



Board of Retirement Regular Meeting

Sacramento County Employees' Retirement System

Agenda Item 18

MEETING DATE: February 21, 2018

SUBJECT: Quarterly Total Fund Investment Performance Report
Fourth Quarter 2017

SUBMITTED FOR: Consent **Deliberation and Action** **Receive 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 quarter ending December 31, 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 December 31, 2017.

SCERS TOTAL FUND RETURNS

This item summarizes SCERS' Total Fund investment returns as presented in Verus' Investment Performance Review for the period ending December 31, 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 December 31, 2017

SCERS ASSET CLASS	Quarter	Fiscal Year-to-Date	1-Year	3-Year	5-Year	Since Inception	Since Inception Date
SCERS TOTAL FUND Return w/Overlay	4.0%	8.1%	16.9%	7.8%	9.0%	8.5%	Jun-86
Policy Index	3.4%	6.8%	14.2%	7.5%	8.6%	8.7%	
InvestorForce Public DB > \$1B	3.8%	7.7%	16.2%	7.9%	9.3%	8.4%	
SCERS TOTAL FUND Return w/o Overlay	4.1%	8.1%	16.9%	8.0%	8.9%	8.4%	Jun-86
Policy Index	3.4%	6.8%	14.2%	7.5%	8.6%	8.7%	
GROWTH ASSET CATEGORY	5.5%	10.6%				15.8%	Mar-17
Custom Benchmark	4.8%	9.5%				13.7%	
DIVERSIFYING ASSET CATEGORY	0.8%	2.1%				3.6%	Mar-17
Custom Benchmark	0.8%	2.0%				3.3%	
REAL RETURN ASSET CATEGORY	2.9%	6.5%				8.8%	Mar-17
Custom Benchmark	2.4%	4.4%				5.5%	
OPPORTUNITIES PORTFOLIO	-0.3%	0.2%				3.8%	Mar-17
Custom Benchmark	3.4%	6.8%				9.7%	

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 includes only the December quarter, fiscal YTD, and since inception (Mar-17) performance for this report, without a historical track record. Verus will continue 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. Several of the asset class benchmarks are carry-over benchmarks from the prior policy index benchmark, while many have been changed as part of the implementation of the new asset allocation, including those for Private Equity, Private Credit, Absolute Return, Real Estate, and Real Assets. A comparison of the new and prior policy benchmarks is shown on the next page.

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SCERS BENCHMARK SUMMARY As of December 31, 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 ex.-U.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 ex.-U.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 ex.-U.S.) + 15.25% (Cambridge All PE)
Public Equities	MSCI ACWI	MSCI ACWI
US Equities	Russell 3000	Russell 3000
International Equities	MSCI ACWI ex.-U.S.	MSCI ACWI ex.-U.S. IMI
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%	HFRI FoF Composite Index + 1%
Diversifying Asset Category	NA	28% (91 Day T-Bill + 5%) + 40% (Barclays U.S. Agg.) + 20% (Barclays U.S. TIPS) + 9.6% (Citi WGBI ex.-U.S.) + 2.4% (JPM GBI EM Diversified)
Core/Core Plus Fixed Income	Barclays U.S. Aggregate	Barclays U.S. Aggregate
U.S. Treasury	NA	Barclays U.S. Treasury
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%	HFRI FoF Conservative Index
Real Return Asset Category	NA	43.75% (NCREIF) + 43.75% (CPI-U Headline + 5%) + 12.5% (Bloomberg Commodity)
Real Estate	NA	65% (NFI-ODCE) + 35% (NFI-ODCE + 1%)
Core Real Estate	NFI-ODCE	NFI-ODCE
Non-Core Real Estate	NFI-ODCE + 1%	NFI-ODCE + 1%
Real Assets	CPI-U Headline + 5%	45% (Cambridge Infrastructure) + 35% (Cambridge Energy) + 10% (NCREIF Agriculture) + 10% (NCREIF Timber)
Commodities	Bloomberg Commodity Index	Bloomberg Commodity Index
SSgA Real Assets Proxy	20% (Barclays U.S. TIPS) + 30% (Dow Jones U.S. Select REIT) + 25% (MSCI World Natural Resources) + 25% (S&P Goldman Sachs Commodities)	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

SCERS GROWTH ASSET CATEGORY RETURNS

SCERS GROWTH Performance Summary for the periods ending 12/31/17	Quarter	Fiscal Year-to- Date	1-Year	Since Inception	Since Inception Date
SCERS GROWTH ASSET CATEGORY	5.5%	10.6%	NA	15.8%	Mar-17
Custom Benchmark	4.8%	9.5%	NA	13.7%	
Public Equity	6.1%	11.7%	25.9%	10.1%	Jun-11
MSCI ACWI	5.7%	11.2%	24.0%	8.7%	
Private Equity (lagged 1 quarter)	5.7%	10.1%	18.0%	0.6%	Feb-08
Cambridge All PE	3.5%	6.8%	15.4%	9.8%	
Public Credit	0.0%	1.2%	6.5%	4.5%	Nov-13
Custom Benchmark	0.8%	2.3%	5.9%	4.7%	
Private Credit (lagged 1 quarter)	1.2%	2.7%	NA	6.3%	Mar-17
Credit Suisse Leveraged Loan + 2%	1.7%	3.3%	6.2%	4.5%	
Growth Absolute Return	1.6%	4.3%	NA	6.9%	Mar-17
HFRI FoF Composite +1%	2.2%	4.9%	7.8%	6.4%	

Public Equity Portfolio Returns

The SCERS Public Equity portfolio is comprised of 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 and the remaining balance is 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.

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SCERS PUBLIC EQUITY Performance Summary for the periods ending 12/31/17	Quarter	Fiscal Year-to-Date	1-Year	Since Inception	Since Inception Date
SCERS PUBLIC EQUITY PORTFOLIO	6.1%	11.7%	25.9%	10.1%	Jun-11
MSCI ACWI	5.7%	11.2%	24.0%	8.7%	
SCERS U.S. Equity	6.5%	11.2%	21.4%	10.2%	Jun-86
Russell 3000	6.3%	11.2%	21.1%	10.3%	
U.S. Large Cap	6.9%	11.7%	22.7%	6.3%	Mar-98
Russell 1000	6.6%	11.4%	21.7%	6.8%	
U.S. Small Cap	5.4%	10.5%	19.6%	12.2%	Dec-90
Russell 2000	3.3%	9.2%	14.6%	11.0%	
U.S. REIT	3.3%	4.7%	6.9%	9.1%	Jan-06
FTSE NAREIT Equity REIT	1.5%	2.5%	5.2%	6.7%	
SCERS International Equity	5.8%	12.3%	30.7%	6.8%	Dec-87
MSCI ACWI ex.-U.S.	5.1%	11.6%	27.8%	6.6%	
International Developed	5.3%	11.7%	29.0%	4.9%	Mar-98
MSCI EAFE	4.3%	10.2%	24.8%	5.2%	
Emerging Markets	7.5%	15.4%	39.4%	7.1%	Jan-00
MSCI Emerging Markets	7.5%	16.1%	37.8%	7.7%	
International REIT	7.1%	10.9%	21.4%	11.8%	Oct-08
FTSE NAREIT Developed ex.-U.S.	6.4%	9.7%	20.8%	10.5%	

Fourth Quarter 2017:

- SCERS Public Equity portfolio returned +6.1% versus the benchmark return of +5.7%.
- SCERS U.S. Equity portfolio returned +6.5% versus the benchmark return of +6.3%.
 - SCERS U.S. Large Cap portfolio returned +6.9% versus the benchmark return of 6.6%. Manager returns compared to their respective benchmark:
 - JP Morgan (130/30): +7.1% versus +6.6%
 - Brown Advisory (growth): +8.0% versus +7.9%
 - Eagle Capital (core): +7.4% versus +6.6%
 - Huber Capital (value): +7.1% versus +5.3%
 - SCERS U.S. Small Cap portfolio returned +5.4% versus the benchmark return of +3.3%. Manager returns compared to their respective benchmark:
 - UBS Global (growth): +6.4% versus +4.6%
 - Weatherbie (growth): +8.2% versus +4.6%
 - DGHM (value): +4.3% versus +2.0%
 - Wedge Capital (value): +2.2% versus +2.0%
 - CenterSquare U.S. REIT: +3.3% versus +1.5%.

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- SCERS International Equity portfolio returned +5.8% versus the benchmark return of +5.1%.
 - SCERS International Developed portfolio returned +5.3% versus the benchmark return of +4.3%. Manager returns compared to their respective benchmark:
 - Lazard (ACWI ex US): +6.7% versus +5.1%
 - Walter Scott (large cap growth): +5.7% versus +4.3%
 - LSV (large cap value): +3.5% versus +4.3%
 - Mondrian (small cap value): +6.1% versus +5.9%
 - William Blair (small cap growth): +5.5% versus +5.9%
 - SCERS Emerging Markets portfolio returned +7.5% versus the benchmark return of +7.5%. Manager returns compared to their respective benchmark:
 - Baillie Gifford (all cap): +7.5% versus +7.5%
 - Mondrian (all cap): +6.4% versus +7.5%
 - Mondrian (small cap): +11.6% versus +9.3%
 - William Blair (small cap): +9.8% versus +9.3%
 - CBRE Clarion International REIT: +7.1% versus the benchmark of +6.4%.

One-Year:

- SCERS Public Equity portfolio returned +25.9% versus the benchmark return of +24.0%.
- SCERS U.S. Equity portfolio returned +21.4% versus the benchmark return of +21.1%.
 - SCERS U.S. Large Cap portfolio returned +22.7% versus the benchmark return of +21.7%. Manager returns compared to their respective benchmark:
 - JP Morgan (130/30): +23.1% versus +21.7%
 - Brown Advisory (growth): +31.0% versus +30.2%
 - Eagle Capital (core): +24.4% versus +21.7%
 - Huber Capital (value): +21.9% versus +13.7%
 - SCERS U.S. Small Cap portfolio returned +19.6% versus the benchmark return of +14.6%. Manager returns compared to their respective benchmark:
 - UBS Global (growth): +20.4% versus +22.2%
 - Weatherbie (growth): +43.2% versus +22.2%
 - DGHM (value): +9.1% versus +7.8%
 - Wedge Capital (value): +6.8% versus +7.8%
 - CenterSquare U.S. REIT: +6.9% versus the benchmark of +5.2%.

- SCERS International Equity portfolio returned +30.7% versus the benchmark return of +27.8%.
 - SCERS International Developed portfolio returned +29.0% versus the benchmark return of +24.8%. Manager returns compared to their respective benchmark:
 - Lazard (ACWI ex US): +28.5% versus +27.8%
 - Walter Scott (large cap growth): NA (inception date March 2017)
 - LSV (large cap value): +25.5% versus +24.8%
 - Mondrian (small cap value): +33.3% versus +31.5%
 - William Blair (small cap growth): +34.6% versus +31.5%
 - SCERS Emerging Markets portfolio returned +39.4% versus the benchmark return of +37.8%. Manager returns compared to their respective benchmark:
 - Baillie Gifford (all cap): +53.1% versus +37.8%
 - Mondrian (all cap): +28.1% versus +37.8%
 - Mondrian (small cap): +21.7% versus +34.2%
 - William Blair (small cap): +42.6% versus +34.2%
 - CBRE Clarion International REIT: +21.4% versus the benchmark of +20.8%.

Private Equity Portfolio Returns

The SCERS Private Equity portfolio remains earlier 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, which will be presented at the March Board meeting.

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

SCERS PRIVATE EQUITY Performance Summary for the periods ending 9/30/17	Quarter	Year-to-Date	1-Year	Since Inception	Since Inception Date
SCERS Private Equity	5.7%	10.1%	18.0%	0.6%	Feb-08
Cambridge All PE	3.5%	6.8%	15.4%	9.8%	

Current Quarter:

- SCERS Private Equity portfolio returned +5.7% versus the benchmark return of +3.5%. Notable outperformers include:
 - Marlin Heritage (buyout): +33.8%

- Summit Ventures IV (venture capital): +31.5%
- H.I.G Capital V (buyout): +30.3%
- Waterland V (buyout): +26.1%
- Accel-KKR IV (venture capital): +20.4%
- SCERS made a \$25 million commitment to Spectrum Equity Fund VIII in the fourth quarter of 2017.

One-Year (ending 9/30/17):

- SCERS Private Equity portfolio returned +18.0% versus the benchmark return of +15.4%. Notable outperformers include:
 - Marlin Heritage (buyout): +78.2%
 - H.I.G Capital V (buyout): +66.1%
 - Accel-KKR IV (venture capital): +48.6%
 - Summit Ventures IV (venture capital): +46.2%
 - Spectrum Equity (buyout): +44.0%
 - Waterland V (buyout): +36.4%

Public/Private Credit Portfolio Returns

SCERS PUBLIC / PRIVATE CREDIT Performance Summary for the periods ending 12/31/17	Quarter	Fiscal Year-to- Date	1-Year	Since Inception	Since Inception Date
SCERS Public Credit (current quarter)	0.0%	1.2%	6.5%	4.5%	Nov-13
Custom Benchmark	0.8%	2.3%	5.9%	4.7%	
SCERS Private Credit (lagged 1 quarter)	1.2%	2.7%	NA	6.3%	Mar-17
Credit Suisse Leverage Loan + 2%	1.7%	3.3%	6.2%	4.5%	

Fourth Quarter 2017:

- SCERS Public Credit portfolio was flat versus the benchmark return of +0.8%.
- SCERS Private Credit portfolio returned +1.2% versus the benchmark return of +1.7% lagged one quarter. Notable outperformers include:
 - Summit Partners Credit II: +2.2%
- SCERS made the following Private Credit commitments during the fourth quarter of 2017:
 - \$100 million commitment to Tennenbaum Capital Partners Direct Lending Fund VIII (fund of one structure)
 - \$50 million commitment to Benefit Street Partners Senior Secured Opportunities Fund.

One-Year:

- SCERS Public Credit portfolio returned +6.5% versus the benchmark return of +5.9%.
- SCERS Private Credit portfolio return was not available.

Growth Absolute Return Portfolio Returns

SCERS GROWTH ABSOLUTE RETURN Performance Summary for the periods ending 12/31/17	Quarter	Fiscal Year-to- Date	1-Year	Since Inception	Since Inception Date
SCERS Growth Absolute Return	1.6%	4.3%	NA	6.9%	Mar-17
HFRI FoF Index +1%	2.2%	4.9%	7.8%	6.4%	

Fourth Quarter 2017:

- SCERS Growth Absolute Return portfolio returned +1.6% versus the benchmark return of +2.2%. Notable outperformers within the direct portfolio include:
 - Third Point (event driven): +2.9%
- Grosvenor separate account returns:
 - SCARF: +2.4%
 - Interim SCARF B: +1.7%
- SCERS did not make any Growth Absolute Return commitments or investments during the fourth quarter of 2017.

One-Year:

- SCERS Growth Absolute Return portfolio return was not available. Notable outperformers within the direct portfolio versus the benchmark return of +7.8% include:
 - Third Point (event driven): +17.8%
 - OZ Domestic Partners II (multi-strategy): +12.1%
- Grosvenor separate account returns:
 - SCARF: +12.0%
 - Interim SCARF B: +10.4%

SCERS DIVERSIFYING ASSET CATEGORY RETURNS

SCERS DIVERSIFYING Performance Summary for the periods ending 12/31/17	Quarter	Fiscal Year-to-Date	1-Year	Since Inception	Since Inception Date
SCERS DIVERSIFYING ASSET CATEGORY	0.8%	2.1%	NA	3.6%	Mar-17
Custom Benchmark	0.8%	2.0%	NA	3.3%	
Core/Core Plus Fixed Income	0.7%	1.7%	4.9%	3.3%	Jun-11
Barclays US Aggregate TR	0.4%	1.2%	3.5%	3.0%	
Global Fixed Income	-0.4%	3.0%	13.3%	3.1%	May-13
Custom Benchmark	1.0%	3.2%	9.0%	0.9%	
Diversifying Absolute Return	1.6%	2.7%	NA	1.7%	Mar-17
HFRI FoF Conservative Index	1.0%	2.4%	5.3%	3.9%	

Fixed Income Portfolio Returns

SCERS FIXED INCOME Performance Summary for the periods ending 12/31/17	Quarter	Fiscal Year-to-Date	1-Year	Since Inception	Since Inception Date
SCERS Core/Core Plus Fixed Income	0.7%	1.7%	4.9%	3.3%	Jun-11
Barclays U.S. Aggregate	0.4%	1.2%	3.5%	3.0%	
SCERS Global Fixed Income	-0.4%	3.0%	13.3%	3.1%	May-13
Custom Benchmark	1.0%	3.2%	9.0%	0.9%	

Fourth Quarter 2017:

- SCERS Core/Core Plus Fixed Income portfolio returned +0.7% versus the benchmark return of +0.4%.
 - Neuberger Berman (enhanced index): +0.4%
 - Prudential (core plus): +1.0%
 - TCW MetWest (core plus): +0.6%
- SCERS Global Fixed Income portfolio returned -0.4% versus benchmark return of +1.0%.
 - Brandywine Global (global opportunistic): -0.4%

One-Year:

- SCERS Core/Core Plus Fixed Income portfolio returned +4.9% versus the benchmark return of +3.5%.
 - Neuberger Berman (enhanced index): +3.7%
 - Prudential (core plus): +6.8%

- TCW MetWest (core plus): +3.9%
- SCERS Global Fixed Income portfolio returned +13.3% versus the benchmark return of +9.0%.
 - Brandywine Global (global opportunistic): +13.3%

Diversifying Absolute Return Portfolio Returns

SCERS DIVERSIFYING ABSOLUTE RETURN Performance Summary for the periods ending 12/31/17	Quarter	Fiscal Year-to- Date	1-Year	Since Inception	Since Inception Date
SCERS Diversifying Absolute Return	1.6%	2.7%	NA	1.7%	Mar-17
HFRI FoF Conservative Index	1.0%	2.4%	5.3%	3.9%	

Fourth Quarter 2017:

- SCERS Diversifying Absolute Return portfolio returned +1.6% versus the benchmark return of +1.0%. Notable outperformers within the direct portfolio include:
 - Graham Global Investment (systematic global macro): +9.4%
 - Winton Diversified Futures (systematic global macro): +7.1%
 Notable underperformers include:
 - Brevan Howard (discretionary global macro): -0.8%
- Grosvenor separate account returns:
 - SCARF: -1.5%
 - SCARF B: -0.9%
- SCERS did not make any Diversifying Absolute Return commitments or investments during the fourth quarter of 2017.

One-Year:

- SCERS Diversifying Absolute Return portfolio return was not available. Benchmark return for the one-year period was +5.3%. Notable outperformers within the direct portfolio include:
 - Elliott Associates (event driven): +8.5%
 - Winton Diversified Futures (systematic global macro): +6.3%
 Notable underperformers include:
 - Brevan Howard (discretionary global macro): -5.3%
- Grosvenor separate account returns:
 - SCARF: -1.6%
 - SCARF B: -3.5%

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' actual and target allocations within the asset category. Most of the gap between actual and target allocation is within the Real Assets asset class. As of December 31, 2017, the SSgA proxy equals \$252.3 million. 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'). This proxy was restructured in January 2018, as part of the Overlay program restructure. 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 Verus real estate and private real asset returns are measured on a time-weighted ('TWR') basis rather than on an internal rate of return ('IRR') basis. Please note that returns for SCERS' non-core 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 March Board meeting. Real Estate performance will be covered by Townsend, which will also be presented at the March Board meeting.

SCERS REAL RETURN Performance Summary	Quarter	Fiscal Year-to-Date	1-Year	Since Inception	Since Inception Date
SCERS REAL RETURN ASSET CATEGORY					
SCERS Real Return w/ SSgA Proxy	2.9%	6.5%		8.8%	Mar-17
SCERS Real Return w/o SSgA Proxy	2.8%	6.4%		9.6%	Mar-17
Custom Benchmark	2.4%	4.4%		5.5%	Mar-17
SCERS Real Estate	2.3%	6.4%	11.7%	12.2%	Jun-11
NCREIF	1.2%	3.2%	6.6%	10.4%	
Core Real Estate (as of 12/31/17)					
Separate Account	4.7%	7.8%	13.7%	6.1%	Sep-08
Commingled Funds	1.7%	5.9%	9.7%	4.3%	Sep-08
NFI-ODCE	2.1%	4.0%	7.6%	5.3%	
Non-Core Real Estate (as of 9/30/17)					
Opportunistic	5.5%	10.5%	20.5%	32.4%	Feb-14
Value Add	-8.1%	-3.2%	1.8%	-4.1%	Sep-08
NFI-ODCE net +1%	-0.3%	1.8%	5.8%	11.2%	Feb-14
				7.8%	Sep-08
SCERS Real Assets (as of 9/30/17)	4.6%	7.3%	20.2%	3.4%	Jan-13
Custom Benchmark	2.8%	4.8%	8.0%	6.5%	
SCERS Commodities (as of 12/31/17)					
Bloomberg Commodity Index	-1.0%	1.4%	-5.3%	-6.6%	May-08
	4.7%	7.3%	1.7%	-8.6%	
SSgA Real Assets Proxy (as of 12/31/17)	3.4%	6.8%	7.8%	1.5%	Jan-08
SSgA Real Assets	3.3%	6.6%	7.5%	NA	

Fourth Quarter 2017:

- SCERS Real Return portfolio returned +2.9% with the SSgA Proxy overlay and +2.8% without the overlay, versus the benchmark return of +2.4%.
- SCERS Real Estate portfolio returned +2.3% versus the benchmark return of +1.2%.
 - SCERS Core Real Estate separate account portfolio returned +4.7% versus the benchmark return of +2.1%
 - BlackRock: +2.9%
 - Barings/Cornerstone: +8.9%
 - SCERS Core Real Estate commingled fund portfolio returned +1.7% versus the benchmark return of +2.1%. Notable outperformers include:
 - Prologis Targeted US Logistics: +3.6%
 - Metlife Core Property: +3.1%
 - SCERS Non-Core Real Estate portfolio returned as follows versus the benchmark return of -0.3%:
 - Opportunistic portfolio: +5.5%
 - Value Add portfolio: -8.1%
 - Notable outperformers include:
 - ✓ NREP Nordic Strategies II: +9.9%
 - ✓ KKR Real Estate Partners Americas: +8.9%
 - ✓ NREP Nordic Strategies I: +8.1%
- SCERS Real Assets portfolio returned +4.6% versus the benchmark return of +2.8%. Notable outperformers include:
 - Pantheon Ventures: +20.2%
 - EnCap Flatrock Midstream III: +6.3%
- SCERS Commodities portfolio returned -1.0% versus the benchmark return of +4.7%.
 - Gresham Strategic Commodities: +6.3%
 - Blackstone Resource Select was liquidated during the quarter.
- The SSgA Real Assets overlay proxy returned +3.4%
- SCERS made the following Real Return commitments during the fourth quarter of 2017:
 - \$40 million commitment to Quantum Energy Partners VIII (Real Assets)
 - \$31.3 million commitment to Hammes Partners III (Value-Add Real Estate)

One-Year:

- SCERS Real Return portfolio returns with and without the SSgA Proxy overlay was not available.
- SCERS Real Estate portfolio return was +11.7% versus the benchmark return of +6.6%.
 - SCERS Core Real Estate separate account portfolio returned +13.7% versus the benchmark return of +7.6%.
 - BlackRock: +12.3%
 - Barings/Cornerstone: +21.3%
 - SCERS Core Real Estate commingled fund portfolio returned +9.7% versus the benchmark return of +7.6%. Notable outperformers include:
 - Prologis Targeted US Logistics: +19.7%
 - Prologis Targeted Euro Logistics: +19.5% (as of 9/30/17)
 - Prime Property: +9.9%
 - SCERS Non-Core Real Estate portfolio returned as follows versus the benchmark return of +5.8%:
 - Opportunistic portfolio: +20.5%
 - Value Add portfolio: +1.8%
 - Notable outperformers include:
 - ✓ NREP Nordic Strategies I: +40.0%
 - ✓ KKR Real Estate Partners Americas: +30.4%
 - ✓ NREP Nordic Strategies II: +29.2%
 - ✓ Och-Ziff Real Estate III: +23.9%
- SCERS Real Assets portfolio returned +20.2% versus the benchmark return of +8.0%. Notable outperformers include:
 - First Reserve Energy II: +65.6%
 - EnCap Energy Capital X: +33.3%
 - Pantheon Ventures: +29.5%
 - Quantum Energy Partners VI: +25.3%
 - EnCap Energy Capital IX: +20.4%
 - EnCap Flatrock Midstream III: +20.4%
- SCERS Commodities portfolio returned -5.3% versus the benchmark return of +1.7%.
 - Gresham Strategic Commodities: -0.9%
 - Blackstone Resource Select: -6.4%

- The SSgA Real Assets overlay proxy returned +7.8%.

SCERS OPPORTUNITIES PORTFOLIO RETURNS

SCERS OPPORTUNITIES Performance Summary for the periods ending 12/31/17	Quarter	Fiscal Year-to-Date	1-Year	Since Inception	Since Inception Date
SCERS Opportunities	-0.3%	0.2%		3.8%	Mar-17
Policy Index	3.4%	6.8%		9.7%	

Fourth Quarter 2017:

- SCERS Opportunities portfolio returned -0.3% versus the benchmark return of +3.4%.
- SCERS did not make any Opportunities commitments or investments during the fourth quarter of 2017.

One-Year:

- SCERS Opportunities portfolio return was not available.

MARKET RECAP

The fourth quarter capped off a tremendous year for global financial markets. The US economy posted another year of growth, making this recovery the third longest in the post-WWII era, at nearly nine years¹. If economic growth persists through mid-2019, it will mark the longest growth period since 1945. The US economy, as measured by Gross Domestic Product (GDP), grew at a healthy 2.6% annualized rate in the quarter², though down from the 3.2% growth in the third quarter. In addition to GDP growth, other economic statistics reached significant levels in the quarter including:

- Overall unemployment rate was 4.1% throughout the quarter with weekly unemployment insurance declining to the lowest level since 1973³.
- ISM manufacturing index registered its highest reading since June 2004.
- Retail sales notched a 5.5% year over year gain during the month of December and hit a record \$5.7 trillion in 2017⁴, up significantly from the pre-recession high of \$4.4 trillion in 2007.

Despite continued political uncertainty making headlines, Congress managed to pass the Tax Cuts and Jobs Act, which was signed into law on December 22nd. The bill marks the most significant overhaul of the tax code since 1986, with one of the signature features being the reduction of the corporate tax rate from 35% to 21%. Following the passage of the bill, 2018

¹ Goldman Sachs 2018 Outlook

² Bureau of Economic Analysis Advance Estimate

³ State Street Global Advisors

⁴ U.S. Census Data

earnings expectations for companies in the S&P 500 were revised upward from 11.1% to 13.1%⁵.

At its December meeting, the Federal Reserve raised interest rates by 25 basis points for the third time during 2017 to a target rate of 1.25-1.50%. General expectations are for three more rate hikes during 2018 and Fed officials raised their 2018 GDP forecast from 2.1% to 2.5%. Despite the increased interest rates and higher growth forecast, the U.S. dollar was little changed in the fourth quarter and declined 7% for the full year.

On a global basis, 179 of 192 economies in the International Monetary Fund's World Economic Outlook forecast posted economic growth last year, and the IMF forecasts 2018 will have the fewest countries in recession ever⁶. Expectations for global GDP growth have been revised upward over the past six months, led by the Eurozone and emerging markets. Year over year, economic growth in the Eurozone increased +2.6% and overall growth in the BRICs (Brazil, Russia, India, China) advanced +5.6%⁷. Overall, low and stable inflation has allowed Central Banks to maintain easy money policies providing a favorable environment to support growth.

Solid global economic data helped equity markets post significant gains in the fourth quarter of 2017. International markets, both developed and emerging, continue to lead global equity markets with the MSCI Asia Pacific +8.2% and the MSCI Emerging Markets

Broad Markets: Equities

	Total Return (%)				
	Month	QTD	CYTD	FYTD	1 Year
S&P 500 Index	1.11	6.64	21.83	11.42	21.83
Russell 2000 Index	-0.40	3.34	14.65	9.20	14.65
Russell 3000 Index	1.00	6.34	21.13	11.20	21.13
MSCI AC World Index	1.61	5.73	23.97	11.21	23.97
MSCI AC Asia Pacific Index	2.15	8.15	31.67	13.74	31.67
MSCI AC Europe Index	1.64	2.31	25.32	9.05	25.32
MSCI Emerging Markets Index	3.59	7.44	37.28	15.92	37.28

Index up +7.4%, during the quarter. In the U.S., large cap stocks significantly outperformed small cap stocks during the quarter, with the S&P 500 up +6.6% compared to the Russell 2000 Index up +3.3%.

For calendar year 2017, emerging markets led the global equity rally, advancing +37.3%. Emerging markets outperformance in 2017 is a reversal of extended underperformance following the GFC and has been aided by recent currency movements, including a weakening of the U.S. dollar. Asia-Pacific equity markets advanced +31.7% for the year, ahead of the European region, which was up +25.3%. U.S. equity markets, as measured by the Russell 3000 Index, advanced +21.1% during 2017. Large cap growth stocks led the U.S. market, with the Russell 1000 Growth Index up +30.2% compared to the Russell 1000 Value Index +13.7%.

ATTACHMENT

Verus' Investment Performance Review for SCERS for the period ending December 31, 2017.
Verus' Supplemental Performance Review for the period ending December 31, 2017.

⁵ Verus Investment Performance Review

⁶ International Monetary Fund and Goldman Sachs

⁷ Verus Investment Performance Review

Prepared by:

/S/

Brian Miller
Investment Officer

Reviewed by:

/S/

Steve Davis
Chief Investment Officer

/S/

Eric Stern
Chief Executive Officer



**PERSPECTIVES
THAT DRIVE
ENTERPRISE
SUCCESS**



PERIOD ENDING: DECEMBER 31, 2017

Investment Performance Review for

Sacramento County Employees' Retirement System

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Market Environment **TAB I**

Total Fund **TAB II**

Policy Index and
Benchmark History **TAB III**

4th quarter summary

THE ECONOMIC CLIMATE

- Global growth forecasts for 2018 have been revised higher, most notably in the Eurozone. U.S. expected 2018 GDP growth is 2.6%, above the expansion average.
- The Eurozone has experienced an impressive economic recovery. In the third quarter, real GDP accelerated to 2.6%, the fastest pace of growth since 2011.
- The House and Senate agreed to a final tax bill that was signed into law by President Trump on December 22nd. The bill, formally known as the Tax Cuts & Jobs Act, represents a major overhaul of the U.S. tax system.

PORTFOLIO IMPACTS

- A synchronized pickup in global economic growth, low inflation, strong employment, and accommodative central banks should support global equities moving forward. We recommend maintaining an overweight equity position.
- Markets remain expensive by most measures. However, it is important to note the merits and flaws of various valuation metrics.

THE INVESTMENT CLIMATE

- Global equities produced strong returns over the quarter and finished the year on a positive note. Emerging market equities led the way, driven by high earnings growth and expansion of valuation multiples off of low levels.
- The outlook for U.S. equity earnings has improved further, following the signing of the Tax Cuts and Jobs Act. S&P 500 earnings expectations for 2018 were revised upwards from 11.1% to 13.1%.
- U.S. high yield spreads became increasingly tight. Credit premiums are near all time lows, which may warrant an underweight to U.S. credit.

ASSET ALLOCATION ISSUES

- Risk assets continue to deliver strong performance, fueled by improving fundamentals and accelerating growth. The current environment appears accommodative for further gains.
- Equity volatility is very low, helped by stable economic conditions and inflation. Historically, low volatility has indicated less risk of an equity downside event.

We believe a moderate overweight to risk is warranted

U.S. economics summary

- U.S. real GDP grew 2.3% from the previous year in Q3, the fastest pace in more than two years. Growth was driven by consumer spending, private inventory accumulation, and business investment.
- Growth in business investment has provided a material support to the economy over recent periods for the first time in the recovery. Rising domestic and external demand has influenced companies to ramp up production. Survey based measures indicate firms are planning to increase capex over the next six months.
- Core inflation rose slightly from 1.7% to 1.8% over the quarter, driven by higher shelter prices. Strong demand, higher raw material prices, and a weaker dollar may provide modest pressures on inflation, but overall levels remain low. Any material rise in inflation would likely be met by more aggressive monetary tightening than what is priced into markets.
- The U3 unemployment rate fell further from 4.2% to 4.1%, its lowest level in 17 years.
- Net job creation averaged 204,000 per month in Q3 - above the expansion average of 196,000. Despite robust job gains and low unemployment, wage growth remained modest at 2.5% YoY.
- The Fed raised interest rates for the third time this year to a target rate of 1.25-1.50%. Fed dot plots indicate three more interest rate hikes in 2018, while the market is only forecasting two. Officials noted that strong economic growth is expected to continue, and raised the 2018 GDP forecast from 2.1% to 2.5%.

	Most Recent	12 Months Prior
GDP (YoY)	2.3% 9/30/17	1.5% 9/30/16
Inflation (CPI YoY, Core)	1.8% 12/31/17	2.2% 12/31/16
Expected Inflation (5yr-5yr forward)	2.1% 12/31/17	2.1% 12/31/16
Fed Funds Target Range	1.25 – 1.50% 12/31/17	0.50 – 0.75% 12/31/16
10 Year Rate	2.4% 12/31/17	2.4% 12/31/16
U-3 Unemployment	4.1% 12/31/17	4.7% 12/31/16
U-6 Unemployment	8.1% 12/31/17	9.1% 12/31/16

International economics summary

- Economic growth advanced in the third quarter across developed and emerging markets. The United States grew at 2.3% YoY, the Eurozone improved to 2.6%, and overall growth in the BRICS nations accelerated to 5.6%. Central bank policy is still broadly accommodative, which is supportive of continued progress.
- Expectations for global GDP growth for the next two years has been revised upward in the past six months, according to the consensus estimate from Bloomberg. The upward revision to global growth forecasts were driven by the Eurozone and emerging markets.
- A pickup in lending and investment, strong external demand, and accommodative monetary policy has helped fuel an impressive economic recovery in the Eurozone. GDP grew 2.6% in Q3 from the previous year and the unemployment rate fell to 8.8%, the lowest level in nine years.
- PMIs across major markets were all above 50, indicating further expansion in the manufacturing sector.
- There are still concerns of a hard landing in China because the central bank has been tightening financial conditions on the short-end of the yield curve to reign in excessive leverage. Thus far, this process has been successful with economic growth slowing only moderately.
- Low inflation in developed economies has persisted, contributing to slower monetary tightening as central banks have been reluctant to raise rates too quickly.

Area	GDP (Real, YoY)	Inflation (CPI, YoY)	Unemployment
United States	2.3% <i>9/30/17</i>	2.1% <i>12/31/17</i>	4.1% <i>12/31/17</i>
Western Europe	2.5% <i>9/30/17</i>	1.6% <i>12/31/17</i>	7.4% <i>12/31/17</i>
Japan	2.1% <i>9/30/17</i>	0.6% <i>11/30/17</i>	2.7% <i>11/30/17</i>
BRICS Nations	5.6% <i>9/30/17</i>	2.0% <i>12/31/17</i>	5.7% <i>9/30/17</i>
Brazil	1.4% <i>9/30/17</i>	3.0% <i>12/31/17</i>	12.1% <i>12/31/17</i>
Russia	1.8% <i>9/30/17</i>	2.5% <i>12/31/17</i>	5.1% <i>11/30/17</i>
India	5.3% <i>9/30/17</i>	4.9% <i>11/30/17</i>	8.0% <i>12/31/16</i>
China	6.8% <i>9/30/17</i>	1.8% <i>12/31/17</i>	4.0% <i>9/30/17</i>

Equity environment

- We maintain an overweight position to equities with a preference for emerging markets. Equity markets delivered strong returns over the quarter and were supported by robust earnings growth. Emerging markets provided outsized gains as is often the case in periods of strong economic growth.
- U.S. corporate earnings are expected to increase by 13.1% YoY in 2018 according to Factset. Expectations improved by a net 2% following the Tax Cuts & Jobs Act, which lowered the corporate tax rate from 35% to 21%, effective January 1st, 2018. Energy and Financial sectors are expected to lead in earnings with growth of 47% and 25%, respectively.
- The way businesses spend tax savings may have significant positive effects on wages, capital investment, and equity returns.

We will be monitoring this activity throughout the year.

- Equity volatility has stayed extraordinarily low. U.S. market volatility over the past year was 3.9% (S&P 500), followed by International at 4.2% (MSCI EAFE) and emerging markets at 6.5% (MSCI Emerging Markets). Low equity volatility has historically indicated less risk of an equity downside event.
- Currency movement contributed to volatility and uncertainty in international assets for investors with unhedged exposure. Recently, the U.S. dollar has weakened, creating a tailwind for unhedged performance.

	QTD TOTAL RETURN		YTD TOTAL RETURN		1 YEAR TOTAL RETURN	
	(unhedged)	(hedged)	(unhedged)	(hedged)	(unhedged)	(hedged)
US Large Cap (Russell 1000)	6.6%		21.7%		21.7%	
US Small Cap (Russell 2000)	3.3%		14.6%		14.6%	
US Large Value (Russell 1000 Value)	5.3%		13.7%		13.7%	
US Large Growth (Russell 1000 Growth)	7.9%		30.2%		30.2%	
International Large (MSCI EAFE)	4.3%	4.0%	25.7%	16.8%	25.7%	16.8%
Eurozone (Euro Stoxx 50)	(0.4%)	(1.8%)	25.3%	11.1%	25.3%	11.1%
U.K. (FTSE 100)	6.0%	5.3%	22.6%	12.9%	22.6%	12.9%
Japan (NIKKEI 225)	12.0%	12.3%	25.7%	21.9%	25.7%	21.9%
Emerging Markets (MSCI Emerging Markets)	7.3%	5.3%	37.3%	28.6%	37.3%	28.6%

Source: Russell Investments, MSCI, STOXX, FTSE, Nikkei, as of 12/31/17

Domestic equity

U.S. equities produced gains over the quarter (S&P 500 +6.6%), adding to record highs. Over the past year, U.S. equity performance (S&P 500 +21.8%) has lagged international developed equities (MSCI EAFE +25.0%) and emerging markets (MSCI Emerging Markets +37.3%). Performance of each equity market is in line with the degree of earnings growth – emerging markets have produced the strongest year-over-year growth and the U.S. has produced the weakest earnings growth. However, earnings growth in the U.S. has still been strong relative to history.

U.S. corporate earnings are expected to increase by 13.1% YoY in 2018, according to Factset. Forecasts were revised upwards by a net 2% following the passing of tax cuts. Energy and Financial sectors are expected to lead in earnings with growth of 47% and 25%, respectively. The way businesses spend additional tax savings may have significant positive effects on wages, capital investment, and equity returns. We will be monitoring the situation throughout the year.

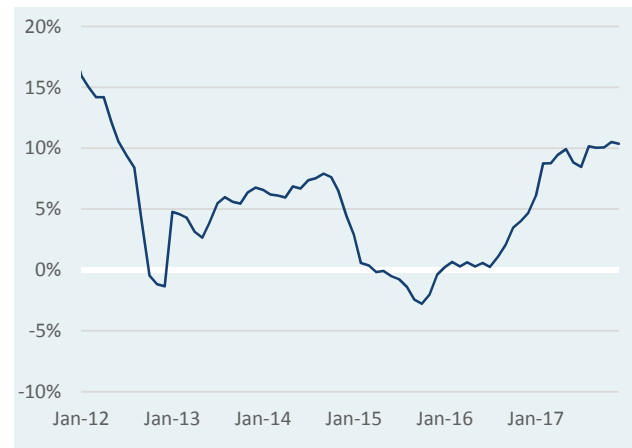
We maintain a neutral weight to U.S. equities

U.S. EQUITIES



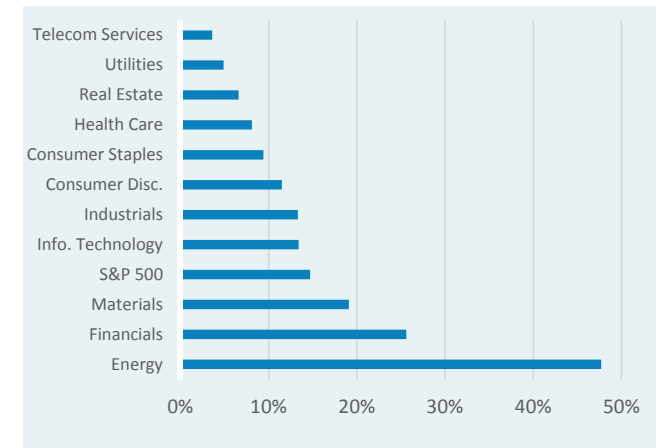
Source: Russell Investments, as of 12/31/17

EARNINGS GROWTH



Source: MSCI, as of 12/31/17, YoY growth in forward earnings

2018 S&P 500 EARNINGS EXPECTATIONS



Source: FactSet, as of 1/12/18

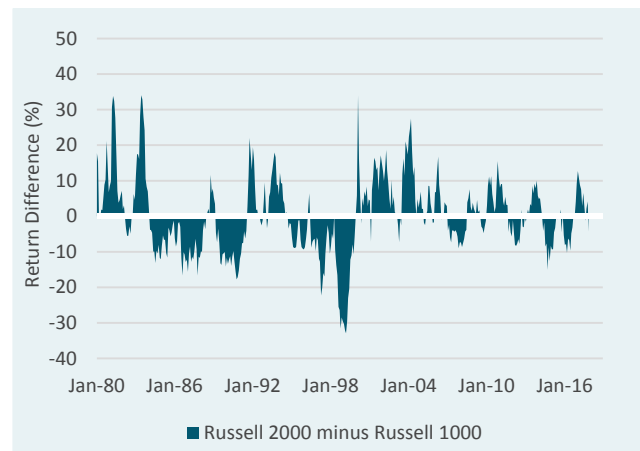
Domestic equity size and style

Large cap equities (Russell 1000 +6.6%) continued to outperform small cap equities (Russell 2000 +3.3%) during the quarter. Small cap stocks are very expensive relative to history based on traditional measures. It appears that a greater number of companies in the small cap universe with low or negative earnings has contributed to rising price-to-earnings multiples of the index.

Value equities underperformed growth equities over the quarter and the past year – caused by extremely positive

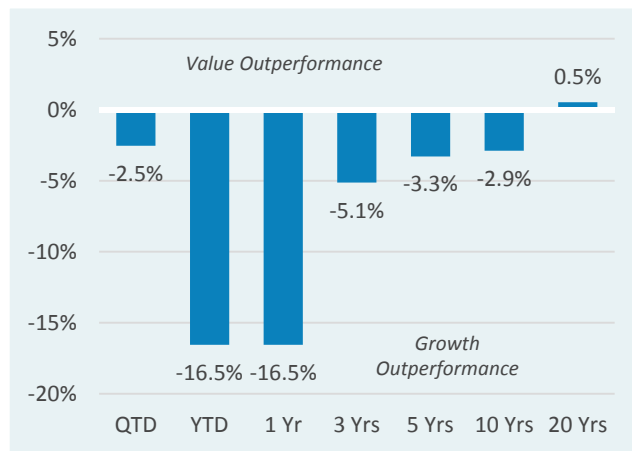
technology sector performance (growth stocks are highly concentrated in the tech sector). Value has now underperformed on a 1-, 3-, 5-, and 10-year basis. Value stocks have underperformed over a 10-year period only twice in the past 100 years – during the great depression (1937) and during the dotcom bubble (1999). Both of these occasions were followed by an impressive bounce back in value performance.

SMALL CAP VS LARGE CAP (YOY)



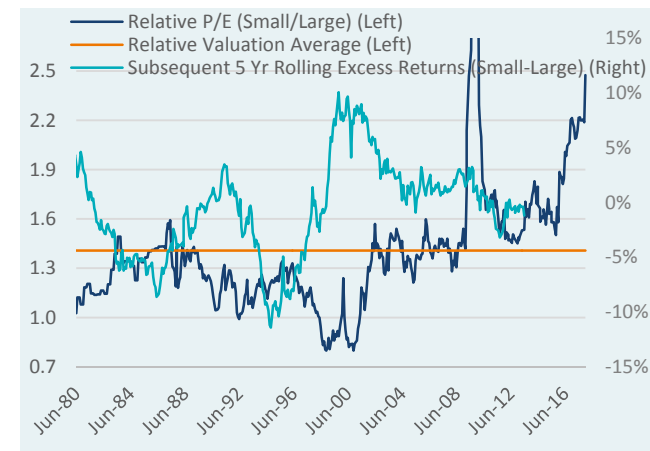
Source: Russell Investments, as of 12/31/17

U.S. VALUE VS GROWTH RELATIVE PERFORMANCE



Source: Morningstar, as of 12/31/17

U.S. LARGE VS. SMALL RELATIVE VALUATIONS



Source: Russell, Bloomberg, as of 12/31/17

International developed equity

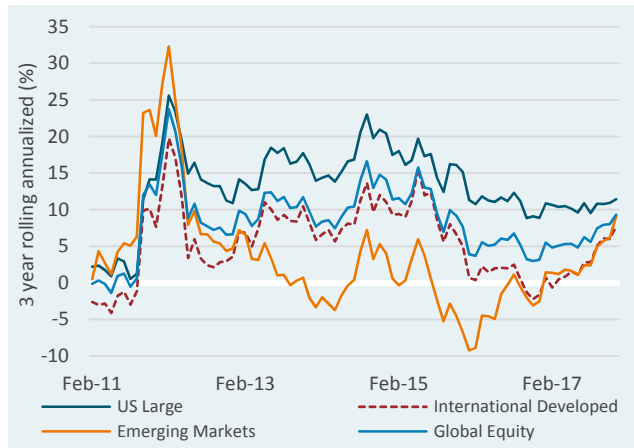
International equities lagged U.S. equities during the fourth quarter as U.S. tax reform contributed to a strong domestic rally. The MSCI EAFE Index returned 4.3% (+4.0% hedged) while the S&P 500 returned 6.6%. Emerging markets continued to outperform (MSCI EM +7.4% unhedged).

Japan outperformed among developed markets, which is particularly notable when considering the pessimism baked into Japan's equity valuations. Japan generated a

12.0% return in the fourth quarter and a 25.7% return in 2017 (Nikkei 225 unhedged). Recent equity gains were fundamentally supported by earnings growth.

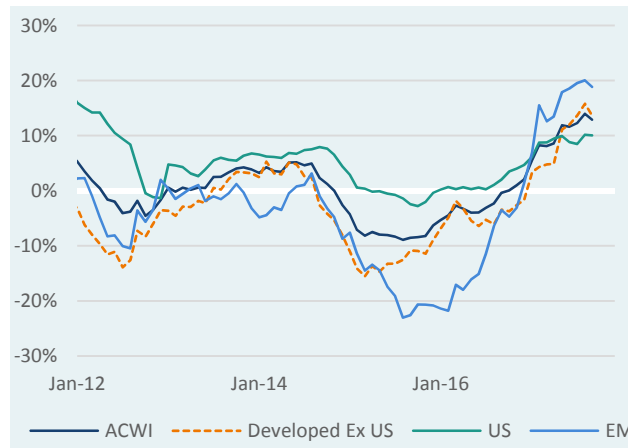
Currency effects added a positive 0.3% to the unhedged MSCI EAFE in Q4 (+8.9% year-to-date), as the U.S. dollar weakened slightly against a trade weighted basket of currencies.

EQUITY PERFORMANCE (3YR ROLLING)



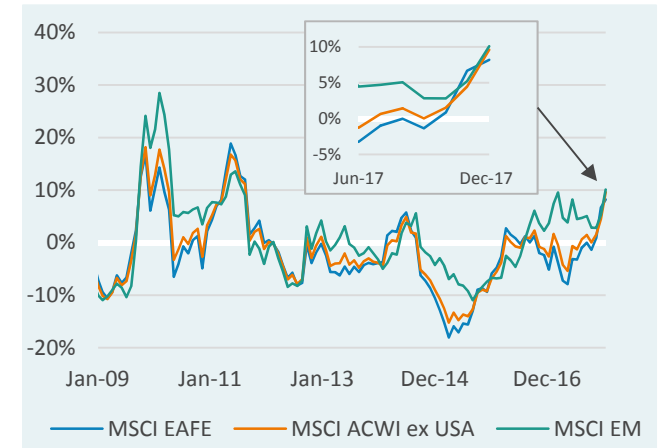
Source: Bloomberg, as of 12/31/17

EARNINGS GROWTH



Source: MSCI, as of 12/31/17 – YoY growth in forward earnings

EFFECT OF CURRENCY (1 YEAR ROLLING)



Source: MSCI, as of 12/31/17

Emerging market equity

We maintain an overweight to emerging market equities. These markets have led the way in economic growth, earnings, and equity performance. Emerging market equities delivered exceptional returns in 2017 (MSCI Emerging Markets +37.3%) relative to developed markets (MSCI ACWI +24.2%) and during the fourth quarter (7.4% vs. 4.2%).

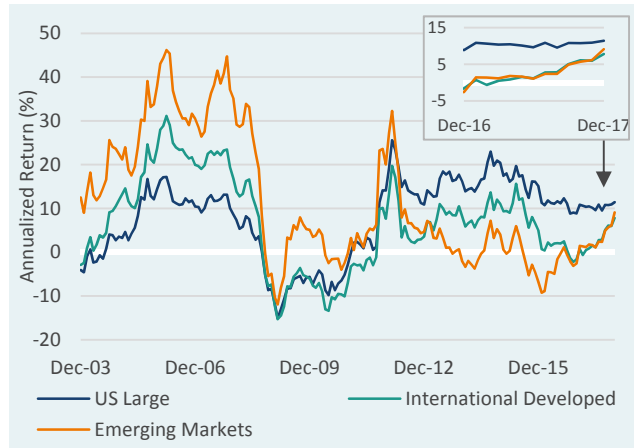
Emerging markets have lagged the U.S. significantly since the global financial crisis, prior to the recent rotation. Emerging market currencies remain depressed relative to

history, and a reversal could provide additional tailwinds to recent outperformance.

Equity multiples have risen modestly, supported by a brighter earnings outlook. As these economies evolve, it has become more difficult to refer to emerging markets as a distinct category. Different levels of economic progress, capital market development, and valuations can be witnessed across emerging market indices. Active management is typically preferred in this asset class.

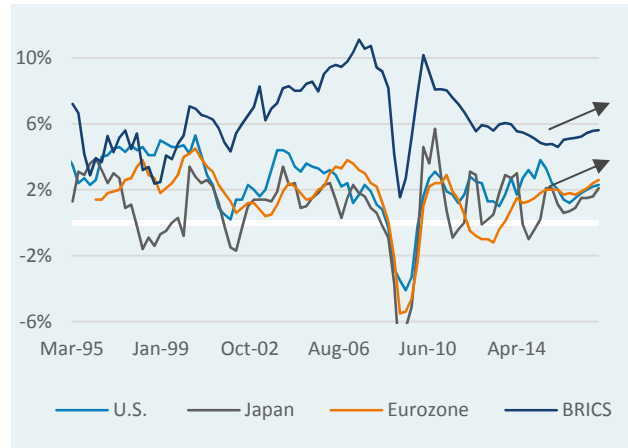
Coordinated global growth has helped propel emerging market equities

EQUITY PERFORMANCE (3YR ROLLING)



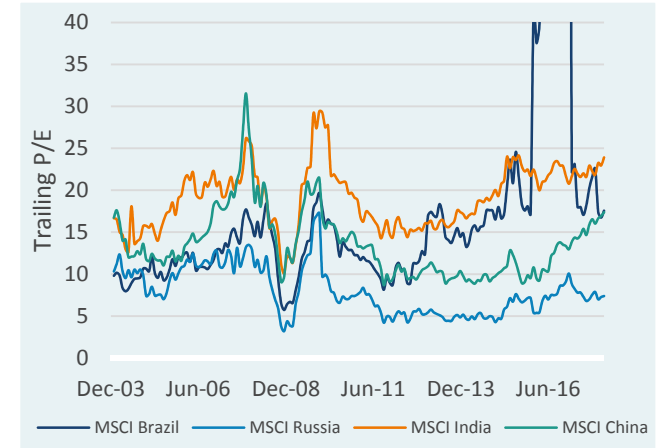
Source: Standard & Poor's, MSCI, as of 12/31/17

ECONOMIC MOMENTUM



Source: Bloomberg, as of 9/30/17

BRIC VALUATIONS



Source: MSCI, as of 12/31/17

Interest rate environment

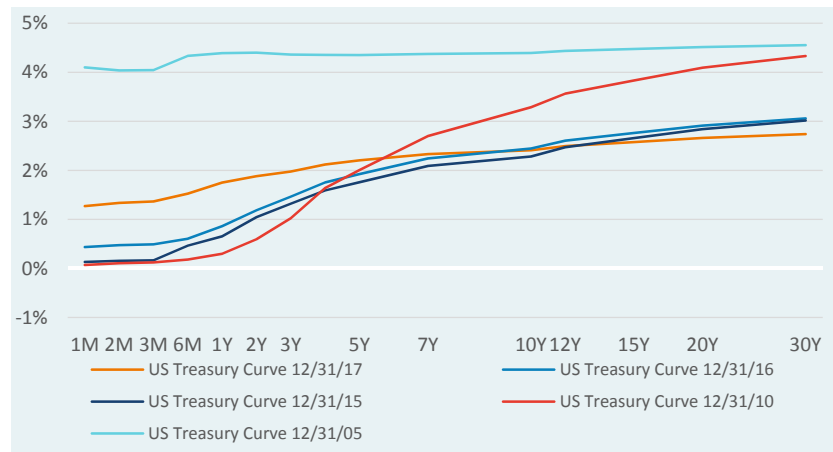
- On December 13th, the Federal Reserve raised the benchmark interest rate by 25 bps to a target range of 1.25%-1.50%. The Fed has communicated three rate hikes in 2018, while the market is pricing in only two.
- U.S. Treasury yields experienced significant increases on the short end of the curve, while longer term rates were modestly higher. The 2- and 10-year yields rose 40 bps and 8 bps, respectively. The increase in short-term rates was likely caused by the Fed raising overnight borrowing rates.
- The Fed began to reduce its balance sheet slowly. Approximately \$30 billion in Treasuries and mortgage-backed securities were trimmed from the balance sheet over the quarter, which did not have a material impact on the market.
- Minutes from the ECB meeting in December showed that officials discussed additional tapering of asset purchases in early 2018 due to stronger than expected economic growth.
- Markets generally expect minimal yield rises across developed markets – between 0% and 0.3% movement over the next year in U.S., U.K., German, and Japanese sovereign bonds. However, we remain watchful of bond market reactions to balance sheet unwinding, given the unprecedented size of central bank assets.
- We remain underweight to U.S. and developed sovereign bonds (currency hedged) primarily due to low yields. It is important to keep in mind the diversification benefits that fixed income provides to the portfolio, despite near record prices.

Area	Short Term (3M)	10 Year
United States	1.38%	2.41%
Germany	(0.80%)	0.42%
France	(0.78%)	0.78%
Spain	(0.58%)	1.56%
Italy	(0.63%)	2.00%
Greece	1.40%	4.10%
U.K.	0.36%	1.19%
Japan	(0.15%)	0.04%
Australia	1.74%	2.63%
China	3.95%	3.90%
Brazil	6.77%	10.25%
Russia	6.55%	7.42%

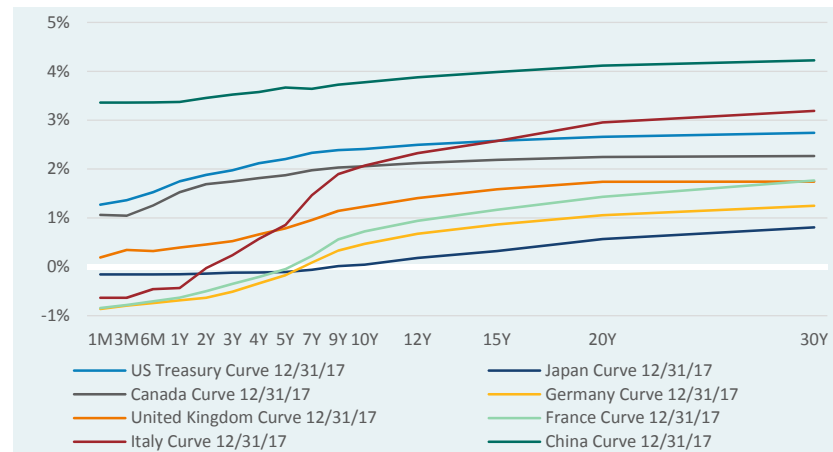
Source: Bloomberg, as of 12/31/17

Yield environment

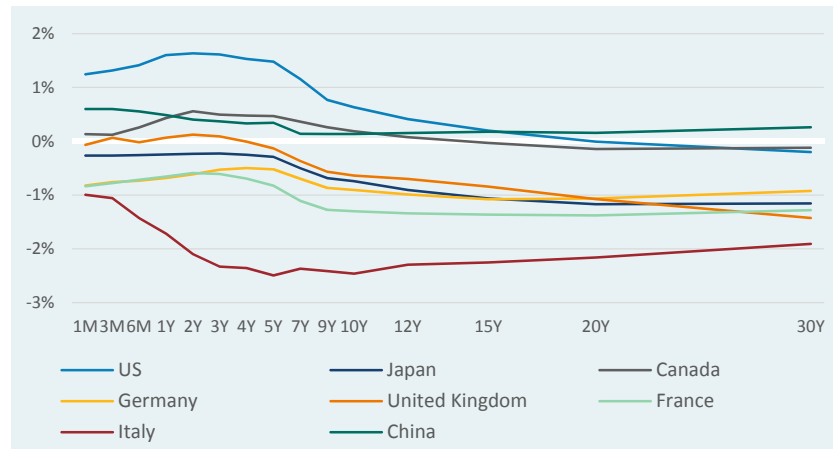
U.S. YIELD CURVE



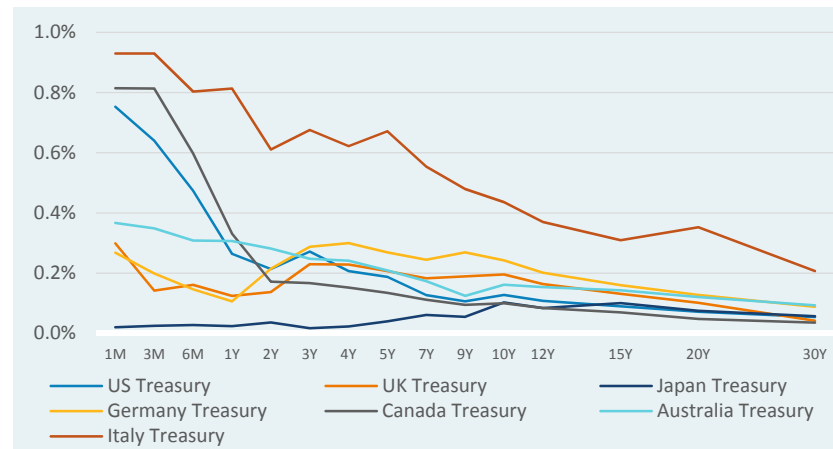
GLOBAL GOVERNMENT YIELD CURVES



YIELD CURVE CHANGES OVER LAST FIVE YEARS



IMPLIED CHANGES OVER NEXT YEAR



Source: Bloomberg, as of 12/31/17

Currency

The U.S. dollar was little changed in the fourth quarter, but finished the year down 7%. Investors with unhedged international asset exposure have seen large disparities in performance as currency movement continued to contribute to volatility and uncertainty.

Recent strengthening of developed and developing economies relative to the U.S. has likely contributed to U.S. dollar weakness. The U.S. Federal Reserve is engaged in monetary tightening, which implies a stronger dollar on a standalone basis. However, U.S. growth expectations

have shifted relative to international economies which has influenced exchange rates and contributed to recent U.S. dollar movement. Fluctuations in relative growth expectations implies changes in expected inflation and interest rate levels, which directly impacts the foreign exchange market.

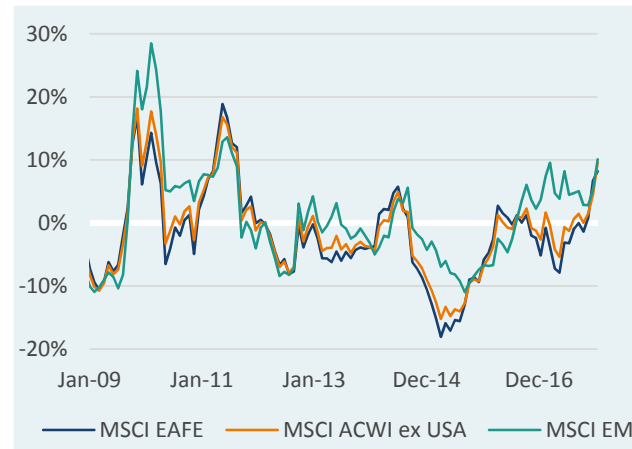
Forecasting currency movement over short periods of time can be extremely difficult. Hedging currency risk is an appropriate method for mitigating currency volatility and uncertainty.

U.S. DOLLAR TRADE WEIGHTED INDEX



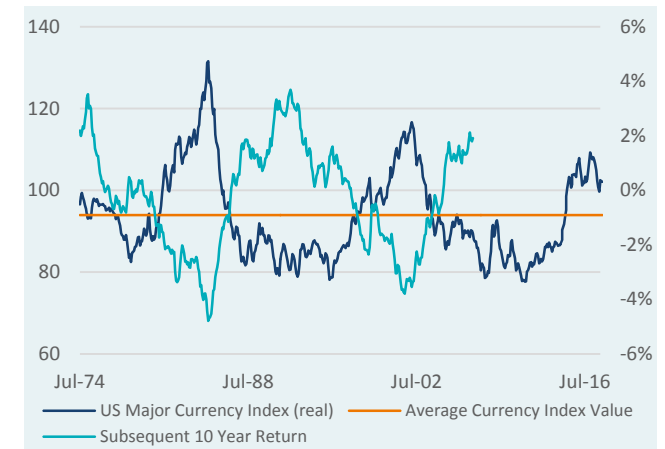
Source: Federal Reserve, as of 12/27/17

EFFECT OF CURRENCY (1-YEAR ROLLING)



Source: MPI, as of 12/31/17

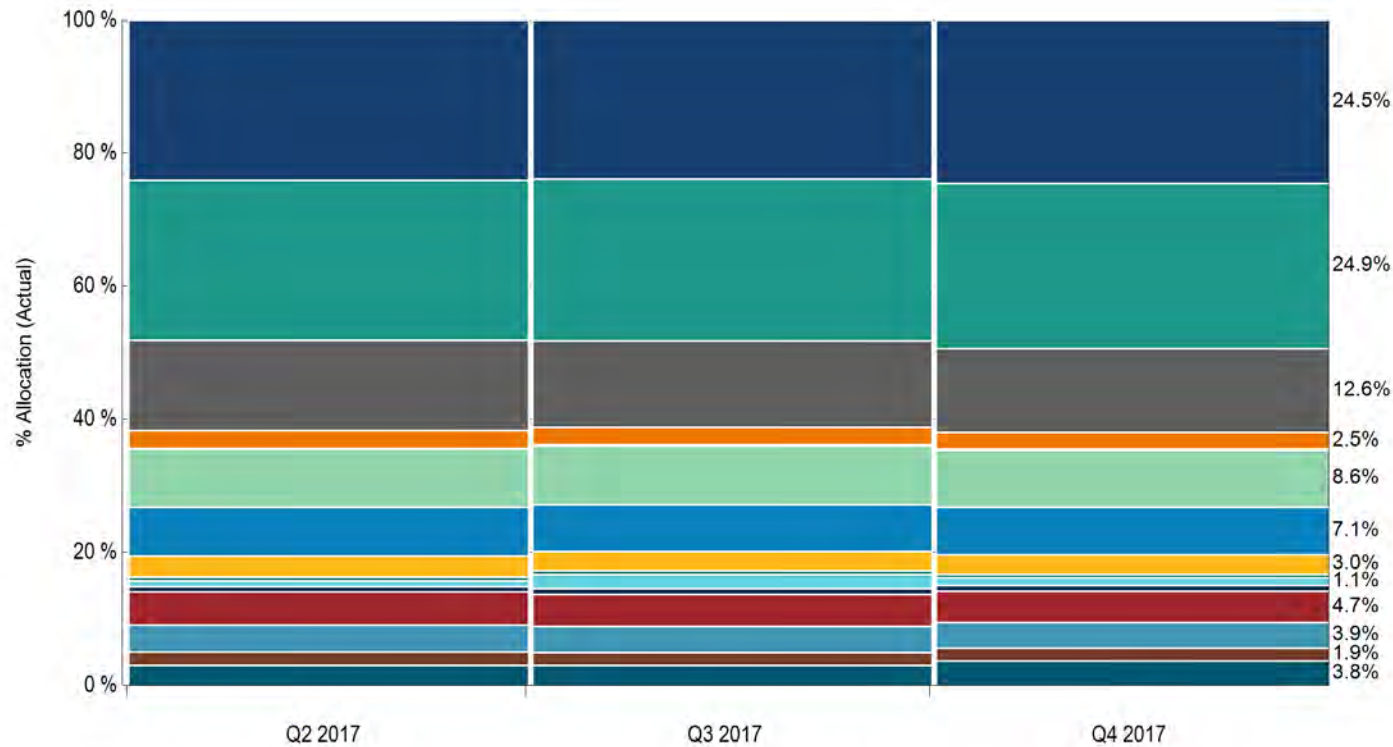
U.S. DOLLAR MAJOR CURRENCY INDEX



Source: Federal Reserve, as of 12/31/17

Total Fund
Quarterly Asset Allocation

Period Ending: December 31, 2017

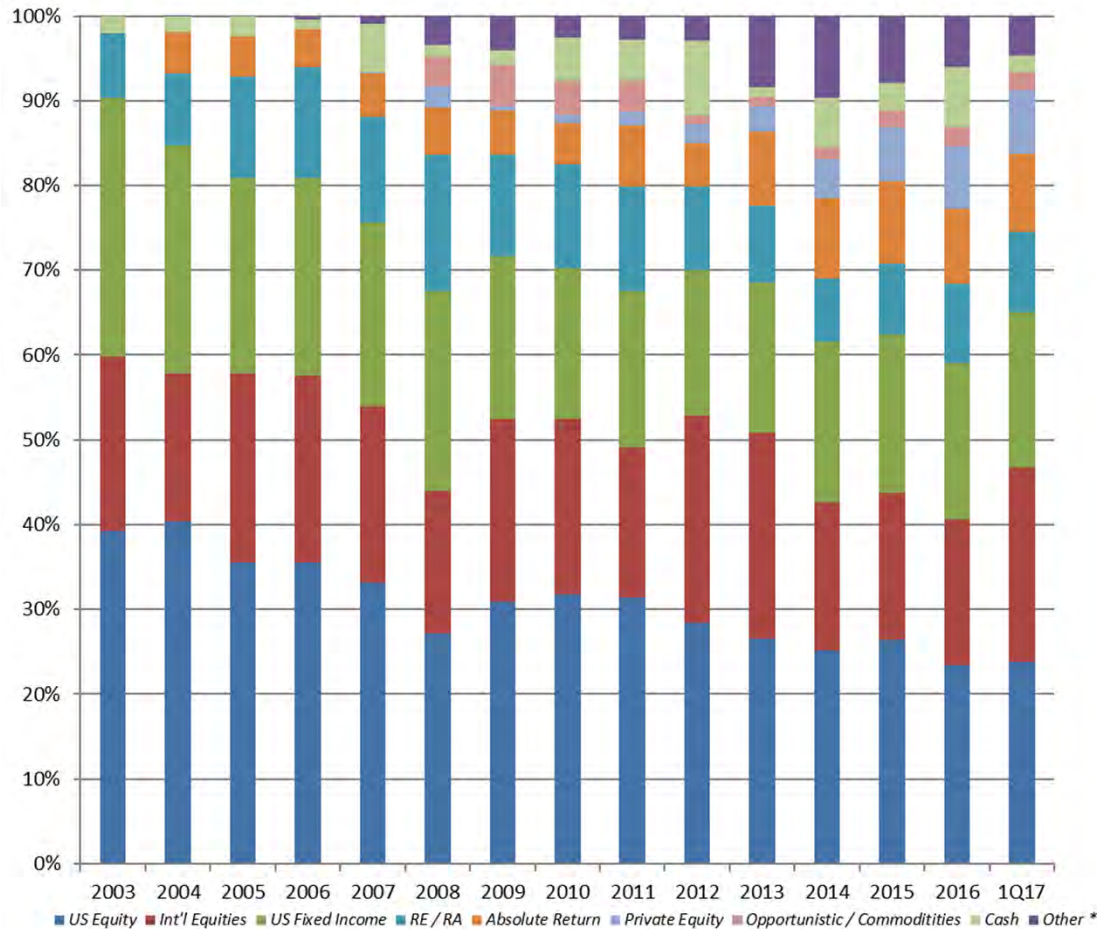


- US Equity
- International Equity
- US Fixed Income
- Global Fixed Income
- Hedge Fund
- Opportunistic
- Real Estate
- Private Equity
- Real Assets
- Direct Lending
- Cash
- Other
- Growth Hedge Fund
- Diversifying Hedge Fund
- Public Credit
- Private Real Assets

* Other includes SSgA Overlay and closing accounts.

Total Fund Actual Yearly and Quarterly Asset Allocation

Period Ending: December 31, 2017



	2003	2004	2005	2006	2007	2008
US Equity	39.2	40.4	35.4	35.5	33.1	27.2
International Equity	20.6	17.5	22.3	22.0	20.9	16.8
US Fixed Income	30.6	26.9	23.1	23.3	21.7	23.5
Real Estate	7.5	8.5	11.9	13.1	12.4	16.1
Absolute Return	-	4.9	4.8	4.4	5.1	5.6
Private Equity	-	-	-	-	0.1	2.5
Opportunistic / Commodities	-	-	-	-	-	3.5
Cash	2.1	1.8	2.4	1.2	5.8	1.4
Other *	-	0.1	-	0.4	0.9	3.4

	2009	2010	2011	2012	2013	2014
US Equity	30.9	31.7	31.4	28.4	26.5	25.2
International Equity	21.5	20.7	17.6	24.5	24.3	17.5
US Fixed Income	19.3	17.8	18.4	17.1	17.7	18.9
Real Assets	11.9	12.2	12.4	9.9	9.0	7.6
Absolute Return	5.3	4.9	7.3	5.2	8.8	9.4
Private Equity	0.5	0.9	1.6	2.2	3.0	4.6
Opportunistic / Commodities	4.8	4.1	3.7	1.1	1.0	1.4
Cash	1.7	5.0	4.9	8.8	1.2	5.9
Other *	4.1	2.6	2.7	2.9	8.4	9.6

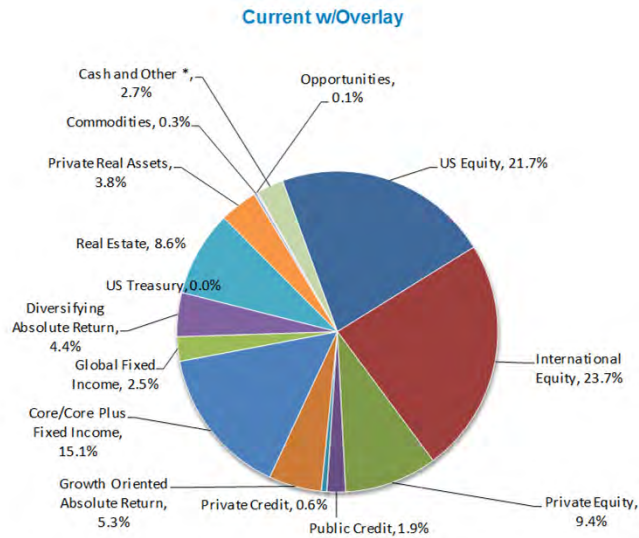
	2015	2016	2017 1Q+
US Equity	26.4	23.4	23.8
International Equity	17.3	17.2	22.9
US Fixed Income	18.7	18.5	18.2
Real Assets	8.3	9.3	9.5
Absolute Return	9.7	8.8	9.2
Private Equity	6.3	7.4	7.5
Opportunistic / Commodities	2.1	2.2	2.1
Cash	3.2	7.1	2.0
Other *	7.9	6.0	4.7

* Allocations without overlay.

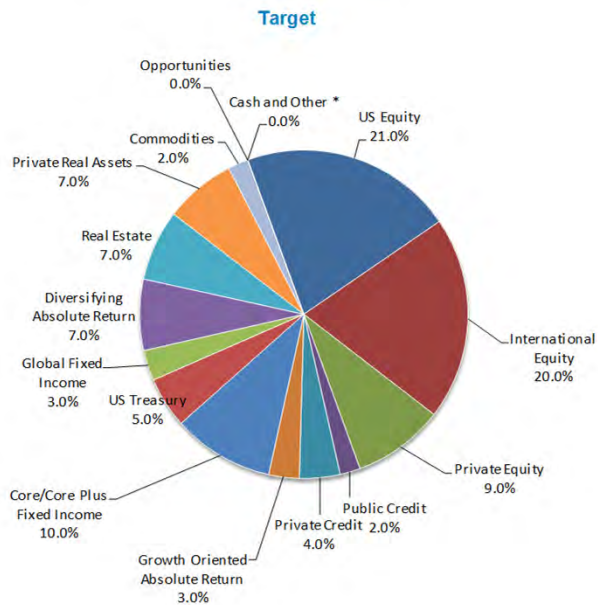
* Other includes SSgA Overlay, SSgA Real Assets and closing accounts.

Total Fund Asset Allocation Analysis

Period Ending: December 31, 2017



ASSET ALLOCATION	MARKET VALUE W/OVERLAY	W/OVERLAY	W/O OVERLAY
US Equity	2,010,151,301	21.7%	24.5%
International Equity	2,189,445,279	23.7%	24.9%
Private Equity	865,422,633	9.4%	7.1%
Public Credit	173,182,467	1.9%	1.9%
Private Credit	51,003,081	0.6%	0.6%
Growth Oriented Absolute Return	492,693,936	5.3%	4.2%
Core/Core Plus Fixed Income	1,397,363,236	15.1%	12.6%
US Treasury	0	0.0%	0.0%
Global Fixed Income	228,195,485	2.5%	2.5%
Diversifying Absolute Return	409,452,353	4.4%	4.4%
Real Estate	795,576,704	8.6%	8.6%
Private Real Assets	352,654,361	3.8%	3.8%
Commodities	27,225,722	0.3%	0.3%
Opportunities	10,127,231	0.1%	0.1%
Cash and Other *	250,736,987	2.7%	4.6%
TOTAL	9,253,230,776	100.0%	100.0%



ASSET ALLOCATION	ACTUAL	TARGET	DIFF
US Equity	21.7%	21.0%	0.7%
International Equity	23.7%	20.0%	3.7%
Private Equity	9.4%	9.0%	0.4%
Public Credit	1.9%	2.0%	-0.1%
Private Credit	0.6%	4.0%	-3.4%
Growth Oriented Absolute Return	5.3%	3.0%	2.3%
Core/Core Plus Fixed Income	15.1%	10.0%	5.1%
US Treasury	0.0%	5.0%	-5.0%
Global Fixed Income	2.5%	3.0%	-0.5%
Diversifying Absolute Return	4.4%	7.0%	-2.6%
Real Estate	8.6%	7.0%	1.6%
Private Real Assets	3.8%	7.0%	-3.2%
Commodities	0.3%	2.0%	-1.7%
Opportunities	0.1%	0.0%	0.1%
Cash and Other *	2.7%	0.0%	2.7%

* Other includes closing accounts (Heitman), SSgA Overlay of \$79 million and SSgA Real Asset of \$248 million, which serve as overlay proxy for Real Assets.

- The Total Plan returned 4.0% net in the fourth quarter of 2017 and ranked in the 38th percentile among other public funds greater than \$1 billion (3.8% median). The Fund exceeded its policy index (3.4%) during this time period. The Total Plan w/o Overlay returned 4.0% for the quarter, net of fees. Longer term, the three and five-year returns of 7.5% and 8.7% ranked below median among large public plans (7.9% and 9.3%, respectively), net of fees.

- Fourth quarter results (net) were enhanced by the following factors:
 1. Weatherbie gained 8.2%, ranked in the top decile of its peers, and topped the Russell 2000 growth (4.6%). Stock selection in consumer discretionary and the industrial sector (lead by Stamps.com, Wayfair, and XPO Logistics) contributed to outperformance.
 2. Dalton, Greiner (4.2%) outperformed the Russell 2000 Value index (2.0%). Relative performance was spread over most sectors, with twelve of the sixteen sectors outperforming lead by retail and technology.
 3. Mondrian Emerging Small Cap topped the MSCI Emerging Markets Small Cap (11.3% vs 9.3%). Stock selection in China, Malaysia and Poland contributed to relative performance.
 4. UBS gained 6.3% beating the Russell 2000 Growth (4.6%). An overweight to energy and underweight to real estate enhanced performance. Stock selection within materials, industrials, energy, and consumer discretionary were all performance drivers.
 5. Huber beat the Russell 1000 Value (6.9% vs 5.3%). At the sector level, the top contributors to relative performance for the period were consumer discretionary, producer durables, financial services and utilities.
 6. Lazard ranked in the top quartile of its peers, gaining 6.6% vs. the MSCI ACWI ex US at 5.1%. Stock selection in industrials, consumer discretionary and information technology drove performance.
 7. Walter Scott beat the EAFE Large Cap Growth (5.7% versus 4.3%). Japan, Canada and Europe ex UK provided positive contributions to relative performance.

- Fourth quarter results (net) were hindered by the following factors:
 1. Mondrian Emerging All Cap trailed the MSCI Emerging Markets (6.2% vs 7.5%). Top-down allocation was positive, driven by country allocations, mainly due to an underweight to China, which was amongst the weakest performers in the index.

Total Fund Performance Summary

Period Ending: December 31, 2017

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Inception Return (%)	Since ⁺
Total Fund- Gross*	9,253,230,776	100.0	4.0	28	8.1	31	16.9	32	7.8	60	9.0	59	8.5	Jun-86
Total Fund- Net			4.0	38	8.0	38	16.6	40	7.5	72	8.7	67	8.3	
<i>Policy Index¹</i>			3.4	79	6.8	81	14.2	82	7.5	72	8.6	70	8.7	Jun-86
<i>InvestorForce Public DB > \$1B Gross Median</i>			3.8		7.7		16.2		7.9		9.3		8.4	Jun-86
Total Fund ex Overlay- Gross**	8,925,733,864	96.5	4.1	22	8.1	31	16.9	35	8.0	46	8.9	63	8.4	Jun-86
Total Fund ex Overlay- Net			4.0	31	8.0	38	16.6	41	7.7	67	8.6	69	8.2	
<i>Policy Index¹</i>			3.4	79	6.8	81	14.2	82	7.5	72	8.6	70	8.7	Jun-86
<i>Allocation ex Overlay Index</i>			3.6	66	7.1	76	--	--	--	--	--	--	--	Jun-86
Growth Asset Category- Gross	5,834,927,098	63.1	5.5	--	10.6	--	--	--	--	--	--	--	15.8	Mar-17
Growth Asset Category- Net			5.5	--	10.5	--	--	--	--	--	--	--	15.6	
<i>Growth Custom¹</i>			4.8	--	9.5	--	--	--	--	--	--	--	13.7	Mar-17
Equities- Gross Public	4,566,600,733	49.4	6.1	--	11.7	--	25.9	--	10.7	--	12.1	--	10.1	Jun-11
Equities- Net			6.0	--	11.6	--	25.4	--	10.4	--	11.7	--	9.7	
<i>MSCI ACWI</i>			5.7	--	11.2	--	24.0	--	9.3	--	10.8	--	8.7	Jun-11
US Equity- Gross	2,263,864,599	24.5	6.5	27	11.2	44	21.4	35	11.0	49	15.2	55	10.2	Jun-86
US Equity- Net			6.4	32	11.0	54	21.0	46	10.7	64	14.9	67	10.0	
<i>Russell 3000</i>			6.3	37	11.2	42	21.1	44	11.1	40	15.6	36	10.3	Jun-86
<i>InvestorForce All DB US Eq Gross Median</i>			6.2		11.1		20.8		11.0		15.3		10.2	Jun-86
Large Cap- Gross	1,800,889,346	19.5	6.9	--	11.7	--	22.7	--	11.2	--	15.6	--	6.3	Mar-98
Large Cap- Net			6.8	--	11.6	--	22.4	--	11.0	--	15.4	--	6.1	
<i>Russell 1000</i>			6.6	--	11.4	--	21.7	--	11.2	--	15.7	--	6.8	Mar-98

*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.

1. See Policy Index and Benchmark History

Total Fund
Performance Summary

Period Ending: December 31, 2017

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Inception Return (%)	Since
Large Cap - Index- Gross	1,175,777,314	12.7	6.6	--	11.3	--	21.6	--	11.2	--	15.7	--	11.9	Sep-08
Large Cap - Index- Net			6.6	--	11.3	--	21.6	--	11.2	--	15.7	--	11.9	
<i>Russell 1000</i>			6.6	--	11.4	--	21.7	--	11.2	--	15.7	--	11.9	Sep-08
AB- Gross	1,175,777,314	12.7	6.6	65	11.3	69	21.6	59	11.2	63	15.7	68	10.1	Apr-89
AB- Net			6.6	65	11.3	69	21.6	59	11.2	63	15.6	68	10.1	
<i>Russell 1000¹</i>			6.6	59	11.4	62	21.7	54	11.2	59	15.7	62	--	Apr-89
<i>eV US Passive Large Cap Equity Gross Median</i>			6.6		11.4		21.7		11.3		15.8		10.2	Apr-89
Equity Active (130/30)- Gross	121,428,108	1.3	7.1	--	12.1	--	23.1	--	11.2	--	17.2	--	12.9	Sep-08
Equity Active (130/30)- Net			6.9	--	11.5	--	22.2	--	10.4	--	16.4	--	12.2	
<i>Russell 1000</i>			6.6	--	11.4	--	21.7	--	11.2	--	15.7	--	11.9	Sep-08
JP Morgan 130/30- Gross	121,428,108	1.3	7.1	48	12.1	69	23.1	31	11.2	63	17.2	48	12.5	Jul-08
JP Morgan 130/30- Net			6.9	55	11.5	77	22.2	40	10.4	82	16.4	67	11.7	
<i>Russell 1000</i>			6.6	66	11.4	79	21.7	45	11.2	61	15.7	90	10.7	Jul-08
<i>eV Extended US 130/30 Equity Gross Median</i>			7.0		12.9		21.1		11.9		17.2		11.7	Jul-08
Large Cap Growth- Gross	127,390,008	1.4	8.0	--	13.3	--	31.0	--	11.3	--	14.0	--	11.0	Sep-08
Large Cap Growth- Net			8.0	--	13.2	--	30.8	--	11.1	--	13.7	--	10.7	
<i>Russell 1000 Growth</i>			7.9	--	14.2	--	30.2	--	13.8	--	17.3	--	13.6	Sep-08
Brown Advisory- Gross	127,390,008	1.4	8.0	20	13.3	41	31.0	36	11.3	69	13.9	93	12.3	Feb-12
Brown Advisory- Net			8.0	21	13.2	42	30.8	36	11.1	71	13.7	95	12.1	
<i>Russell 1000 Growth</i>			7.9	23	14.2	26	30.2	42	13.8	26	17.3	34	15.4	Feb-12
<i>eV US Large Cap Growth Equity Gross Median</i>			7.0		12.7		28.8		12.3		16.7		14.7	Feb-12
Large Cap Value- Gross	376,293,916	4.1	7.3	--	12.2	--	23.6	--	11.3	--	15.6	--	11.6	Sep-08
Large Cap Value- Net			7.1	--	11.9	--	22.4	--	10.5	--	14.7	--	11.0	
<i>Russell 1000 Value</i>			5.3	--	8.6	--	13.7	--	8.7	--	14.0	--	10.2	Sep-08
Eagle Capital- Gross	251,783,616	2.7	7.4	24	11.7	36	24.4	5	12.1	8	16.8	11	16.0	Feb-12
Eagle Capital- Net			7.2	29	11.3	42	23.2	7	11.2	18	15.9	25	15.2	
<i>Russell 1000</i>			6.6	43	11.4	41	21.7	12	11.2	18	15.7	28	14.5	Feb-12

1. See Policy Index and Benchmark History.

Total Fund
Performance Summary

Period Ending: December 31, 2017

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Return (%)	Inception Since
<i>Russell 1000 Value</i>			5.3	75	8.6	80	13.7	87	8.7	74	14.0	65	13.6	Feb-12
<i>eV US Large Cap Value Equity Gross Median</i>			6.2		10.7		17.2		9.7		14.6		13.8	Feb-12
Huber Capital- Gross	124,510,300	1.3	7.1	31	13.4	12	21.9	11	9.7	49	13.0	84	12.5	Feb-12
Huber Capital- Net			6.9	36	13.1	13	20.8	18	8.9	69	12.2	92	11.7	
<i>Russell 1000 Value</i>			5.3	75	8.6	80	13.7	87	8.7	74	14.0	65	13.6	Feb-12
<i>eV US Large Cap Value Equity Gross Median</i>			6.2		10.7		17.2		9.7		14.6		13.8	Feb-12
Small Cap- Gross	363,302,200	3.9	5.4	--	10.5	--	19.6	--	11.2	--	14.4	--	12.2	Dec-90
Small Cap- Net			5.2	--	10.3	--	18.9	--	10.5	--	13.6	--	11.5	
<i>Russell 2000</i>			3.3	--	9.2	--	14.6	--	10.0	--	14.1	--	11.0	Dec-90
Small Cap - Growth- Gross	187,569,925	2.0	7.5	--	13.9	--	33.4	--	12.4	--	15.0	--	12.0	Sep-08
Small Cap - Growth- Net			7.4	--	13.8	--	33.0	--	12.0	--	14.3	--	11.3	
<i>Russell 2000 Growth</i>			4.6	--	11.1	--	22.2	--	10.3	--	15.2	--	12.0	Sep-08
UBS- Gross	73,015,469	0.8	6.4	27	9.9	70	20.4	73	--	--	--	--	6.3	Jul-15
UBS- Net			6.3	29	9.9	72	20.0	74	--	--	--	--	6.2	
<i>Russell 2000 Growth</i>			4.6	59	11.1	54	22.2	62	10.3	64	15.2	62	8.9	Jul-15
<i>eV US Small Cap Growth Equity Gross Median</i>			4.9		11.4		24.6		11.6		15.8		10.0	Jul-15
Weatherbie- Gross	114,554,457	1.2	8.2	7	16.5	7	43.2	2	17.8	3	18.9	14	13.2	Dec-02
Weatherbie- Net			8.2	8	16.4	7	42.8	3	17.2	5	18.1	21	12.3	
<i>Russell 2000 Growth</i>			4.6	59	11.1	54	22.2	62	10.3	64	15.2	62	11.6	Dec-02
<i>eV US Small Cap Growth Equity Gross Median</i>			4.9		11.4		24.6		11.6		15.8		12.5	Dec-02
Small Cap - Value- Gross	175,732,274	1.9	3.2	--	7.2	--	7.9	--	10.0	--	13.8	--	11.0	Sep-08
Small Cap - Value- Net			3.0	--	6.8	--	6.9	--	9.0	--	12.8	--	10.0	
<i>Russell 2000 Value</i>			2.0	--	7.3	--	7.8	--	9.5	--	13.0	--	9.5	Sep-08
Dalton, Greiner- Gross	83,709,117	0.9	4.3	30	9.1	51	9.1	65	10.2	53	13.6	72	11.1	Dec-00
Dalton, Greiner- Net			4.2	35	8.8	56	8.4	70	9.5	69	12.8	81	10.3	
<i>Russell 2000 Value</i>			2.0	81	7.3	77	7.8	75	9.5	68	13.0	78	9.4	Dec-00
<i>eV US Small Cap Value Equity Gross Median</i>			3.7		9.2		11.1		10.4		14.6		11.6	Dec-00

Total Fund
Performance Summary

Period Ending: December 31, 2017

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Inception Return (%)	Since
WEDGE Capital- Gross	92,023,157	1.0	2.2	79	5.6	87	6.8	82	9.7	64	14.6	50	10.6	Apr-08
WEDGE Capital- Net			2.0	83	5.0	91	5.5	90	8.7	79	13.5	72	9.6	
<i>Russell 2000 Value</i>			2.0	81	7.3	77	7.8	75	9.5	68	13.0	78	8.9	Apr-08
<i>eV US Small Cap Value Equity Gross Median</i>			3.7		9.2		11.1		10.4		14.6		10.8	Apr-08
CenterSquare- Gross	99,673,053	1.1	3.3	25	4.7	19	6.9	45	7.2	22	11.2	16	9.1	Jan-06
CenterSquare- Net			3.2	29	4.5	22	6.6	51	6.7	38	10.6	26	8.6	
<i>FTSE NAREIT Equity REIT</i>			1.5	83	2.5	76	5.2	70	5.6	76	9.5	75	6.7	Jan-06
<i>eV US REIT Gross Median</i>			2.5		3.2		6.7		6.2		9.9		7.9	Jan-06
International Equity- Gross	2,302,736,133	24.9	5.8	10	12.3	18	30.7	23	9.7	28	8.1	47	6.8	Dec-87
International Equity- Net			5.7	12	12.2	22	30.2	29	9.3	42	7.8	55	6.4	
<i>MSCI ACWI ex US¹</i>			5.1	39	11.6	39	27.8	63	8.3	69	7.3	71	6.6	Dec-87
<i>InvestorForce All DB ex-US Eq Gross Median</i>			4.8		11.2		28.5		8.9		7.9		7.4	Dec-87
International - Developed- Gross	1,791,774,864	19.4	5.3	17	11.7	29	29.0	31	10.4	26	9.3	39	4.9	Mar-98
International - Developed- Net			5.2	18	11.6	30	28.5	32	9.9	31	8.8	49	4.5	
<i>MSCI World ex US Gross</i>			4.3	62	10.2	59	24.8	84	7.9	68	8.0	67	5.2	Mar-98
<i>InvestorForce All DB Dev Mkt ex-US Eq Gross Median</i>			4.4		10.5		27.3		9.0		8.8		5.7	Mar-98
Lazard- Gross	502,111,154	5.4	6.7	16	12.6	42	28.5	63	8.8	67	9.7	42	11.5	Jun-12
Lazard- Net			6.6	17	12.5	44	28.0	66	8.5	73	9.3	48	11.2	
<i>MSCI ACWI ex USA Gross</i>			5.1	50	11.6	53	27.8	69	8.3	75	7.3	86	9.1	Jun-12
<i>eV All ACWI ex-US Equity Gross Median</i>			5.0		11.9		30.1		9.9		9.2		11.0	Jun-12
Walter Scott & Partners Limited- Gross	494,661,279	5.3	5.7	30	10.9	51	--	--	--	--	--	--	19.8	Mar-17
Walter Scott & Partners Limited- Net			5.7	30	10.8	52	--	--	--	--	--	--	19.7	
<i>MSCI World ex US Gross</i>			4.3	65	10.2	59	24.8	82	7.9	74	8.0	65	16.7	Mar-17
<i>eV EAFE Large Cap Growth Gross Median</i>			4.5		11.0		28.6		8.4		8.9		19.1	Mar-17

1. See Policy Index and Benchmark History.

Total Fund
Performance Summary

Period Ending: December 31, 2017

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Inception Return (%)	Since
LSV- Gross	546,655,147	5.9	3.5	67	10.8	45	25.5	51	10.3	22	10.2	21	5.5	Dec-04
LSV- Net			3.4	68	10.7	46	25.0	52	9.9	32	9.7	29	5.0	
MSCI World ex US Gross			4.3	34	10.2	48	24.8	52	7.9	70	8.0	66	5.8	Dec-04
eV EAFE Large Cap Value Gross Median			4.0		9.9		25.5		9.1		9.2		6.1	Dec-04
Mondrian Dev Small Cap- Gross	114,386,852	1.2	6.1	52	12.5	67	33.3	68	11.6	81	9.5	87	11.2	Aug-10
Mondrian Dev Small Cap- Net			6.0	54	12.3	69	32.4	72	10.9	87	8.8	91	10.6	
MSCI World ex US Small Cap GD			5.9	55	13.6	61	31.5	73	13.4	47	11.8	53	11.3	Aug-10
eV ACWI ex-US Small Cap Equity Gross Median			6.3		14.7		35.3		13.2		12.1		12.3	Aug-10
William Blair Dev Small Cap- Gross	133,947,797	1.4	5.5	69	14.6	51	34.6	54	13.4	47	11.9	52	11.7	Sep-08
William Blair Dev Small Cap- Net			5.5	69	14.4	53	33.7	63	12.6	61	11.1	72	10.7	
MSCI World ex US Small Cap GD			5.9	55	13.6	61	31.5	73	13.4	47	11.8	53	10.5	Sep-08
eV ACWI ex-US Small Cap Equity Gross Median			6.3		14.7		35.3		13.2		12.1		12.1	Sep-08
International - Emerging- Gross	418,888,208	4.5	7.5	19	15.4	25	39.4	14	8.4	71	4.0	66	7.1	Jan-00
International - Emerging- Net			7.4	23	15.1	27	38.7	17	8.0	75	3.8	69	6.7	
MSCI Emerging Markets Gross			7.5	20	16.1	17	37.8	22	9.5	38	4.7	48	7.7	Jan-00
InvestorForce All DB Emg Mkt Eq Gross Median			6.4		14.0		34.6		9.0		4.5		7.5	Jan-00
Baillie Gifford Emg All Cap- Gross	196,468,461	2.1	7.5	37	20.5	9	53.1	2	--	--	--	--	31.0	Mar-16
Baillie Gifford Emg All Cap- Net			7.5	37	20.5	9	53.1	2	--	--	--	--	31.0	
MSCI Emerging Markets Gross			7.5	38	16.1	41	37.8	49	9.5	62	4.7	76	23.8	Mar-16
eV Emg Mkts Equity Gross Median			7.1		15.5		37.6		10.2		6.0		24.0	Mar-16
Mondrian Emg All Cap- Gross	160,438,190	1.7	6.4	71	10.3	93	28.1	94	--	--	--	--	16.7	Mar-16
Mondrian Emg All Cap- Net			6.2	74	10.0	94	27.0	96	--	--	--	--	16.0	
MSCI Emerging Markets Gross			7.5	38	16.1	41	37.8	49	9.5	62	4.7	76	23.8	Mar-16
eV Emg Mkts Equity Gross Median			7.1		15.5		37.6		10.2		6.0		24.0	Mar-16

Total Fund
Performance Summary

Period Ending: December 31, 2017

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Inception Return (%)	Since
Mondrian Emg Small Cap- Gross	28,112,681	0.3	11.6	2	8.3	88	21.7	99	3.0	98	--	--	6.1	Jan-14
Mondrian Emg Small Cap- Net			11.3	4	7.7	95	19.8	99	1.5	99	--	--	4.8	
MSCI Emerging Markets Small Cap Gross			9.3	24	15.6	42	34.2	72	8.7	76	5.7	79	7.7	Jan-14
eV Emg Mkts Small Cap Equity Gross Median			7.7		15.0		36.6		10.6		8.2		9.9	Jan-14
William Blair Emg Small Cap- Gross	33,868,876	0.4	9.8	15	18.4	23	42.6	28	8.9	74	--	--	10.2	Dec-13
William Blair Emg Small Cap- Net			9.5	20	17.8	28	40.8	32	8.0	84	--	--	9.3	
MSCI Emerging Markets Small Cap Gross			9.3	24	15.6	42	34.2	72	8.7	76	5.7	79	6.8	Dec-13
eV Emg Mkts Small Cap Equity Gross Median			7.7		15.0		36.6		10.6		8.2		8.1	Dec-13
CBRE Clarion- Gross	92,073,061	1.0	7.1	18	10.9	35	21.4	50	6.4	50	6.0	51	11.8	Oct-08
CBRE Clarion- Net			7.1	20	10.7	48	21.1	60	6.1	71	5.8	61	11.6	
FTSE NAREIT Developed ex US Gross			6.4	44	9.7	67	20.8	69	6.0	74	5.5	99	10.5	Oct-08
eV EAFE REIT Gross Median			6.3		10.7		21.4		6.3		6.0		10.0	Oct-08
Private Equity- Gross****	658,198,637	7.1	5.7	5	10.1	7	18.0	12	11.1	36	13.8	27	0.6	Feb-08
Private Equity- Net			5.7	5	10.1	7	18.0	12	11.1	36	13.8	27	0.8	
Thomson Reuters CJA All PE 1 Qtr Lag ¹			3.5	29	6.8	39	15.4	31	11.5	32	16.0	7	9.8	Feb-08
Russell 3000 +3% 1Q Lag			5.6	5	8.9	16	21.7	6	13.7	16	17.2	7	11.1	Feb-08
InvestorForce All DB Private Eq Net Median			2.6		5.5		13.2		10.0		11.3		7.4	Feb-08
Abbott VI- Gross	57,290,963	0.6	4.8	--	10.3	--	18.0	--	15.2	--	14.7	--	3.0	Jul-08
Abbott VI- Net			4.8	--	10.3	--	18.0	--	15.2	--	14.7	--	--	
Thomson Reuters CJA All PE 1 Qtr Lag			3.5	--	6.8	--	15.4	--	11.5	--	16.0	--	10.9	Jul-08
Accel-KKR IV- Gross	11,604,385	0.1	20.4	--	27.3	--	48.6	--	23.2	--	--	--	-6.7	Jun-13
Accel-KKR IV- Net			20.4	--	27.3	--	48.6	--	23.2	--	--	--	-6.7	
Thomson Reuters CJA All PE 1 Qtr Lag			3.5	--	6.8	--	15.4	--	11.5	--	16.0	--	14.8	Jun-13

1. See Policy Index and Benchmark History.

*** Private Equity Composite includes the historical returns of Summit Credit and Athyrium Opportunities up to 4/1/17.

++ Returns are one-quarter lag.

Total Fund
Performance Summary

Period Ending: December 31, 2017

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Return (%)	Inception Since
Accel-KKR V- Gross	4,444,752	0.0	-0.6	--	-0.1	--	--	--	--	--	--	--	9.8	Jan-17
Accel-KKR V- Net			-0.6	--	-0.1	--	--	--	--	--	--	--	9.8	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			3.5	--	6.8	--	15.4	--	11.5	--	16.0	--	17.3	Jan-17
Accel-KKR Growth Partners II- Gross	5,217,204	0.1	2.7	--	6.1	--	7.5	--	--	--	--	--	-10.9	Feb-15
Accel-KKR Growth Partners II- Net			2.7	--	6.1	--	7.5	--	--	--	--	--	-10.9	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			3.5	--	6.8	--	15.4	--	11.5	--	16.0	--	10.3	Feb-15
Atalaya Special Opp VI- Gross	18,630,645	0.2	1.4	--	3.4	--	6.8	--	--	--	--	--	4.5	Apr-16
Atalaya Special Opp VI- Net			1.4	--	3.4	--	6.8	--	--	--	--	--	4.5	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			3.5	--	6.8	--	15.4	--	11.5	--	16.0	--	19.1	Apr-16
Dyal Capital Partners II- Gross	8,313,034	0.1	-0.8	--	-1.7	--	-1.1	--	-6.8	--	--	--	-6.8	Dec-14
Dyal Capital Partners II- Net			-0.8	--	-1.7	--	-1.1	--	-6.8	--	--	--	-6.8	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			3.5	--	6.8	--	15.4	--	11.5	--	16.0	--	11.5	Dec-14
Dyal Capital Partners III- Gross	12,746,511	0.1	8.1	--	8.7	--	18.4	--	--	--	--	--	18.4	Dec-16
Dyal Capital Partners III- Net			8.1	--	8.7	--	18.4	--	--	--	--	--	18.4	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			3.5	--	6.8	--	15.4	--	11.5	--	16.0	--	15.4	Dec-16
Garrison Investment Group- Gross	13,632,930	0.1	-1.0	--	-1.2	--	-3.6	--	-7.7	--	-0.1	--	-0.5	May-12
Garrison Investment Group- Net			-1.0	--	-1.2	--	-3.6	--	-7.7	--	-0.1	--	-0.5	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			3.5	--	6.8	--	15.4	--	11.5	--	16.0	--	15.8	May-12
Harbourvest VIII- Gross	22,666,269	0.2	4.4	--	9.3	--	17.9	--	14.2	--	14.9	--	9.4	Dec-07
Harbourvest VIII- Net			4.4	--	9.3	--	17.9	--	14.2	--	14.9	--	--	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			3.5	--	6.8	--	15.4	--	11.5	--	16.0	--	9.4	Dec-07
Harbourvest Intl VI- Gross	35,151,284	0.4	3.4	--	11.5	--	16.3	--	12.3	--	13.6	--	-10.3	Mar-09
Harbourvest Intl VI- Net			3.4	--	11.5	--	16.3	--	12.3	--	13.6	--	--	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			3.5	--	6.8	--	15.4	--	11.5	--	16.0	--	16.8	Mar-09
H.I.G. Bayside Loan III- Gross	22,329,789	0.2	2.7	--	3.3	--	13.1	--	10.6	--	--	--	5.6	Jan-13
H.I.G. Bayside Loan III- Net			2.7	--	3.3	--	13.1	--	10.6	--	--	--	5.6	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			3.5	--	6.8	--	15.4	--	11.5	--	16.0	--	16.6	Jan-13

Total Fund
Performance Summary

Period Ending: December 31, 2017

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Inception Return (%)	Since
H.I.G. Capital V- Gross	6,769,467	0.1	30.3	--	22.4	--	66.1	--	8.7	--	--	--	3.3	Jul-13
H.I.G. Capital V- Net			30.3	--	22.4	--	66.1	--	8.7	--	--	--	3.3	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			3.5	--	6.8	--	15.4	--	11.5	--	16.0	--	14.6	Jul-13
H.I.G. Europe Capital II - Gross*	7,081,673	0.1	-3.7	--	17.2	--	-5.5	--	--	--	--	--	--	Jan-14
H.I.G. Europe Capital II - Net			-3.7	--	17.2	--	-5.5	--	--	--	--	--	--	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			3.5	--	6.8	--	15.4	--	11.5	--	16.0	--	13.1	Jan-14
Khosla IV- Gross	16,996,880	0.2	11.0	--	25.1	--	18.2	--	18.4	--	19.7	--	15.1	Jul-11
Khosla IV- Net			11.0	--	25.1	--	18.2	--	18.4	--	19.7	--	15.1	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			3.5	--	6.8	--	15.4	--	11.5	--	16.0	--	14.3	Jul-11
Khosla V- Gross	15,893,644	0.2	16.1	--	18.4	--	31.7	--	9.7	--	--	--	9.4	Nov-14
Khosla V- Net			16.1	--	18.4	--	31.7	--	9.7	--	--	--	9.4	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			3.5	--	6.8	--	15.4	--	11.5	--	16.0	--	10.7	Nov-14
Linden Capital- Gross	31,119,601	0.3	5.9	--	13.0	--	33.3	--	--	--	--	--	5.2	Jun-16
Linden Capital- Net			5.9	--	13.0	--	33.3	--	--	--	--	--	5.2	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			3.5	--	6.8	--	15.4	--	11.5	--	16.0	--	15.8	Jun-16
Marlin Equity IV- Gross	18,004,145	0.2	0.3	--	3.0	--	-1.3	--	6.3	--	--	--	1.0	Nov-13
Marlin Equity IV- Net			0.3	--	3.0	--	-1.3	--	6.3	--	--	--	1.0	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			3.5	--	6.8	--	15.4	--	11.5	--	16.0	--	14.8	Nov-13
Marlin Heritage- Gross	8,421,371	0.1	33.8	--	39.2	--	78.2	--	33.3	--	--	--	22.2	Jul-14
Marlin Heritage- Net			33.8	--	39.2	--	78.2	--	33.3	--	--	--	22.2	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			3.5	--	6.8	--	15.4	--	11.5	--	16.0	--	12.1	Jul-14
Marlin Heritage II- Gross**	901,985	0.0	--	--	--	--	--	--	--	--	--	--	0.0	Oct-17
Marlin Heritage II- Net			--	--	--	--	--	--	--	--	--	--	0.0	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			3.5	--	6.8	--	15.4	--	11.5	--	16.0	--	3.5	Oct-17
Marlin Heritage Europe- Gross	3,025,426	0.0	0.0	--	--	--	--	--	--	--	--	--	0.0	Aug-17
Marlin Heritage Europe- Net			0.0	--	--	--	--	--	--	--	--	--	0.0	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			3.5	--	6.8	--	15.4	--	11.5	--	16.0	--	6.8	Aug-17

*Unable to calculate a since inception return due to system limitations when HIG Europe Capital II experienced 2 quarters of negative fund values in 2016.

**Funded in October 2017.

Total Fund
Performance Summary

Period Ending: December 31, 2017

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Inception Return (%)	Since
New Enterprise 14- Gross	35,898,240	0.4	-0.4	--	2.1	--	13.8	--	16.6	--	15.1	--	12.4	May-12
New Enterprise 14- Net			-0.4	--	2.1	--	13.8	--	16.6	--	15.1	--	12.4	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			3.5	--	6.8	--	15.4	--	11.5	--	16.0	--	15.8	May-12
New Enterprise 15- Gross	32,900,262	0.4	3.3	--	10.3	--	31.2	--	--	--	--	--	12.8	Apr-15
New Enterprise 15- Net			3.3	--	10.3	--	31.2	--	--	--	--	--	12.8	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			3.5	--	6.8	--	15.4	--	11.5	--	16.0	--	12.0	Apr-15
New Enterprise 16- Gross	4,078,609	0.0	-1.7	--	-9.3	--	--	--	--	--	--	--	-9.3	May-17
New Enterprise 16- Net			-1.7	--	-9.3	--	--	--	--	--	--	--	-9.3	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			3.5	--	6.8	--	15.4	--	11.5	--	16.0	--	10.4	May-17
Private Equity X- Gross	36,925,158	0.4	6.6	--	10.3	--	19.8	--	4.0	--	13.6	--	-3.4	Jun-08
Private Equity X- Net			6.6	--	10.3	--	19.8	--	4.0	--	13.6	--	--	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			3.5	--	6.8	--	15.4	--	11.5	--	16.0	--	11.3	Jun-08
RRJ Capital Master Fund II- Gross	19,238,928	0.2	5.7	--	6.9	--	9.6	--	9.5	--	--	--	12.3	May-13
RRJ Capital Master Fund II- Net			5.7	--	6.9	--	9.6	--	9.5	--	--	--	12.3	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			3.5	--	6.8	--	15.4	--	11.5	--	16.0	--	15.6	May-13
RRJ Capital Master Fund III- Gross	14,708,693	0.2	5.2	--	9.3	--	11.7	--	--	--	--	--	-26.4	Dec-15
RRJ Capital Master Fund III- Net			5.2	--	9.3	--	11.7	--	--	--	--	--	-26.4	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			3.5	--	6.8	--	15.4	--	11.5	--	16.0	--	16.6	Dec-15
Spectrum Equity- Gross	22,040,166	0.2	15.6	--	23.0	--	44.0	--	-5.1	--	--	--	-5.1	Dec-14
Spectrum Equity- Net			15.6	--	23.0	--	44.0	--	-5.1	--	--	--	-5.1	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			3.5	--	6.8	--	15.4	--	11.5	--	16.0	--	11.5	Dec-14
Summit Ventures III- Gross	16,360,235	0.2	14.7	--	18.4	--	18.1	--	24.3	--	14.3	--	11.8	Jun-12
Summit Ventures III- Net			14.7	--	18.4	--	18.1	--	24.3	--	14.3	--	11.8	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			3.5	--	6.8	--	15.4	--	11.5	--	16.0	--	15.3	Jun-12
Summit Ventures IV- Gross	12,409,208	0.1	31.5	--	40.9	--	46.2	--	--	--	--	--	39.5	May-16
Summit Ventures IV- Net			31.5	--	40.9	--	46.2	--	--	--	--	--	39.5	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			3.5	--	6.8	--	15.4	--	11.5	--	16.0	--	20.0	May-16

Total Fund
Performance Summary

Period Ending: December 31, 2017

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Inception Return (%)	Since
Thoma Bravo XI- Gross	33,433,617	0.4	0.2	--	8.5	--	17.1	--	9.6	--	--	--	7.4	Jun-14
Thoma Bravo XI- Net			0.2	--	8.5	--	17.1	--	9.6	--	--	--	7.4	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			3.5	--	6.8	--	15.4	--	11.5	--	16.0	--	12.0	Jun-14
Thoma Bravo XII- Gross	14,388,709	0.2	0.0	--	4.9	--	3.1	--	--	--	--	--	-8.2	May-16
Thoma Bravo XII- Net			0.0	--	4.9	--	3.1	--	--	--	--	--	-8.2	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			3.5	--	6.8	--	15.4	--	11.5	--	16.0	--	20.0	May-16
TPG Opp Partners III- Gross	20,741,485	0.2	1.9	--	4.1	--	9.2	--	7.7	--	--	--	-24.6	Mar-14
TPG Opp Partners III- Net			1.9	--	4.1	--	9.2	--	7.7	--	--	--	-24.6	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			3.5	--	6.8	--	15.4	--	11.5	--	16.0	--	12.0	Mar-14
Trinity Ventures XI- Gross	24,359,187	0.3	-3.7	--	1.8	--	15.8	--	12.1	--	--	--	0.4	Apr-13
Trinity Ventures XI- Net			-3.7	--	1.8	--	15.8	--	12.1	--	--	--	0.4	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			3.5	--	6.8	--	15.4	--	11.5	--	16.0	--	15.7	Apr-13
Trinity Ventures XII- Gross	10,415,499	0.1	-1.7	--	-1.4	--	19.7	--	--	--	--	--	1.1	Apr-16
Trinity Ventures XII- Net			-1.7	--	-1.4	--	19.7	--	--	--	--	--	1.1	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			3.5	--	6.8	--	15.4	--	11.5	--	16.0	--	19.1	Apr-16
TSG7 A LP- Gross	5,367,408	0.1	2.3	--	2.9	--	-1.7	--	--	--	--	--	--	Mar-16
TSG7 A LP- Net			2.3	--	2.9	--	-1.7	--	--	--	--	--	--	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			3.5	--	6.8	--	15.4	--	11.5	--	16.0	--	14.7	Mar-16
TSG7 B LP- Gross	293,950	0.0	-11.9	--	-18.9	--	-36.7	--	--	--	--	--	-30.1	Jan-16
TSG7 B LP- Net			-11.9	--	-18.9	--	-36.7	--	--	--	--	--	-30.1	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			3.5	--	6.8	--	15.4	--	11.5	--	16.0	--	12.7	Jan-16
Waterland V- Gross	14,726,372	0.2	26.1	--	27.1	--	36.4	--	54.8	--	60.8	--	22.8	Aug-11
Waterland V- Net			26.1	--	27.1	--	36.4	--	54.8	--	60.8	--	22.8	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			3.5	--	6.8	--	15.4	--	11.5	--	16.0	--	14.7	Aug-11

Total Fund
Performance Summary

Period Ending: December 31, 2017

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Inception Return (%)	Since
Waterland VI- Gross	12,391,523	0.1	16.3	--	21.0	--	24.7	--	--	--	--	--	-19.2	Jul-15
Waterland VI- Net			16.3	--	21.0	--	24.7	--	--	--	--	--	-19.2	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			3.5	--	6.8	--	15.4	--	11.5	--	16.0	--	10.7	Jul-15
Waterland VI Over- Gross	1,606	0.0	-34.1	--	-41.5	--	-66.0	--	--	--	--	--	-78.2	Dec-15
Waterland VI Over- Net			-34.1	--	-41.5	--	-66.0	--	--	--	--	--	-78.2	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			3.5	--	6.8	--	15.4	--	11.5	--	16.0	--	16.6	Dec-15
Wayzata Opportunities III- Gross	7,277,824	0.1	1.6	--	0.1	--	6.0	--	0.6	--	--	--	-5.2	Feb-13
Wayzata Opportunities III- Net			1.6	--	0.1	--	6.0	--	0.6	--	--	--	-5.2	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			3.5	--	6.8	--	15.4	--	11.5	--	16.0	--	16.7	Feb-13
Public Credit- Gross	173,182,467	1.9	0.0	--	1.2	--	6.5	--	5.7	--	--	--	4.5	Nov-13
Public Credit- Net			0.0	--	1.2	--	6.5	--	5.7	--	--	--	4.5	
<i>Brigade Custom¹</i>			0.8	--	2.3	--	5.9	--	5.5	--	--	--	4.7	Nov-13
Brigade Capital- Gross	173,182,467	1.9	0.0	99	1.2	98	6.5	75	5.7	69	--	--	4.5	Nov-13
Brigade Capital- Net			0.0	99	1.2	98	6.5	75	5.7	69	--	--	4.5	
<i>Brigade Custom¹</i>			0.8	38	2.3	63	5.9	83	5.5	74	--	--	4.7	Nov-13
<i>eV US High Yield Fixed Inc Gross Median</i>			0.6		2.6		7.5		6.1		5.7		5.3	Nov-13
Private Credit- Gross⁺⁺	51,003,081	0.6	1.2	--	2.7	--	--	--	--	--	--	--	6.3	Mar-17
Private Credit- Net			1.2	--	2.7	--	--	--	--	--	--	--	6.3	
<i>Credit Suisse Leveraged Loan + 2%</i>			1.7	--	3.3	--	6.2	--	--	--	--	--	4.5	Mar-17
Athyrium Opp II- Gross	17,814,716	0.2	1.2	--	2.4	--	6.9	--	--	--	--	--	4.4	Jun-15
Athyrium Opp II- Net			1.2	--	2.4	--	6.9	--	--	--	--	--	4.4	
<i>Credit Suisse Leveraged Loan + 2%</i>			1.7	--	3.3	--	6.2	--	--	--	--	--	--	Jun-15
Athyrium Opp III- Gross	4,879,924	0.1	-1.6	--	-10.3	--	--	--	--	--	--	--	-10.3	May-17
Athyrium Opp III- Net			-1.6	--	-10.3	--	--	--	--	--	--	--	-10.3	
<i>Credit Suisse Leveraged Loan + 2%</i>			1.7	--	3.3	--	6.2	--	--	--	--	--	3.4	May-17

1. See Policy Index and Benchmark History.

++Returns are lagged one quarter.

Total Fund Performance Summary

Period Ending: December 31, 2017

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Inception Return (%)	Since
Summit Credit- Gross	5,775,256	0.1	-1.2	--	1.8	--	8.8	--	8.8	--	10.0	--	8.0	Oct-11
Summit Credit- Net			-1.2	--	1.8	--	8.8	--	8.8	--	10.0	--	8.0	
<i>Credit Suisse Leveraged Loan + 2%</i>			1.7	--	3.3	--	6.2	--	--	--	--	--	--	Oct-11
Summit Credit II- Gross	22,533,185	0.2	2.2	--	5.0	--	12.7	--	6.6	--	--	--	6.5	Nov-14
Summit Credit II- Net			2.2	--	5.0	--	12.7	--	6.6	--	--	--	6.5	
<i>Credit Suisse Leveraged Loan + 2%</i>			1.7	--	3.3	--	6.2	--	--	--	--	--	--	Nov-14
Growth Oriented Absolute Return- Gross⁺⁺	385,942,180	4.2	1.6	--	4.3	--	--	--	--	--	--	--	6.9	Mar-17
Growth Oriented Absolute Return- Net			1.6	--	4.3	--	--	--	--	--	--	--	6.9	
<i>HFRI FoF Composite Index + 1%¹</i>			2.2	--	4.9	--	7.8	--	6.0	--	5.6	--	6.4	Mar-17
Grosvenor- Gross	194,667	0.0	-52.6	99	-51.5	99	-52.4	99	-10.5	99	-4.0	99	0.6	Aug-04
Grosvenor- Net			-52.6	99	-51.5	99	-52.4	99	-10.5	99	-4.0	99	0.3	
<i>HFRI FoF Composite Index + 1%</i>			2.2	33	4.9	31	7.8	44	6.0	18	5.6	39	6.4	Aug-04
<i>eV Alt Fund of Funds - Multi-Strategy Median</i>			1.7		3.9		7.2		3.0		5.1		4.8	Aug-04
Grosvenor SCARF Growth- Gross	163,919,859	1.8	2.4	31	5.5	24	12.0	20	4.0	35	6.3	33	6.7	Nov-11
Grosvenor SCARF Growth- Net			2.4	31	5.5	24	12.0	20	4.0	35	6.3	33	6.7	
<i>HFRI FoF Composite Index + 1%</i>			2.2	33	4.9	31	7.8	44	6.0	18	5.6	39	5.5	Nov-11
<i>eV Alt Fund of Funds - Multi-Strategy Median</i>			1.7		3.9		7.2		3.0		5.1		5.5	Nov-11
Grosvenor SCARF B Growth- Gross	39,292,478	0.4	1.7	52	3.9	52	10.4	30	3.9	36	--	--	5.2	Jan-13
Grosvenor SCARF B Growth- Net			1.7	52	3.9	52	10.4	30	3.9	36	--	--	5.2	
<i>HFRI FoF Composite Index + 1%</i>			2.2	33	4.9	31	7.8	44	6.0	18	5.6	39	5.7	Jan-13
<i>eV Alt Fund of Funds - Multi-Strategy Median</i>			1.7		3.9		7.2		3.0		5.1		4.7	Jan-13
JANA Partners- Gross	40,987,586	0.4	-0.9	87	-0.1	84	6.6	52	1.2	83	--	--	3.4	Jul-13
JANA Partners- Net			-0.9	87	-0.1	84	6.6	52	1.2	83	--	--	3.4	
<i>HFRI FoF Composite Index + 1%</i>			2.2	38	4.9	40	7.8	48	6.0	45	5.6	58	5.7	Jul-13
<i>eV Alt All Event Driven Median</i>			1.6		3.6		6.8		5.1		6.6		5.6	Jul-13

⁺⁺ Absolute Return managers are ranked in the eVest net of fee universe.

¹ See Policy Index and Benchmark History.

Total Fund
Performance Summary

Period Ending: December 31, 2017

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Inception Return (%)	Since
Lakewood- Gross	45,477,958	0.5	0.1	80	4.0	68	8.3	69	7.4	41	--	--	7.9	Jun-13
Lakewood- Net			0.1	80	4.0	68	8.3	69	7.4	41	--	--	7.9	
<i>HFRI FoF Composite Index + 1%</i>			2.2	61	4.9	64	7.8	70	6.0	50	5.6	72	5.7	Jun-13
<i>eV Alt Fundamental - Long/Short Equity Median</i>			3.1		6.7		13.1		6.0		8.2		7.2	Jun-13
OZ Domestic II- Gross	46,768,479	0.5	1.3	62	3.6	54	12.1	32	4.7	47	6.8	42	7.8	Dec-11
OZ Domestic II- Net			1.3	62	3.6	54	12.1	32	4.7	47	6.8	42	7.7	
<i>HFRI FoF Composite Index + 1%</i>			2.2	45	4.9	44	7.8	49	6.0	40	5.6	49	5.5	Dec-11
<i>eV Alt All Multi-Strategy Median</i>			1.9		4.0		7.5		4.2		5.5		5.8	Dec-11
Third Point Offshore Fund- Gross	49,301,153	0.5	2.9	28	6.4	31	17.8	16	7.6	29	10.5	20	11.6	Apr-12
Third Point Offshore Fund- Net			2.9	28	6.4	31	17.8	16	7.6	29	10.5	20	11.6	
<i>HFRI FoF Composite Index + 1%</i>			2.2	38	4.9	40	7.8	48	6.0	45	5.6	58	5.6	Apr-12
<i>eV Alt All Event Driven Median</i>			1.6		3.6		6.8		5.1		6.6		6.4	Apr-12
Diversifying Asset Category- Gross	1,802,744,890	19.5	0.8	--	2.1	--	--	--	--	--	--	--	3.6	Mar-17
Diversifying Asset Category- Net			0.7	--	2.0	--	--	--	--	--	--	--	3.6	
<i>Diversifying Custom¹</i>			0.8	--	2.0	--	--	--	--	--	--	--	3.3	Mar-17
Core/Core Plus Fixed Income- Gross	1,165,097,052	12.6	0.7	--	1.7	--	4.9	--	3.1	--	2.7	--	3.3	Jun-11
Core/Core Plus Fixed Income- Net			0.7	--	1.6	--	4.8	--	3.0	--	2.6	--	3.2	
<i>BBgBarc US Aggregate TR</i>			0.4	--	1.2	--	3.5	--	2.2	--	2.1	--	3.0	Jun-11
Neuberger Berman Fixed- Gross	355,670,226	3.8	0.4	70	1.3	73	3.7	73	2.4	80	2.3	72	6.6	Jun-88
Neuberger Berman Fixed- Net			0.4	72	1.3	74	3.6	76	2.3	83	2.2	80	6.5	
<i>BBgBarc US Aggregate TR</i>			0.4	76	1.2	76	3.5	79	2.2	90	2.1	85	6.3	Jun-88
<i>eV US Core Fixed Inc Gross Median</i>			0.5		1.5		4.0		2.7		2.5		6.7	Jun-88
Prudential- Gross	439,077,345	4.7	1.0	3	2.2	3	6.8	2	4.2	3	--	--	4.5	Jul-14
Prudential- Net			1.0	3	2.2	3	6.6	2	4.0	3	--	--	4.3	
<i>BBgBarc US Aggregate TR</i>			0.4	76	1.2	76	3.5	79	2.2	90	2.1	85	2.6	Jul-14
<i>eV US Core Fixed Inc Gross Median</i>			0.5		1.5		4.0		2.7		2.5		3.0	Jul-14

1. See Policy Index and Benchmark History.

Total Fund
Performance Summary

Period Ending: December 31, 2017

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Inception Return (%)	Since
TCW MetWest Fixed- Gross	370,349,481	4.0	0.6	32	1.5	44	3.9	60	2.6	58	2.7	31	6.0	Dec-01
TCW MetWest Fixed- Net			0.5	55	1.4	60	3.8	67	2.4	79	2.6	46	5.8	
<i>BBgBarc US Aggregate TR</i>			0.4	76	1.2	76	3.5	79	2.2	90	2.1	85	4.5	Dec-01
<i>eV US Core Fixed Inc Gross Median</i>			0.5		1.5		4.0		2.7		2.5		5.0	Dec-01
U.S. Treasury- Gross	--	--	--	--	--	--	--	--	--	--	--	--	--	Mar-17
U.S. Treasury- Net			--	--	--	--	--	--	--	--	--	--	--	
<i>BBgBarc US Treasury TR</i>			0.1	--	0.4	--	2.3	--	1.4	--	1.3	--	1.6	Mar-17
Global Fixed Income- Gross	228,195,485	2.5	-0.4	--	3.0	--	13.3	--	3.3	--	--	--	3.1	May-13
Global Fixed Income- Net			-0.5	--	2.8	--	12.9	--	2.9	--	--	--	2.7	
<i>Brandywine Custom¹</i>			1.0	--	3.2	--	9.0	--	1.9	--	--	--	0.9	May-13
Brandywine Global- Gross	228,195,485	2.5	-0.4	97	3.0	49	13.3	12	3.3	50	--	--	3.1	May-13
Brandywine Global- Net			-0.5	98	2.8	55	12.9	13	2.9	59	--	--	2.7	
<i>Brandywine Custom¹</i>			1.0	52	3.2	41	9.0	36	1.9	81	--	--	0.9	May-13
<i>eV All Global Fixed Inc Gross Median</i>			1.0		2.9		7.9		3.3		2.8		3.1	May-13
Diversifying Absolute Return- Gross⁺⁺	409,452,353	4.4	1.6	--	2.7	--	--	--	--	--	--	--	1.7	Mar-17
Diversifying Absolute Return- Net			1.6	--	2.7	--	--	--	--	--	--	--	1.7	
<i>HFRI FoF Conservative Index¹</i>			1.0	--	2.4	--	5.3	--	5.2	--	5.1	--	3.9	Mar-17
AQR DELTA II- Gross AQR	72,524,364	0.8	1.0	66	4.5	46	4.5	69	5.4	43	--	--	6.1	May-13
DELTA II- Net			1.0	66	4.5	46	4.5	69	5.4	43	--	--	6.1	
<i>HFRI FoF Conservative Index</i>			1.0	65	2.4	67	5.3	64	5.2	44	5.1	54	5.1	May-13
<i>eV Alt All Multi-Strategy Median</i>			1.9		4.0		7.5		4.2		5.5		5.2	May-13
Brevan Howard US- Gross	33,943,932	0.4	-0.8	82	-0.2	78	-5.3	86	-1.5	68	--	--	-0.8	Feb-14
Brevan Howard US- Net			-0.8	82	-0.2	78	-5.3	86	-1.5	68	--	--	-0.8	
<i>HFRI FoF Conservative Index</i>			1.0	68	2.4	63	5.3	37	5.2	19	5.1	26	5.2	Feb-14

1. See Policy Index and Benchmark History.

++ Absolute Return managers are ranked in the eVest net of fee universe.

Total Fund
Performance Summary

Period Ending: December 31, 2017

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Inception Return (%)	Since
<i>HFRI Fund of Funds Composite Index</i>			2.0	59	4.3	48	7.7	29	2.6	36	4.0	33	2.6	Feb-14
<i>eV Alt All Macro Median</i>			2.7		3.8		2.9		1.0		2.5		2.3	Feb-14
Claren Road Credit- Gross	141,746	0.0	-16.5	99	-18.6	98	-12.4	95	-5.8	99	-4.6	99	-3.5	Jan-12
Claren Road Credit- Net			-16.5	99	-18.6	98	-12.4	95	-5.8	99	-4.6	99	-3.5	Jan-12
<i>HFRI FoF Conservative Index</i>			1.0	62	2.4	61	5.3	64	5.2	50	5.1	54	5.1	Jan-12
<i>eV Alt Fundamental - Long/Short Credit Median</i>			1.5		3.0		7.1		5.2		5.4		6.3	Jan-12
Elliot Associates- Gross***	52,851,200	0.6	1.8	49	4.8	41	8.5	46	7.4	31	8.0	37	8.2	Apr-12
Elliot Associates- Net			1.8	49	4.8	41	8.5	46	7.4	31	8.0	37	8.2	Apr-12
<i>HFRI FoF Conservative Index</i>			1.0	61	2.4	59	5.3	60	5.2	50	5.1	61	5.1	Apr-12
<i>eV Alt All Event Driven Median</i>			1.6		3.6		6.8		5.1		6.6		6.4	Apr-12
Graham Global Inv II- Gross	35,303,646	0.4	9.4	9	7.6	25	--	--	--	--	--	--	2.0	Feb-17
Graham Global Inv II- Net			9.4	9	7.6	25	--	--	--	--	--	--	2.0	Feb-17
<i>HFRI FoF Conservative Index</i>			1.0	68	2.4	58	5.3	33	5.2	26	5.1	35	4.3	Feb-17
<i>eV Alt All Managed Futures Median</i>			2.6		3.6		1.8		0.7		3.7		1.6	Feb-17
Grosvenor SCARF Diversifying- Gross	102,688,413	1.1	-1.5	99	-0.8	99	-1.6	99	-1.2	98	1.5	97	1.8	Nov-11
Grosvenor SCARF Diversifying- Net			-1.5	99	-0.8	99	-1.6	99	-1.2	98	1.5	97	1.8	Nov-11
<i>HFRI FoF Conservative Index</i>			1.0	74	2.4	81	5.3	66	5.2	23	5.1	49	5.1	Nov-11
<i>eV Alt Fund of Funds - Multi-Strategy Median</i>			1.7		3.9		7.2		3.0		5.1		5.5	Nov-11
Grosvenor SCARF B Diversifying- Gross	31,774,590	0.3	-0.9	98	-1.1	99	-3.5	99	-2.3	99	--	--	0.7	Jan-13
Grosvenor SCARF B Diversifying- Net			-0.9	98	-1.1	99	-3.5	99	-2.3	99	--	--	0.7	Jan-13
<i>HFRI FoF Conservative Index</i>			1.0	74	2.4	81	5.3	66	5.2	23	5.1	49	5.1	Jan-13
<i>eV Alt Fund of Funds - Multi-Strategy Median</i>			1.7		3.9		7.2		3.0		5.1		4.7	Jan-13

***Preliminary quarterly returns as of 12/31/2017 (Returns not available at reporting period).

Total Fund
Performance Summary

Period Ending: December 31, 2017

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Inception Return (%)	Since
Laurion Capital- Gross	43,008,387	0.5	3.6	29	4.0	52	2.7	77	6.2	45	--	--	5.6	Mar-14
Laurion Capital- Net			3.6	29	4.0	52	2.7	77	6.2	45	--	--	5.6	
<i>HFRI FoF Conservative Index</i>			1.0	65	2.4	74	5.3	54	5.2	54	5.1	56	5.2	Mar-14
<i>eV Alt Relative Value - Equity Relative Value Median</i>			2.0		4.2		5.5		5.5		5.6		5.2	Mar-14
Winton Diversified Futures- Gross	37,216,076	0.4	7.1	15	7.9	23	6.3	31	--	--	--	--	6.3	Dec-16
Winton Diversified Futures- Net			7.1	15	7.9	23	6.3	31	--	--	--	--	6.3	
<i>HFRI FoF Conservative Index</i>			1.0	68	2.4	58	5.3	33	5.2	26	5.1	35	5.3	Dec-16
<i>eV Alt All Managed Futures Median</i>			2.6		3.6		1.8		0.7		3.7		1.8	Dec-16
Real Return (with SSgA RA Overlay Proxy)- Gross	1,414,427,827	15.3	2.9	--	6.5	--	--	--	--	--	--	--	8.8	Mar-17
Real Return (with SSgA RA Overlay Proxy)- Net			2.8	--	6.4	--	--	--	--	--	--	--	8.6	
<i>Real Return Custom¹</i>			2.4	--	4.4	--	--	--	--	--	--	--	5.5	Mar-17
Real Return Asset Category- Gross	1,175,456,787	12.7	2.8	--	6.4	--	--	--	--	--	--	--	9.6	Mar-17
Real Return Asset Category- Net			2.7	--	6.3	--	--	--	--	--	--	--	9.5	
<i>Real Return Custom¹</i>			2.4	--	4.4	--	--	--	--	--	--	--	5.5	Mar-17
Real Estate- Gross	795,576,704	8.6	2.3	8	6.4	2	11.7	1	10.8	10	11.7	10	12.2	Jun-11
Real Estate- Net			2.2	9	6.2	2	11.4	2	10.0	26	10.8	44	11.3	
<i>Real Estate Custom¹</i>			1.2	88	3.2	52	6.6	46	9.3	47	10.1	59	10.4	Jun-11
<i>InvestorForce All DB Real Estate Priv Net Median</i>			1.8		3.3		6.4		9.1		10.6		10.4	Jun-11
Core RE -Separate- Gross	251,018,595	2.7	4.7	--	7.8	--	13.7	--	9.9	--	11.0	--	6.1	Sep-08
Core RE -Separate- Net			4.5	--	7.5	--	12.9	--	9.0	--	9.9	--	5.1	
<i>NFI-ODCE</i>			2.1	--	4.0	--	7.6	--	10.4	--	11.5	--	5.3	Sep-08
BlackRock RE Leveraged- Gross	173,563,533	1.9	2.9	--	5.2	--	12.3	--	12.2	--	12.5	--	9.9	Dec-98
BlackRock RE Leveraged- Net			2.7	--	5.1	--	11.6	--	11.5	--	11.4	--	--	
<i>NFI-ODCE</i>			2.1	--	4.0	--	7.6	--	10.4	--	11.5	--	8.6	Dec-98

1. See Policy Index and Benchmark History.

Total Fund
Performance Summary

Period Ending: December 31, 2017

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Inception Return (%)	Since
Cornerstone Leveraged- Gross	77,429,989	0.8	8.9	--	13.9	--	21.3	--	12.9	--	12.7	--	8.6	May-04
Cornerstone Leveraged- Net			8.4	--	13.4	--	20.3	--	11.8	--	11.6	--	--	
<i>NFI-ODCE</i>			2.1	--	4.0	--	7.6	--	10.4	--	11.5	--	8.3	May-04
BlackRock RE Unleveraged- Gross	--	--	2.5	--	4.6	--	11.0	--	11.5	--	11.6	--	10.3	Oct-95
BlackRock RE Unleveraged- Net			2.3	--	4.1	--	9.9	--	10.4	--	10.3	--	--	
<i>NFI-ODCE</i>			2.1	--	4.0	--	7.6	--	10.4	--	11.5	--	9.2	Oct-95
Cornerstone Unleveraged- Gross	--	--	6.1	--	9.5	--	14.8	--	9.1	--	9.5	--	7.3	Jun-04
Cornerstone Unleveraged- Net			6.0	--	9.3	--	14.4	--	8.6	--	9.0	--	--	
<i>NFI-ODCE</i>			2.1	--	4.0	--	7.6	--	10.4	--	11.5	--	8.3	Jun-04
Core RE -Limited Partnership- Gross	369,424,944	4.0	1.7	--	5.9	--	9.7	--	11.4	--	11.7	--	4.3	Sep-08
Core RE -Limited Partnership- Net			1.6	--	5.8	--	9.5	--	11.0	--	11.1	--	3.7	
<i>NFI-ODCE</i>			2.1	--	4.0	--	7.6	--	10.4	--	11.5	--	5.3	Sep-08
Jamestown Premier Property - Gross	20,178,425	0.2	1.3	--	2.8	--	6.8	--	9.7	--	--	--	10.2	Dec-13
Jamestown Premier Property - Net			1.3	--	2.8	--	6.8	--	9.7	--	--	--	10.2	
<i>NFI-ODCE</i>			2.1	--	4.0	--	7.6	--	10.4	--	11.5	--	10.9	Dec-13
Metlife Core Property - Gross	55,072,419	0.6	3.1	--	5.6	--	8.3	--	11.3	--	--	--	12.8	Dec-13
Metlife Core Property - Net			3.0	--	5.3	--	7.8	--	10.8	--	--	--	12.3	
<i>NFI-ODCE</i>			2.1	--	4.0	--	7.6	--	10.4	--	11.5	--	10.9	Dec-13
Prime Property- Gross	55,824,191	0.6	2.3	--	4.9	--	9.9	--	12.0	--	--	--	13.0	Sep-13
Prime Property- Net			2.1	--	4.4	--	8.8	--	10.8	--	--	--	11.8	
<i>NFI-ODCE</i>			2.1	--	4.0	--	7.6	--	10.4	--	11.5	--	11.1	Sep-13
Principal US Property- Gross	42,378,231	0.5	1.8	--	3.9	--	8.1	--	--	--	--	--	9.2	Oct-15
Principal US Property- Net			1.8	--	3.9	--	8.1	--	--	--	--	--	9.2	
<i>NFI-ODCE</i>			2.1	--	4.0	--	7.6	--	10.4	--	11.5	--	9.2	Oct-15
Prologis Targeted Euro Logistics- Gross***	34,075,939	0.4	0.0	--	15.3	--	19.5	--	--	--	--	--	10.2	Oct-15
Prologis Targeted Euro Logistics- Net			0.0	--	15.3	--	19.5	--	--	--	--	--	10.2	
<i>NFI-ODCE</i>			2.1	--	4.0	--	7.6	--	10.4	--	11.5	--	9.2	Oct-15

*** Preliminary quarterly returns as of 12/31/2017 (Returns are not available at reporting period.)

Total Fund
Performance Summary

Period Ending: December 31, 2017

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Inception Return (%)	Since
Prologis Targeted US Logistics- Gross ⁺⁺⁺	61,341,758	0.7	3.6	--	10.2	--	19.7	--	--	--	--	--	16.9	Jul-15
Prologis Targeted US Logistics- Net			3.6	--	10.2	--	19.7	--	--	--	--	--	16.9	
<i>NFI-ODCE</i>			2.1	--	4.0	--	7.6	--	10.4	--	11.5	--	9.8	Jul-15
Townsend Real Estate- Gross ⁺⁺⁺	100,525,897	1.1	0.0	--	2.8	--	8.1	--	--	--	--	--	9.3	Mar-16
Townsend Real Estate- Net			0.0	--	2.8	--	8.1	--	--	--	--	--	9.3	
<i>NFI-ODCE</i>			2.1	--	4.0	--	7.6	--	10.4	--	11.5	--	8.1	Mar-16
Non-Core RE -Opportunistic- Gross⁺⁺	121,153,721	1.3	5.5	--	10.5	--	20.5	--	19.2	--	--	--	32.4	Feb-14
Non-Core RE -Opportunistic- Net			5.5	--	10.5	--	20.5	--	18.1	--	--	--	31.1	
<i>NFI-ODCE net +1% 1Q Lag</i>			-0.3	--	1.8	--	5.8	--	10.2	--	--	--	11.2	Feb-14
Carlyle China Realty- Gross	3,453,607	0.0	-1.5	--	-17.4	--	--	--	--	--	--	--	-17.4	Jun-17
Carlyle China Realty- Net			-1.5	--	-17.4	--	--	--	--	--	--	--	-17.4	
<i>NFI-ODCE net +1% 1Q Lag</i>			-0.3	--	1.8	--	5.8	--	10.2	--	--	--	1.8	Jun-17
Carlyle China Rome Logistics- Gross	10,252,155	0.1	-0.6	--	-9.5	--	--	--	--	--	--	--	-9.5	Jun-17
Carlyle China Rome Logistics- Net			-0.6	--	-9.5	--	--	--	--	--	--	--	-9.5	
<i>NFI-ODCE net +1% 1Q Lag</i>			-0.3	--	1.8	--	5.8	--	10.2	--	--	--	1.8	Jun-17
CIM Opportunity VIII- Gross	28,579,444	0.3	1.4	--	1.5	--	4.9	--	--	--	--	--	6.3	Feb-15
CIM Opportunity VIII- Net			1.4	--	1.5	--	4.9	--	--	--	--	--	4.3	
<i>NFI-ODCE net +1% 1Q Lag</i>			-0.3	--	1.8	--	5.8	--	10.2	--	--	--	10.8	Feb-15
Kohlberg Kravis Roberts - Gross	36,574,708	0.4	8.9	--	14.3	--	30.4	--	27.7	--	--	--	40.2	Feb-14
Kohlberg Kravis Roberts - Net			8.9	--	14.3	--	30.4	--	27.5	--	--	--	39.7	
<i>NFI-ODCE net +1% 1Q Lag</i>			-0.3	--	1.8	--	5.8	--	10.2	--	--	--	11.2	Feb-14
NREP Nordic Strat FCP-FIS- Gross	13,370,285	0.1	8.1	--	29.1	--	40.0	--	27.9	--	--	--	27.9	Dec-14
NREP Nordic Strat FCP-FIS- Net			8.1	--	29.1	--	40.0	--	27.9	--	--	--	27.9	
<i>NFI-ODCE net +1% 1Q Lag</i>			-0.3	--	1.8	--	5.8	--	10.2	--	--	--	10.2	Dec-14

⁺⁺⁺ Preliminary quarterly returns as of 12/31/2017 (Returns are not available at reporting period.)

⁺⁺ Returns are one-quarter lag.

Total Fund
Performance Summary

Period Ending: December 31, 2017

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Inception Return (%)	Since
NREP Nordic Strat II- Gross	15,317,188	0.2	9.9	--	21.1	--	29.2	--	--	--	--	--	8.1	Jun-16
NREP Nordic Strat II- Net			9.9	--	21.1	--	29.2	--	--	--	--	--	8.1	
<i>NFI-ODCE net +1% 1Q Lag</i>			-0.3	--	1.8	--	5.8	--	10.2	--	--	--	6.7	Jun-16
OZ RE III- Gross	13,606,335	0.1	4.1	--	10.8	--	23.9	--	4.2	--	--	--	-0.4	Sep-14
OZ RE III- Net			4.1	--	10.8	--	23.9	--	-2.2	--	--	--	-6.0	
<i>NFI-ODCE net +1% 1Q Lag</i>			-0.3	--	1.8	--	5.8	--	10.2	--	--	--	10.3	Sep-14
Core RE -Value Added- Gross⁺⁺	53,979,443	0.6	-8.1	--	-3.2	--	1.8	--	6.4	--	9.5	--	-4.1	Sep-08
Non-Core RE -Value Added- Net			-8.1	--	-3.2	--	1.8	--	5.4	--	8.5	--	-5.4	
<i>NFI-ODCE net +1% 1Q Lag¹</i>			-0.3	--	1.8	--	5.8	--	10.6	--	11.6	--	7.8	Sep-08
AEW II- Gross	49,301	0.0	-1.1	--	-5.8	--	-19.4	--	-1.8	--	7.5	--	0.3	May-07
AEW II- Net			-1.1	--	-5.8	--	-19.4	--	-2.6	--	6.5	--	-1.3	
<i>NFI-ODCE net +1% 1Q Lag</i>			-0.3	--	1.8	--	5.8	--	10.6	--	11.6	--	--	May-07
ECE Euro Prime Shopping II- Gross	9,529,207	0.1	4.4	--	9.5	--	14.5	--	--	--	--	--	19.8	Jul-15
ECE Euro Prime Shopping II- Net			4.4	--	9.5	--	14.5	--	--	--	--	--	17.7	
<i>NFI-ODCE net +1% 1Q Lag</i>			-0.3	--	1.8	--	5.8	--	10.6	--	11.6	--	9.8	Jul-15
European RE Debt II- Gross	11,947,379	0.1	2.1	--	12.2	--	17.5	--	4.9	--	--	--	4.4	Nov-13
European RE Debt II- Net			2.1	--	12.2	--	17.5	--	4.9	--	--	--	4.4	
<i>NFI-ODCE net +1% 1Q Lag</i>			-0.3	--	1.8	--	5.8	--	10.6	--	11.6	--	11.7	Nov-13
Hammes II- Gross	16,587,634	0.2	-33.4	--	-32.0	--	-29.0	--	--	--	--	--	-2.5	Jul-15
Hammes II- Net			-33.4	--	-32.0	--	-29.0	--	--	--	--	--	-6.3	
<i>NFI-ODCE net +1% 1Q Lag</i>			-0.3	--	1.8	--	5.8	--	10.6	--	11.6	--	9.8	Jul-15
Hines US Office II- Gross	613,724	0.0												
Hines US Office II- Net														
<i>NFI-ODCE net +1% 1Q Lag</i>														

1. See Policy Index and Benchmark History.

++ Returns are one-quarter lag.

Total Fund
Performance Summary

Period Ending: December 31, 2017

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Inception Return (%)	Since
UBS RE- Gross	15,252,198	0.2	2.5	--	4.7	--	6.0	--	9.0	--	8.7	--	0.6	Sep-06
UBS RE- Net			2.5	--	4.7	--	6.0	--	8.6	--	8.3	--	-1.0	
<i>NFI-ODCE net +1% 1Q Lag</i>			-0.3	--	1.8	--	5.8	--	10.6	--	11.6	--	--	Sep-06
Private Real Assets- Gross**	352,654,361	3.8	4.6	--	7.3	--	20.2	--	10.1	--	3.4	--	3.4	Jan-13
Private Real Assets- Net			4.6	--	7.3	--	20.2	--	10.1	--	3.4	--	3.4	
<i>Private Real Assets Custom¹</i>			2.8	--	4.8	--	8.0	--	6.6	--	--	--	6.5	Jan-13
<i>CPI-U Headline +5%</i>			1.9	--	3.9	--	7.1	--	6.3	--	6.1	--	6.3	Jan-13
ACM II- Gross	6,894,717	0.1	-0.7	--	-3.6	--	-6.6	--	--	--	--	--	-7.9	Sep-16
ACM II- Net			-0.7	--	-3.6	--	-6.6	--	--	--	--	--	-7.9	
<i>NCREIF Farmland 1 Qtr Lag</i>			1.0	--	2.7	--	6.2	--	9.1	--	12.7	--	6.1	Sep-16
ArcLight Energy VI- Gross	30,036,805	0.3	1.7	--	2.8	--	7.8	--	--	--	--	--	4.2	Aug-15
ArcLight Energy VI- Net			1.7	--	2.8	--	7.8	--	--	--	--	--	4.2	
<i>Cambridge Associates Private Infrastructure 1 Qtr Lag</i>			4.6	--	8.8	--	15.4	--	11.5	--	10.1	--	15.2	Aug-15
Atalaya SMA- Gross	23,146,635	0.3	3.1	--	4.9	--	4.0	--	--	--	--	--	6.8	May-15
Atalaya SMA- Net			3.1	--	4.9	--	4.0	--	--	--	--	--	6.8	
<i>Cambridge Associates Private Infrastructure 1 Qtr Lag</i>			4.6	--	8.8	--	15.4	--	11.5	--	10.1	--	12.8	May-15
Brookfield Infra III- Gross	13,321,173	0.1	3.4	--	3.7	--	3.9	--	--	--	--	--	13.3	May-16
Brookfield Infra III- Net			3.4	--	3.7	--	3.9	--	--	--	--	--	13.3	
<i>Cambridge Associates Private Infrastructure 1 Qtr Lag</i>			4.6	--	8.8	--	15.4	--	11.5	--	10.1	--	15.7	May-16
Carlyle Power II- Gross	11,325,979	0.1	-3.7	--	-1.4	--	1.8	--	--	--	--	--	-12.1	Oct-15
Carlyle Power II- Net			-3.7	--	-1.4	--	1.8	--	--	--	--	--	-12.1	
<i>Cambridge Associates Private Infrastructure 1 Qtr Lag</i>			4.6	--	8.8	--	15.4	--	11.5	--	10.1	--	13.6	Oct-15
EnCap Energy IX- Gross	24,338,406	0.3	3.1	--	-2.4	--	20.4	--	9.1	--	--	--	-1.4	Jan-13
EnCap Energy IX- Net			3.1	--	-2.4	--	20.4	--	9.1	--	--	--	-1.4	
<i>Cambridge Associates Private Energy 1 Qtr Lag</i>			1.7	--	1.3	--	11.8	--	-5.3	--	1.0	--	1.0	Jan-13

1. See Policy Index and Benchmark History.

** Returns are one-quarter lag.

Total Fund
Performance Summary

Period Ending: December 31, 2017

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Return (%)	Inception Since
EnCap Energy X- Gross	24,901,133	0.3	3.5	--	1.0	--	33.3	--	--	--	--	--	-4.9	Apr-15
EnCap Energy X- Net			3.5	--	1.0	--	33.3	--	--	--	--	--	-4.9	
<i>Cambridge Associates Private Energy 1 Qtr Lag</i>			1.7	--	1.3	--	11.8	--	-5.3	--	1.0	--	-1.0	Apr-15
EnCap Flatrock Midstream III- Gross	10,347,686	0.1	6.3	--	13.9	--	20.4	--	16.5	--	--	--	6.2	Jul-14
EnCap Flatrock Midstream III- Net			6.3	--	13.9	--	20.4	--	16.5	--	--	--	6.2	
<i>Cambridge Associates Private Infrastructure 1 Qtr Lag</i>			4.6	--	8.8	--	15.4	--	11.5	--	10.1	--	10.9	Jul-14
First Reserve- Gross***	15,555,155	0.2	0.0	--	-0.8	--	65.6	--	-8.1	--	--	--	-8.1	Dec-14
First Reserve- Net			0.0	--	-0.8	--	65.6	--	-8.1	--	--	--	-8.1	
<i>Cambridge Associates Private Infrastructure 1 Qtr Lag</i>			4.6	--	8.8	--	15.4	--	11.5	--	10.1	--	11.5	Dec-14
IFM Global Infrastructure US LP- Gross	99,896,284	1.1	1.7	--	4.4	--	--	--	--	--	--	--	4.4	Apr-17
IFM Global Infrastructure US LP- Net			1.7	--	4.4	--	--	--	--	--	--	--	4.4	
<i>Cambridge Associates Private Infrastructure 1 Qtr Lag</i>			4.6	--	8.8	--	15.4	--	11.5	--	10.1	--	15.0	Apr-17
Meridiam Infra N America III- Gross	585,706	0.0	0.0	--	--	--	--	--	--	--	--	--	0.0	Sep-17
Meridiam Infra N America III- Net			0.0	--	--	--	--	--	--	--	--	--	0.0	
<i>Cambridge Associates Private Infrastructure 1 Qtr Lag</i>			4.6	--	8.8	--	15.4	--	11.5	--	10.1	--	4.6	Sep-17
Pantheon Ventures- Gross	60,089,790	0.6	20.2	--	27.5	--	29.5	--	21.2	--	--	--	34.5	Jul-14
Pantheon Ventures- Net			20.2	--	27.5	--	29.5	--	21.2	--	--	--	34.5	
<i>Cambridge Associates Private Infrastructure 1 Qtr Lag</i>			4.6	--	8.8	--	15.4	--	11.5	--	10.1	--	10.9	Jul-14
Quantum Energy VI- Gross	20,803,008	0.2	-0.2	--	14.1	--	25.3	--	23.1	--	--	--	22.4	Nov-14
Quantum Energy VI- Net			-0.2	--	14.1	--	25.3	--	23.1	--	--	--	22.4	
<i>Cambridge Associates Private Energy 1 Qtr Lag</i>			1.7	--	1.3	--	11.8	--	-5.3	--	1.0	--	-5.5	Nov-14
Quantum Energy VII- Gross	6,591,053	0.1	-11.6	--	--	--	--	--	--	--	--	--	-11.6	Aug-17
Quantum Energy VII- Net			-11.6	--	--	--	--	--	--	--	--	--	-11.6	
<i>Cambridge Associates Private Energy 1 Qtr Lag</i>			1.7	--	1.3	--	11.8	--	-5.3	--	1.0	--	1.3	Aug-17

*** Preliminary quarterly returns as of 12/31/2017 (Returns are not available at reporting period.)

Total Fund
Performance Summary

Period Ending: December 31, 2017

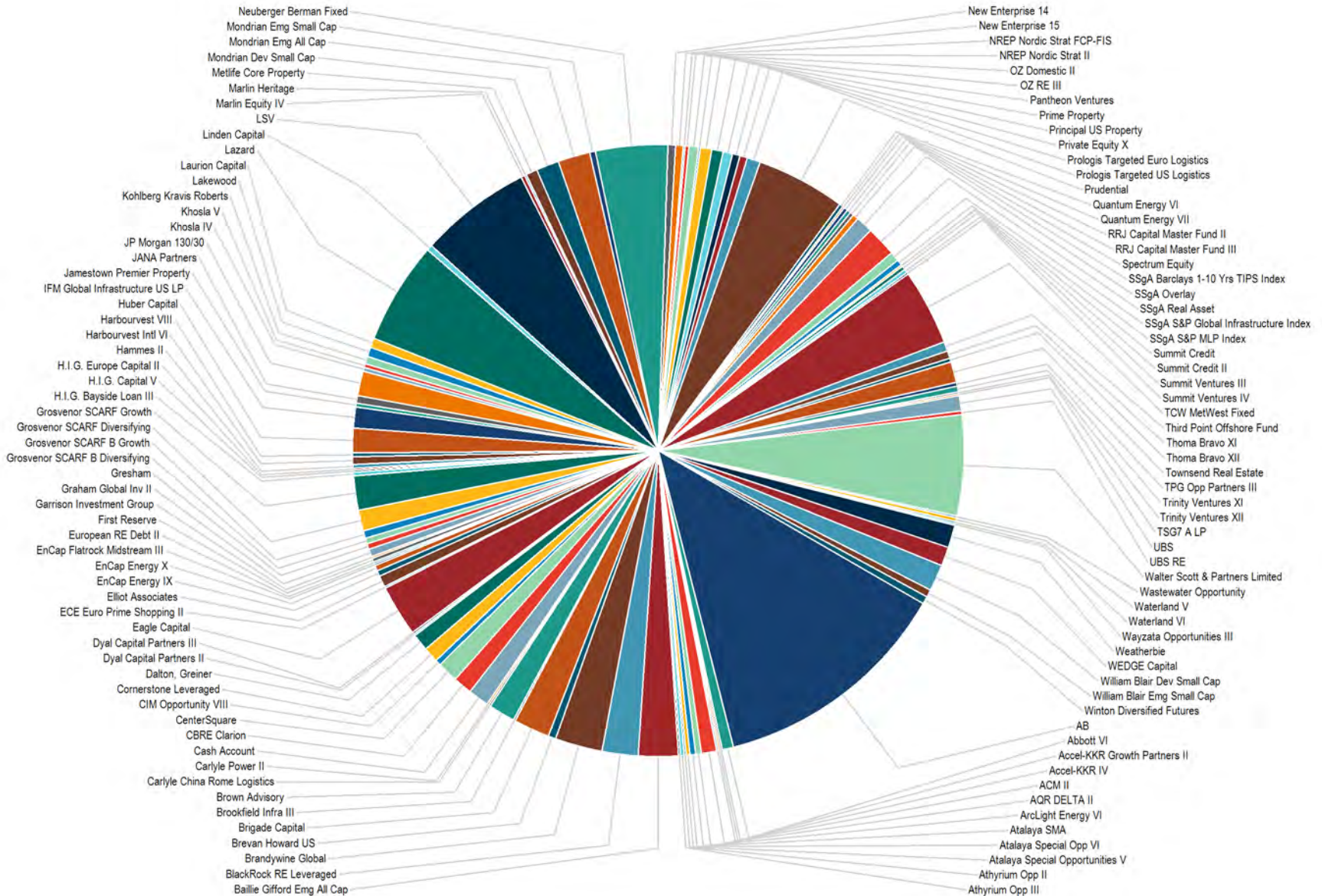
	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Inception Return (%)	Since
Wastewater Opportunity- Gross	4,820,831	0.1	-2.6	--	-5.1	--	-13.4	--	--	--	--	--	-40.8	Dec-15
Wastewater Opportunity- Net			-2.6	--	-5.1	--	-13.4	--	--	--	--	--	-40.8	
<i>Cambridge Associates Private Infrastructure 1 Qtr Lag</i>			4.6	--	8.8	--	15.4	--	11.5	--	10.1	--	13.9	Dec-15
Commodities- Gross	27,225,722	0.3	-1.0	--	1.4	--	-5.3	--	-7.8	--	-8.9	--	-6.6	May-08
Commodities- Net			-1.1	--	1.2	--	-5.6	--	-8.5	--	-9.6	--	--	
<i>Bloomberg Commodity Index TR USD</i>			4.7	--	7.3	--	1.7	--	-5.0	--	-8.5	--	-8.6	May-08
Gresham- Gross***	27,225,722	0.3	6.3	--	10.7	--	5.4	--	-4.0	--	-7.3	--	-7.8	Apr-08
Gresham- Net			6.2	--	10.4	--	4.7	--	-4.7	--	-7.9	--	--	
<i>Bloomberg Commodity Index TR USD</i>			4.7	--	7.3	--	1.7	--	-5.0	--	-8.5	--	-8.3	Apr-08
Opportunities Asset Category- Gross	10,127,231	0.1	-0.3	--	0.2	--	--	--	--	--	--	--	3.8	Mar-17
Opportunities Asset Category- Net			-0.3	--	0.2	--	--	--	--	--	--	--	3.8	
<i>Policy Index¹</i>			3.4	--	6.8	--	14.2	--	7.5	--	8.6	--	9.7	Mar-17
Atalaya Special Opportunities V- Gross	10,127,231	0.1	-0.3	--	0.2	--	5.5	--	8.1	--	--	--	6.0	Jul-13
Atalaya Special Opportunities V- Net			-0.3	--	0.2	--	5.5	--	8.1	--	--	--	6.0	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			3.5	--	6.8	--	15.4	--	11.5	--	16.0	--	14.6	Jul-13
SSgA Real Asset Overlay Proxy- Gross	--	--	3.4	--	6.8	--	7.8	--	2.2	--	1.9	--	1.5	Jan-08
SSgA Real Asset Overlay Proxy- Net			3.4	--	6.7	--	7.6	--	1.9	--	1.7	--	1.3	
<i>SSgA Real Asset¹</i>			3.3	--	6.6	--	7.5	--	1.9	--	1.8	--	--	Jan-08
Cash - Gross	102,469,469	1.1	0.8	--	1.4	--	2.7	--	2.0	--	1.3	--	3.2	Jun-92
Cash - Net			0.8	--	1.4	--	2.7	--	2.0	--	1.3	--	--	
<i>91 Day T-Bills</i>			0.3	--	0.6	--	0.9	--	0.4	--	0.3	--	2.5	Jun-92
Cash Account- Gross	102,469,469	1.1	0.8	--	1.4	--	2.7	--	2.0	--	1.2	--	3.3	Jun-92
Cash Account- Net			0.8	--	1.4	--	2.7	--	2.0	--	1.2	--	--	
<i>91 Day T-Bills</i>			0.3	--	0.6	--	0.9	--	0.4	--	0.3	--	2.5	Jun-92

*** Preliminary quarterly returns as of 12/31/2017 (Returns are not available at reporting period.)

1. See Policy Index and Benchmark History.

Total Fund Manager Allocation Analysis

Period Ending: December 31, 2017



Total Fund
 Manager Allocation Analysis

Period Ending: December 31, 2017

	Current	%
AB	\$1,175,777,314	12.7%
JP Morgan 130/30	\$121,428,108	1.3%
Brown Advisory	\$127,390,008	1.4%
Eagle Capital	\$251,783,616	2.7%
Huber Capital	\$124,510,300	1.3%
UBS	\$73,015,469	0.8%
Weatherbie	\$114,554,457	1.2%
Dalton, Greiner	\$83,709,117	0.9%
WEDGE Capital	\$92,023,157	1.0%
CenterSquare	\$99,673,053	1.1%
Lazard	\$502,111,154	5.4%
Walter Scott & Partners Limited	\$494,661,279	5.3%
LSV	\$546,655,147	5.9%
Mondrian Dev Small Cap	\$114,386,852	1.2%
William Blair Dev Small Cap	\$133,947,797	1.4%
Baring	\$12,635	0.0%
Baillie Gifford Emg All Cap	\$196,468,461	2.1%
Mondrian Emg All Cap	\$160,438,190	1.7%
Mondrian Emg Small Cap	\$28,112,681	0.3%
William Blair Emg Small Cap	\$33,868,876	0.4%
CBRE Clarion	\$92,073,061	1.0%
Abbott VI	\$57,290,963	0.6%
Accel-KKR IV	\$11,604,385	0.1%
Accel-KKR V	\$4,444,752	0.0%
Accel-KKR Growth Partners II	\$5,217,204	0.1%
Atalaya Special Opp VI	\$18,630,645	0.2%
Dyal Capital Partners II	\$8,313,034	0.1%
Dyal Capital Partners III	\$12,746,511	0.1%

Total Fund
 Manager Allocation Analysis

Period Ending: December 31, 2017

	Current	%
Garrison Investment Group	\$13,632,930	0.1%
Harbourvest VIII	\$22,666,269	0.2%
Harbourvest Intl VI	\$35,151,284	0.4%
H.I.G. Bayside Loan III	\$22,329,789	0.2%
H.I.G. Capital V	\$6,769,467	0.1%
H.I.G. Europe Capital II	\$7,081,673	0.1%
Khosla IV	\$16,996,880	0.2%
Khosla V	\$15,893,644	0.2%
Linden Capital	\$31,119,601	0.3%
Marlin Equity IV	\$18,004,145	0.2%
Marlin Heritage	\$8,421,371	0.1%
Marlin Heritage II	\$901,985	0.0%
Marlin Heritage Europe	\$3,025,426	0.0%
New Enterprise 14	\$35,898,240	0.4%
New Enterprise 15	\$32,900,262	0.4%
New Enterprise 16	\$4,078,609	0.0%
Private Equity X	\$36,925,158	0.4%
RRJ Capital Master Fund II	\$19,238,928	0.2%
RRJ Capital Master Fund III	\$14,708,693	0.2%
Spectrum Equity	\$22,040,166	0.2%
Summit Ventures III	\$16,360,235	0.2%
Summit Ventures IV	\$12,409,208	0.1%
Thoma Bravo XI	\$33,433,617	0.4%
Thoma Bravo XII	\$14,388,709	0.2%
TPG Opp Partners III	\$20,741,485	0.2%
Trinity Ventures XI	\$24,359,187	0.3%
Trinity Ventures XII	\$10,415,499	0.1%
TSG7 A LP	\$5,367,408	0.1%

Total Fund
 Manager Allocation Analysis

Period Ending: December 31, 2017

	Current	%
TSG7 B LP	\$293,950	0.0%
Waterland V	\$14,726,372	0.2%
Waterland VI	\$12,391,523	0.1%
Waterland VI Over	\$1,606	0.0%
Wayzata Opportunities III	\$7,277,824	0.1%
Brigade Capital	\$173,182,467	1.9%
Athyrium Opp II	\$17,814,716	0.2%
Athyrium Opp III	\$4,879,924	0.1%
Summit Credit	\$5,775,256	0.1%
Summit Credit II	\$22,533,185	0.2%
Grosvenor	\$194,667	0.0%
Grosvenor SCARF Growth	\$163,919,859	1.8%
Grosvenor SCARF B Growth	\$39,292,478	0.4%
JANA Partners	\$40,987,586	0.4%
Lakewood	\$45,477,958	0.5%
OZ Domestic II	\$46,768,479	0.5%
Third Point Offshore Fund	\$49,301,153	0.5%
Neuberger Berman Fixed	\$355,670,226	3.8%
Prudential	\$439,077,345	4.7%
TCW MetWest Fixed	\$370,349,481	4.0%
Brandywine Global	\$228,195,485	2.5%
AQR DELTA II	\$72,524,364	0.8%
Brevan Howard US	\$33,943,932	0.4%
Claren Road Credit	\$141,746	0.0%
Elliot Associates	\$52,851,200	0.6%
Graham Global Inv II	\$35,303,646	0.4%
Grosvenor SCARF Diversifying	\$102,688,413	1.1%
Grosvenor SCARF B Diversifying	\$31,774,590	0.3%

Total Fund
 Manager Allocation Analysis

Period Ending: December 31, 2017

	Current	%
Laurion Capital	\$43,008,387	0.5%
Winton Diversified Futures	\$37,216,076	0.4%
BlackRock RE Leveraged	\$173,563,533	1.9%
BlackRock RE II Leveraged	\$25,073	0.0%
Cornerstone Leveraged	\$77,429,989	0.8%
Jamestown Premier Property	\$20,178,425	0.2%
Metlife Core Property	\$55,072,419	0.6%
Prime Property	\$55,824,191	0.6%
Principal US Property	\$42,378,231	0.5%
Prologis Targeted Euro Logistics	\$34,075,939	0.4%
Prologis Targeted US Logistics	\$61,341,758	0.7%
Townsend Real Estate	\$100,525,897	1.1%
Transition Account	\$28,084	0.0%
Carlyle China Realty	\$3,453,607	0.0%
Carlyle China Rome Logistics	\$10,252,155	0.1%
CIM Opportunity VIII	\$28,579,444	0.3%
Kohlberg Kravis Roberts	\$36,574,708	0.4%
NREP Nordic Strat FCP-FIS	\$13,370,285	0.1%
NREP Nordic Strat II	\$15,317,188	0.2%
OZ RE III	\$13,606,335	0.1%
AEW II	\$49,301	0.0%
ECE Euro Prime Shopping II	\$9,529,207	0.1%
European RE Debt II	\$11,947,379	0.1%
Hammes II	\$16,587,634	0.2%
Hines US Office II	\$613,724	0.0%
UBS RE	\$15,252,198	0.2%
ACM II	\$6,894,717	0.1%
ArcLight Energy VI	\$30,036,805	0.3%

Total Fund
 Manager Allocation Analysis

Period Ending: December 31, 2017

	Current	%
Atalaya SMA	\$23,146,635	0.3%
Brookfield Infra III	\$13,321,173	0.1%
Carlyle Power II	\$11,325,979	0.1%
EnCap Energy IX	\$24,338,406	0.3%
EnCap Energy X	\$24,901,133	0.3%
EnCap Flatrock Midstream III	\$10,347,686	0.1%
First Reserve	\$15,555,155	0.2%
IFM Global Infrastructure US LP	\$99,896,284	1.1%
Meridiam Infra N America III	\$585,706	0.0%
Pantheon Ventures	\$60,089,790	0.6%
Quantum Energy VI	\$20,803,008	0.2%
Quantum Energy VII	\$6,591,053	0.1%
Wastewater Opportunity	\$4,820,831	0.1%
Gresham	\$27,225,722	0.3%
Atalaya Special Opportunities V	\$10,127,231	0.1%
Cash Account	\$102,469,469	1.1%
Heitman Adv JMB V	\$8,390	0.0%
SSgA Overlay	\$79,433,063	0.9%
SSgA Barclays 1-10 Yrs TIPS Index	\$24,703,276	0.3%
SSgA Real Asset	\$149,003,344	1.6%
SSgA S&P Global Infrastructure Index	\$49,565,701	0.5%
SSgA S&P MLP Index	\$24,791,528	0.3%
Total	\$9,253,230,776	100.0%

Statistics Summary

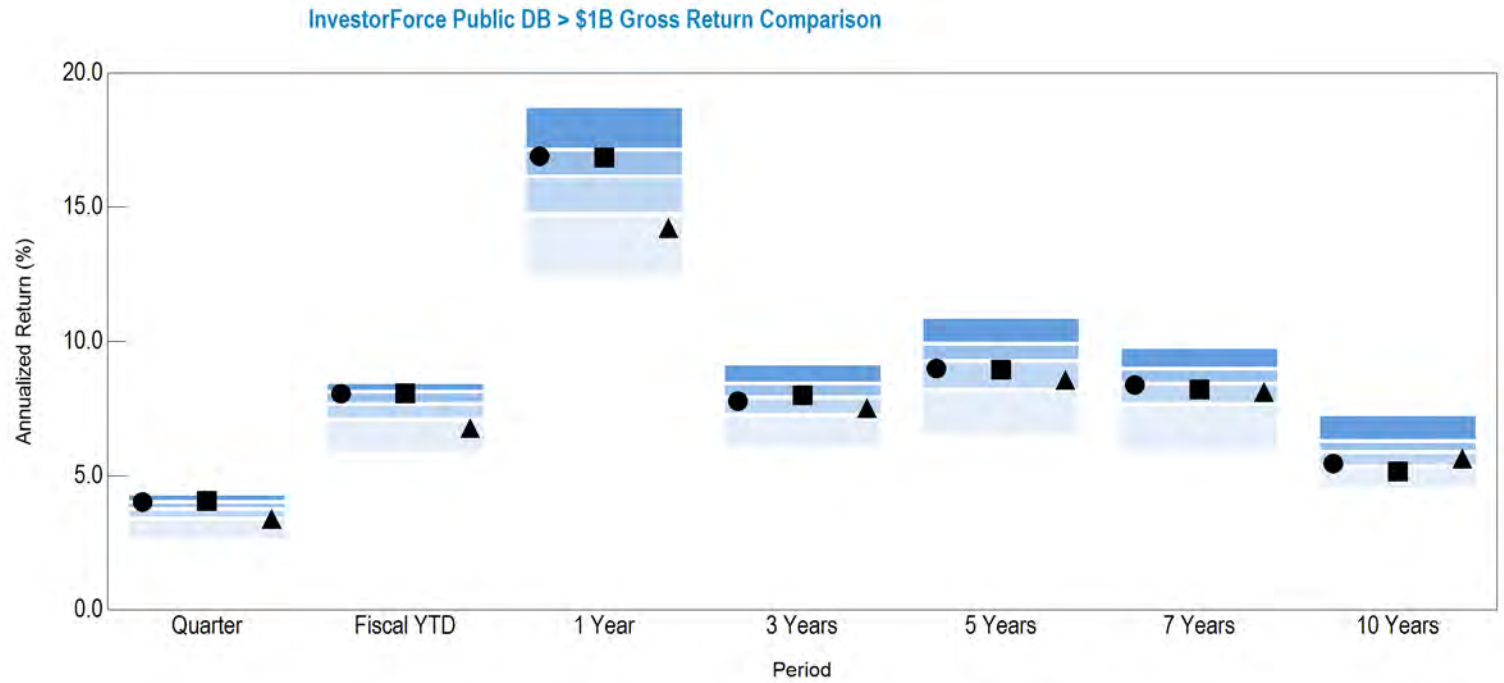
3 Years

	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	7.8%	60	5.7%	44	1.3	47	0.1	64	1.7%	90
Policy Index	7.5%	72	4.9%	14	1.5	21	--	--	0.0%	1
Total Fund ex Overlay	8.0%	46	5.4%	30	1.4	27	0.3	51	1.5%	85
Policy Index	7.5%	72	4.9%	14	1.5	21	--	--	0.0%	1

Statistics Summary

5 Years

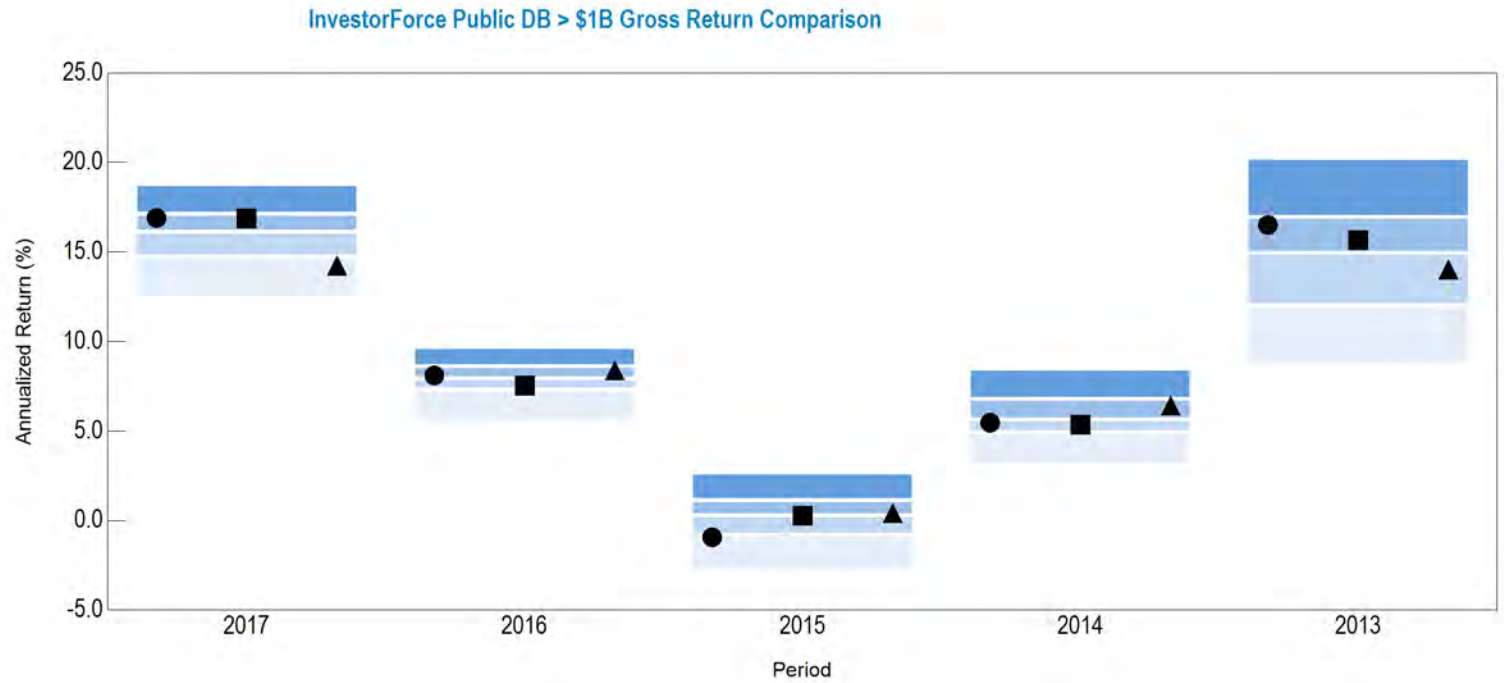
	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Sharpe Ratio	Sharpe Ratio Rank	Information Ratio	Information Ratio Rank	Tracking Error	Tracking Error Rank
Total Fund	9.0%	59	5.7%	47	1.5	45	0.2	70	1.9%	90
Policy Index	8.6%	70	4.7%	9	1.8	18	--	--	0.0%	1
Total Fund ex Overlay	8.9%	63	5.3%	26	1.6	30	0.3	66	1.5%	84
Policy Index	8.6%	70	4.7%	9	1.8	18	--	--	0.0%	1



	Quarter		Fiscal YTD		1 Year		3 Years		5 Years		7 Years		10 Years	
5th Percentile	4.3		8.5		18.8		9.2		10.9		9.8		7.3	
25th Percentile	4.0		8.1		17.2		8.4		9.9		9.0		6.3	
Median	3.8		7.7		16.2		7.9		9.3		8.4		5.9	
75th Percentile	3.4		7.1		14.8		7.3		8.2		7.7		5.4	
95th Percentile	2.6		5.9		12.4		6.0		6.5		5.9		4.5	
# of Portfolios	100		98		98		82		79		70		68	
● Total Fund	4.0	(28)	8.1	(31)	16.9	(32)	7.8	(60)	9.0	(59)	8.4	(56)	5.5	(72)
■ Total Fund ex Overlay	4.1	(22)	8.1	(31)	16.9	(35)	8.0	(46)	8.9	(63)	8.2	(62)	5.1	(82)
▲ Policy Index	3.4	(79)	6.8	(81)	14.2	(82)	7.5	(72)	8.6	(70)	8.1	(66)	5.6	(61)

Total Fund
Peer Universe Comparison (Calendar Years)

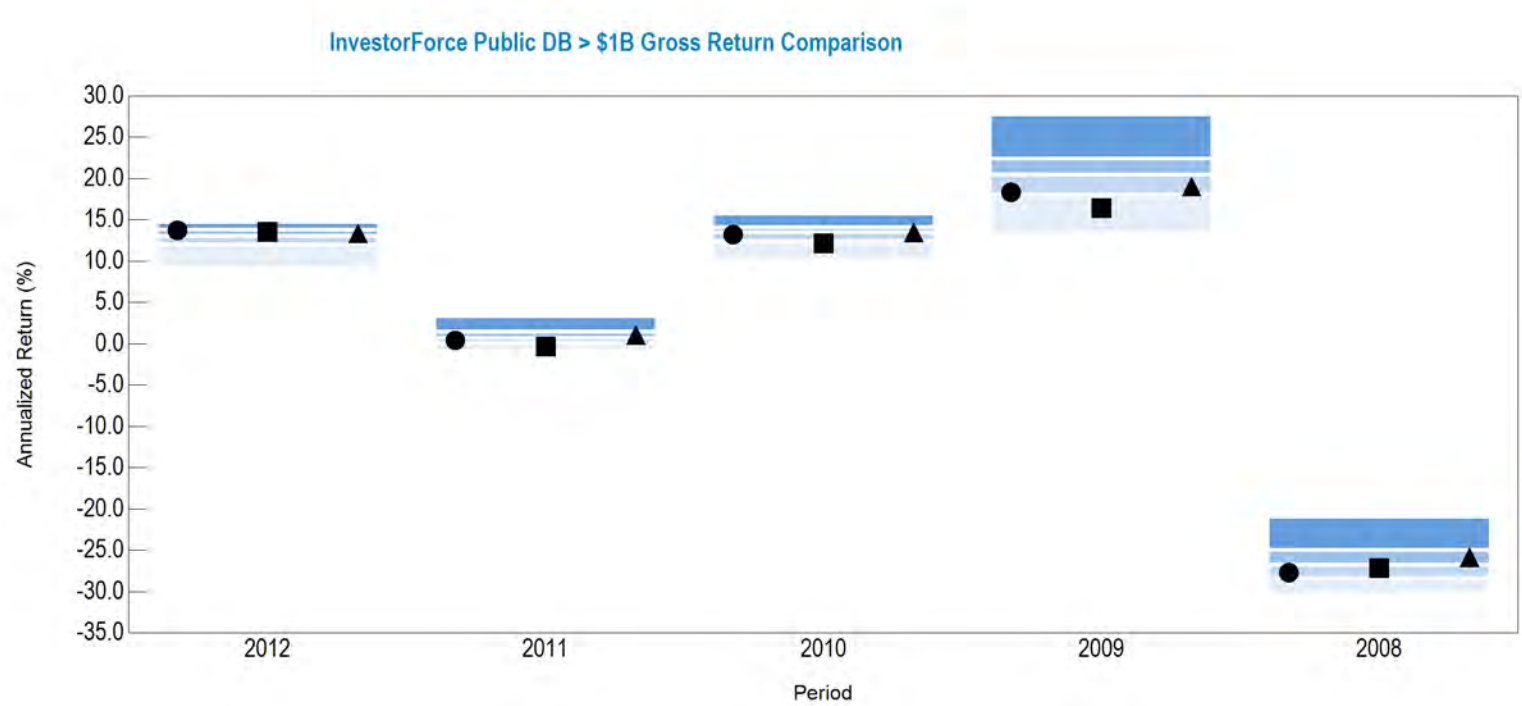
Period Ending: December 31, 2017



	2017		2016		2015		2014		2013	
5th Percentile	18.8		9.7		2.7		8.5		20.2	
25th Percentile	17.2		8.6		1.1		6.8		17.0	
Median	16.2		8.0		0.3		5.7		15.0	
75th Percentile	14.8		7.4		-0.7		4.9		12.0	
95th Percentile	12.4		5.5		-2.8		3.1		8.7	
# of Portfolios	98		92		98		79		67	
● Total Fund	16.9	(32)	8.1	(43)	-0.9	(83)	5.5	(61)	16.5	(31)
■ Total Fund ex Overlay	16.9	(35)	7.5	(69)	0.3	(51)	5.3	(65)	15.6	(43)
▲ Policy Index	14.2	(82)	8.4	(34)	0.4	(46)	6.4	(34)	14.0	(64)

Total Fund
Peer Universe Comparison (Calendar Years)

Period Ending: December 31, 2017



	Return (Rank)				
	2012	2011	2010	2009	2008
5th Percentile	14.7	3.3	15.7	27.7	-21.0
25th Percentile	13.9	1.6	14.2	22.5	-24.9
Median	13.0	0.8	13.5	20.5	-26.7
75th Percentile	12.1	0.1	12.5	18.1	-28.3
95th Percentile	9.2	-0.9	10.2	13.4	-30.2
# of Portfolios	74	68	66	66	65
● Total Fund	13.7 (36)	0.4 (60)	13.2 (62)	18.3 (73)	-27.7 (65)
■ Total Fund ex Overlay	13.6 (41)	-0.3 (86)	12.2 (81)	16.4 (86)	-27.2 (53)
▲ Policy Index	13.4 (42)	1.0 (38)	13.5 (53)	19.0 (62)	-25.8 (42)

Policy Index and Benchmark History

Period Ending: December 31, 2017

Total Plan Policy Index	As of:									
	7/1/17	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%	10.0%	15.0%	20.0%	20.0%	25.0%	25.0%	30.0%		
BBgBarc US Treasury	5.0%	5.0%								
BofA ML High Yield II	1.0%	1.0%	1.0%							
Bloomberg Commodity	2.0%	2.0%			5.0%					
Cambridge Associates Private Energy 1 Qtr Lag	2.5%									
Cambridge Associates Private Infrastructure 1 Qtr Lag	3.2%									
Citigroup BIG										23.0%
Citigroup WGBI ex US Unhedged	2.4%	2.4%	2.4%							
CPI-U +5% (PRA)		7.0%	15.0%	15.0%						
Credit Suisse Leveraged Loans	1.0%	1.0%	1.0%							
Credit Suisse Leveraged Loans +2%	4.0%	4.0%								
JPM GBI EM Diversified	0.6%	0.6%	0.6%							
HFRI FoF Composite Index + 1%	3.0%									
HFRI FoF Conservative Index	7.0%									
MSCI ACWI ex US	20.0%	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%				
NFI-ODCE	4.6%									
NFI-ODCE net +1% 1Q Lag	2.5%									
NCREIF		7.0%			12.0%	12.0%	15.0%	10.0%	15.0%	
NCREIF Farmland 1 Qtr Lag	0.7%									
NCREIF Timberland Index Lagged	0.7%									
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%	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%	9.0%								
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Policy Index and Benchmark History

Period Ending: December 31, 2017

Growth Benchmark	As of:	
	7/1/17	4/1/17
91 Day T-Bill +5%		5.08%
BofA ML High Yield II	1.70%	1.70%
Credit Suisse Leveraged Loans	1.70%	1.70%
Credit Suisse Leveraged Loan + 2%	6.78%	6.78%
HFRI FoF Composite Index + 1%		5.08%
MSCI ACWI ex US	33.90%	33.90%
Russell 3000	35.59%	35.59%
Thomson Reuters C A All PE 1 Qtr Lag	15.25%	15.25%
	100.0%	100.0%

US Equity Benchmark	As of:			
	1/1/08	9/1/04	1/1/00	7/1/86
Russell 1000		85.71%	87.5%	
Russell 2000		14.29%	12.5%	
Russell 3000	100.0%			100.0%
	100.0%	100.0%	100.0%	100.0%

International Equity Benchmark	As of:		
	1/1/08	1/1/00	7/1/86
MSCI ACWI ex US	100.0%		
MSCI EAFE		75.0%	100.0%
MSCI Emerging Markets		25.0%	
	100.0%	100.0%	100.0%

Private Equity Benchmark	As of:		
	4/1/17	1/1/12	1/1/08
Russell 1000 +3% 1QL		100.0%	
S&P 500 +2% 1QL			100.0%
Thomson Reuters C A All PE 1 Qtr Lag	100.0%		
	100.0%	100.0%	100.0%

Public Credit Benchmark	As of:	
	4/1/17	
BofA ML High Yield II		50.0%
Credit Suisse Leveraged Loans		50.0%
	100.0%	

Private Credit Benchmark	As of:	
	4/1/17	
Credit Suisse Leveraged Loan + 2%		100.0%
	100.0%	

Growth Oriented Absolute Return Benchmark	As of:	
	7/1/17	4/1/17
91-day UST Bill +5%		100.0%
HFRI FoF Composite Index + 1%	100.0%	
	100.0%	100.0%

Diversifying Benchmark	As of:	
	7/1/17	4/1/17
91 Day T-Bill +5%		28.0%
BBgBarc US Aggregate	40.0%	40.0%
BBgBarc US TIPS	20.0%	20.0%
Citigroup WGBI ex US Unhedged	9.6%	9.6%
HFRI FoF Conservative Index		28.0%
JPM GBI EM Diversified	2.4%	2.4%
	100.0%	100.0%

Global Fixed Income Benchmark	As of:	
	6/1/13	
Citigroup WGBI ex US Unhedged		80.0%
JPM GBI EM Diversified		20.0%
	100.0%	

Diversifying Absolute Return Benchmark	As of:	
	7/1/17	4/1/17
91-day UST Bill +5%		100.0%
HFRI FoF Conservative Index	100.0%	
	100.0%	100.0%

Real Return Benchmark	As of:	
	4/1/17	
NCREIF Property		43.75%
CPI-U Headline +5%		43.75%
Bloomberg Commodity		12.50%
	100.0%	

RE-Value Added Benchmark	As of:	
	7/1/16	10/1/08
NCREIF +2% 1Q Lag		100.0%
NFI-ODCE net +1% 1Q Lag	100.0%	
	100.0%	100.0%

Private Real Assets Benchmark	As of:	
	7/1/17	4/1/17
CPI-U Headline +5%		100.0%
Cambridge Associates Private Energy 1 Qtr Lag	35.0%	
Cambridge Associates Private Infrastructure 1 Qtr Lag	45.0%	
NCREIF Farmland 1 Qtr Lag	10.0%	
NCREIF Timberland Index Lagged	10.0%	
	100.0%	100.0%

Policy Index and Benchmark History

Period Ending: December 31, 2017

AllianceBernstein Benchmark	As of:		
	1/1/01	1/1/98	5/1/89
Russell 1000	100.0%		
Russell 3000		100.0%	
Wilshire 2500			100.0%
	100.0%	100.0%	100.0%

Brandywine Benchmark	As of:	
	6/1/13	
Citigroup WGBI ex US Unhedged	80.0%	
JPM GBI EM Diversified	20.0%	
	100.0%	

Brigade Benchmark	As of:	
	12/1/13	
BofA ML High Yield II	50.0%	
Credit Suisse Leveraged Loans	50.0%	
	100.0%	

SSgA Real Asset Benchmark	As of:	
	10/1/15	2/1/08
BBgBarc US Govt Inflation-Linked 1-10 Yrs	10.0%	
BBgBarc US TIPS	10.0%	20.0%
BBgBarc Roll Select Commodity TR	20.0%	
DJ US Select REIT		30.0%
FTSE EPRA/NAREIT Developed Liquid	10.0%	
MSCI World Natural Resources	20.0%	25.0%
S&P Global Infrastructure	20.0%	
S&P GS Commodities		25.0%
S&P MLP	10.0%	
	100.0%	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: $\text{Portfolio Return} - [\text{Risk-free Rate} + \text{Portfolio Beta} \times (\text{Market Return} - \text{Risk-free Rate})]$.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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