, and Switzerland contributed to the outperformance.
- Second quarter results (net) were hindered by the following factors:
 - 1. Mondrian Emerging All Cap underperformed their benchmark by 2.3% and ranked in the bottom quartile of its peer group. Underperformance was predominantly from stock selection in Asia, where an underweight to Alibaba hurt results on a relative basis due to strong returns from the company. The Fund's underweight position to IT was another detractor of relative returns.
 - 2. UBS gained 2.5%, trailing the Russell 2000 Growth which was up 4.4%. Relative performance was hurt by an energy overweight, which is double the index.



													Incept	tion
	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Return (%)	Since
Total Fund- Gross *	8,571,728,529	100.0	3.5	26	8.1	30	13.7	31	5.0	67	8.8	58	8.4	Jun-86
Total Fund- Net			3.5	28	7.9	36	13.4	35	4.7	75	8.5	69	8.2	
Policy Index 1			2.7	74	7.0	77	11.7	79	5.3	58	8.4	72	8.6	Jun-86
InvestorForce Public DB > \$1B Gross Median			3.1		7.6		12.8		5.4		9.1		8.3	Jun-86
Total Fund ex Overlay- Gross **	8,254,850,852	96.3	3.6	16	8.0	31	13.4	35	5.3	62	8.7	62	8.3	Jun-86
Total Fund ex Overlay- Net			3.6	20	7.9	39	13.0	47	5.0	68	8.4	72	8.1	
Policy Index 1			2.7	74	7.0	77	11.7	79	5.3	58	8.4	72	8.6	Jun-86
Allocation ex Overlay Index			2.9	66										Jun-86
Growth Asset Category- Gross	5,369,584,546	62.6	4.6										4.6	Mar-17
Growth Asset Category- Net			4.6	-	-	-	-		-		-		4.6	
Growth Custom ¹			3.8										3.8	Mar-17
Public Equities- Gross	4,102,519,343	47.9	5.1										5.1	Mar-17
Public Equities- Net			5.1	-	-	-	-		-		-		5.1	
MSCI ACWI			4.3		11.5		18.8		4.8		10.5		4.3	Mar-17
US Equity- Gross	2,049,734,370	23.9	3.3	30	9.2	35	19.3	37	8.9	43	14.3	56	10.0	Jun-86
US Equity- Net			3.2	31	9.0	40	18.9	48	8.6	56	14.0	72	9.8	
Russell 30001			3.0	50	8.9	45	18.5	61	9.1	35	14.6	39	10.1	Jun-86
InvestorForce All DB US Eq Gross Median			3.0		8.8		18.8		8.7		14.4		10.2	Jun-86
Large Cap- Gross	1,624,634,664	19.0	3.3		9.9		19.6		9.1		14.6		5.8	Mar-98
Large Cap- Net			3.2		9.7		19.3		8.8		14.3		5.7	
Russell 1000			3.1		9.3		18.0		9.3		14.7		6.4	Mar-98

^{1.} See Policy Index and Benchmark History



^{*}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.

^{**}Total Fund ex Overlay returns from 2/1/2006-12/31/2010 were calculated using the overlay impact provided by SSgA.

⁺ Since inception date denotes last day of the month.

													Incep	tion
	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Return (%)	Since
Large Cap - Index- Gross	1,066,777,467	12.4	3.1	-	9.2		18.0		9.2	-	14.6		11.2	Sep-08
Large Cap - Index- Net			3.1	-	9.2	-	18.0		9.2	-	14.6		11.2	
Russell 1000			3.1		9.3		18.0		9.3		14.7		11.3	Sep-08
AB- Gross	1,066,777,467	12.4	3.1	60	9.2	59	18.0	25	9.2	67	14.6	63	9.9	Apr-89
AB- Net			3.1	61	9.2	59	18.0	28	9.2	67	14.6	66	9.9	
Russell 1000 ¹			3.1	57	9.3	53	18.0	20	9.3	65	14.7	31		Apr-89
eA US Passive Large Cap Equity Gross Median			3.1		9.3		17.9		9.6		14.6		10.0	Apr-89
Equity Active (130/30)- Gross	108,905,113	1.3	2.1		9.8		23.5		9.8		16.6		12.2	Sep-08
Equity Active (130/30)- Net			2.1	-	9.6	-	22.8		9.0	-	15.8		11.5	
Russell 1000			3.1		9.3		18.0		9.3		14.7		11.3	Sep-08
JP Morgan 130/30- Gross	108,905,113	1.3	2.1	55	9.8	18	23.5	16	9.8	55	16.6	44	11.8	Jul-08
JP Morgan 130/30- Net			2.1	55	9.6	23	22.8	21	9.0	66	15.8	61	11.0	
Russell 1000			3.1	21	9.3	26	18.0	61	9.3	58	14.7	86	10.0	Jul-08
eA Extended US 130/30 Equity Gross Median			2.2		7.6		20.3		10.5		16.2		11.1	Jul-08
Large Cap Growth- Gross	112,526,776	1.3	5.7		15.7		14.6		8.5		12.7		10.1	Sep-08
Large Cap Growth- Net			5.6	-	15.5	-	14.4		8.3	-	12.5		9.7	
Russell 1000 Growth			4.7		14.0		20.4		11.1		15.3		12.7	Sep-08
Brown Advisory- Gross	112,526,776	1.3	5.7	37	15.7	34	14.6	95	8.5	80	12.7	90	10.9	Feb-12
Brown Advisory- Net			5.6	38	15.5	35	14.4	96	8.3	84	12.5	93	10.7	
Russell 1000 Growth			4.7	59	14.0	54	20.4	54	11.1	35	15.3	43	14.1	Feb-12
eA US Large Cap Growth Equity Gross Median			5.0		14.2		20.7		10.3		15.0		13.7	Feb-12
Large Cap Value- Gross	336,425,308	3.9	3.6		10.1		24.6		8.5		14.5		10.9	Sep-08
Large Cap Value- Net			3.4	-	9.4	-	23.4		7.6	-	13.7		10.3	
Russell 1000 Value			1.3		4.7		15.5		7.4		13.9		9.7	Sep-08
Eagle Capital- Gross	226,310,285	2.6	4.2	6	11.5	3	26.6	6	10.6	6	15.8	16	15.2	Feb-12
Eagle Capital- Net			4.0	9	10.8	6	25.3	7	9.7	11	15.0	28	14.4	
Russell 1000			3.1	22	9.3	10	18.0	43	9.3	14	14.7	34	13.7	Feb-12

^{1.} See Policy Index and Benchmark History.



													Incep	tion
	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Return (%)	Since
Russell 1000 Value			1.3	72	4.7	74	15.5	68	7.4	54	13.9	50	13.2	Feb-12
eA US Large Cap Value Equity Gross Median			2.0		6.0		17.3		7.5		13.9		12.9	Feb-12
Huber Capital- Gross	110,115,022	1.3	2.5	34	7.5	29	20.6	24	4.1	92	11.6	92	11.1	Feb-12
Huber Capital- Net			2.3	39	6.9	36	19.6	31	3.3	96	10.8	96	10.3	
Russell 1000 Value			1.3	72	4.7	74	15.5	68	7.4	54	13.9	50	13.2	Feb-12
eA US Large Cap Value Equity Gross Median			2.0	_	6.0	_	17.3		7.5		13.9		12.9	Feb-12
Small Cap- Gross	329,659,598	3.8	4.1		8.2		27.9		7.8		14.0		12.0	Dec-90
Small Cap- Net			3.9		7.8		27.2	-	7.1		13.1		11.3	
Russell 2000			2.5		5.0		24.6		7.4		13.7		10.9	Dec-90
Small Cap - Growth- Gross	164,904,098	1.9	8.3		17.1		35.8		8.6		13.6		11.0	Sep-08
Small Cap - Growth- Net			8.2		16.9		35.5	-	8.0		12.9		10.3	
Russell 2000 Growth			4.4		10.0		24.4		7.6		14.0		11.3	Sep-08
UBS- Gross	66,454,975	0.8	2.7	86	9.5	67	24.8	48					2.8	Jul-15
UBS- Net			2.5	89	9.3	69	24.5	50			-		2.7	
Russell 2000 Growth			4.4	60	10.0	64	24.4	50	7.6	60	14.0	63	5.4	Jul-15
eA US Small Cap Growth Equity Gross Median			5.0		11.5		24.3		8.4		14.6		6.7	Jul-15
Weatherbie- Gross	98,449,123	1.1	12.6	1	22.9	2	44.3	1	12.9	5	17.1	18	12.4	Dec-02
Weatherbie- Net			12.5	1	22.7	3	44.0	1	12.2	11	16.2	29	11.5	
Russell 2000 Growth			4.4	60	10.0	64	24.4	50	7.6	60	14.0	63	11.2	Dec-02
eA US Small Cap Growth Equity Gross Median			5.0		11.5		24.3		8.4		14.6		12.2	Dec-02
Small Cap - Value- Gross	164,755,500	1.9	0.1		0.6		21.0		7.4		14.4		10.8	Sep-08
Small Cap - Value- Net			-0.1	-	0.1		19.9	-	6.6	-	13.4		9.8	
Russell 2000 Value			0.7		0.5		24.9		7.0		13.4		9.2	Sep-08
Dalton, Greiner- Gross	77,365,867	0.9	-0.1	75	0.0	71	21.9	63	6.4	69	14.0	64	10.9	Dec-00
Dalton, Greiner- Net			-0.2	78	-0.4	76	21.0	72	5.7	74	13.2	79	10.1	
Russell 2000 Value			0.7	55	0.5	64	24.9	35	7.0	63	13.4	76	9.2	Dec-00
eA US Small Cap Value Equity Gross Median			0.9		2.0		23.2		7.5		14.8		11.4	Dec-00



												Incep	tion	
	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Return (%)	Since
WEDGE Capital- Gross	87,389,633	1.0	0.3	65	1.2	59	20.2	77	8.4	34	15.5	34	10.5	Apr-08
WEDGE Capital- Net			0.0	71	0.5	66	19.0	82	7.3	54	14.4	59	9.5	
Russell 2000 Value			0.7	55	0.5	64	24.9	35	7.0	63	13.4	76	8.5	Apr-08
eA US Small Cap Value Equity Gross Median			0.9		2.0		23.2		7.5		14.8		10.3	Apr-08
CenterSquare- Gross	95,290,335	1.1	1.0	86	2.1	65	-2.0	75	9.6	24	10.7	30	9.1	Jan-06
CenterSquare- Net			1.0	86	1.9	73	-2.6	88	8.9	45	10.1	47	8.5	
FTSE NAREIT Equity REIT			1.5	70	2.7	54	-1.7	66	8.4	70	9.5	69	6.8	Jan-06
eA US REIT Gross Median			2.1	_	3.0		-0.5		8.9		10.0		7.9	Jan-06
International Equity- Gross	2,052,784,973	23.9	7.0	29	16.3	37	21.1	49	2.1	56	8.5	54	6.5	Dec-87
International Equity- Net			7.0	32	16.0	46	20.5	59	1.7	64	8.1	64	6.1	
MSCI ACWI ex US ¹			6.0	70	14.5	83	21.0	51	1.3	77	7.7	73	6.3	Dec-87
InvestorForce All DB ex-US Eq Gross Median			6.5		15.8		21.0		2.3		8.6		7.1	Dec-87
International - Developed- Gross	1,606,643,868	18.7	7.3	32	15.5	40	21.6	41	2.8	47	9.6	41	4.5	Mar-98
International - Developed- Net			7.2	33	15.2	44	21.0	45	2.3	58	9.2	52	4.1	
MSCI EAFE Gross			6.4	54	14.2	76	20.8	47	1.6	68	9.2	52	4.6	Mar-98
InvestorForce All DB Dev Mkt ex-US Eq Gross Median			6.4		14.8		20.3		2.5		9.3		5.3	Mar-98
Lazard- Gross	446,505,177	5.2	7.3	47	14.1	77	15.1	89	2.4	62	10.1	40	10.1	Jun-12
Lazard- Net			7.2	48	13.9	80	14.7	91	2.1	67	9.8	48	9.8	
MSCI ACWI ex USA Gross			6.0	73	14.5	74	21.0	46	1.3	78	7.7	84	7.7	Jun-12
eA All ACWI ex-US Equity Gross Median			7.2		16.3		20.6		3.0		9.7		9.7	Jun-12
Walter Scott & Partners Limited- Gross	446,322,816	5.2	8.1	34									8.1	Mar-17
Walter Scott & Partners Limited- Net			8.0	34									8.0	
MSCI World ex US			5.9	79	13.2	98	20.1	24	1.2	86	8.7	70	5.9	Mar-17
eA EAFE Large Cap Growth Gross Median			7.5		16.6		17.8		2.6		9.4		7.5	Mar-17

^{1.} See Policy Index and Benchmark History.



													Incep	tion
	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Return (%)	Since
LSV- Gross	495,060,249	5.8	6.1	24	13.3	47	26.6	23	2.9	24	11.3	14	4.9	Dec-04
LSV- Net			6.0	25	12.9	48	26.0	26	2.5	33	10.8	19	4.4	
MSCI World ex US			5.9	27	13.2	47	20.1	69	1.2	71	8.7	78	4.5	Dec-04
MSCI EAFE Value Gross			5.1	60	11.6	72	25.7	26	0.0	94	8.7	77	4.5	Dec-04
eA EAFE Large Cap Value Gross Median			5.2		12.6		22.8		2.0		9.6		5.6	Dec-04
Mondrian Dev Small Cap- Gross	101,655,993	1.2	7.9	65	18.5	53	19.1	59	4.3	73	10.1	87	10.2	Aug-10
Mondrian Dev Small Cap- Net			7.7	67	17.9	57	18.1	71	3.6	76	9.4	90	9.5	
MSCI World ex US Small Cap GD			7.5	72	15.8	79	21.7	44	4.4	72	11.8	60	10.1	Aug-10
eA ACWI ex-US Small Cap Equity Gross Median			8.5		18.7		19.9		5.1		13.2		11.2	Aug-10
William Blair Dev Small Cap- Gross	117,087,633	1.4	8.6	47	17.4	62	18.8	65	5.3	46	11.9	59	10.6	Sep-08
William Blair Dev Small Cap- Net			8.6	47	16.9	65	17.7	76	4.5	72	11.0	77	9.6	
MSCI World ex US Small Cap GD			7.5	72	15.8	79	21.7	44	4.4	72	11.8	60	9.5	Sep-08
eA ACWI ex-US Small Cap Equity Gross Median			8.5		18.7		19.9		5.1		13.2		11.4	Sep-08
International - Emerging- Gross	363,048,436	4.2	6.6	30	20.8	14	23.2	42	0.3	80	3.7	81	6.4	Jan-00
International - Emerging- Net			6.5	38	20.4	22	22.6	45	0.1	83	3.6	83	6.0	
MSCI Emerging Markets Gross			6.4	41	18.6	52	24.2	36	1.4	55	4.3	70	7.0	Jan-00
InvestorForce All DB Emg Mkt Eq Gross Median			6.0		18.7		21.7		1.7		4.7		6.9	Jan-00
Baillie Gifford Emg All Cap- Gross	163,069,272	1.9	9.2	11	27.1	2	34.5	2					25.7	Mar-16
Baillie Gifford Emg All Cap- Net			9.2	11	27.1	2	34.5	2		-		-	25.7	
MSCI Emerging Markets Gross			6.4	50	18.6	63	24.2	49	1.4	71	4.3	82	19.7	Mar-16
eA Emg Mkts Equity Gross Median			6.4		19.7		24.0		2.6		5.9		20.7	Mar-16
Mondrian Emg All Cap- Gross	145,413,863	1.7	4.3	81	16.1	83	16.7	86					14.7	Mar-16
Mondrian Emg All Cap- Net			4.1	82	15.5	86	15.9	87					14.1	
MSCI Emerging Markets Gross			6.4	50	18.6	63	24.2	49	1.4	71	4.3	82	19.7	Mar-16
eA Emg Mkts Equity Gross Median			6.4		19.7		24.0		2.6		5.9		20.7	Mar-16



													Incep	tion
	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Return (%)	Since
Mondrian Emg Small Cap- Gross	25,948,586	0.3	3.9	82	12.4	98	9.2	96	-1.1	92			4.5	Jan-14
Mondrian Emg Small Cap- Net			3.6	86	11.2	99	7.4	99	-2.4	99			3.2	
MSCI Emerging Markets Small Cap Gross			2.7	97	16.1	85	17.3	77	1.1	85	5.5	91	4.4	Jan-14
eA Emg Mkts Small Cap Equity Gross Median			5.7		20.3		22.1		4.3		8.6		7.5	Jan-14
William Blair Emg Small Cap- Gross	28,616,715	0.3	6.8	24	20.5	44	14.4	87	4.0	57			6.5	Dec-13
William Blair Emg Small Cap- Net			6.5	32	19.5	56	12.9	89	3.1	68			5.6	
MSCI Emerging Markets Small Cap Gross			2.7	97	16.1	85	17.3	77	1.1	85	5.5	91	3.5	Dec-13
eA Emg Mkts Small Cap Equity Gross Median			5.7		20.3		22.1		4.3		8.6		5.9	Dec-13
CBRE Clarion- Gross	83,092,669	1.0	4.8	92	9.5	54	6.1	56	1.5	76	7.9	53	11.2	Oct-08
CBRE Clarion- Net			4.8	92	9.4	73	5.8	87	1.3	90	7.6	77	11.0	
FTSE NAREIT Developed ex US Gross			5.0	71	10.1	31	6.0	58	1.4	87	7.4	88	10.0	Oct-08
eA EAFE REIT Gross Median			5.5		9.6		6.4		1.9		7.9		9.3	Oct-08
Private Equity- Gross *** ++	619,904,947	7.2	3.9	33	7.2	28	14.5	26	10.4	41	13.2	25	-0.4	Feb-08
Private Equity- Net			3.9	33	7.2	28	14.5	26	10.4	41	13.2	25	-0.2	
Thomson Reuters C A All PE 1 Qtr Lag			3.4	39	8.1	19	16.7	11	11.7	23	15.4	11	9.6	Feb-08
Russell 3000 +3% 1Q Lag			6.5	10	11.8	3	21.1	2	12.8	16	16.2	7	10.7	Feb-08
InvestorForce All DB Private Eq Net Median			2.7		5.4		10.5		8.9		10.9		6.9	Feb-08
Abbott VI- Gross	60,550,477	0.7	4.2		7.0		17.0		14.0		12.2		2.0	Jul-08
Abbott VI- Net			4.2		7.0		17.0		14.0		12.2			
Thomson Reuters C A All PE 1 Qtr Lag			3.4		8.1		16.7		11.7		15.4		10.7	Jul-08
Accel-KKR IV- Gross	11,266,816	0.1	15.3		16.8		21.7		12.4				-12.9	Jun-13
Accel-KKR IV- Net			15.3		16.8		21.7		12.4				-12.9	
Thomson Reuters C A All PE 1 Qtr Lag			3.4		8.1		16.7		11.7		15.4		15.0	Jun-13
Accel-KKR V- Gross	1,387,251	0.0	9.9						-	-			9.9	Jan-17
Accel-KKR V- Net			9.9						-				9.9	
Thomson Reuters C A All PE 1 Qtr Lag			3.4		8.1		16.7		11.7		15.4		9.9	Jan-17



^{***} Private Equity Composite includes the historical returns of Summit Credit and Athyrium Opportunities up to 4/1/17. ++ Returns are one-quarter lag.

													Incep	tion
	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Return (%)	Since
Accel-KKR Structured II- Gross	4,377,369	0.1	2.9		1.4		-0.1						-15.3	Feb-15
Accel-KKR Structured II- Net			2.9		1.4		-0.1						-15.3	
Thomson Reuters C A All PE 1 Qtr Lag			3.4		8.1		16.7		11.7		15.4		9.5	Feb-15
Atalaya Special Opp VI- Gross	17,520,509	0.2	1.1		3.3		4.0						3.4	Apr-16
Atalaya Special Opp VI- Net			1.1	-	3.3		4.0						3.4	
Thomson Reuters C A All PE 1 Qtr Lag			3.4		8.1		16.7		11.7		15.4		21.3	Apr-16
Dyal Capital Partners II- Gross	8,576,573	0.1	2.0		0.6		-0.7						-7.5	Dec-14
Dyal Capital Partners II- Net			2.0	-	0.6		-0.7						-7.5	
Thomson Reuters C A All PE 1 Qtr Lag			3.4		8.1		16.7		11.7		15.4		11.0	Dec-14
Dyal Capital Partners III- Gross	13,491,156	0.2	-8.8	-	8.9						-		8.9	Dec-16
Dyal Capital Partners III- Net			-8.8	-	8.9						-		8.9	
Thomson Reuters C A All PE 1 Qtr Lag			3.4		8.1		16.7		11.7		15.4		8.1	Dec-16
Garrison Investment Group- Gross	13,798,507	0.2	-0.2		-2.4		-9.4		-6.4		-0.3		-0.3	May-12
Garrison Investment Group- Net			-0.2	-	-2.4		-9.4		-6.4		-0.3		-0.3	
Thomson Reuters C A All PE 1 Qtr Lag			3.4		8.1		16.7		11.7		15.4		15.9	May-12
Harbourvest VIII- Gross	24,900,625	0.3	4.9		7.9		14.3		13.0		17.7		8.9	Dec-07
Harbourvest VIII- Net			4.9	-	7.9		14.3		13.0		17.7			
Thomson Reuters C A All PE 1 Qtr Lag			3.4		8.1		16.7		11.7		15.4		9.2	Dec-07
Harbourvest Intl VI- Gross	33,168,690	0.4	3.8	-	4.3		9.6		11.7		10.4		-12.1	Mar-09
Harbourvest Intl VI- Net			3.8	-	4.3		9.6		11.7		10.4			
Thomson Reuters C A All PE 1 Qtr Lag			3.4		8.1		16.7		11.7		15.4		17.0	Mar-09
H.I.G. Bayside Loan III- Gross	20,095,736	0.2	4.8		9.5		11.7		11.7				5.5	Jan-13
H.I.G. Bayside Loan III- Net			4.8		9.5		11.7		11.7				5.5	
Thomson Reuters C A All PE 1 Qtr Lag			3.4		8.1		16.7		11.7		15.4		16.9	Jan-13
H.I.G. Capital V- Gross	3,211,131	0.0	2.4		35.7		31.6		0.1				-1.5	Jul-13
H.I.G. Capital V- Net			2.4	-	35.7		31.6		0.1	-			-1.5	
Thomson Reuters C A All PE 1 Qtr Lag			3.4		8.1		16.7		11.7		15.4		14.7	Jul-13



													Incep	tion
	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Return (%)	Since
H.I.G. Europe Capital II - Gross H.I.G. Europe Capital II - Net	1,424,206	0.0	-11.0 -11.0		-19.4 -19.4		-80.0 -80.0		 	 	 		 	Jan-14
Thomson Reuters C A All PE 1 Qtr Lag			3.4		8.1		16.7		11.7		15.4		13.0	Jan-14
Khosla IV- Gross	14,134,173	0.2	-1.9		-5.5		4.6		13.3		17.2		12.1	Jul-11
Khosla IV- Net			-1.9		-5.5		4.6		13.3		17.2		12.1	
Thomson Reuters C A All PE 1 Qtr Lag			3.4		8.1		16.7		11.7		15.4		14.3	Jul-11
Khosla V- Gross	10,995,750	0.1	-0.6		11.2		7.2						4.3	Nov-14
Khosla V- Net			-0.6		11.2		7.2						4.3	
Thomson Reuters C A All PE 1 Qtr Lag			3.4		8.1		16.7		11.7		15.4		10.1	Nov-14
Linden Capital- Gross	21,166,570	0.2	6.9		18.0		-4.5						-4.5	Jun-16
Linden Capital- Net			6.9		18.0		-4.5						-4.5	
Thomson Reuters C A All PE 1 Qtr Lag			3.4		8.1		16.7		11.7		15.4		16.7	Jun-16
Marlin Equity IV- Gross	14,184,369	0.2	-4.8		-4.1		8.8		3.5				0.3	Nov-13
Marlin Equity IV- Net			-4.8		-4.1		8.8		3.5				0.3	
Thomson Reuters C A All PE 1 Qtr Lag			3.4		8.1		16.7		11.7		15.4		14.9	Nov-13
Marlin Heritage- Gross	10,793,547	0.1	10.0		28.1		62.2						13.0	Jul-14
Marlin Heritage- Net			10.0		28.1		62.2						13.0	
Thomson Reuters C A All PE 1 Qtr Lag			3.4		8.1		16.7		11.7		15.4		11.7	Jul-14
New Enterprise 14- Gross	35,680,872	0.4	9.0	-	11.5		18.9		19.5		13.5		13.2	May-12
New Enterprise 14- Net			9.0	-	11.5		18.9		19.5	-	13.5		13.2	
Thomson Reuters C A All PE 1 Qtr Lag			3.4		8.1		16.7		11.7		15.4		15.9	May-12
New Enterprise 15- Gross	27,243,261	0.3	10.1	-	19.0		23.9		-	-	-		10.8	Apr-15
New Enterprise 15- Net			10.1	-	19.0		23.9						10.8	
Thomson Reuters C A All PE 1 Qtr Lag			3.4		8.1		16.7		11.7		15.4		11.6	Apr-15
New Enterprise 16- Gross*	1,050,000	0.0											0.0	May-17
New Enterprise 16- Net													0.0	
Thomson Reuters C A All PE 1 Qtr Lag			3.4		8.1		16.7		11.7		15.4		3.4	May-17

^{*} Funded in May 2017.



													Incep	tion
	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Return (%)	Since
Private Equity X- Gross	47,172,269	0.6	5.5		8.6		18.5		3.8		12.7		-4.6	Jun-08
Private Equity X- Net			5.5		8.6		18.5		3.8		12.7			
Thomson Reuters C A All PE 1 Qtr Lag			3.4		8.1		16.7		11.7		15.4		11.2	Jun-08
RRJ Capital- Gross	24,603,775	0.3	-2.6		2.6		-0.5		7.4				12.1	May-13
RRJ Capital- Net			-2.6	-	2.6	-	-0.5		7.4				12.1	
Thomson Reuters C A All PE 1 Qtr Lag			3.4		8.1		16.7		11.7		15.4		15.8	May-13
RRJ Capital Masterfund III- Gross	12,829,928	0.1	3.9		2.2		3.2						-37.4	Dec-15
RRJ Capital Masterfund III- Net			3.9		2.2		3.2						-37.4	
Thomson Reuters C A All PE 1 Qtr Lag			3.4		8.1		16.7		11.7		15.4		17.5	Dec-15
Spectrum Equity- Gross	19,369,928	0.2	9.5	-	17.1		20.4						-13.5	Dec-14
Spectrum Equity- Net			9.5		17.1		20.4						-13.5	
Thomson Reuters C A All PE 1 Qtr Lag			3.4		8.1		16.7		11.7		15.4		11.0	Dec-14
Summit Ventures- Gross	21,120,011	0.2	3.4	-	-0.2		29.8		18.6		9.3		9.3	Jun-12
Summit Ventures- Net			3.4	-	-0.2	-	29.8		18.6		9.3		9.3	
Thomson Reuters C A All PE 1 Qtr Lag			3.4		8.1		16.7		11.7		15.4		15.4	Jun-12
Summit Ventures IV- Gross	9,194,941	0.1	0.0		3.8		20.3						18.6	May-16
Summit Ventures IV- Net			0.0		3.8		20.3		-		-		18.6	
Thomson Reuters C A All PE 1 Qtr Lag			3.4		8.1		16.7		11.7		15.4		22.9	May-16
Thoma Bravo XI- Gross	35,630,406	0.4	0.0		8.0		15.9		5.8				5.8	Jun-14
Thoma Bravo XI- Net			0.0		8.0		15.9		5.8				5.8	
Thomson Reuters C A All PE 1 Qtr Lag			3.4		8.1		16.7		11.7		15.4		11.7	Jun-14
Thoma Bravo XII- Gross	11,594,569	0.1	-0.7		-1.7		-16.8						-15.6	May-16
Thoma Bravo XII- Net			-0.7		-1.7		-16.8						-15.6	
Thomson Reuters C A All PE 1 Qtr Lag			3.4		8.1		16.7		11.7		15.4		22.9	May-16
TPG Opp Partners III- Gross	21,202,177	0.2	3.6		4.9		16.2		4.3				-28.7	Mar-14
TPG Opp Partners III- Net			3.6		4.9		16.2		4.3				-28.7	
Thomson Reuters C A All PE 1 Qtr Lag			3.4		8.1		16.7		11.7		15.4		11.7	Mar-14



													Incep	tion
	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Return (%)	Since
Trinity Ventures XI- Gross	22,894,843	0.3	11.1		13.7		10.0		12.3				0.0	Apr-13
Trinity Ventures XI- Net			11.1		13.7		10.0		12.3		-		0.0	
Thomson Reuters C A All PE 1 Qtr Lag			3.4		8.1		16.7		11.7		15.4		15.9	Apr-13
Trinity Ventures XII- Gross	8,218,659	0.1	30.5		21.4		3.4						2.9	Apr-16
Trinity Ventures XII- Net			30.5		21.4		3.4						2.9	
Thomson Reuters C A All PE 1 Qtr Lag			3.4		8.1		16.7		11.7		15.4		21.3	Apr-16
TSG7 A LP- Gross	5,090,847	0.1	-3.9		-4.5									Mar-16
TSG7 A LP- Net			-3.9		-4.5									
Thomson Reuters C A All PE 1 Qtr Lag			3.4		8.1		16.7		11.7		15.4		14.9	Mar-16
TSG7 B LP- Gross	292,760	0.0	-6.0		-22.0		-29.0						-28.6	Jan-16
TSG7 B LP- Net			-6.0		-22.0		-29.0						-28.6	
Thomson Reuters C A All PE 1 Qtr Lag			3.4		8.1		16.7		11.7		15.4		12.3	Jan-16
Waterland V- Gross	13,558,348	0.2	0.6		7.3		53.9		66.2		47.1		19.9	Aug-11
Waterland V- Net			0.6		7.3		53.9		66.2		47.1		19.9	
Thomson Reuters C A All PE 1 Qtr Lag			3.4		8.1		16.7		11.7		15.4		14.8	Aug-11
Waterland VI- Gross	9,396,212	0.1	7.3		3.1		30.5						-30.8	Jul-15
Waterland VI- Net			7.3		3.1		30.5						-30.8	
Thomson Reuters C A All PE 1 Qtr Lag			3.4		8.1		16.7		11.7		15.4		9.8	Jul-15
Waterland VI Over- Gross	708	0.0	-17.6		-41.9		-55.3						-81.3	Dec-15
Waterland VI Over- Net			-17.6		-41.9		-55.3						-81.3	
Thomson Reuters C A All PE 1 Qtr Lag			3.4		8.1		16.7		11.7		15.4		17.5	Dec-15
Wayzata Opportunities III- Gross	8,716,978	0.1	0.9		5.9		20.4		0.6				-5.8	Feb-13
Wayzata Opportunities III- Net			0.9		5.9		20.4		0.6				-5.8	
Thomson Reuters C A All PE 1 Qtr Lag			3.4		8.1		16.7		11.7		15.4		17.0	Feb-13



													Incep	tion
	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Return (%)	Since
Public Credit- Gross	171,087,002	2.0	1.7										1.7	Mar-17
Public Credit- Net			1.7										1.7	
Brigade Custom ¹			1.4		3.4		10.1		4.0				1.4	Mar-17
Brigade Capital- Gross	171,087,002	2.0	1.7	76	5.2	22	15.3	9	3.7	72			4.8	Nov-13
Brigade Capital- Net			1.7	76	5.2	22	15.3	9	3.7	72			4.8	
Brigade Custom1			1.4	90	3.4	86	10.1	73	4.0	62	-		4.7	Nov-13
eA US High Yield Fixed Inc Gross Median			2.1		4.6		11.7		4.3		6.8		5.2	Nov-13
Private Credit- Gross ++	49,069,627	0.6	3.5										3.5	Mar-17
Private Credit- Net			3.5	-		-	-		-	-	-		3.5	
Credit Suisse Leveraged Loan + 2%			1.1		2.8		9.5						1.1	Mar-17
Athyrium Opp II- Gross	22,379,711	0.3	2.8		4.4		14.5						4.3	Jun-15
Athyrium Opp II- Net			2.8	-	4.4		14.5						4.3	
Credit Suisse Leveraged Loan + 2%			1.1		2.8		9.5							Jun-15
Athyrium Opp III- Gross*	2,577,988	0.0											0.0	May-17
Athyrium Opp III- Net													0.0	
Credit Suisse Leveraged Loan + 2%			1.1		2.8		9.5						0.1	May-17
Summit Credit- Gross	6,106,955	0.1	4.2		6.9		15.3		10.3		10.5		8.4	Oct-11
Summit Credit- Net			4.2		6.9		15.3		10.3		10.5		8.4	
Credit Suisse Leveraged Loan + 2%			1.1		2.8		9.5							Oct-11
Summit Credit II- Gross	18,004,973	0.2	4.1	-	7.4		15.6					-	5.8	Nov-14
Summit Credit II- Net			4.1	-	7.4		15.6						5.8	
Credit Suisse Leveraged Loan + 2%			1.1		2.8		9.5							Nov-14



See Policy Index and Benchmark History.
 Returns are one-quarter lag.
 Funded in May 2017.

													Incept	tion
	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Return (%)	Since
Growth Oriented Absolute Return- Gross ⁺⁺	427,003,627	5.0	2.2										2.2	Mar-17
Growth Oriented Absolute Return- Net			2.2	-	-	-			-	-			2.2	
91 Day T-Bill +5%			1.4		2.8		5.5		5.2		5.2		1.4	Mar-17
Claren Road Credit- Gross	2,314,975	0.0	5.9	5	7.6	21	18.6	18	-3.4	99	-0.3	97	-0.1	Jan-12
Claren Road Credit- Net			5.9	5	7.6	21	18.6	18	-3.4	99	-0.3	97	-0.1	
91 Day T-Bill +5%			1.4	48	2.8	69	5.5	84	5.2	42	5.2	66	5.2	Jan-12
eV Alt Fundamental - Long/Short Credit Median			1.3		4.2		10.4		4.6		6.6		6.9	Jan-12
Elliot Associates- Gross	50,443,019	0.6	0.3	77	3.3	51	11.0	54	6.5	21	8.8	32	8.0	Apr-12
Elliot Associates- Net			0.3	77	3.3	51	11.0	54	6.5	21	8.8	32	8.0	
91 Day T-Bill +5%			1.4	54	2.8	57	5.5	77	5.2	31	5.2	73	5.2	Apr-12
eV Alt All Event Driven Median			1.6		3.4		11.9		3.6		7.0		6.3	Apr-12
Grosvenor- Gross	404,857	0.0	-0.6	90	-1.0	93	66.3	1	16.6	1	11.9	6	6.6	Aug-04
Grosvenor- Net			-0.6	90	-1.0	93	66.3	1	16.6	1	11.9	6	6.2	
91 Day T-Bill +5%			1.4	40	2.8	61	5.5	66	5.2	17	5.2	52	6.3	Aug-04
eV Alt Fund of Funds - Multi-Strategy Median			1.0		3.3		7.7		2.3		5.4		4.6	Aug-04
Grosvenor SCARF Growth- Gross	160,121,601	1.9	2.0	24	6.2	23	12.9	20	1.8	56	6.3	33	6.3	Nov-11
Grosvenor SCARF Growth- Net			2.0	24	6.2	23	12.9	20	1.8	56	6.3	33	6.3	
91 Day T-Bill +5%			1.4	40	2.8	61	5.5	66	5.2	17	5.2	52	5.2	Nov-11
eV Alt Fund of Funds - Multi-Strategy Median			1.0		3.3		7.7		2.3		5.4		5.2	Nov-11
Grosvenor SCARF B Growth- Gross	37,473,056	0.4	2.5	17	6.2	22	11.3	28	2.2	51			4.9	Jan-13
Grosvenor SCARF B Growth- Net			2.5	17	6.2	22	11.3	28	2.2	51			4.9	
91 Day T-Bill +5%			1.4	40	2.8	61	5.5	66	5.2	17	5.2	52	5.2	Jan-13
eV Alt Fund of Funds - Multi-Strategy Median			1.0		3.3		7.7		2.3		5.4		4.4	Jan-13

⁺⁺ Absolute Return managers are ranked in the eVest net of fee universe.
+++ Preliminary quarterly returns as of 6/30/2017 (Returns are not available at reporting period.)



													Incep	tion
	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Return (%)	Since
JANA Partners- Gross	41,039,143	0.5	1.4	55	6.7	29	16.3	30	0.7	71			3.9	Jul-13
JANA Partners- Net			1.4	55	6.7	29	16.3	30	0.7	71			3.9	
91 Day T-Bill +5%			1.4	54	2.8	57	5.5	77	5.2	31	5.2	73	5.2	Jul-13
eV Alt All Event Driven Median			1.6		3.4		11.9		3.6		7.0		5.3	Jul-13
Lakewood- Gross	43,734,451	0.5	1.5	61	4.2	65	15.4	39	6.7	32			7.8	Jun-13
Lakewood- Net			1.5	61	4.2	65	15.4	39	6.7	32			7.8	
91 Day T-Bill +5%			1.4	61	2.8	74	5.5	77	5.2	41	5.2	78	5.2	Jun-13
eV Alt Fundamental - Long/Short Equity Median			2.5		6.2		12.9		4.2		8.6		6.7	Jun-13
OZ Domestic II- Gross	45,122,975	0.5	3.6	16	8.1	18	14.8	21	4.7	46	7.5	43	7.8	Dec-11
OZ Domestic II- Net			3.6	16	8.1	18	14.8	21	4.7	46	7.5	43	7.7	
91 Day T-Bill +5%			1.4	40	2.8	58	5.5	59	5.2	42	5.2	55	5.2	Dec-11
eV Alt All Multi-Strategy Median			1.0		3.2		7.3		4.1		6.0		6.2	Dec-11
Third Point Offshore Fund- Gross	46,349,550	0.5	4.6	19	10.7	15	15.2	35	5.5	28	12.4	15	11.4	Apr-12
Third Point Offshore Fund- Net			4.6	19	10.7	15	15.2	35	5.5	28	12.4	15	11.4	
91 Day T-Bill +5%			1.4	54	2.8	57	5.5	77	5.2	31	5.2	73	5.2	Apr-12
eV Alt All Event Driven Median			1.6	_	3.4	_	11.9		3.6		7.0		6.3	Apr-12
Diversifying Asset Category- Gross	1,722,665,711	20.1	1.5										1.5	Mar-17
Diversifying Asset Category- Net			1.5	-		-				-			1.5	
Diversifying Custom ¹			1.3										1.3	Mar-17
Core/Core Plus Fixed Income- Gross	1,157,326,579	13.5	1.8										1.8	Mar-17
Core/Core Plus Fixed Income- Net			1.8	-						-			1.8	
BBgBarc US Aggregate TR			1.4		2.3		-0.3		2.5		2.2		1.4	Mar-17
Neuberger Berman Fixed- Gross	354,060,528	4.1	1.6	51	2.4	70	-0.2	78	2.7	67	2.5	72	6.7	Jun-88
Neuberger Berman Fixed- Net			1.6	51	2.3	74	-0.2	79	2.6	74	2.4	76	6.6	
BBgBarc US Aggregate TR			1.4	73	2.3	77	-0.3	86	2.5	83	2.2	89	6.4	Jun-88
eA US Core Fixed Inc Gross Median			1.6		2.5		0.3		2.8		2.7		6.7	Jun-88

^{1.} See Policy Index and Benchmark History.



													Incep	tion
	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Return (%)	Since
Prudential- Gross	429,726,956	5.0	2.3	2	4.5	1	3.6	2					4.5	Jul-14
Prudential- Net			2.3	2	4.3	2	3.4	2					4.3	
BBgBarc US Aggregate TR			1.4	73	2.3	77	-0.3	86	2.5	83	2.2	89	2.6	Jul-14
eA US Core Fixed Inc Gross Median			1.6		2.5		0.3		2.8		2.7		3.0	Jul-14
TCW MetWest Fixed- Gross	373,539,095	4.4	1.5	73	2.4	67	1.0	22	2.8	56	3.4	15	6.1	Dec-01
TCW MetWest Fixed- Net			1.5	62	2.3	73	0.8	28	2.6	76	3.2	20	5.9	
BBgBarc US Aggregate TR			1.4	73	2.3	77	-0.3	86	2.5	83	2.2	89	4.6	Dec-01
eA US Core Fixed Inc Gross Median			1.6		2.5		0.3		2.8		2.7		5.1	Dec-01
U.S. Treasury- Gross														Mar-17
U.S. Treasury- Net				-		-	-	-		-	-			
BBgBarc US TIPS TR			-0.4		0.9		-0.6		0.6		0.3		-0.4	Mar-17
Global Fixed Income- Gross	222,029,888	2.6	4.4		10.0		5.1		1.6				2.7	May-13
Global Fixed Income- Net			4.4	-	9.9		4.8	-	1.3	-	-		2.4	
Brandywine Custom ¹			3.0		5.6		-2.1		-1.3				0.2	May-13
Brandywine Global- Gross	222,029,888	2.6	4.4	13	10.0	7	5.1	43	1.6	55			2.7	May-13
Brandywine Global- Net			4.4	13	9.9	7	4.8	46	1.3	57			2.4	
Brandywine Custom 1			3.0	32	5.6	33	-2.1	92	-1.3	85		-	0.2	May-13
eA All Global Fixed Inc Gross Median	_		2.4		4.9		4.2		1.9		3.4		2.8	May-13
Diversifying Absolute Return- Gross ⁺⁺	343,309,244	4.0	-1.2										-1.2	Mar-17
Diversifying Absolute Return- Net			-1.2	-	-	-		-	-	-	-		-1.2	
91 Day T-Bill +5%			1.4		2.8		5.5		5.2		5.2		1.4	Mar-17
AQR DELTA II- Gross	69,408,073	0.8	-1.3	80	0.0	81	4.9	62	6.9	32			5.7	May-13
AQR DELTA II- Net			-1.3	80	0.0	81	4.9	62	6.9	32			5.7	
91 Day T-Bill +5%			1.4	40	2.8	58	5.5	59	5.2	42	5.2	55	5.2	<i>May-13</i>
eV Alt All Multi-Strategy Median			1.0		3.2		7.3		4.1		6.0		4.9	May-13

See Policy Index and Benchmark History.
 ++ Absolute Return managers are ranked in the eVest net of fee universe.



													Incep	tion
	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Return (%)	Since
Brevan Howard US - Gross	33,996,992	0.4	-2.9	74	-5.2	78	-1.2	52	-0.3	73			-0.9	Feb-14
Brevan Howard US - Net			-2.9	74	-5.2	78	-1.2	52	-0.3	73			-0.9	
91 Day T-Bill +5%			1.4	27	2.8	31	5.5	26	5.2	24	5.2	23	5.2	Feb-14
HFRI Fund of Funds Composite Index			0.7	34	3.1	28	6.4	24	1.5	54	3.9	35	1.6	Feb-14
eV Alt All Macro Median			-0.4		-0.7		-0.8		2.2		2.5		2.4	Feb-14
Graham Global Inv II - Gross	32,805,419	0.4	-2.1	62									-5.2	Feb-17
Graham Global Inv II - Net			-2.1	62									-5.2	
91 Day T-Bill +5%			1.4	26	2.8	28	5.5	20	5.2	34	5.2	25	1.9	Feb-17
eV Alt All Managed Futures Median			-0.8		-1.8		-3.6		2.0		2.2		-1.9	Feb-17
Grosvenor SCARF Diversifying- Gross	98,760,462	1.2	-0.7	91	-0.8	93	2.1	90	-0.6	91	2.2	90	2.1	Nov-11
Grosvenor SCARF Diversifying- Net			-0.7	91	-0.8	93	2.1	90	-0.6	91	2.2	90	2.1	
91 Day T-Bill +5%			1.4	40	2.8	61	5.5	66	5.2	17	5.2	52	5.2	Nov-11
eV Alt Fund of Funds - Multi-Strategy Median	00.405.074	0.4	1.0	0.4	3.3	0.5	7.7	0.4	2.3	00	5.4		5.2	Nov-11
Grosvenor SCARF B Diversifying- Gross	32,485,371	0.4	-1.7	94	-2.5	95	-1.5	94	-1.4	96			1.0	Jan-13
Grosvenor SCARF B Diversifying- Net			-1.7	94	-2.5	95	-1.5	94	-1.4	96			1.0	1 10
91 Day T-Bill +5%			1.4	40	2.8	61	5.5	66	5.2	17	5.2	52	5.2	Jan-13
eV Alt Fund of Funds - Multi-Strategy Median	44 200 045	0.5	1.0	C1	3.3	77	7.7	70	2.3 6.3	50	5.4		4.4	Jan-13
Laurion Capital- Gross	41,362,215	0.5	1.2	61	-1.3	77	2.0 2.0	76	6.3	59 50			5.2	Mar-14
Laurion Capital- Net 91 Day T-Bill +5%			1.2 1.4	61 59	-1.3 2.8	64	5.5	76 63	5.2	59 73	5.2	 80	5.2 5.2	Mor 11
•			2.3	59	2.0 4.0	04	5.5 8.2	03	5.2 7.2	73	5.2 6.6	00	5.2 7.4	Mar-14 Mar-14
eV Alt Relative Value - Equity Relative Value Median Winton Diversified Futures - Gross	34,490,711	0.4	-2.4	64	-1.5	49	0.2		1.2		0.0		-1.5	Dec-16
Winton Diversified Futures - Gloss Winton Diversified Futures - Net	34,490,711	0.4	-2.4 -2.4	64	-1.5 -1.5	49 49			-				-1.5 -1.5	Dec-10
91 Day T-Bill +5%			-2.4 1.4	26	2.8	28	 5.5	20	5.2	34	5.2	25	2.8	Dec-16
eV Alt All Managed Futures Median			-0.8	20	2.0 -1.8	20	-3.6	20	2.0	34	2.2	20	2.0 -1.8	Dec-16 Dec-16
ev All All Mallayeu Futules Mediali			-0.0		-1.0		-3.0		2.0		۷.۷		-1.0	Dec-10



													Incep	tion
	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Return (%)	Since
Real Return (with SSgA RA Overlay Proxy)- Gross	1,319,879,166	15.4	2.0										2.0	Mar-17
Real Return (with SSgA RA Overlay Proxy)- Net			1.9	-	-	-			-	-			1.9	
Real Return Custom ¹			1.1										1.1	Mar-17
Real Return Asset Category- Gross	1,074,362,052	12.5	2.7										2.7	Mar-17
Real Return Asset Category- Net			2.7										2.7	
Real Return Custom ¹			1.1										1.1	Mar-17
Real Estate- Gross	746,914,636	8.7	3.3	5									3.3	Mar-17
Real Estate- Net			3.3	5									3.3	
NCREIF Property Index			1.8	32	3.3	43	7.0	29	10.2	32	10.5	38	1.8	Mar-17
InvestorForce All DB Real Estate Pub Net Median			1.5	_	3.0	_	6.2		9.7		10.2		1.5	Mar-17
Core RE -Separate- Gross	240,167,987	2.8	3.4		5.5		11.8		10.4		10.7		5.5	Sep-08
Core RE -Separate- Net			3.4		5.0		10.9		9.0		9.5		4.6	
NFI-ODCE			1.7		3.5		7.9		11.3		11.8		5.2	Sep-08
BlackRock RE Leveraged- Gross	170,084,714	2.0	4.4		6.8		12.0		13.3		12.8		9.9	Dec-98
BlackRock RE Leveraged- Net			4.4		6.2		11.3		11.8		11.6			
NFI-ODCE			1.7		3.5		7.9		11.3		11.8		8.6	Dec-98
BlackRock RE II Leveraged- Gross*	1,601,553	0.0												
BlackRock RE II Leveraged- Net														
NFI-ODCE														
Cornerstone Leveraged- Gross	68,481,720	0.8	4.7		6.5		16.8		10.8		11.3		7.8	May-04
Cornerstone Leveraged- Net			4.7		6.2		16.2		9.6		10.2			
NFI-ODCE			1.7		3.5		7.9		11.3		11.8		8.3	May-04
BlackRock RE Unleveraged- Gross			3.9		6.1		10.9		12.6		11.8		10.4	Oct-95
BlackRock RE Unleveraged- Net			3.7		5.6		9.7		11.2		10.6			
NFI-ODCE			1.7		3.5		7.9		11.3		11.8		9.3	Oct-95



See Policy Index and Benchmark History.
 Liquidating as of January 2017.

													Incep	tion
	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Return (%)	Since
Cornerstone Unleveraged- Gross			3.4		4.9		11.8		8.0		8.6		6.8	Jun-04
Cornerstone Unleveraged- Net			3.3		4.7		11.3		7.5		8.1			
NFI-ODCE			1.7		3.5		7.9		11.3		11.8		8.3	Jun-04
Core RE -Limited Partnership- Gross	333,005,044	3.9	1.6		2.8		8.7		11.5		11.3		3.8	Sep-08
Core RE -Limited Partnership- Net			1.5		2.7		8.4		10.9		10.7		3.1	
NFI-ODCE			1.7		3.5		7.9		11.3		11.8		5.2	Sep-08
Jamestown Premier Property - Gross	19,634,546	0.2	2.0		4.0		6.6		10.5				10.9	Dec-13
Jamestown Premier Property - Net			2.0		4.0		6.6		10.5				10.9	
NFI-ODCE			1.7		3.5		7.9		11.3		11.8		11.3	Dec-13
Metlife Core Property - Gross	52,266,892	0.6	0.6		2.5		8.4		12.1				13.0	Dec-13
Metlife Core Property - Net			0.5		2.3		7.9		11.5				12.5	
NFI-ODCE			1.7		3.5		7.9		11.3		11.8		11.3	Dec-13
Prime Property- Gross	53,488,671	0.6	2.5		4.8		10.3		13.4				13.4	Sep-13
Prime Property- Net			2.2		4.2		9.1		12.1				12.2	
NFI-ODCE			1.7		3.5		7.9		11.3		11.8		11.5	Sep-13
Principal US Property- Gross	40,768,849	0.5	2.1		4.0		8.8						9.6	Oct-15
Principal US Property- Net			2.1		4.0		8.8						9.6	
NFI-ODCE			1.7		3.5		7.9		11.3		11.8		9.5	Oct-15
Prologis Targeted Euro Logistics- Gross	30,304,489	0.4	2.9		3.6		3.2						4.2	Oct-15
Prologis Targeted Euro Logistics- Net			2.9		3.6		3.2						4.2	
NFI-ODCE			1.7		3.5		7.9		11.3		11.8		9.5	Oct-15
Prologis Targeted US Logistics- Gross	41,046,340	0.5	3.4		8.6		16.6						15.8	Jul-15
Prologis Targeted US Logistics- Net			3.4		8.6		16.6						15.8	
NFI-ODCE			1.7		3.5		7.9		11.3		11.8		10.3	Jul-15
Townsend Real Estate- Gross+++	95,467,126	1.1	0.0		2.4		7.5	-	-	-			8.4	Mar-16
Townsend Real Estate- Net			0.0		2.4		7.5	-	-	-			8.4	
NFI-ODCE			1.7		3.5		7.9		11.3		11.8		8.1	Mar-16

+++ Preliminary quarterly returns as of 06/30/2017 (Returns are not available at reporting period.)



													Incep	tion
	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Return (%)	Since
Non-Core RE -Opportunistic- Gross ⁺⁺	110,192,724	1.3	3.7		9.1		18.6		35.3				34.0	Feb-14
Non-Core RE -Opportunistic- Net			3.7	-	9.1	-	17.9		34.0	-	-		32.5	
NFI-ODCE net +1%			2.1		4.0		7.9		11.3				12.0	Feb-14
Carlyle China Realty- Gross**	2,919,494	0.0												Jun-17
Carlyle China Realty- Net														
NFI-ODCE net +1%			2.1		4.0		7.9		11.3					Jun-17
Carlyle China Rome Logistics- Gross**	7,993,510	0.1												Jun-17
Carlyle China Rome Logistics- Net														
NFI-ODCE net +1%			2.1		4.0		7.9		11.3					Jun-17
CIM Opportunity VIII- Gross	26,208,964	0.3	3.5		3.3		9.1						7.0	Feb-15
CIM Opportunity VIII- Net			3.5		3.3		7.9						4.5	
NFI-ODCE net +1%			2.1		4.0		7.9		11.3				11.8	Feb-15
Kohlberg Kravis Roberts - Gross	34,514,743	0.4	1.6		14.1		33.8		43.9				41.7	Feb-14
Kohlberg Kravis Roberts - Net			1.6		14.1		33.7		43.7				41.1	
NFI-ODCE net +1%			2.1		4.0		7.9		11.3				12.0	Feb-14
NREP Nordic Strat FCP-FIS- Gross	14,072,762	0.2	5.5		8.4		16.6						21.4	Dec-14
NREP Nordic Strat FCP-FIS- Net			5.5		8.4		16.6						21.4	
NFI-ODCE net +1%			2.1		4.0		7.9		11.3				11.1	Dec-14
NREP Nordic Strat II- Gross	10,009,162	0.1	3.4		6.7		-7.1						-7.1	Jun-16
NREP Nordic Strat II- Net			3.4		6.7		-7.1						-7.1	
NFI-ODCE net +1%			2.1		4.0		7.9		11.3				7.9	Jun-16
OZ RE III- Gross	14,474,089	0.2	7.3		11.9		20.0						-4.1	Sep-14
OZ RE III- Net			7.3		11.9		16.7						-10.5	
NFI-ODCE net +1%			2.1		4.0		7.9		11.3				11.3	Sep-14

⁺⁺ Returns are one-quarter lag.



^{**} Funded in June 2017.

													Incep	tion
	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Return (%)	Since
Non-Core RE -Value Added- Gross ++	63,548,881	0.7	12.0		5.2		8.5		11.5		12.1		-3.9	Sep-08
Non-Core RE -Value Added- Net			12.0		5.2		7.7		10.3		10.9		-5.4	
NFI-ODCE net +1% 1Q Lag ¹			1.8		4.0		8.4		12.3		12.5		8.0	Sep-08
AEW II- Gross	337,612	0.0	-8.2		-14.4		-25.4		3.7		10.5		0.9	May-07
AEW II- Net			-8.2		-14.4		-25.8		2.7		9.4		-0.7	
NFI-ODCE net +1% 1Q Lag			1.8		4.0		8.4		12.3		12.5			May-07
ECE Euro Prime Shopping II- Gross	8,891,967	0.1	3.5		4.6		21.2						19.8	Jul-15
ECE Euro Prime Shopping II- Net			3.5		4.6		18.5		-		-		17.2	
NFI-ODCE net +1% 1Q Lag			1.8		4.0		8.4		12.3		12.5		11.5	Jul-15
European RE Debt II- Gross	23,447,910	0.3	32.5		4.7		-1.2		1.3				1.7	Nov-13
European RE Debt II- Net			32.5		4.7		-1.2		1.3				1.7	
NFI-ODCE net +1% 1Q Lag			1.8		4.0		8.4		12.3		12.5		12.9	Nov-13
Hammes II- Gross	14,219,463	0.2	2.3		4.5		10.1						18.4	Jul-15
Hammes II- Net			2.3		4.5		7.8						12.7	
NFI-ODCE net +1% 1Q Lag			1.8		4.0		8.4		12.3		12.5		11.5	Jul-15
Hines US Office II- Gross*	647,612	0.0												
Hines US Office II- Net														
NFI-ODCE net +1% 1Q Lag														
UBS RE- Gross	16,004,316	0.2	1.0		1.2		7.1		9.8		9.4		0.2	Sep-06
UBS RE- Net			1.0		1.2		6.8		9.3		8.9		-1.4	
NFI-ODCE net +1% 1Q Lag			1.8		4.0		8.4		12.3		12.5			Sep-06
Private Real Assets - Gross ++	263,647,718	3.1	3.2		11.9		22.3		25.9				2.2	Jan-13
Private Real Assets - Net			3.2	-	11.9		22.3		25.9		-		2.2	
CPI-U Headline +5%			1.6		3.1		6.6		5.6		6.0		6.2	Jan-13
ACM II- Gross	3,932,930	0.0	-1.8		-3.1								-6.4	Sep-16
ACM II- Net			-1.8		-3.1			-		-			-6.4	
CPI-U Headline +5%			1.6		3.1		6.6		5.6		6.0		5.2	Sep-16

See Policy Index and Benchmark History.
 Returns are one-quarter lag.
 Liquidating as of December 2016.



													Incep	tion
	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Return (%)	Since
ArcLight Energy VI- Gross	23,020,066	0.3	3.9		4.9		16.6						3.8	Aug-15
ArcLight Energy VI- Net			3.9		4.9		16.6						3.8	
CPI-U Headline +5%			1.6		3.1		6.6		5.6		6.0	-	6.5	Aug-15
Atalaya SMA- Gross	13,479,042	0.2	1.4		-0.9		6.5						6.0	May-15
Atalaya SMA- Net			1.4	-	-0.9		6.5	-	-				6.0	
CPI-U Headline +5%			1.6		3.1		6.6		5.6		6.0		6.4	May-15
Brookfield Infra III- Gross	10,092,374	0.1	2.5		0.3		17.5						16.0	May-16
Brookfield Infra III- Net			2.5		0.3		17.5						16.0	
CPI-U Headline +5%			1.6		3.1		6.6		5.6		6.0		6.8	May-16
Carlyle Power II- Gross	11,487,612	0.1	-2.2		3.2		-2.1						-14.7	Oct-15
Carlyle Power II- Net			-2.2		3.2		-2.1						-14.7	
CPI-U Headline +5%			1.6		3.1		6.6		5.6		6.0		6.4	Oct-15
EnCap Energy IX- Gross	23,338,200	0.3	-1.0		23.3		50.2		20.2				-1.0	Jan-13
EnCap Energy IX- Net			-1.0		23.3		50.2		20.2				-1.0	
CPI-U Headline +5%			1.6		3.1		6.6		5.6		6.0		6.2	Jan-13
EnCap Energy X- Gross	18,481,118	0.2	0.9		32.0		35.9						-6.5	Apr-15
EnCap Energy X- Net			0.9		32.0		35.9						-6.5	
CPI-U Headline +5%			1.6		3.1		6.6		5.6		6.0		6.4	Apr-15
EnCap Flatrock Midstream III- Gross	8,192,315	0.1	-0.7		5.7		7.4						2.6	Jul-14
EnCap Flatrock Midstream III- Net			-0.7	-	5.7		7.4		-				2.6	
CPI-U Headline +5%			1.6		3.1		6.6		5.6		6.0	-	5.6	Jul-14
First Reserve- Gross	8,307,450	0.1	45.4		67.0		80.6						-9.4	Dec-14
First Reserve- Net			45.4		67.0		80.6						-9.4	
CPI-U Headline +5%			1.6		3.1		6.6		5.6		6.0		6.0	Dec-14
IFM Global Infrastructure US LP- Gross*	75,000,000	0.9											0.0	Apr-17
IFM Global Infrastructure US LP- Net													0.0	
CPI-U Headline +5%			1.6		3.1		6.6		5.6		6.0		0.6	Apr-17

^{*} Funded in April 2017.



													Incep	tion
	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Return (%)	Since
Pantheon Ventures- Gross +++	43,206,627	0.5	0.0		1.2		6.3						30.1	Jul-14
Pantheon Ventures- Net			0.0		1.2		6.3						30.1	
CPI-U Headline +5%			1.6		3.1		6.6		5.6		6.0		5.6	Jul-14
Quantum Energy VI - Gross	20,028,961	0.2	-0.7		9.8		51.1						20.9	Nov-14
Quantum Energy VI - Net			-0.7		9.8		51.1				-		20.9	
CPI-U Headline +5%			1.6		3.1		6.6		5.6		6.0		5.5	Nov-14
Wastewater Opportunity- Gross	5,081,023	0.1	-4.7		-8.7		-18.1						-48.5	Dec-15
Wastewater Opportunity- Net			-4.7		-8.7		-18.1						-48.5	
CPI-U Headline +5%			1.6		3.1		6.6		5.6		6.0		6.8	Dec-15
Commodities- Gross	63,799,699	0.7	-4.4		-6.6		-6.9		-14.7		-8.3		-7.1	May-08
Commodities- Net			-4.5	-	-6.7		-7.4		-15.4		-9.0			
Bloomberg Commodity Index TR USD			-3.0		-5.3		-6.5		-14.8		-9.2		-9.7	<i>May-08</i>
Blackstone- Gross	39,128,376	0.5	-5.3		-7.7		-8.5		-14.7		-8.2		-4.8	May-08
Blackstone- Net			-5.3		-7.7		-8.9		-15.4		-9.0			
Bloomberg Commodity Index TR USD			-3.0		-5.3		-6.5		-14.8		-9.2		-9.7	<i>May-08</i>
Gresham- Gross	24,671,323	0.3	-3.0		-4.8		-4.3		-14.8		-8.4		-9.2	Apr-08
Gresham- Net			-3.2		-5.2		-5.0		-15.3		-9.0			
Bloomberg Commodity Index TR USD			-3.0		-5.3		-6.5		-14.8		-9.2		-9.4	Apr-08
Opportunities Asset Category- Gross	12,834,239	0.1	3.6										3.6	Mar-17
Opportunities Asset Category- Net			3.6	-	-		-				-		3.6	
Policy Index ¹			2.7		7.0		11.7		5.3		8.4		2.7	Mar-17
Atalaya Special Opportunities V- Gross++	12,834,239	0.1	3.6		5.3		9.2		9.9				6.8	Jul-13
Atalaya Special Opportunities V- Net			3.6		5.3		9.2		9.9				6.8	
Thomson Reuters C A All PE 1 Qtr Lag			3.4		8.1		16.7		11.7		15.4		14.7	Jul-13

⁺⁺ Returns are one-quarter lag.
+++ Preliminary quarterly returns as of 6/30/2017 (Returns are not available at reporting period.)

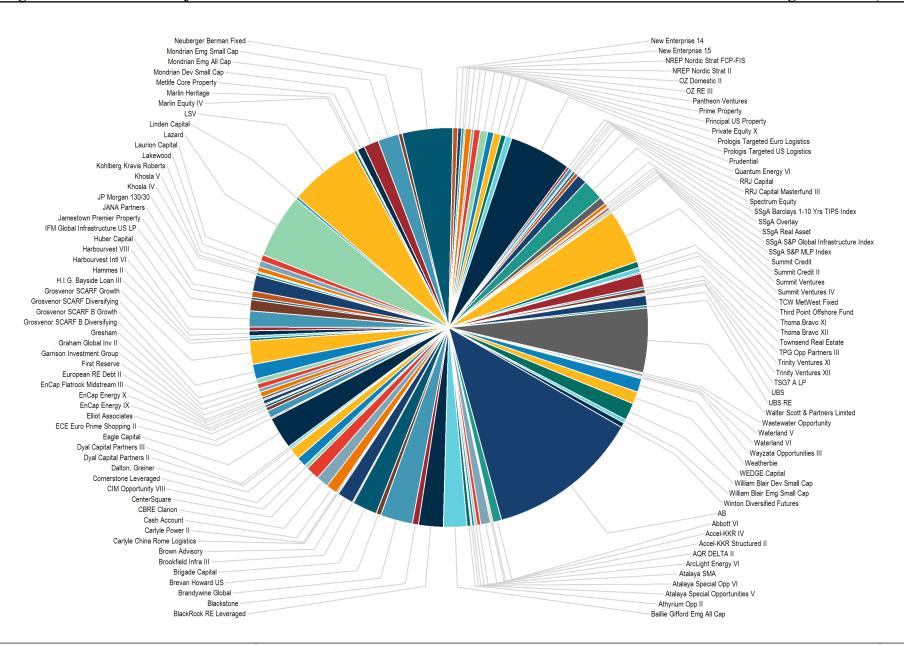


^{1.} See Policy Index and Benchmark History.

													Incep	tion
	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Return (%)	Since
SSgA Real Asset Overlay Proxy- Gross	245,517,114	2.9	-0.7	-	1.0		2.5		-2.8		1.6		0.9	Jan-08
SSgA Real Asset Overlay Proxy- Net			-0.7	-	0.8		2.1		-3.0	-	1.4		0.7	
SSgA Real Asset ¹			-0.7		0.8		2.4		-3.1		1.5			Jan-08
Cash - Gross	75,395,913	0.9	0.9		1.3		2.0		1.5		1.0		3.2	Jun-92
Cash - Net			0.9	-	1.3		2.0		1.5	-	1.0			
91 Day T-Bills			0.2		0.4		0.5		0.2		0.2		2.5	Jun-92
Cash Account- Gross	75,395,913	0.9	0.9	-	1.3		2.0		1.6		1.0		3.3	Jun-92
Cash Account- Net			0.9	-	1.3		2.0		1.6		1.0			
91 Day T-Bills			0.2		0.4		0.5		0.2		0.2		2.5	Jun-92

^{1.} See Policy Index and Benchmark History.







	Current	%
AB	\$1,066,777,467	12.4%
JP Morgan 130/30	\$108,905,113	1.3%
Brown Advisory	\$112,526,776	1.3%
Eagle Capital	\$226,310,285	2.6%
Huber Capital	\$110,115,022	1.3%
UBS	\$66,454,975	0.8%
Weatherbie	\$98,449,123	1.1%
Dalton, Greiner	\$77,365,867	0.9%
WEDGE Capital	\$87,389,633	1.0%
CenterSquare	\$95,290,335	1.1%
Principal Global Inv	\$149,772	0.0%
Lazard	\$446,505,177	5.2%
Walter Scott & Partners Limited	\$446,322,816	5.2%
LSV	\$495,060,249	5.8%
Mondrian Dev Small Cap	\$101,655,993	1.2%
William Blair Dev Small Cap	\$117,087,633	1.4%
Baring	\$12,001	0.0%
Baillie Gifford Emg All Cap	\$163,069,272	1.9%
Mondrian Emg All Cap	\$145,413,863	1.7%
Mondrian Emg Small Cap	\$25,948,586	0.3%
William Blair Emg Small Cap	\$28,616,715	0.3%
CBRE Clarion	\$83,092,669	1.0%
Abbott VI	\$60,550,477	0.7%
Accel-KKR IV	\$11,266,816	0.1%
Accel-KKR V	\$1,387,251	0.0%
Accel-KKR Structured II	\$4,377,369	0.1%
Atalaya Special Opp VI	\$17,520,509	0.2%
Dyal Capital Partners II	\$8,576,573	0.1%



	Current	%
Dyal Capital Partners III	\$13,491,156	0.2%
Garrison Investment Group	\$13,798,507	0.2%
Harbourvest VIII	\$24,900,625	0.3%
Harbourvest Intl VI	\$33,168,690	0.4%
H.I.G. Bayside Loan III	\$20,095,736	0.2%
H.I.G. Capital V	\$3,211,131	0.0%
H.I.G. Europe Capital II	\$1,424,206	0.0%
Khosla IV	\$14,134,173	0.2%
Khosla V	\$10,995,750	0.1%
Linden Capital	\$21,166,570	0.2%
Marlin Equity IV	\$14,184,369	0.2%
Marlin Heritage	\$10,793,547	0.1%
New Enterprise 14	\$35,680,872	0.4%
New Enterprise 15	\$27,243,261	0.3%
New Enterprise 16	\$1,050,000	0.0%
Private Equity X	\$47,172,269	0.6%
RRJ Capital	\$24,603,775	0.3%
RRJ Capital Masterfund III	\$12,829,928	0.1%
Spectrum Equity	\$19,369,928	0.2%
Summit Ventures	\$21,120,011	0.2%
Summit Ventures IV	\$9,194,941	0.1%
Thoma Bravo XI	\$35,630,406	0.4%
Thoma Bravo XII	\$11,594,569	0.1%
TPG Opp Partners III	\$21,202,177	0.2%
Trinity Ventures XI	\$22,894,843	0.3%
Trinity Ventures XII	\$8,218,659	0.1%
TSG7 A LP	\$5,090,847	0.1%
TSG7 B LP	\$292,760	0.0%



	Current	%
Waterland V	\$13,558,348	0.2%
Waterland VI	\$9,396,212	0.1%
Waterland VI Over	\$708	0.0%
Wayzata Opportunities III	\$8,716,978	0.1%
Brigade Capital	\$171,087,002	2.0%
Athyrium Opp II	\$22,379,711	0.3%
Athyrium Opp III	\$2,577,988	0.0%
Summit Credit	\$6,106,955	0.1%
Summit Credit II	\$18,004,973	0.2%
Claren Road Credit	\$2,314,975	0.0%
Elliot Associates	\$50,443,019	0.6%
Grosvenor	\$404,857	0.0%
Grosvenor SCARF Growth	\$160,121,601	1.9%
Grosvenor SCARF B Growth	\$37,473,056	0.4%
JANA Partners	\$41,039,143	0.5%
Lakewood	\$43,734,451	0.5%
OZ Domestic II	\$45,122,975	0.5%
Third Point Offshore Fund	\$46,349,550	0.5%
Neuberger Berman Fixed	\$354,060,528	4.1%
Prudential	\$429,726,956	5.0%
TCW MetWest Fixed	\$373,539,095	4.4%
Brandywine Global	\$222,029,888	2.6%
AQR DELTA II	\$69,408,073	0.8%
Brevan Howard US	\$33,996,992	0.4%
Graham Global Inv II	\$32,805,419	0.4%
Grosvenor SCARF Diversifying	\$98,760,462	1.2%
Grosvenor SCARF B Diversifying	\$32,485,371	0.4%
Laurion Capital	\$41,362,215	0.5%



	Current	%
Winton Diversified Futures	\$34,490,711	0.4%
BlackRock RE Leveraged	\$170,084,714	2.0%
BlackRock RE II Leveraged	\$1,601,553	0.0%
Cornerstone Leveraged	\$68,481,720	0.8%
Jamestown Premier Property	\$19,634,546	0.2%
Metlife Core Property	\$52,266,892	0.6%
Prime Property	\$53,488,671	0.6%
Principal US Property	\$40,768,849	0.5%
Prologis Targeted Euro Logistics	\$30,304,489	0.4%
Prologis Targeted US Logistics	\$41,046,340	0.5%
Townsend Real Estate	\$95,467,126	1.1%
Transition Account	\$28,132	0.0%
Carlyle China Realty	\$2,919,494	0.0%
Carlyle China Rome Logistics	\$7,993,510	0.1%
CIM Opportunity VIII	\$26,208,964	0.3%
Kohlberg Kravis Roberts	\$34,514,743	0.4%
NREP Nordic Strat FCP-FIS	\$14,072,762	0.2%
NREP Nordic Strat II	\$10,009,162	0.1%
OZ RE III	\$14,474,089	0.2%
AEW II	\$337,612	0.0%
ECE Euro Prime Shopping II	\$8,891,967	0.1%
European RE Debt II	\$23,447,910	0.3%
Hammes II	\$14,219,463	0.2%
Hines US Office II	\$647,612	0.0%
UBS RE	\$16,004,316	0.2%
ACM II	\$3,932,930	0.0%
ArcLight Energy VI	\$23,020,066	0.3%
Atalaya SMA	\$13,479,042	0.2%



	Current	%
Brookfield Infra III	\$10,092,374	0.1%
Carlyle Power II	\$11,487,612	0.1%
EnCap Energy IX	\$23,338,200	0.3%
EnCap Energy X	\$18,481,118	0.2%
EnCap Flatrock Midstream III	\$8,192,315	0.1%
First Reserve	\$8,307,450	0.1%
IFM Global Infrastructure US LP	\$75,000,000	0.9%
Pantheon Ventures	\$43,206,627	0.5%
Quantum Energy VI	\$20,028,961	0.2%
Wastewater Opportunity	\$5,081,023	0.1%
Blackstone	\$39,128,376	0.5%
Gresham	\$24,671,323	0.3%
Atalaya Special Opportunities V	\$12,834,239	0.1%
Cash Account	\$75,395,913	0.9%
Heitman Adv JMB V	\$8,390	0.0%
SSgA Overlay	\$71,360,563	0.8%
SSgA Barclays 1-10 Yrs TIPS Index	\$24,387,492	0.3%
SSgA Real Asset	\$147,646,689	1.7%
SSgA S&P Global Infrastructure Index	\$48,565,693	0.6%
SSgA S&P MLP Index	\$24,917,240	0.3%
Total	\$8,571,728,529	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%	45	0.8	57	-0.2	74	1.9%	90
Policy Index	5.3%	58	5.1%	12	1.0	23			0.0%	1
Total Fund ex Overlay	5.3%	62	5.5%	27	0.9	38	0.0	69	1.5%	77
Policy Index	5.3%	58	5.1%	12	1.0	23			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	8.8%	58	5.7%	42	1.5	42	0.2	70	1.9%	88
Policy Index	8.4%	72	4.7%	9	1.7	17			0.0%	1
Total Fund ex Overlay	8.7%	62	5.3%	21	1.6	33	0.2	70	1.5%	81
Policy Index	8.4%	72	4.7%	9	1.7	17			0.0%	1

InvestorForce Public DB > \$1B Gross Accounts



5th Percentile
Median
75th Percentile 95th Percentile
of Portfolios
T-4-1 F1

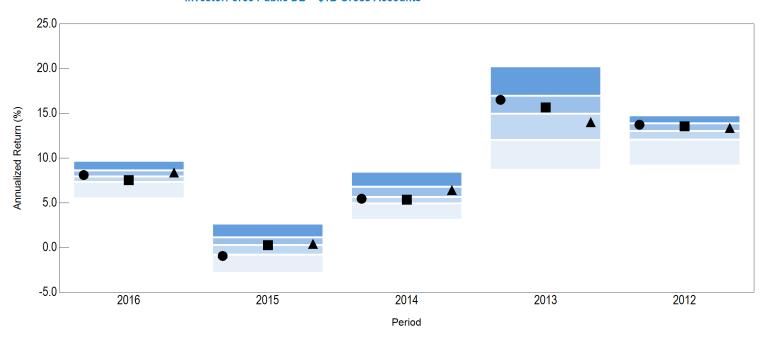
Total FundTotal Fund ex Overlay

▲ Policy Index

)												
	9.7		15.6		6.7		10.5		10.8		6.6	
	8.5		13.9		6.1		9.8		10.3		5.7	
	7.6		12.8		5.4		9.1		9.5		5.2	
	7.1		11.9		4.7		8.3		8.8		4.4	
	5.2		7.8		2.4		3.0		3.3		3.3	
	85		83		67		63		55		53	
(26)	8.1	(30)	13.7	(31)	5.0	(67)	8.8	(58)	9.5	(49)	4.8	(69)
(16)	8.0	(31)	13.4	(35)	5.3	(62)	8.7	(62)	9.2	(63)	4.4	(77)
(74)	7.0	(77)	11.7	(79)	5.3	(58)	8.4	(72)	9.5	(48)	5.2	(53)
((((26) (16)	9.7 8.5 7.6 7.1 5.2 85 (26) 8.1 (16) 8.0	9.7 8.5 7.6 7.1 5.2 85 (26) 8.1 (30) (16) 8.0 (31)	9.7 15.6 8.5 13.9 7.6 12.8 7.1 11.9 5.2 7.8 85 83 (26) 8.1 (30) 13.7 (16) 8.0 (31) 13.4	9.7 15.6 8.5 13.9 7.6 12.8 7.1 11.9 5.2 7.8 85 83 (26) 8.1 (30) 13.7 (31) (16) 8.0 (31) 13.4 (35)	9.7 15.6 6.7 8.5 13.9 6.1 7.6 12.8 5.4 7.1 11.9 4.7 5.2 7.8 2.4 85 83 67 (26) 8.1 (30) 13.7 (31) 5.0 (16) 8.0 (31) 13.4 (35) 5.3	9.7 15.6 6.7 8.5 13.9 6.1 7.6 12.8 5.4 7.1 11.9 4.7 5.2 7.8 2.4 85 83 67 (26) 8.1 (30) 13.7 (31) 5.0 (67) (16) 8.0 (31) 13.4 (35) 5.3 (62)	9.7 15.6 6.7 10.5 8.5 13.9 6.1 9.8 7.6 12.8 5.4 9.1 7.1 11.9 4.7 8.3 5.2 7.8 2.4 3.0 85 83 67 63 (26) 8.1 (30) 13.7 (31) 5.0 (67) 8.8 (16) 8.0 (31) 13.4 (35) 5.3 (62) 8.7	9.7 15.6 6.7 10.5 8.5 13.9 6.1 9.8 7.6 12.8 5.4 9.1 7.1 11.9 4.7 8.3 5.2 7.8 2.4 3.0 85 83 67 63 (26) 8.1 (30) 13.7 (31) 5.0 (67) 8.8 (58) (16) 8.0 (31) 13.4 (35) 5.3 (62) 8.7 (62)	9.7 15.6 6.7 10.5 10.8 8.5 13.9 6.1 9.8 10.3 7.6 12.8 5.4 9.1 9.5 7.1 11.9 4.7 8.3 8.8 5.2 7.8 2.4 3.0 3.3 85 83 67 63 55 (26) 8.1 (30) 13.7 (31) 5.0 (67) 8.8 (58) 9.5 (16) 8.0 (31) 13.4 (35) 5.3 (62) 8.7 (62) 9.2	9.7 15.6 6.7 10.5 10.8 8.5 13.9 6.1 9.8 10.3 7.6 12.8 5.4 9.1 9.5 7.1 11.9 4.7 8.3 8.8 5.2 7.8 2.4 3.0 3.3 85 83 67 63 55 (26) 8.1 (30) 13.7 (31) 5.0 (67) 8.8 (58) 9.5 (49) (16) 8.0 (31) 13.4 (35) 5.3 (62) 8.7 (62) 9.2 (63)	9.7 15.6 6.7 10.5 10.8 6.6 8.5 13.9 6.1 9.8 10.3 5.7 7.6 12.8 5.4 9.1 9.5 5.2 7.1 11.9 4.7 8.3 8.8 4.4 5.2 7.8 2.4 3.0 3.3 3.3 85 83 67 63 55 53 (26) 8.1 (30) 13.7 (31) 5.0 (67) 8.8 (58) 9.5 (49) 4.8 (16) 8.0 (31) 13.4 (35) 5.3 (62) 8.7 (62) 9.2 (63) 4.4



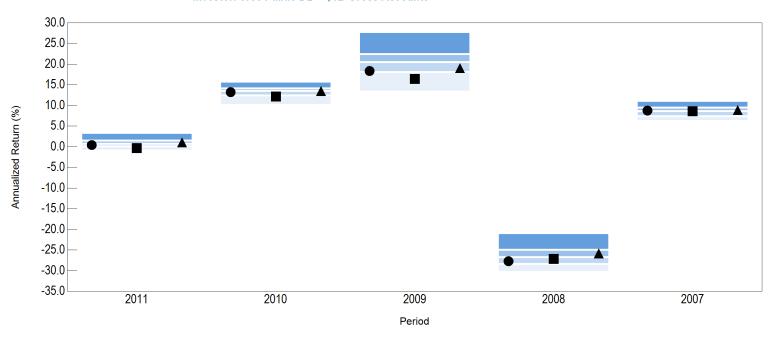
InvestorForce Public DB > \$1B Gross Accounts



•	5th Percentile 25th Percentile
- 1	Vledian
7	75th Percentile
ç	95th Percentile
#	f 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)

InvestorForce Public DB > \$1B Gross Accounts



	Return (Rank)									
5th Percentile	3.3		15.7		27.7		-21.0		11.0	
25th Percentile	1.6		14.2		22.5		-24.9		9.5	
Median	0.8		13.5		20.5		-26.7		8.6	
75th Percentile	0.1		12.5		18.1		-28.3		7.4	
95th Percentile	-0.9		10.2		13.4		-30.2		6.2	
# of Portfolios	68		66		66		65		64	
Total Fund	0.4	(60)	13.2	(62)	18.3	(73)	-27.7	(65)	8.7	(50)
■ Total Fund ex Overlay	-0.3	(86)	12.2	(81)	16.4	(86)	-27.2	(53)	8.6	(51)
▲ Policy Index	1.0	(38)	13.5	(53)	19.0	(62)	-25.8	(42)	8.9	(42)

Total Plan Policy Index	As of:							
	4/1/17	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% (AR)	10.0%	10.0%	10.0%	5.0%	5.0%	5.0%		
BBgBarc Aggregate	10.0%	15.0%	20.0%	20.0%	25.0%	25.0%	30.0%	
BBgBarc US TIPS	5.0%							
BofA ML High Yield II	1.0%	1.0%						
Bloomberg Commodity	2.0%			5.0%				
Citigroup BIG								23.0%
Citigroup WGBI ex US Unhedged	2.4%	2.4%						
CPI-U +5% (PRA)	7.0%	15.0%	15.0%					
Credit Suisse Leveraged Loans	1.0%	1.0%						
Credit Suisse Leveraged Loans +2%	4.0%							
JPM GBI EM Diversified	0.6%	0.6%						
MSCI ACWI ex US	20.0%	22.5%	22.5%	20.0%				
MSCI EAFE					15.0%	15.0%	15.0%	15.0%
MSCI Emerging Markets					5.0%	5.0%	5.0%	
NAREIT				3.0%	3.0%			
NCREIF	7.0%			12.0%	12.0%	15.0%	10.0%	15.0%
Russell 1000					30.0%	30.0%	35.0%	
Russell 1000 +3% 1QL (PE)		10.0%	10.0%					
Russell 2000					5.0%	5.0%	5.0%	
Russell 3000	21.0%	22.5%	22.5%	30.0%				47.0%
S&P 500 +2% 1QL (PE)				5.0%				
Thomson Reuters C A All PE 1 Qtr Lag	9.0%							
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%



Growth Benchmark	As of: 4/1/17				Growth Oriented Absolute Return Benchmark	As of: 4/1/17	
91 Day T-Bill +5%	5.08%				91-day UST Bill +5%	100%	
BofA ML High Yield II	1.70%				91-day 031 biii +3%	100.0%	
Credit Suisse Leveraged Loans	1.70%					100.070	
Credit Suisse Leveraged Loan + 2%	6.78%				Diversifying Benchmark	As of:	
MSCI ACWI ex US	33.90%				Sittle on young Deliciting in	4/1/17	
Russell 3000	35.59%				91 Day T-Bill +5%	28.0%	
Thomson Reuters C A All PE 1 Qtr Lag	15.25%				BBgBarc US Aggregate	40.0%	
	100.0%				BBgBarc US TIPS	20.0%	
					Citigroup WGBI ex US Unhedged	9.6%	
US Equity Benchmark	As of:				JPM GBI EM Diversified	2.4%	
. ,	1/1/08	9/1/04	1/1/00	7/1/86		72.0%	
Russell 1000		85.71%	87.5%				
Russell 2000		14.29%	12.5%		Global Fixed Income Benchmark	As of:	
Russell 3000	100%			100%		6/1/13	
	100.0%	100.0%	100.0%	100.0%	Citigroup WGBI ex US Unhedged	80%	
					JPM GBI EM Diversified	20%	
International Equity Benchmark	As of:					100.0%	
	1/1/08	1/1/00	7/1/86				
MSCI ACWI ex US	100%				Diversifying Absolute Return Benchmark	As of:	
MSCI EAFE		75%	100%			4/1/17	
MSCI Emerging Markets		25%			91-day UST Bill +5%	100%	
	100.0%	100.0%	100.0%			100.0%	
Private Equity Benchmark	As of:				Real Return Benchmark	As of:	
	4/1/17	1/1/12	1/1/08			4/1/17	
Russell 1000 +3% 1QL		100.0%			NCREIF Property	43.75%	
S&P 500 +2% 1QL			100.0%		CPI-U Headline +5%	43.75%	
Thomson Reuters C A All PE 1 Qtr Lag	100.0%				Bloomberg Commodity	12.50%	
	100.0%	100.0%	100.0%			100.0%	
Public Credit Benchmark	As of:				RE-Value Added Benchmark	As of:	
	4/1/17					7/1/16	10/1/08
BofA ML High Yield II	50%				NCREIF +2% 1Q Lag		100.0%
Credit Suisse Leveraged Loans	50%				NFI-ODCE net +1% 1Q Lag	100.0%	
	100.0%					100.0%	100.0%
Private Credit Benchmark	As of:				Private Real Assets Benchmark	As of:	
	4/1/17					4/1/17	
Credit Suisse Leveraged Loan + 2%	100%				CPI-U Headline +5%	100%	
	100.0%					100.0%	



1/1/01 1/1/98 5/1/	'89
D II 4 000	-
Russell 1000 100% Russell 3000 100%	
Wilshire 2500 100%	10/
100.0% 100.0% 100.0 100.	
100.0 /0 100.0 /0 100.	J /U
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%	
00 40 14 40 1	
SSgA Real Asset Benchmark As of:	
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.