



Board of Retirement Regular Meeting

Sacramento County Employees' Retirement System

Agenda Item 14

MEETING DATE: May 15, 2019

SUBJECT: Quarterly Investment Performance Report—
First Quarter 2019

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 March 31, 2019.

PURPOSE

This agenda item does not specifically support the 2018-19 Strategic Management Plan, but complies with SCERS' investment policy statement reporting requirements and contributes to the effective management and oversight of investment activities.

SCERS TOTAL FUND RETURNS

This item summarizes SCERS' Total Fund investment returns as presented in Verus' Investment Performance Review for the period ending March 31, 2019. Please note that returns for SCERS' private equity, private credit, non-core real estate, and real assets portfolios are lagged one quarter.

Verus' report has been reformatted to reflect SCERS' 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 the current quarter, YTD, 1-Year, and since inception March 2017 performance for this report, without a historical track record (3-Year and 5-Year).

SCERS TOTAL FUND PERFORMANCE SUMMARY
Quarter Reporting Periods Ending March 31, 2019

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	7.0%	3.7%	5.0%	9.8%	6.5%	8.3%	Jun-86
Policy Index	6.1%	3.1%	4.0%	8.3%	6.2%	8.5%	
InvestorForce Public DB > \$1B	7.6%	2.5%	3.4%	8.5%	6.1%	8.1%	
SCERS TOTAL FUND Return w/o Overlay	6.5%	3.6%	4.9%	9.6%	6.7%	8.2%	Jun-86
Policy Index	6.1%	3.1%	4.0%	8.3%	6.2%	8.5%	
GROWTH ASSET CATEGORY	9.9%	4.0%	5.7%			10.9%	Mar-17
Custom Benchmark	9.0%	3.0%	4.2%			9.0%	
DIVERSIFYING ASSET CATEGORY	2.5%	2.6%	1.8%			2.5%	Mar-17
Custom Benchmark	2.7%	3.1%	2.8%			2.9%	
REAL RETURN ASSET CATEGORY	2.7%	3.0%	5.9%			9.2%	Mar-17
Custom Benchmark	1.1%	2.8%	4.5%			6.5%	
OPPORTUNITIES PORTFOLIO	2.0%	6.1%	5.2%	5.3%	6.5%	15.5%	Oct-07
Custom Benchmark	6.1%	3.1%	4.0%	8.3%	6.2%	7.7%	

The SCERS portfolio returned +7.0% in the first quarter, outperforming the +6.1% policy index benchmark for the quarter, and underperforming the median public fund return of +7.6%.

Growth Asset Category

During the quarter, growth assets increased significantly with SCERS' Public Equity portfolio outperforming the MSCI ACWI benchmark, +9.9% vs. +9.0%. U.S. small capitalization stocks led the Growth portfolio, with SCERS' small cap portfolio advancing +22.2% versus the Russell 2000 index up +14.6% for the first quarter. Private Equity, where results are lagged by one quarter, continued to show strong returns for the fiscal year to date and one-year periods.

SCERS GROWTH Performance Summary for the periods ending 3/31/19	Quarter	Fiscal Year-to-Date	1-Year	Since Inception	Since Inception Date
SCERS GROWTH ASSET CATEGORY	9.9%	4.0%	5.7%	10.9%	Mar-17
Custom Benchmark	9.0%	3.0%	4.2%	9.0%	
Public Equity	12.8%	2.2%	3.2%	8.8%	Jun-11
MSCI ACWI	12.2%	2.1%	2.6%	7.4%	
Private Equity (lagged 1 quarter)	2.8%	17.5%	23.2%	2.9%	Feb-08
Cambridge All PE	-1.3%	7.7%	10.7%	10.1%	
Public Credit	4.2%	0.6%	2.1%	4.1%	Nov-13
Custom Benchmark	5.6%	3.7%	4.6%	4.5%	
Private Credit (lagged 1 quarter)	-1.0%	2.5%	4.4%	6.8%	Mar-17
Credit Suisse Leveraged Loan + 2%	4.2%	4.1%	5.3%	6.9%	
Growth Absolute Return	6.3%	-2.2%	-0.1%	4.7%	Aug-04
HFRI FoF Composite +1%	4.9%	0.4%	1.2%	6.0%	

Diversifying Asset Category

The Diversifying Asset Category generated positive returns in the first quarter, as the Federal Reserve and other Central Banks shifted to a more dovish stance on monetary policy during the quarter. The Diversifying Asset Category returned +2.5% for the quarter and +1.8% for the year, slightly underperforming the custom benchmark. Core/Core Plus Fixed Income and Global Fixed Income led returns during the quarter, while the Diversifying Absolute Return asset class underperformed.

SCERS DIVERSIFYING Performance Summary for the periods ending 3/31/19	Quarter	Fiscal Year-to-Date	1-Year	Since Inception	Since Inception Date
SCERS DIVERSIFYING ASSET CATEGORY	2.5%	2.6%	1.8%	2.5%	Mar-17
Custom Benchmark	2.7%	3.1%	2.8%	2.9%	
Core/Core Plus Fixed Income	3.5%	5.0%	5.1%	3.2%	Jun-11
Barclays US Aggregate TR	2.9%	4.6%	4.5%	2.9%	
U.S. Treasury	2.1%	4.1%	4.2%	4.8%	Feb-18
Barclays US Treasury TR	2.1%	4.1%	4.2%	4.8%	
Global Fixed Income	3.3%	1.3%	-5.3%	2.1%	May-13
Custom Benchmark	2.0%	2.2%	-2.7%	0.7%	
Diversifying Absolute Return	1.0%	-1.5%	-1.7%	1.8%	Nov-11
HFRI FoF Conservative Index	3.2%	0.6%	1.7%	4.6%	

(Remainder of page intentionally left blank)

Real Return Asset Category

SCERS' Real Return portfolio was positive in the quarter, returning +2.7% including the Real Return Overlay Proxy, outperforming the asset class benchmark return of +1.1%. All segments of the portfolio contributed positively to performance in the quarter, despite the returns for Non-Core Real Estate and Real Assets being lagged by one quarter. The Real Return Proxy benefited from rising global equities and commodities markets, offsetting declines in the fourth quarter of 2018.

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	2.7%	3.0%	5.9%	9.2%	Mar-17
SCERS Real Return w/o SSgA Proxy	2.3%	3.5%	6.5%	10.7%	Mar-17
Custom Benchmark	1.1%	2.8%	4.5%	6.5%	Mar-17
SCERS Real Estate	2.0%	1.1%	4.7%	11.4%	Jun-11
Custom Benchmark	2.2%	5.6%	7.8%	10.1%	
Core Real Estate (as of 3/31/19)					
Separate Account	13.0%	11.9%	18.4%	7.2%	Sep-08
Commingled Funds	1.6%	5.7%	8.0%	5.0%	Sep-08
NFI-ODCE	1.4%	5.4%	7.5%	5.6%	
Non-Core Real Estate (as of 12/31/18)					
Opportunistic	2.2%	-13.5%	-9.9%	23.0%	Feb-14
Value Add	-0.7%	1.1%	2.6%	-2.9%	Sep-08
NFI-ODCE net +1%	3.6%	6.0%	8.4%	10.9%	Feb-14
				8.0%	Sep-08
SCERS Real Assets (as of 12/31/18)	2.6%	9.6%	11.2%	5.6%	Jan-13
Custom Benchmark	-1.5%	2.4%	4.0%	6.4%	
SCERS Commodities (as of 3/31/19)	7.6%	-6.3%	-4.2%	-6.2%	May-08
Bloomberg Commodity Index	6.3%	-5.6%	-5.3%	-8.1%	
SSgA Real Return Proxy (as of 3/31/19)	8.4%	3.1%	5.4%	1.5%	Jan-08
SSgA Real Assets	8.3%	2.9%	5.1%	N/A	

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.

SCERS BENCHMARK SUMMARY As of March 31, 2019	
Asset Class	Policy Index Benchmark
Growth Asset Category	Blended Weighted Average of Asset Class Benchmarks
US Equities	Russell 3000
International Equities	MSCI ACWI ex.-U.S. IMI
Private Equity	Cambridge All PE
Public Credit	50% (BofA High Yield) + 50% (CS High Yield)
Private Credit	CS Leveraged Loan + 2%
Growth Absolute Return	HFRI FoF Composite Index +1%
Diversifying Asset Category	Blended Weighted Average of Asset Class Benchmarks
Core/Core Plus Fixed Income	Barclays U.S. Aggregate
U.S. Treasury	Barclays U.S. Treasury
Global Fixed Income	80% Citi WGBI + 20% JPMorgan GBI EM
Diversifying Absolute Return	HFRI FoF Conservative Index
Real Return Asset Category	Blended Weighted Average of Asset Class Benchmarks
Real Estate	65% (NFI-ODCE) + 35% (NFI-ODCE +1%)
Real Assets	45% (Cambridge Infrastructure) + 35% (Cambridge Energy) + 10% (NCREIF Agriculture) + 10% (NCREIF Timber)
Commodities	Bloomberg Commodity Index
SSgA Real Assets Proxy	30% (Barclays U.S. TIPS) + 25% (S&P Global Infrastructure Index) + 15% (Global REITs) + 10% (S&P Global Natural Resources Index) + 10% (Bloomberg Commodity Index) + 10% (U.S. Dollar Floating Rate Notes)
Opportunities Portfolio	SCERS Total Fund

ATTACHMENT

Verus' Investment Performance Review for SCERS for the period ending March 31, 2019.

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: MARCH 31, 2019

Investment Performance Review for

Sacramento County Employees' Retirement System

Table of Contents



[VERUSINVESTMENTS.COM](https://www.verusinvestments.com)

SEATTLE 206-622-3700

LOS ANGELES 310-297-1777

SAN FRANCISCO 415-362-3484

Market Environment

TAB I

Total Fund

TAB II

Policy Index and
Benchmark History

TAB III

1st quarter summary

THE ECONOMIC CLIMATE

- Real GDP growth continued at 3.0% YoY - on pace with the third quarter (2.2% quarterly annualized rate). Forecasts for 2019 U.S. growth have weakened. The U.S. economy is expected to grow at a 2.4% pace in 2019, according to the Survey of Professional Forecasters, while the Federal Reserve expects 2.1% growth this year.
- In March, negotiations resumed between U.S. and Chinese trade delegations. The dialogue was viewed as constructive, and optimism picked up for a trade resolution being reached in the near-to-intermediate future. The two sides have yet to agree on a formal timeline.

PORTFOLIO IMPACTS

- The Federal Open Market Committee reiterated its “patient” approach to policy, leaving rates unchanged, helping to push asset prices upward. Chairman Powell announced that starting in May the balance sheet runoff would slow from \$50 to \$30 billion a month, and would end in September.
- Risk assets exhibited strong performance over the quarter. U.S. equities delivered the greatest gains (S&P 500 +13.6%, MSCI ACWI +12.2%), reversing U.S. underperformance in Q4 2018 (S&P 500 -13.5%, MSCI ACWI -12.8%). This was followed by riskier credit with high single-digit returns, and safer credit and government bonds with low single-digit returns.

THE INVESTMENT CLIMATE

- The first quarter was nearly a mirror image of 2018 Q4, as many assets retraced losses of the prior quarter.
- Declining long-term Treasury yields following the Fed meeting in March briefly caused the yield curve to invert, meaning that short-term yields (3-month) were higher than long-term yields (10-year). Investors have expressed concerns that this may signal a near term recession. We believe these concerns are overblown.
- The House of Commons in the British Parliament briefly took control of their government’s legislative agenda, but failed to reach a majority vote on a path forward. On April 10th, British Prime Minister Theresa May and the European Council agreed to extend the Brexit deadline from April 12th to October 31st.

ASSET ALLOCATION ISSUES

- All major asset classes delivered positive performance in Q1, a refreshing change of pace from broad-based losses experienced in 2018.
- Economic conditions around the world have exhibited a weakening trend, leading to the question of whether a turn in the economic cycle is near. The first quarter was more mixed with strength in places, easing some concern. We remain watchful of this weakening trend, but believe the economy and market may have more room to run.

A neutral risk stance may be appropriate in today’s environment

U.S. economics summary

- Real GDP growth continued at 3.0% YoY, on pace with the third quarter (2.2% on a quarterly annualized rate).
- Forecasts for 2019 U.S. growth have weakened. The U.S. economy is expected to grow at a 2.4% pace in 2019, according to the Survey of Professional Forecasters, while the Federal Reserve expects 2.1% growth this year.
- In March, negotiations resumed between U.S. and Chinese trade delegations. The dialogue was viewed as constructive, and optimism picked up for a formal trade resolution being reached in the near future.
- U.S. inflation remained near the 2.0% Fed target. After dipping to 1.5% YoY in February, headline inflation recovered to 1.9% in March, resulting in no change over the quarter.
- Average hourly earnings grew 3.2% YoY in March, missing expectations of 3.3%. A slight tick up in the average non-farm private workweek from 34.4 to 34.5 hours likely contributed to the cooler wage data.
- The labor market remained strong in Q1. U-3 unemployment fell to 3.8% from 3.9% in December, though the labor force participation rate weakened from 63.1% to 63.0% during the period.
- The Federal Open Market Committee reiterated its “patient” approach to policy, leaving rates unchanged. Expectations for 2019 GDP growth and rate hikes were cut, and markets rallied. Chairman Powell announced that starting in May the balance sheet runoff would slow from \$50 billion per month to \$30 billion, and would end in September.

	Most Recent	12 Months Prior
GDP (YoY)	3.0% <i>12/31/18</i>	2.5% <i>12/31/17</i>
Inflation (CPI YoY, Core)	2.0% <i>3/31/19</i>	2.1% <i>3/31/18</i>
Expected Inflation (5yr-5yr forward)	2.0% <i>3/31/19</i>	2.2% <i>3/31/18</i>
Fed Funds Target Range	2.25 – 2.50% <i>3/31/19</i>	1.50 – 1.75% <i>3/31/18</i>
10 Year Rate	2.4% <i>3/31/19</i>	2.7% <i>3/31/18</i>
U-3 Unemployment	3.8% <i>3/31/19</i>	4.0% <i>3/31/18</i>
U-6 Unemployment	7.3% <i>3/31/19</i>	7.9% <i>3/31/18</i>

International economics summary

- Global growth expectations for the next two years were revised materially lower in Q1. The OECD’s global GDP growth forecast for 2019 and 2020 fell from 3.5% to 3.3%, and from 3.5% to 3.4%, respectively.
- In March, negotiations resumed between high-level U.S. and Chinese trade delegations. The dialogue was viewed as constructive, and optimism picked up for some sort of formal trade resolution being reached in the near-to-intermediate future, although the two sides have yet to agree on a formal timeline.
- The German Manufacturing PMI fell from 47.6 to 44.1 in March, falling further into the contractionary territory below 50. New orders and export sales data came in weaker than expected which contributed to a more pessimistic outlook for German manufacturing activity.
- The House of Commons in the British Parliament briefly took control of their government’s legislative agenda, but failed to reach a majority vote on a path forward. On April 10th, British Prime Minister Theresa May and the European Council agreed to extend the Brexit deadline from April 12th to October 31st.
- The spread between the JP Morgan Global Services and Manufacturing PMIs rose to 3.1 in March. Last March, the spread was at 0.0, indicating that over the past year the outlook for global manufacturing activity has weakened relative to the outlook for global services activity. Typically, services activity is more resilient to a worsening economic backdrop.

Area	GDP (Real, YoY)	Inflation (CPI, YoY)	Unemployment
United States	3.0% <i>12/31/18</i>	1.5% <i>2/28/19</i>	3.8% <i>3/31/19</i>
Eurozone	1.1% <i>12/31/18</i>	1.4% <i>3/31/19</i>	7.8% <i>2/28/19</i>
Japan	0.3% <i>12/31/18</i>	0.2% <i>2/28/19</i>	2.3% <i>2/28/19</i>
BRICS Nations	5.8% <i>12/31/18</i>	2.4% <i>3/31/19</i>	5.3% <i>12/31/18</i>
Brazil	1.1% <i>12/31/18</i>	3.9% <i>2/28/19</i>	12.2% <i>3/31/19</i>
Russia	2.7% <i>12/31/18</i>	5.3% <i>3/31/19</i>	4.9% <i>2/28/19</i>
India	7.2% <i>12/31/18</i>	2.6% <i>2/28/19</i>	8.5% <i>12/31/17</i>
China	6.4% <i>12/31/18</i>	1.5% <i>2/28/19</i>	3.8% <i>12/31/18</i>

Equity environment

- U.S. equities experienced a 13.6% total return (S&P 500 Index) in Q1, nearly a mirror image of Q4 2018. The first quarter has indeed been one of the strongest quarters recently, but was simply a bounce back in lost performance from the prior quarter. At the end of March, the S&P 500 price index was just 3.2% below its high watermark that was reached in September.
- Currency movement had little impact on unhedged international equity over the quarter, though currencies on a 1-year basis have had a substantially negative effect. An unhedged investment in international developed equities (MSCI EAFE) lost 8.9% of portfolio value due to currency movement.
- First quarter earnings growth for S&P 500 companies is expected to be negative for the first time since Q2 2016. If corporate earnings

expectations continue to be downgraded, this will likely hold back markets around the world. The greatest determinant of medium and long-term equity performance is typically the underlying trend of corporate earnings.

- The risk-on quarter drove small cap equities forward. The Russell 2000 Index posted a 14.6% return, compared to the 13.8% return of the Russell 1000 Index.
- Value equities underperformed growth equities over the quarter (Russell 1000 Value +11.7%, Russell 1000 Growth +16.0%). Performance over the quarter reversed value's gains from Q4 2018.
- After spiking in the fourth quarter, U.S. equity volatility returned to muted levels.

	QTD TOTAL RETURN		1 YEAR TOTAL RETURN	
	(unhedged)	(hedged)	(unhedged)	(hedged)
US Large Cap (Russell 1000)	13.8%		8.7%	
US Small Cap (Russell 2000)	14.6%		2.1%	
US Large Value (Russell 1000 Value)	11.7%		4.9%	
US Large Growth (Russell 1000 Growth)	16.0%		12.3%	
International Large (MSCI EAFE)	10.0%	11.3%	(3.7%)	5.2%
Eurozone (Euro Stoxx 50)	10.6%	12.9%	(6.3%)	5.8%
U.K. (FTSE 100)	9.5%	10.1%	(0.2%)	9.6%
Japan (NIKKEI 225)	6.8%	7.6%	(3.4%)	2.9%
Emerging Markets (MSCI Emerging Markets)	9.9%	9.8%	(7.4%)	(2.1%)

Source: Russell Investments, MSCI, STOXX, FTSE, Nikkei, as of 3/31/19

Domestic equity

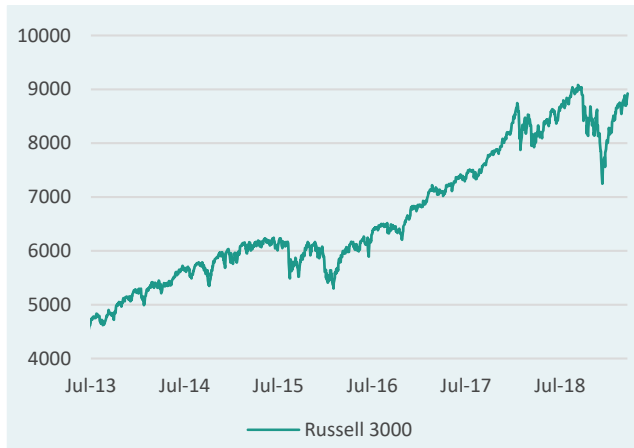
U.S. equities experienced a 13.6% total return (S&P 500 Index) in the first quarter, rebounding from the sharp sell-off in the prior quarter. At the end of March, the S&P 500 price index was just 3.2% below its high watermark that was reached in September. The bounce back in equity prices was driven by better than expected/feared Q1 corporate earnings, improving sentiment toward a U.S.-China trade deal, and the Fed's pivot to a more patient approach to monetary policy. The fall and subsequent rise in equities was primarily reflected in valuation changes. After dropping to a low of 13.6 in December, the forward 12-month P/E ratio on the S&P 500 finished the

quarter at 16.7, essentially unchanged over the past six months.

Now 10 years removed from the bottom of the financial crisis, it is worth noting that U.S. equities have experienced one of their best decades of performance ever. The S&P 500 had a compound price return of 14.2% per year, and over 75% of this was due to profit margin and valuation expansion. With both of these measures at above average levels, we do not think that it is reasonable to expect this level of performance to continue moving forward.

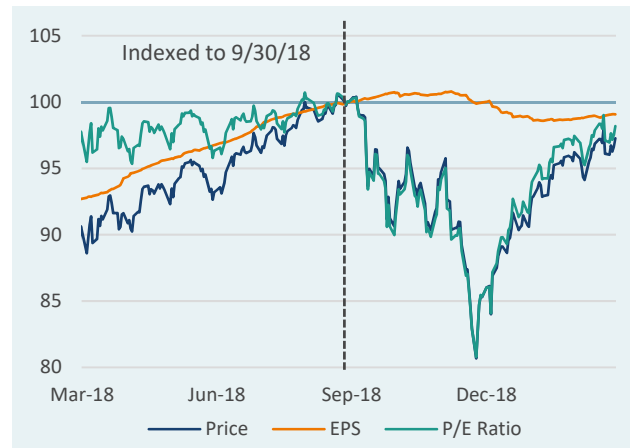
We maintain a neutral view on U.S. equities

U.S. EQUITIES



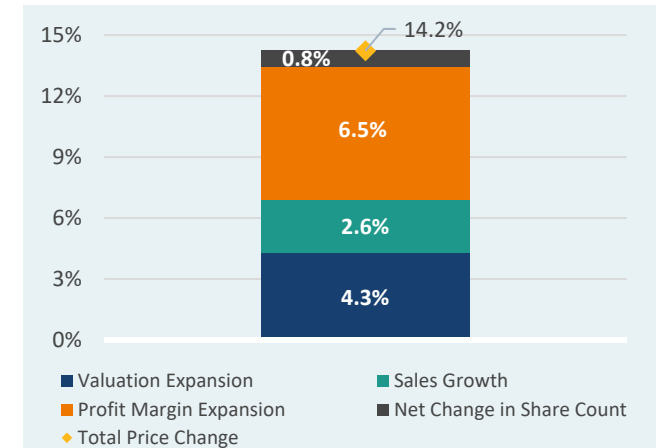
Source: Russell Investments, as of 3/31/19

S&P 500 PRICE MOVEMENT ATTRIBUTION



Source: Bloomberg, as of 3/31/19

S&P 500 10-YR PRICE RETURN ATTRIBUTION



Source: Verus, Bloomberg, as of 3/31/19

Domestic equity size & style

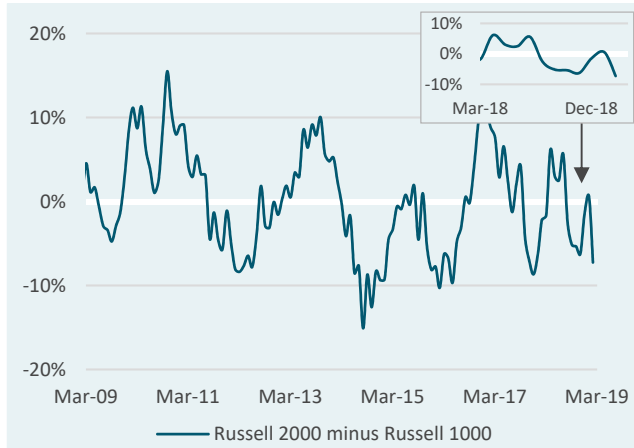
Small cap equities (Russell 2000 +14.6%) slightly outperformed large cap equities (Russell 1000 +14.0%) during the quarter. Meanwhile, growth stocks outperformed value stocks by a wide margin (Russell 1000 Growth +16.1% vs. Russell 1000 Value +11.9%).

The impact of sector performance on the value premium was more nuanced in Q1, as Materials (+10.3%) and Financials (+8.6%) underperformed the overall index (S&P 500 +13.6%), but Energy (+16.4%) outperformed. Information Technology,

the top performing sector, continued to deliver outsized returns (+19.9%).

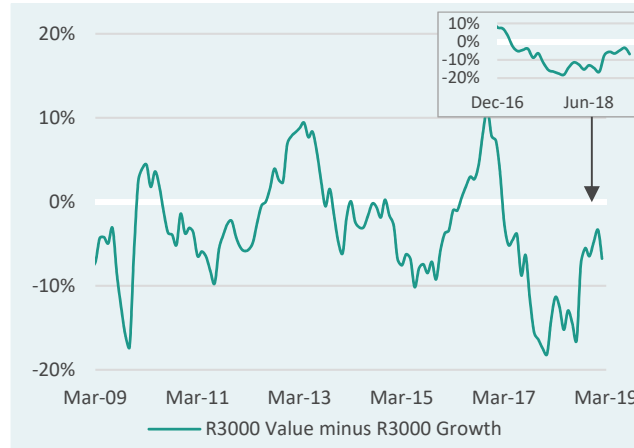
Both the small cap premium and value premium have struggled to deliver positive risk premiums over the past 10 years. It can be difficult to endure longer periods of factor underperformance, but similar to the equity premium in general, these periods do exist and investors should expect this on occasion.

SMALL CAP VS LARGE CAP (YOY)



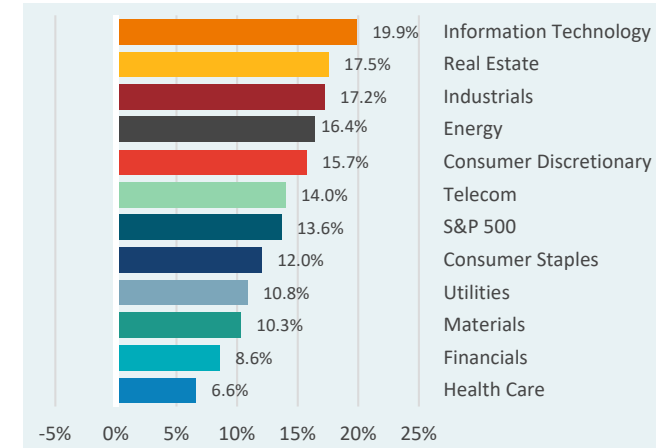
Source: FTSE, as of 3/31/19

VALUE VS GROWTH (YOY)



Source: FTSE, as of 3/31/19

Q1 S&P 500 SECTOR RETURNS



Source: Morningstar, as of 3/31/19

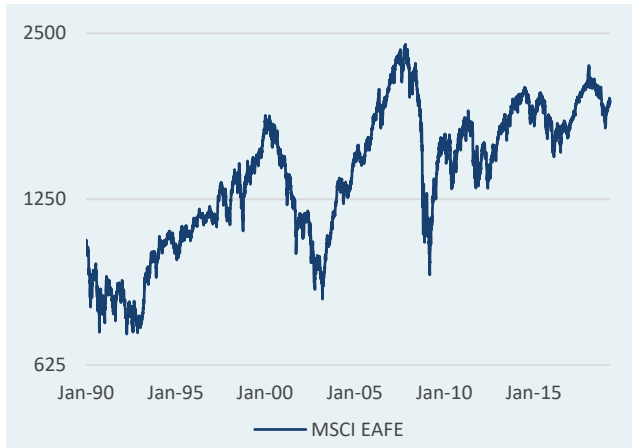
International developed equity

Like U.S. equities, international developed equities erased most of the losses they suffered in the prior quarter. After posting a return of -12.5% in Q4, the MSCI EAFE Index returned +10.2% in Q1. Currency losses were a mild detractor from unhedged U.S. dollar performance. On a currency hedged basis, EAFE equities returned 11.3%. From a country perspective, Swiss, French and UK equities outperformed, while Japanese and German equities lagged the overall index. While most markets are back near record highs, German equities (MSCI Germany) finished the quarter 17% below the previous high watermark. Underperformance in German equities has likely been influenced by a greater

sensitivity to global growth and trade as well as concerns over a slowing domestic economy.

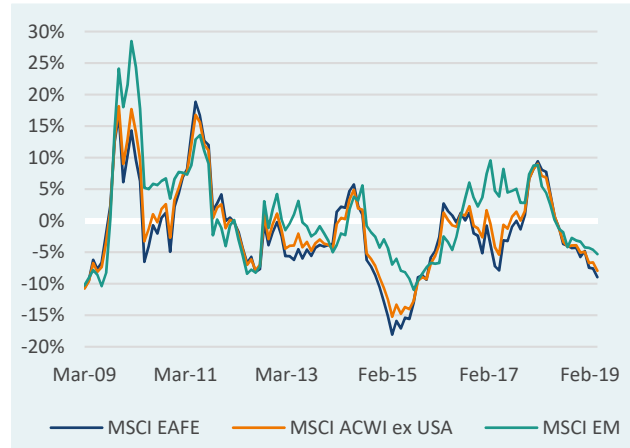
International developed equity markets are still cheap on both an absolute and relative basis at 13.3x forward earnings, but we believe there are good reasons for this pricing in certain markets. Within equity allocations, we are pessimistic on EAFE equities primarily due to a negative view on the Eurozone. We believe slowing economic growth, rising political risks, and the lacking ability of the ECB to meaningfully ease policy presents material headwinds to equity performance.

INTERNATIONAL DEVELOPED EQUITIES



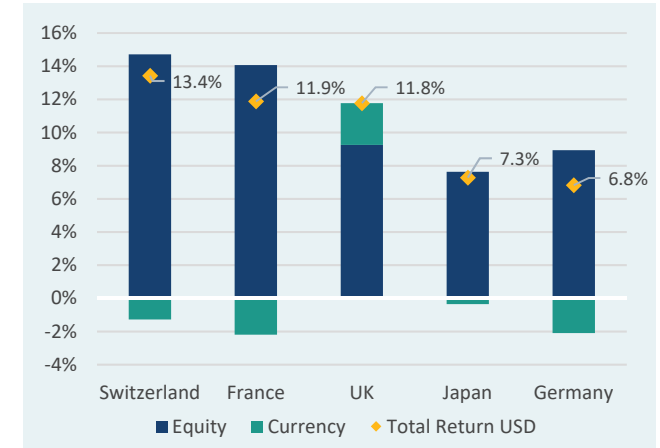
Source: MSCI, as of 3/31/19

EFFECT OF CURRENCY (1-YEAR ROLLING)



Source: MSCI, as of 3/31/19

Q1 COUNTRY PERFORMANCE



Source: MSCI, largest five country exposures shown above

Emerging market equity

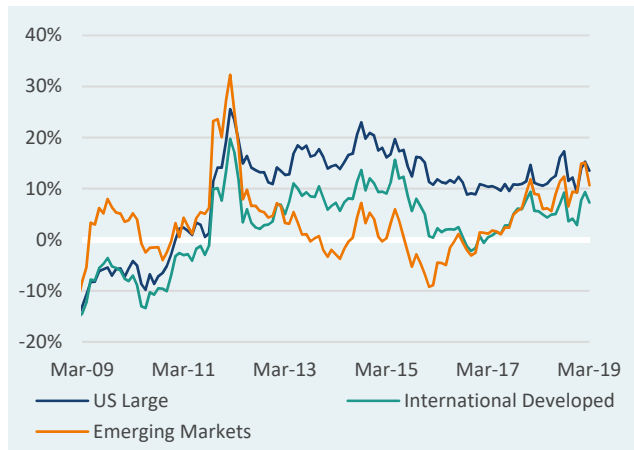
Emerging market equity performance was in-line with international developed markets in the first quarter, while U.S. equities outperformed. Currencies in these markets continued to show stability (MSCI EM +9.9%, MSCI EM Hedged +9.8%). Business sentiment across emerging market economies indicates expanding conditions, and fears of a sharp China slowdown have subsided. Moderating conditions may bolster emerging market returns throughout the year.

Equity multiples rebounded in the first quarter and are near

the long-term average. The divide between domestic and emerging equities remains wide.

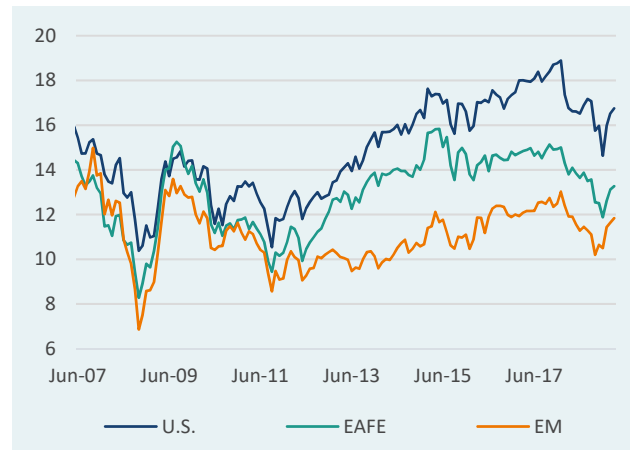
Decelerating global growth and rising probability of recession do present unique risks to emerging markets, as these markets typically exhibit a higher beta during market downside and upside moves. However, emerging markets can also deliver robust performance in times of moderate growth and easy monetary policy when investors seek growth and higher yields.

EQUITY PERFORMANCE (3-YR ROLLING)



Source: Standard & Poor's, MSCI, as of 3/31/19

FORWARD P/E



Source: MSCI, as of 3/31/19

PURCHASING MANAGERS' INDEX (PMI)

	18-Dec	19-Jan	19-Feb	19-Mar
Manufacturing				
Global	51.4	50.8	50.6	50.6
Developed	52.3	51.8	50.4	50.0
US	54.3	56.6	54.2	55.3
EM	50.3	49.5	50.6	51.0
Services				
Global	53.0	52.6	53.3	53.7
Developed	52.8	52.5	53.7	53.7
US	58.0	56.7	59.7	56.1
EM	53.6	52.9	52.1	53.6

Source: Markit, Institute for Supply Management (ISM)

Interest rate environment

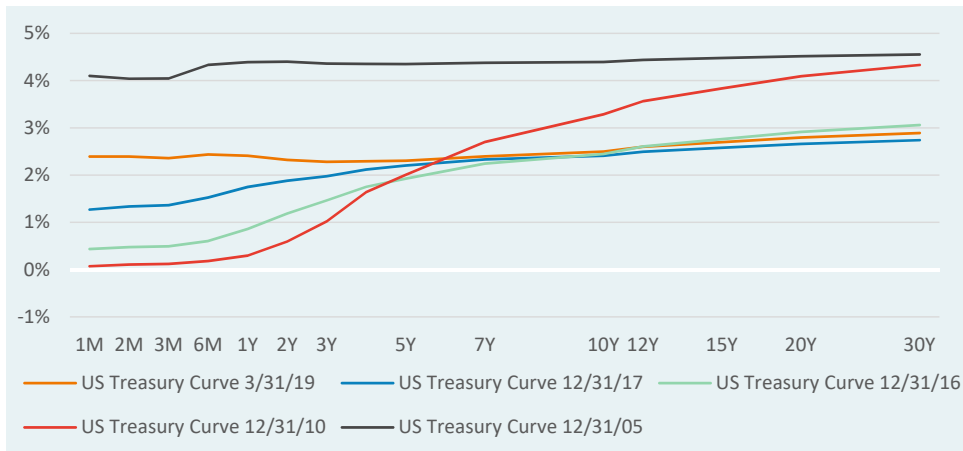
- The Federal Reserve held the fed funds rate unchanged over the quarter, and communicated a much more dovish stance on monetary policy amid slower growth expectations and stable inflation near 2%.
- Fed officials lowered their collective expectations for rate hikes in 2019 from two to zero, and announced that the balance sheet unwind would conclude in September, much earlier than previously anticipated.
- More dovish expectations for monetary policy and concerns over economic growth likely helped push long-term Treasury yields lower. The 10-year yield fell 28 bps to just above 2.4%.
- Falling long-term yields and stable short-term yields led to a brief inversion of the Treasury curve between the 10-year and 3-month yields.
- While widely considered a bearish signal for the economy and risk markets, the timing between curve inversion and bearish economic and market environments has varied widely. Additionally, Fed asset purchases of long-term Treasuries has artificially lowered yields and muddied the information conveyed by the yield curve.
- The ECB also pivoted to a more dovish stance as officials announced that deposit rates will be on hold through at least the end of the year.
- The 10-year German bund yield dipped back into negative territory for the first time since late 2016.
- Emerging market local bonds offer attractive yields relative to developed markets, even after adjusting for inflation. The JPM GBI-EM Index yielded 7% at the end of March.

Area	Short Term (3M)	10-Year
United States	2.39%	2.41%
Germany	(0.53%)	(0.07%)
France	(0.54%)	0.32%
Spain	(0.40%)	1.10%
Italy	(0.20%)	2.49%
Greece	0.87%	3.73%
U.K.	0.80%	1.00%
Japan	(0.17%)	0.08%
Australia	1.68%	1.77%
China	2.08%	3.07%
Brazil	6.31%	8.97%
Russia	7.35%	8.41%

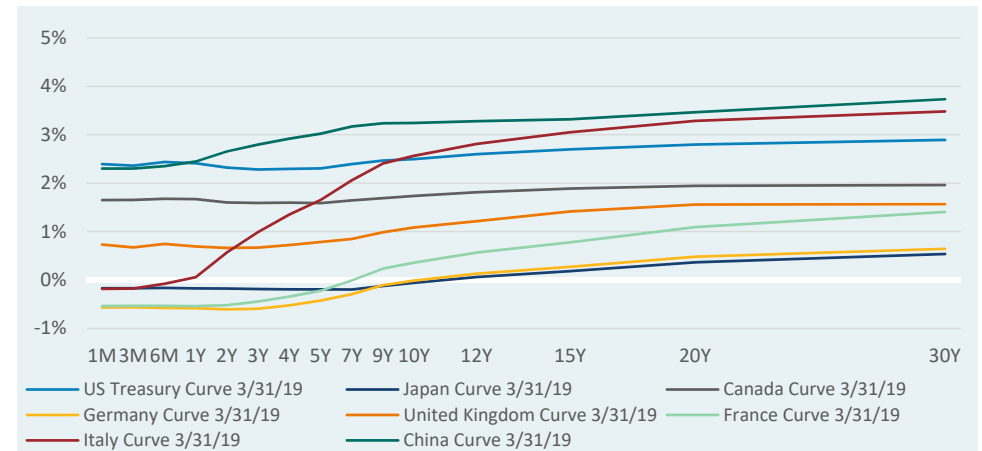
Source: Bloomberg, as of 3/31/19

Yield environment

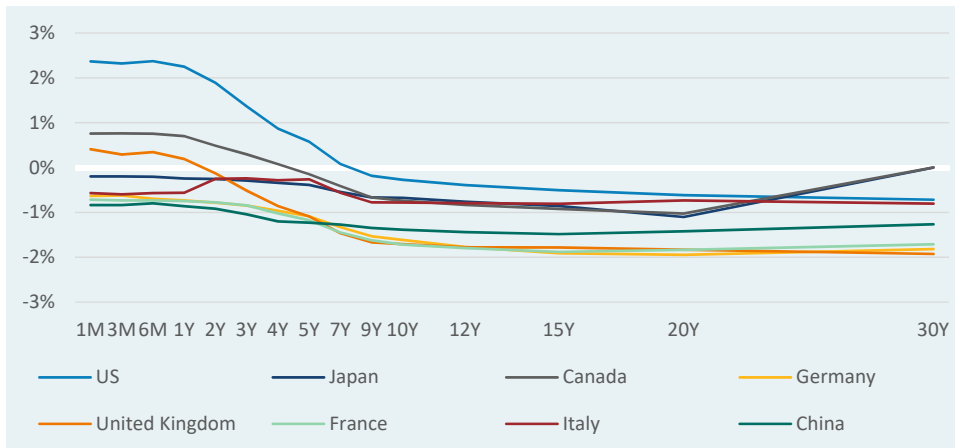
U.S. YIELD CURVE



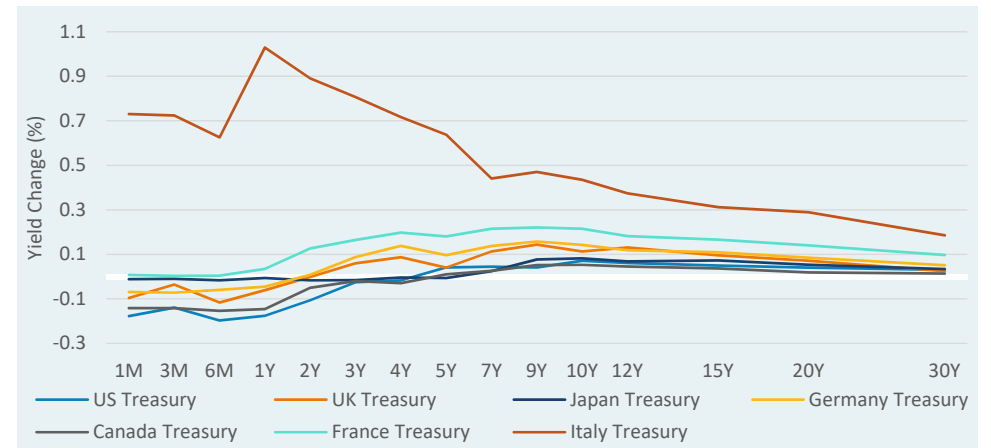
GLOBAL GOVERNMENT YIELD CURVES



YIELD CURVE CHANGES OVER LAST FIVE YEARS



IMPLIED CHANGES OVER NEXT YEAR



Source: Bloomberg, as of 3/31/19

Currency

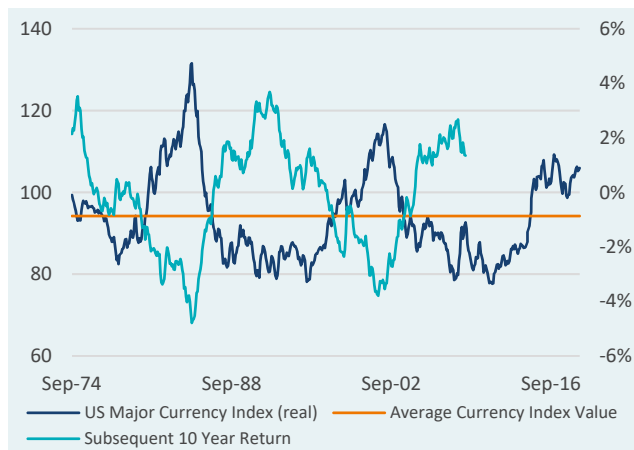
The U.S. dollar failed to gain traction in either direction during the first quarter, and remained near cycle highs. The Major Trade Weighted U.S. Dollar Index fell 0.3% over the period, but was 12.5% above its long-term average dating back to 1974 at the end of March. Expectations for a more accommodative Fed and weaker relative U.S. economic growth (from strong levels in 2018) has led many investors to call for U.S. dollar depreciation, but this has not occurred thus far. This may in part be because other developed central banks have followed the Fed's lead in moving away from monetary tightening.

Emerging market currencies were relatively stable versus the dollar for a second consecutive quarter. The JPMorgan Emerging Market Currency Index gained 0.4%. EM currencies have yet to stage a major comeback after falling more than 15% in the middle of last year.

The U.S. dollar remained near a cycle high

Despite some high-profile Brexit related volatility in the British pound, the global FX market has been relatively quiet. The trailing 1-year volatility of the Bloomberg Dollar Spot Index was 5.2% at the end of the quarter, the lowest level since 2014.

U.S. DOLLAR TRADE WEIGHTED INDEX



Source: Federal Reserve, Verus, as of 3/31/19

JPM EMERGING MARKET CURRENCY INDEX



Source: Bloomberg, JPMorgan, as of 3/31/19

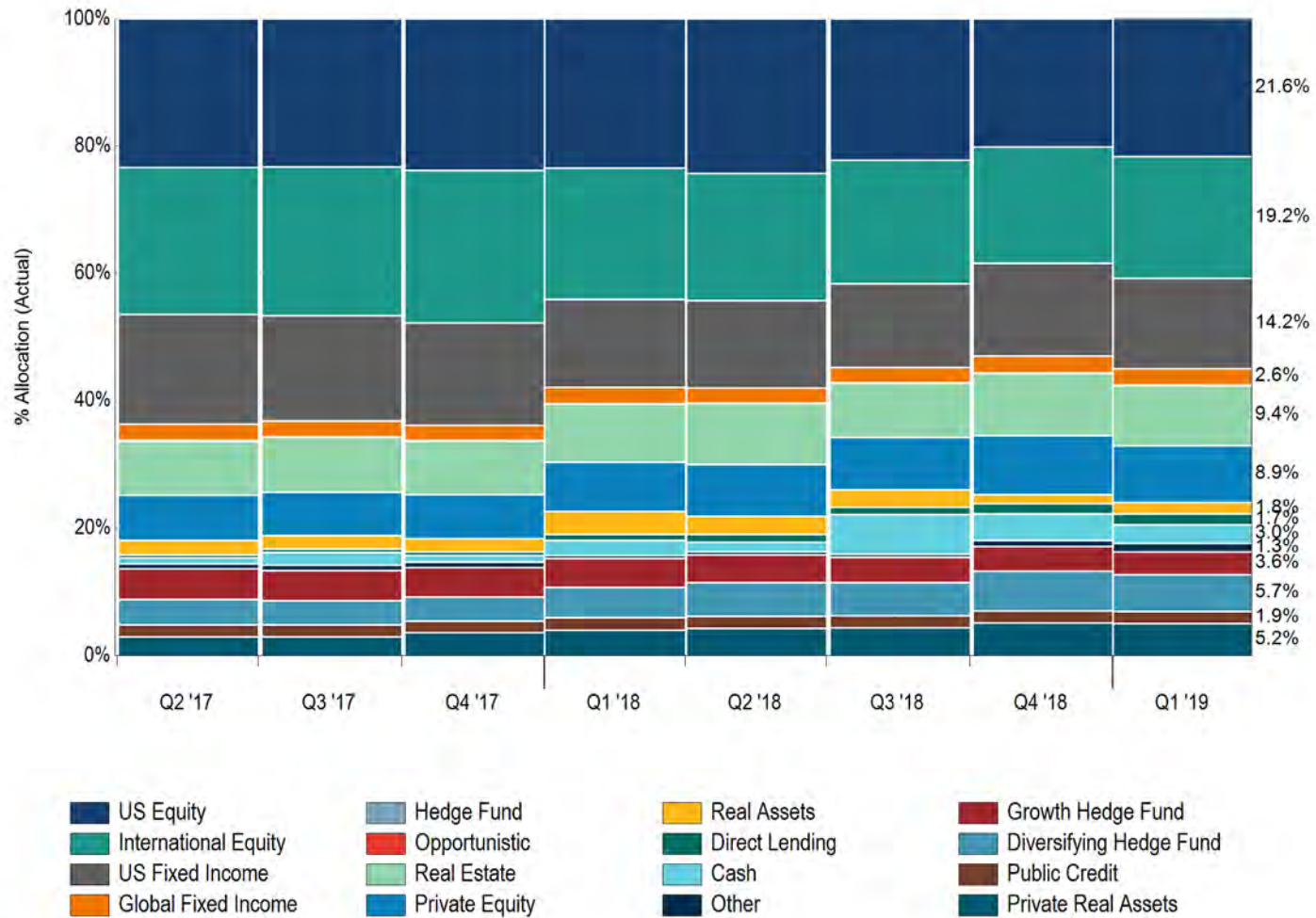
BLOOMBERG DOLLAR SPOT INDEX VOLATILITY



Source: Bloomberg, as of 3/31/19, trailing 12-month vol shown

Total Fund
Quarterly Asset Allocation

Period Ending: March 31, 2019

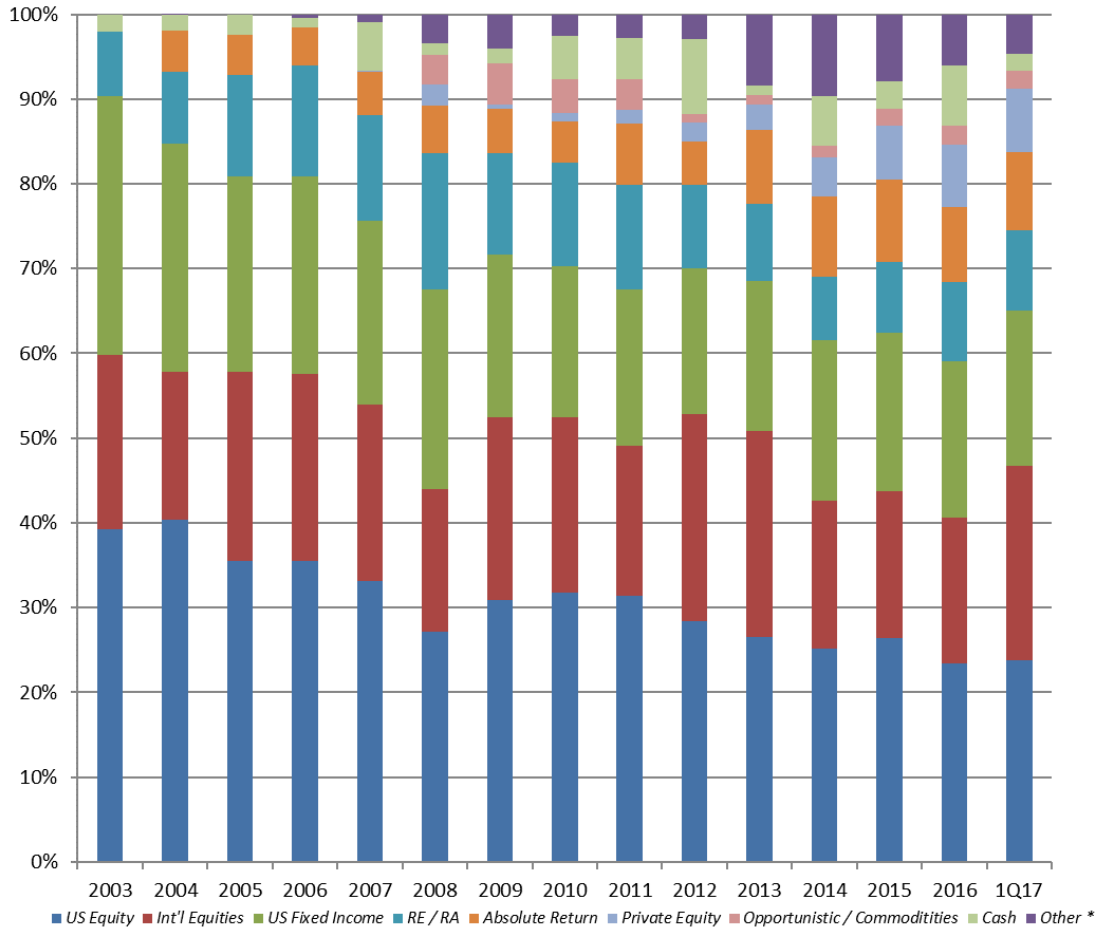


* Other includes SSgA Overlay and closing accounts.

Total Fund

Actual Yearly and Quarterly Asset Allocation

Period Ending: March 31, 2019



	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

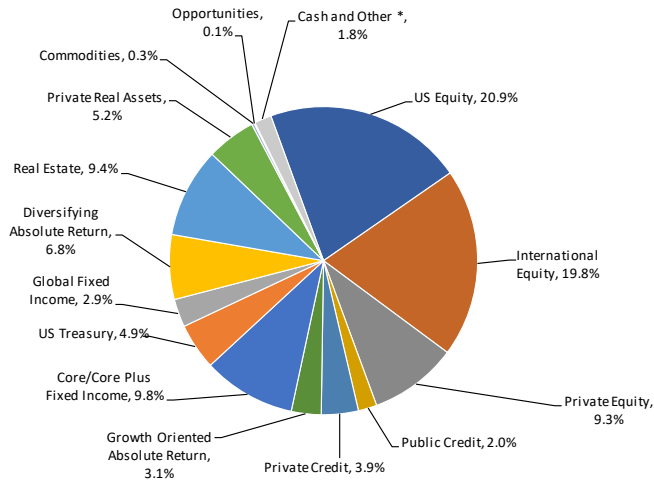
* Allocations without overlay.

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

Total Fund Asset Allocation Analysis

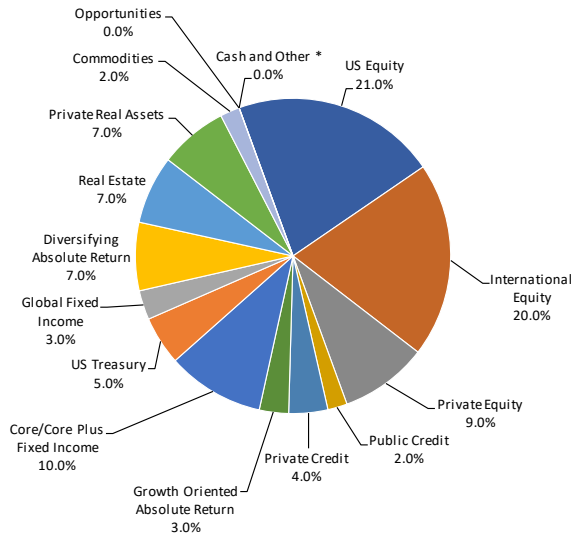
Period Ending: March 31, 2019

Current w/Overlay



ASSET ALLOCATION	MARKET VALUE W/OVERLAY	W/OVERLAY	W/O OVERLAY
US Equity	1,988,551,360	20.9%	21.6%
International Equity	1,882,010,427	19.8%	19.2%
Private Equity	880,018,952	9.3%	9.0%
Public Credit	185,727,684	2.0%	1.9%
Private Credit	368,943,452	3.9%	1.7%
Growth Oriented Absolute Return	297,506,549	3.1%	3.1%
Core/Core Plus Fixed Income	928,186,278	9.8%	9.5%
US Treasury	463,188,322	4.9%	4.7%
Global Fixed Income	279,801,692	2.9%	2.6%
Diversifying Absolute Return	645,424,872	6.8%	6.3%
Real Estate	894,760,261	9.4%	9.4%
Private Real Assets	489,871,820	5.2%	5.2%
Commodities	25,834,029	0.3%	0.3%
Opportunities	8,177,193	0.1%	0.1%
Cash and Other *	170,749,638	1.8%	5.7%
TOTAL	9,508,752,528	100.0%	100.0%

Target



ASSET ALLOCATION	ACTUAL	TARGET	DIFF
US Equity	20.9%	21.0%	-0.1%
International Equity	19.8%	20.0%	-0.2%
Private Equity	9.3%	9.0%	0.3%
Public Credit	2.0%	2.0%	0.0%
Private Credit	3.9%	4.0%	-0.1%
Growth Oriented Absolute Return	3.1%	3.0%	0.1%
Core/Core Plus Fixed Income	9.8%	10.0%	-0.2%
US Treasury	4.9%	5.0%	-0.1%
Global Fixed Income	2.9%	3.0%	-0.1%
Diversifying Absolute Return	6.8%	7.0%	-0.2%
Real Estate	9.4%	7.0%	2.4%
Private Real Assets	5.2%	7.0%	-1.8%
Commodities	0.3%	2.0%	-1.7%
Opportunities	0.1%	0.0%	0.1%
Cash and Other *	1.8%	0.0%	1.8%

* Other includes closing accounts (Heltman), Transition Account, SSgA Overlay of \$122 million and SSgA Real Asset of \$141 million, which serve as overlay proxy for Real Assets.

- The Total Plan returned 7.0% gross in the first quarter of 2019 and ranked in the third quartile among other public funds greater than \$1 billion (7.6% median). The Fund beat its policy index by 90bps during this time period. The Total Plan w/o Overlay returned 6.5% for the quarter, gross of fees. Longer term, the three-year return of 9.8% beat the median large public plan peer group by 130bps and ranking SCERS in the top decile of all public plans in the universe. The five-year returns of 6.5% ranked in the second quartile among peers.
- First quarter results (net) were enhanced by the following factors:
 1. Weatherbie gained 31.3%, outperforming the Russell 2000 Growth (17.1%). What hurt last quarter benefited the fund this quarter. The strategy's overweight in information technology and consumer discretionary, along with stock selection in these sectors contributed to relative outperformance.
 2. Baillie Gifford Emerging Markets beat the MSCI Emerging Markets (14.7% vs. 10.0%). Outperformance was led by investments in China, which contributed to 2% of the outperformance. Stock selection in financials and energy contributed a combined 2.6% to relative performance.
 3. William Blair International Small Cap beat the MSCI World ex US Small cap (12.9% vs 11.0%). The consumer discretionary, information technology, and industrials sectors contributed to the outperformance.
 4. Dalton, Grainer gained 13.2% beating the Russell 2000 Value by 1.3%. The top three performing sectors were consumer durables, consumer staples, and utilities all of which contributed to the relative outperformance.
- First quarter results (net) were hindered by the following factors:
 1. SCERS underweight to public equities, relative to peers, contributed to below median rankings during a quarter when equities returned 12.0% while nearly all other asset classes returned low single digits.
 2. The diversifying absolute return portfolio was up 1.0% during the 1st quarter which trailed its benchmark, the HFRI FoF Conservative Index by 220bps.
 3. Mondrian developed Small Cap gained 9.9% slightly underperforming the MSCI World ex US Small Cap (11.0%). Most underperformance came from exchange rate movements that detracted from US dollar returns.

Total Fund Performance Summary

Period Ending: March 31, 2019

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Inception (%)	Inception Date ⁺
Total Fund- Gross*	9,508,752,528	100.0	7.0	73	3.7	9	5.0	13	9.8	8	6.5	30	8.3	Jun-86
Total Fund- Net			7.0	74	3.5	13	4.8	14	9.6	11	6.2	45	8.1	
<i>Policy Index¹</i>			6.1	95	3.1	22	4.0	29	8.3	63	6.2	47	8.5	Jun-86
<i>InvestorForce Public DB > \$1B Gross Median</i>			7.6		2.5		3.4		8.5		6.1		8.1	Jun-86
Total Fund ex Overlay- Gross**	9,245,819,054	97.2	6.5	83	3.6	9	4.9	13	9.6	11	6.7	23	8.2	Jun-86
Total Fund ex Overlay- Net			6.5	85	3.4	17	4.6	14	9.4	13	6.4	36	8.0	
<i>Policy Index</i>			6.1	95	3.1	22	4.0	29	8.3	63	6.2	47	8.5	Jun-86
<i>Allocation ex Overlay Index</i>			5.9	96	3.0	24	3.9	30	--	--	--	--	--	Jun-86
Growth Asset Category- Gross	5,354,021,770	56.3	9.9	--	4.0	--	5.7	--	--	--	--	--	10.9	Mar-17
Growth Asset Category- Net			9.9	--	3.8	--	5.3	--	--	--	--	--	10.6	
<i>Growth Custom¹</i>			9.0	--	3.0	--	4.2	--	--	--	--	--	9.0	Mar-17
Public Equities- Gross	3,872,721,630	40.7	12.8	--	2.2	--	3.2	--	12.0	--	7.5	--	8.8	Jun-11
Public Equities- Net			12.7	--	1.9	--	2.8	--	11.6	--	7.1	--	8.4	
<i>MSCI ACWI</i>			12.2	--	2.1	--	2.6	--	10.7	--	6.5	--	7.4	Jun-11
US Equity- Gross	2,049,615,574	21.6	14.4	28	4.4	37	9.0	21	13.7	24	10.1	36	10.1	Jun-86
US Equity- Net			14.4	32	4.2	41	8.7	28	13.4	41	9.8	51	9.9	
<i>Russell 3000</i>			14.0	53	4.7	30	8.8	27	13.5	38	10.4	26	10.2	Jun-86
<i>InvestorForce All DB US Eq Gross Median</i>			14.1		3.9		7.7		13.2		9.8		9.8	Jun-86
Large Cap- Gross	1,854,007,484	19.5	13.7	--	4.7	--	8.4	--	13.8	--	10.4	--	6.3	Mar-98
Large Cap- Net			13.6	--	4.6	--	8.2	--	13.6	--	10.1	--	6.1	
<i>Russell 1000</i>			14.0	--	5.5	--	9.3	--	13.5	--	10.6	--	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: March 31, 2019

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Inception (%)	Inception Date
Large Cap - Index- Gross	1,118,732,551	11.8	13.9	--	5.6	--	9.3	--	13.5	--	10.6	--	11.3	Sep-08
Large Cap - Index- Net			13.9	--	5.5	--	9.3	--	13.5	--	10.6	--	11.2	
<i>Russell 1000</i>			14.0	--	5.5	--	9.3	--	13.5	--	10.6	--	11.3	Sep-08
AB- Gross	1,118,732,551	11.8	13.9	28	5.6	64	9.3	64	13.5	56	10.6	71	10.0	Apr-89
AB- Net			13.9	28	5.5	65	9.3	65	13.5	62	10.6	71	10.0	
<i>Russell 1000</i>			14.0	25	5.5	65	9.3	62	13.5	39	10.6	69	--	Apr-89
<i>eV US Passive Large Cap Equity Gross Median</i>			13.6		5.8		9.5		13.5		10.9		10.0	Apr-89
Large Cap - Enhanced- Gross	237,245,467	2.5	13.4	--	--	--	--	--	--	--	--	--	0.1	Jul-18
Large Cap - Enhanced- Net			13.3	--	--	--	--	--	--	--	--	--	0.0	
<i>Russell 1000</i>			14.0	--	5.5	--	9.3	--	13.5	--	10.6	--	2.0	Jul-18
AQR US Enhanced Equity- Gross	237,245,467	2.5	13.4	56	--	--	--	--	--	--	--	--	0.1	Jul-18
AQR US Enhanced Equity- Net			13.3	57	--	--	--	--	--	--	--	--	0.0	
<i>Russell 1000</i>			14.0	33	5.5	27	9.3	24	13.5	25	10.6	42	2.0	Jul-18
<i>eV US Enh Equity Gross Median</i>			13.5		4.7		7.8		12.8		10.4		1.1	Jul-18
Equity Active (130/30)- Gross	251,957,362	2.6	12.8	--	3.5	--	7.5	--	13.8	--	10.6	--	11.8	Sep-08
Equity Active (130/30)- Net			12.7	--	3.2	--	6.9	--	13.1	--	9.9	--	11.2	
<i>Russell 1000</i>			14.0	--	5.5	--	9.3	--	13.5	--	10.6	--	11.3	Sep-08
JP Morgan 130/30- Gross	128,092,089	1.3	13.3	25	3.9	29	7.9	27	14.0	21	10.7	45	11.6	Jul-08
JP Morgan 130/30- Net			13.1	29	3.6	37	7.4	29	13.2	37	10.0	64	10.8	
<i>Russell 1000</i>			14.0	10	5.5	14	9.3	3	13.5	31	10.6	45	10.2	Jul-08
<i>eV Extended US 130/30 Equity Gross Median</i>			12.2		1.2		4.4		12.2		10.4		10.9	Jul-08
DE Shaw Broad Mkt Core Alpha Ext- Gross*	123,865,273	1.3	--	--	--	--	--	--	--	--	--	--	4.8	Jan-19
DE Shaw Broad Mkt Core Alpha Ext- Net			--	--	--	--	--	--	--	--	--	--	4.8	
<i>Russell 1000</i>			14.0	11	5.5	14	9.3	3	13.5	25	10.6	38	5.2	Jan-19
<i>eV Extended US Equity Gross Median</i>			11.8		0.8		3.4		11.8		10.2		3.0	Jan-19

* Funded in January 2019.

Total Fund
Performance Summary

Period Ending: March 31, 2019

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Inception (%)	Inception Date
Large Cap Value- Gross	246,072,059	2.6	13.3	--	3.8	--	6.0	--	14.4	--	9.2	--	10.7	Sep-08
Large Cap Value- Net			12.9	--	3.0	--	5.2	--	13.5	--	8.4	--	10.1	
<i>Russell 1000 Value</i>			11.9	--	4.4	--	5.7	--	10.5	--	7.7	--	9.2	Sep-08
Eagle Capital- Gross	246,041,919	2.6	13.3	15	4.1	37	7.5	26	16.0	2	11.1	4	14.2	Feb-12
Eagle Capital- Net			12.9	22	3.3	44	6.6	30	15.1	3	10.3	9	13.4	
<i>Russell 1000</i>			14.0	9	5.5	22	9.3	14	13.5	9	10.6	6	13.1	Feb-12
<i>Russell 1000 Value</i>			11.9	44	4.4	34	5.7	34	10.5	64	7.7	60	11.5	Feb-12
<i>eV US Large Cap Value Equity Gross Median</i>			11.7		2.6		4.2		11.0		8.1		11.6	Feb-12
Small Cap- Gross	195,607,812	2.1	22.2	--	1.9	--	10.7	--	17.5	--	9.3	--	12.0	Dec-90
Small Cap- Net			22.1	--	1.7	--	10.2	--	16.9	--	8.6	--	11.3	
<i>Russell 2000</i>			14.6	--	-5.3	--	2.0	--	12.9	--	7.1	--	10.6	Dec-90
Small Cap - Growth- Gross	103,751,615	1.1	31.3	--	10.4	--	23.5	--	27.6	--	12.7	--	13.1	Sep-08
Small Cap - Growth- Net			31.3	--	10.3	--	23.0	--	27.2	--	12.2	--	12.5	
<i>Russell 2000 Growth</i>			17.1	--	-3.2	--	3.9	--	14.9	--	8.4	--	11.1	Sep-08
Weatherbie- Gross	103,751,599	1.1	31.3	1	9.8	9	23.7	9	30.7	2	15.9	3	13.8	Dec-02
Weatherbie- Net			31.3	1	9.6	10	23.0	10	30.1	4	15.3	6	12.9	
<i>Russell 2000 Growth</i>			17.1	55	-3.2	78	3.9	82	14.9	75	8.4	77	11.1	Dec-02
<i>eV US Small Cap Growth Equity Gross Median</i>			17.5		1.2		10.2		17.8		9.8		12.7	Dec-02
Small Cap - Value- Gross	91,856,197	1.0	13.3	--	-6.1	--	-1.4	--	8.0	--	5.8	--	9.1	Sep-08
Small Cap - Value- Net			13.2	--	-6.4	--	-1.9	--	7.2	--	5.0	--	8.2	
<i>Russell 2000 Value</i>			11.9	--	-7.5	--	0.2	--	10.9	--	5.6	--	8.1	Sep-08
Dalton, Greiner- Gross	91,854,759	1.0	13.3	39	-6.0	41	-1.9	57	8.1	85	5.2	74	9.9	Dec-00
Dalton, Greiner- Net			13.2	41	-6.3	43	-2.4	61	7.4	92	4.6	81	9.2	
<i>Russell 2000 Value</i>			11.9	69	-7.5	56	0.2	39	10.9	33	5.6	67	8.6	Dec-00
<i>eV US Small Cap Value Equity Gross Median</i>			12.7		-7.1		-1.0		9.8		6.2		10.8	Dec-00

Total Fund Performance Summary

Period Ending: March 31, 2019

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Inception (%)	Inception Date
International Equity- Gross	1,823,106,056	19.2	10.9	43	-0.1	13	-3.0	16	9.5	18	4.1	19	6.4	Dec-87
International Equity- Net			10.8	46	-0.6	18	-3.6	20	9.0	29	3.6	30	6.1	
<i>MSCI ACWI ex US¹</i>			10.4	61	-1.4	26	-3.7	22	8.6	37	3.0	54	6.2	Dec-87
<i>InvestorForce All DB ex-US Eq Gross Median</i>			10.7		-2.4		-5.4		8.2		3.1		7.0	Dec-87
International - Developed- Gross	1,461,771,864	15.4	10.5	54	-1.4	33	-2.7	38	9.4	28	4.3	33	4.5	Mar-98
International - Developed- Net			10.4	55	-2.0	44	-3.4	39	8.8	39	3.8	44	4.1	
<i>MSCI World ex US Gross</i>			10.6	51	-2.1	50	-2.6	38	7.8	58	2.7	70	4.6	Mar-98
<i>InvestorForce All DB Dev Mkt ex-US Eq Gross Median</i>			10.7		-2.2		-4.1		8.1		3.5		5.0	Mar-98
Lazard- Gross	368,439,549	3.9	10.5	62	-0.1	15	-3.6	33	8.5	47	4.7	35	9.0	Jun-12
Lazard- Net			10.4	63	-0.4	18	-3.9	35	8.2	56	4.4	39	8.7	
<i>MSCI ACWI ex USA Gross</i>			10.4	63	-1.4	30	-3.7	35	8.6	46	3.0	65	6.6	Jun-12
<i>eV All ACWI ex-US Equity Gross Median</i>			11.1		-2.7		-5.2		8.4		3.9		8.0	Jun-12
Walter Scott & Partners Limited- Gross	501,408,495	5.3	11.8	59	3.4	3	5.1	1	--	--	--	--	12.4	Mar-17
Walter Scott & Partners Limited- Net			11.7	60	2.3	6	4.0	2	--	--	--	--	11.7	
<i>MSCI World ex USA Growth GR USD</i>			12.5	48	-1.1	51	-0.2	34	7.9	58	4.1	40	7.9	Mar-17
<i>eV EAFE Large Cap Growth Gross Median</i>			12.4		-1.1		-1.7		8.2		3.5		7.6	Mar-17
LSV- Gross	418,070,748	4.4	8.7	68	-5.0	55	-7.9	57	7.8	34	3.0	18	4.4	Dec-04
LSV- Net			8.6	75	-5.3	56	-8.3	62	7.3	45	2.6	37	3.9	
<i>MSCI World ex US Value Gross</i>			8.7	69	-3.2	29	-4.9	34	7.8	34	1.3	82	4.3	Dec-04
<i>eV EAFE Large Cap Value Gross Median</i>			9.1		-4.5		-7.2		7.1		2.2		4.7	Dec-04
Mondrian Dev Small Cap- Gross	91,209,021	1.0	10.1	72	-6.0	31	-3.9	14	7.4	73	4.2	68	8.8	Aug-10
Mondrian Dev Small Cap- Net			9.9	73	-6.5	38	-4.6	14	6.6	77	3.5	73	8.2	
<i>MSCI World ex US Small Cap GD</i>			11.0	60	-7.6	46	-8.3	40	7.7	71	4.1	69	8.4	Aug-10
<i>eV ACWI ex-US Small Cap Equity Gross Median</i>			11.7		-7.8		-9.5		8.7		5.1		9.8	Aug-10

1. See Policy Index and Benchmark History.

Total Fund
Performance Summary

Period Ending: March 31, 2019

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Inception (%)	Inception Date
William Blair Dev Small Cap- Gross	82,644,051	0.9	13.1	34	-10.0	85	-12.5	77	5.1	85	3.2	74	8.8	Sep-08
William Blair Dev Small Cap- Net			12.9	35	-10.6	90	-13.3	86	4.1	94	2.3	91	7.8	
MSCI World ex US Small Cap GD			11.0	60	-7.6	46	-8.3	40	7.7	71	4.1	69	8.2	Sep-08
eV ACWI ex-US Small Cap Equity Gross Median			11.7		-7.8		-9.5		8.7		5.1		9.9	Sep-08
International - Emerging- Gross	361,312,981	3.8	12.6	6	5.7	8	-4.1	13	11.4	36	3.5	79	6.4	Jan-00
International - Emerging- Net			12.5	7	5.4	8	-4.4	13	11.0	37	3.2	83	6.0	
MSCI Emerging Markets Gross			10.0	42	0.9	47	-7.1	27	11.1	36	4.1	31	6.9	Jan-00
InvestorForce All DB Emg Mkt Eq Gross Median			9.9		0.7		-8.3		9.9		3.8		6.2	Jan-00
Baillie Gifford Emg All Cap- Gross	191,887,947	2.0	14.7	7	6.0	5	-3.6	13	16.1	4	--	--	16.1	Mar-16
Baillie Gifford Emg All Cap- Net			14.7	7	6.0	5	-3.6	13	16.1	4	--	--	16.1	
MSCI Emerging Markets Gross			10.0	56	0.9	45	-7.1	40	11.1	47	4.1	64	11.1	Mar-16
eV Emg Mkts Equity Gross Median			10.3		0.5		-7.7		10.9		4.7		10.9	Mar-16
Mondrian Emg All Cap- Gross	169,425,034	1.8	10.2	51	5.3	9	-4.7	19	7.8	88	--	--	7.8	Mar-16
Mondrian Emg All Cap- Net			10.1	54	4.8	11	-5.3	24	7.2	93	--	--	7.2	
MSCI Emerging Markets Gross			10.0	56	0.9	45	-7.1	40	11.1	47	4.1	64	11.1	Mar-16
eV Emg Mkts Equity Gross Median			10.3		0.5		-7.7		10.9		4.7		10.9	Mar-16

Total Fund Performance Summary

Period Ending: March 31, 2019

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Inception (%)	Inception Date
Private Equity- Gross***	852,691,903	9.0	2.8	7	17.5	4	23.2	4	17.8	4	15.1	13	2.9	Feb-08
Private Equity- Net			2.8	7	17.5	4	23.2	4	17.8	4	15.1	13	3.1	
<i>Thomson Reuters CJA All PE 1 Qtr Lag¹</i>			-1.3	77	7.7	40	10.7	48	13.6	28	12.0	34	10.1	Feb-08
<i>Russell 3000 +3% 1Q Lag</i>			-13.2	99	-2.5	93	-2.2	96	12.0	49	10.9	43	10.2	Feb-08
<i>InvestorForce All DB Private Eq Net Median</i>			-0.1		6.3		10.6		11.6		10.6		8.2	Feb-08
Abbott VI- Gross⁺	49,537,032	0.5	0.0	--	9.9	--	14.1	--	16.0	--	15.2	--	4.4	Jul-08
Abbott VI- Net			0.0	--	9.9	--	14.1	--	16.0	--	15.2	--	--	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			-1.3	--	7.7	--	10.7	--	13.6	--	12.0	--	11.0	Jul-08
Accel-KKR IV- Gross	14,256,838	0.1	6.3	--	113.6	--	123.5	--	53.8	--	31.3	--	9.7	Jun-13
Accel-KKR IV- Net			6.3	--	113.6	--	123.5	--	53.8	--	31.3	--	9.7	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			-1.3	--	7.7	--	10.7	--	13.6	--	12.0	--	14.3	Jun-13
Accel-KKR V- Gross	10,932,879	0.1	0.8	--	6.4	--	8.8	--	--	--	--	--	10.4	Jan-17
Accel-KKR V- Net			0.8	--	6.4	--	8.8	--	--	--	--	--	10.4	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			-1.3	--	7.7	--	10.7	--	13.6	--	12.0	--	15.1	Jan-17
Accel-KKR Growth Partners II- Gross	8,931,671	0.1	10.7	--	16.1	--	19.9	--	14.6	--	--	--	-0.1	Feb-15
Accel-KKR Growth Partners II- Net			10.7	--	16.1	--	19.9	--	14.6	--	--	--	-0.1	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			-1.3	--	7.7	--	10.7	--	13.6	--	12.0	--	10.9	Feb-15
Atalaya Special Opp VI- Gross	21,594,062	0.2	2.9	--	10.8	--	14.0	--	--	--	--	--	8.2	Apr-16
Atalaya Special Opp VI- Net			2.9	--	10.8	--	14.0	--	--	--	--	--	8.2	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			-1.3	--	7.7	--	10.7	--	13.6	--	12.0	--	16.1	Apr-16
Davidson Kempner LT Dist Opp- Gross	20,269,048	0.2	3.4	--	15.8	--	16.7	--	--	--	--	--	16.7	Mar-18
Davidson Kempner LT Dist Opp- Net			3.4	--	15.8	--	16.7	--	--	--	--	--	16.7	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			-1.3	--	7.7	--	10.7	--	13.6	--	12.0	--	10.7	Mar-18

1. See Policy Index and Benchmark History.

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

++ Returns are one-quarter lag.

+ Preliminary quarterly returns as of 3/31/2019 (Returns are not available at reporting period.)

Total Fund
Performance Summary

Period Ending: March 31, 2019

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Inception (%)	Inception Date
Dyal Capital Partners II- Gross	15,000,124	0.2	-15.9	--	-18.2	--	-24.0	--	-11.8	--	--	--	-10.5	Dec-14
Dyal Capital Partners II- Net			-15.9	--	-18.2	--	-24.0	--	-11.8	--	--	--	-10.5	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			-1.3	--	7.7	--	10.7	--	13.6	--	12.0	--	11.7	Dec-14
Dyal Capital Partners III- Gross	17,573,712	0.2	-1.2	--	16.4	--	32.0	--	--	--	--	--	21.4	Dec-16
Dyal Capital Partners III- Net			-1.2	--	16.4	--	32.0	--	--	--	--	--	21.4	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			-1.3	--	7.7	--	10.7	--	13.6	--	12.0	--	13.6	Dec-16
Garrison Investment Group- Gross	13,380,727	0.1	-1.2	--	5.1	--	8.1	--	-2.1	--	-1.8	--	0.8	May-12
Garrison Investment Group- Net			-1.2	--	5.1	--	8.1	--	-2.1	--	-1.8	--	0.8	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			-1.3	--	7.7	--	10.7	--	13.6	--	12.0	--	15.1	May-12
Harbourvest VIII- Gross	15,566,092	0.2	-4.4	--	4.8	--	8.3	--	12.5	--	13.1	--	9.5	Dec-07
Harbourvest VIII- Net			-4.4	--	4.8	--	8.3	--	12.5	--	13.1	--	--	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			-1.3	--	7.7	--	10.7	--	13.6	--	12.0	--	9.7	Dec-07
Harbourvest Intl VI- Gross	34,246,501	0.4	-3.7	--	5.0	--	7.9	--	13.5	--	13.2	--	-7.7	Mar-09
Harbourvest Intl VI- Net			-3.7	--	5.0	--	7.9	--	13.5	--	13.2	--	--	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			-1.3	--	7.7	--	10.7	--	13.6	--	12.0	--	16.2	Mar-09
H.I.G. Bayside Loan III- Gross	18,311,347	0.2	4.6	--	11.5	--	19.1	--	11.0	--	11.6	--	7.4	Jan-13
H.I.G. Bayside Loan III- Net			4.6	--	11.5	--	19.1	--	11.0	--	11.6	--	7.4	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			-1.3	--	7.7	--	10.7	--	13.6	--	12.0	--	15.7	Jan-13
H.I.G. Capital V- Gross	12,211,040	0.1	-0.8	--	21.2	--	36.1	--	31.2	--	14.0	--	9.7	Jul-13
H.I.G. Capital V- Net			-0.8	--	21.2	--	36.1	--	31.2	--	14.0	--	9.7	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			-1.3	--	7.7	--	10.7	--	13.6	--	12.0	--	14.1	Jul-13
H.I.G. Europe Capital II- Gross*	8,397,090	0.1	-3.2	--	1.3	--	18.4	--	--	--	--	--	--	Jan-14
H.I.G. Europe Capital II- Net			-3.2	--	1.3	--	18.4	--	--	--	--	--	--	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			-1.3	--	7.7	--	10.7	--	13.6	--	12.0	--	12.9	Jan-14

* 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.

Total Fund
Performance Summary

Period Ending: March 31, 2019

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Inception (%)	Inception Date
Khosla IV- Gross	17,108,232	0.2	4.5	--	27.9	--	35.2	--	21.5	--	21.9	--	17.3	Jul-11
Khosla IV- Net			4.5	--	27.9	--	35.2	--	21.5	--	21.9	--	17.3	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			-1.3	--	7.7	--	10.7	--	13.6	--	12.0	--	14.0	Jul-11
Khosla V- Gross	21,830,808	0.2	5.6	--	10.3	--	11.4	--	13.8	--	--	--	9.4	Nov-14
Khosla V- Net			5.6	--	10.3	--	11.4	--	13.8	--	--	--	9.4	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			-1.3	--	7.7	--	10.7	--	13.6	--	12.0	--	11.1	Nov-14
Khosla VI- Gross	7,664,670	0.1	-2.6	--	--	--	--	--	--	--	--	--	-7.6	Aug-18
Khosla VI- Net			-2.6	--	--	--	--	--	--	--	--	--	-7.6	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			-1.3	--	7.7	--	10.7	--	13.6	--	12.0	--	7.7	Aug-18
Linden Capital- Gross	46,172,078	0.5	9.7	--	26.5	--	31.2	--	--	--	--	--	15.0	Jun-16
Linden Capital- Net			9.7	--	26.5	--	31.2	--	--	--	--	--	15.0	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			-1.3	--	7.7	--	10.7	--	13.6	--	12.0	--	14.2	Jun-16
Linden Capital Partners IV- Gross	1,107,654	0.0	55.3	--	--	--	--	--	--	--	--	--	59.8	Sep-18
Linden Capital Partners IV- Net			55.3	--	--	--	--	--	--	--	--	--	59.8	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			-1.3	--	7.7	--	10.7	--	13.6	--	12.0	--	2.4	Sep-18
Marlin Equity IV- Gross	13,707,393	0.1	5.6	--	17.5	--	17.1	--	9.0	--	5.4	--	3.8	Nov-13
Marlin Equity IV- Net			5.6	--	17.5	--	17.1	--	9.0	--	5.4	--	3.8	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			-1.3	--	7.7	--	10.7	--	13.6	--	12.0	--	14.2	Nov-13
Marlin Equity V- Gross	5,020,208	0.1	16.9	--	12.5	--	6.5	--	--	--	--	--	5.9	Feb-18
Marlin Equity V- Net			16.9	--	12.5	--	6.5	--	--	--	--	--	5.9	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			-1.3	--	7.7	--	10.7	--	13.6	--	12.0	--	14.2	Feb-18
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			-1.3	--	7.7	--	10.7	--	13.6	--	12.0	--	14.2	Feb-18
Marlin Heritage- Gross	9,491,581	0.1	17.9	--	21.0	--	22.3	--	44.3	--	--	--	23.2	Jul-14
Marlin Heritage- Net			17.9	--	21.0	--	22.3	--	44.3	--	--	--	23.2	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			-1.3	--	7.7	--	10.7	--	13.6	--	12.0	--	12.1	Jul-14
Marlin Heritage II- Gross	4,279,079	0.0	-1.1	--	-3.7	--	-6.9	--	--	--	--	--	-13.1	Oct-17
Marlin Heritage II- Net			-1.1	--	-3.7	--	-6.9	--	--	--	--	--	-13.1	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			-1.3	--	7.7	--	10.7	--	13.6	--	12.0	--	13.4	Oct-17

Total Fund Performance Summary

Period Ending: March 31, 2019

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Inception (%)	Inception Date
Marlin Heritage Europe- Gross	5,884,253	0.1	15.1	--	18.6	--	24.9	--	--	--	--	--	9.4	Aug-17
Marlin Heritage Europe- Net			15.1	--	18.6	--	24.9	--	--	--	--	--	9.4	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			-1.3	--	7.7	--	10.7	--	13.6	--	12.0	--	14.1	Aug-17
New Enterprise 14- Gross	30,868,422	0.3	-0.7	--	10.9	--	24.1	--	15.9	--	18.5	--	14.0	May-12
New Enterprise 14- Net			-0.7	--	10.9	--	24.1	--	15.9	--	18.5	--	14.0	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			-1.3	--	7.7	--	10.7	--	13.6	--	12.0	--	15.1	May-12
New Enterprise 15- Gross	43,462,410	0.5	4.8	--	9.3	--	30.8	--	20.4	--	--	--	16.3	Apr-15
New Enterprise 15- Net			4.8	--	9.3	--	30.8	--	20.4	--	--	--	16.3	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			-1.3	--	7.7	--	10.7	--	13.6	--	12.0	--	12.1	Apr-15
New Enterprise 16- Gross	16,414,201	0.2	1.2	--	14.8	--	17.2	--	--	--	--	--	3.7	May-17
New Enterprise 16- Net			1.2	--	14.8	--	17.2	--	--	--	--	--	3.7	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			-1.3	--	7.7	--	10.7	--	13.6	--	12.0	--	14.2	May-17
Private Equity X- Gross	27,432,561	0.3	-2.9	--	16.8	--	16.8	--	17.3	--	10.6	--	-1.3	Jun-08
Private Equity X- Net			-2.9	--	16.8	--	16.8	--	17.3	--	10.6	--	--	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			-1.3	--	7.7	--	10.7	--	13.6	--	12.0	--	11.4	Jun-08
RCP Multi-Fund Feeder- Gross*	4,250,000	0.0	0.0	--	--	--	--	--	--	--	--	--	0.0	Nov-18
RCP Multi-Fund Feeder- Net			0.0	--	--	--	--	--	--	--	--	--	0.0	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			-1.3	--	7.7	--	10.7	--	13.6	--	12.0	--	2.4	Nov-18
RRJ Capital Master Fund II- Gross	19,519,804	0.2	3.9	--	14.3	--	16.1	--	8.5	--	11.1	--	13.9	May-13
RRJ Capital Master Fund II- Net			3.9	--	14.3	--	16.1	--	8.5	--	11.1	--	13.9	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			-1.3	--	7.7	--	10.7	--	13.6	--	12.0	--	14.8	May-13
RRJ Capital Master Fund III- Gross	33,267,079	0.3	9.4	--	13.6	--	17.1	--	11.5	--	--	--	-12.6	Dec-15
RRJ Capital Master Fund III- Net			9.4	--	13.6	--	17.1	--	11.5	--	--	--	-12.6	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			-1.3	--	7.7	--	10.7	--	13.6	--	12.0	--	14.9	Dec-15
Spectrum Equity- Gross	30,069,959	0.3	3.5	--	49.3	--	63.1	--	41.6	--	--	--	11.3	Dec-14
Spectrum Equity- Net			3.5	--	49.3	--	63.1	--	41.6	--	--	--	11.3	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			-1.3	--	7.7	--	10.7	--	13.6	--	12.0	--	11.7	Dec-14

+ Preliminary quarterly returns as of 3/31/2019 (Returns are not available at reporting period.)

Total Fund Performance Summary

Period Ending: March 31, 2019

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Inception (%)	Inception Date
Spectrum Equity Fund VIII- Gross	3,540,048	0.0	-4.6	--	-81.5	--	--	--	--	--	--	--	-81.5	Jun-18
Spectrum Equity Fund VIII- Net			-4.6	--	-81.5	--	--	--	--	--	--	--	-81.5	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			-1.3	--	7.7	--	10.7	--	13.6	--	12.0	--	7.7	Jun-18
Summit EUR Growth Equity II- Gross	8,195,741	0.1	-1.6	--	494.8	--	279.4	--	--	--	--	--	213.6	Jan-18
Summit EUR Growth Equity II- Net			-1.6	--	494.8	--	279.4	--	--	--	--	--	213.6	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			-1.3	--	7.7	--	10.7	--	13.6	--	12.0	--	13.1	Jan-18
Summit Ventures III- Gross	13,746,544	0.1	-0.5	--	2.8	--	6.6	--	20.8	--	17.7	--	11.8	Jun-12
Summit Ventures III- Net			-0.5	--	2.8	--	6.6	--	20.8	--	17.7	--	11.8	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			-1.3	--	7.7	--	10.7	--	13.6	--	12.0	--	14.7	Jun-12
Summit Ventures IV- Gross	12,381,992	0.1	17.9	--	51.2	--	55.9	--	--	--	--	--	41.1	May-16
Summit Ventures IV- Net			17.9	--	51.2	--	55.9	--	--	--	--	--	41.1	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			-1.3	--	7.7	--	10.7	--	13.6	--	12.0	--	16.5	May-16
Thoma Bravo XI- Gross	40,735,444	0.4	-3.8	--	29.1	--	34.8	--	29.2	--	--	--	18.1	Jun-14
Thoma Bravo XI- Net			-3.8	--	29.1	--	34.8	--	29.2	--	--	--	18.1	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			-1.3	--	7.7	--	10.7	--	13.6	--	12.0	--	12.0	Jun-14
Thoma Bravo XII- Gross	30,694,777	0.3	0.7	--	7.0	--	6.1	--	--	--	--	--	0.5	May-16
Thoma Bravo XII- Net			0.7	--	7.0	--	6.1	--	--	--	--	--	0.5	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			-1.3	--	7.7	--	10.7	--	13.6	--	12.0	--	16.5	May-16
Thoma Bravo XIII- Gross*	6,476,718	0.1	--	--	--	--	--	--	--	--	--	--	0.0	Feb-19
Thoma Bravo XIII- Net			--	--	--	--	--	--	--	--	--	--	0.0	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			-1.3	--	7.7	--	10.7	--	13.6	--	12.0	--	-1.3	Feb-19
TPG Opp Partners III- Gross	23,393,491	0.2	-4.2	--	4.5	--	9.5	--	12.7	--	-16.8	--	-16.8	Mar-14
TPG Opp Partners III- Net			-4.2	--	4.5	--	9.5	--	12.7	--	-16.8	--	-16.8	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			-1.3	--	7.7	--	10.7	--	13.6	--	12.0	--	12.0	Mar-14
Trinity Ventures XI- Gross	32,547,163	0.3	7.2	--	30.3	--	33.0	--	15.7	--	14.8	--	6.6	Apr-13
Trinity Ventures XI- Net			7.2	--	30.3	--	33.0	--	15.7	--	14.8	--	6.6	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			-1.3	--	7.7	--	10.7	--	13.6	--	12.0	--	14.9	Apr-13

* Funded February 2019.

Total Fund Performance Summary

Period Ending: March 31, 2019

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Inception (%)	Inception Date
Trinity Ventures XII- Gross	27,648,902	0.3	26.8	--	33.0	--	61.7	--	--	--	--	--	17.7	Apr-16
Trinity Ventures XII- Net			26.8	--	33.0	--	61.7	--	--	--	--	--	17.7	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			-1.3	--	7.7	--	10.7	--	13.6	--	12.0	--	16.1	Apr-16
TSG7 A LP- Gross*	11,830,761	0.1	1.8	--	11.2	--	14.1	--	--	--	--	--	--	Mar-16
TSG7 A LP- Net			1.8	--	11.2	--	14.1	--	--	--	--	--	--	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			-1.3	--	7.7	--	10.7	--	13.6	--	12.0	--	13.6	Mar-16
TSG7 B LP- Gross	1,107,285	0.0	2.0	--	2.6	--	-3.3	--	-24.4	--	--	--	-23.2	Jan-16
TSG7 B LP- Net			2.0	--	2.6	--	-3.3	--	-24.4	--	--	--	-23.2	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			-1.3	--	7.7	--	10.7	--	13.6	--	12.0	--	12.5	Jan-16
TSG8 LP- Gross*	225,709	0.0	--	--	--	--	--	--	--	--	--	--	0.0	Jan-19
TSG8 LP- Net			--	--	--	--	--	--	--	--	--	--	0.0	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			-1.3	--	7.7	--	10.7	--	13.6	--	12.0	--	-1.3	Jan-19
TSSP Opportunities Partners IV- Gross	1,798,490	0.0	--	--	--	--	--	--	--	--	--	--	0.0	Jan-19
TSSP Opportunities Partners IV- Net			--	--	--	--	--	--	--	--	--	--	0.0	
<i>Credit Suisse Leveraged Loan + 2%</i>			4.2	--	4.1	--	5.3	--	7.9	--	5.9	--	1.8	Jan-19
Waterland V- Gross	12,112,587	0.1	10.3	--	37.7	--	48.7	--	46.5	--	64.8	--	25.7	Aug-11
Waterland V- Net			10.3	--	37.7	--	48.7	--	46.5	--	64.8	--	25.7	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			-1.3	--	7.7	--	10.7	--	13.6	--	12.0	--	14.3	Aug-11
Waterland VI- Gross	22,292,182	0.2	-3.4	--	22.1	--	27.7	--	16.5	--	--	--	-7.7	Jul-15
Waterland VI- Net			-3.4	--	22.1	--	27.7	--	16.5	--	--	--	-7.7	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			-1.3	--	7.7	--	10.7	--	13.6	--	12.0	--	11.2	Jul-15
Wayzata Opportunities III- Gross	6,205,514	0.1	-2.4	--	-9.4	--	-8.1	--	3.3	--	-2.3	--	-5.8	Feb-13
Wayzata Opportunities III- Net			-2.4	--	-9.4	--	-8.1	--	3.3	--	-2.3	--	-5.8	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			-1.3	--	7.7	--	10.7	--	13.6	--	12.0	--	15.7	Feb-13

+ Unable to calculate a since inception return due to system limitations when account experienced 1 quarter of negative fund value in 2016.

* Funded January 2019.

Total Fund
Performance Summary

Period Ending: March 31, 2019

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Inception (%)	Inception Date
Public Credit- Gross	179,233,966	1.9	4.2	--	0.6	--	2.1	--	9.4	--	3.8	--	4.1	Nov-13
Public Credit- Net			4.2	--	0.6	--	2.1	--	9.4	--	3.8	--	4.1	
<i>Brigade Custom¹</i>			5.6	--	3.7	--	4.6	--	7.3	--	4.3	--	4.5	Nov-13
Brigade Capital- Gross	179,233,966	1.9	4.2	93	0.6	99	2.1	99	9.4	12	3.8	82	4.1	Nov-13
Brigade Capital- Net			4.2	93	0.6	99	2.1	99	9.4	12	3.8	82	4.1	
<i>Brigade Custom</i>			5.6	77	3.7	83	4.6	84	7.3	64	4.3	69	4.5	Nov-13
<i>eV US High Yield Fixed Inc Gross Median</i>			7.0		4.9		5.8		7.9		4.6		5.0	Nov-13
Private Credit- Gross ⁺⁺	157,433,767	1.7	-1.0	--	2.5	--	4.4	--	8.3	--	7.2	--	6.8	Oct-11
Private Credit- Net			-1.0	--	2.5	--	4.4	--	8.3	--	7.2	--	6.8	
<i>Credit Suisse Leveraged Loan + 2%</i>			4.2	--	4.1	--	5.3	--	7.9	--	5.9	--	6.9	Oct-11
Athyrium Opp II- Gross	14,444,511	0.2	0.2	--	6.6	--	9.9	--	9.6	--	--	--	6.1	Jun-15
Athyrium Opp II- Net			0.2	--	6.6	--	9.9	--	9.6	--	--	--	6.1	
<i>Credit Suisse Leveraged Loan + 2%</i>			4.2	--	4.1	--	5.3	--	7.9	--	5.9	--	6.2	Jun-15
Athyrium Opp III- Gross	12,115,445	0.1	-0.1	--	1.7	--	2.7	--	--	--	--	--	-4.7	May-17
Athyrium Opp III- Net			-0.1	--	1.7	--	2.7	--	--	--	--	--	-4.7	
<i>Credit Suisse Leveraged Loan + 2%</i>			4.2	--	4.1	--	5.3	--	7.9	--	5.9	--	6.0	May-17
Benefit St Pr Sr Secure Opp- Gross	40,116,066	0.4	-2.4	--	0.3	--	3.2	--	--	--	--	--	2.7	Jan-18
Benefit St Pr Sr Secure Opp- Net			-2.4	--	0.3	--	3.2	--	--	--	--	--	2.7	
<i>Credit Suisse Leveraged Loan + 2%</i>			4.2	--	4.1	--	5.3	--	7.9	--	5.9	--	5.3	Jan-18
Summit Credit- Gross	2,736,406	0.0	-11.6	--	-1.9	--	-1.3	--	6.3	--	6.9	--	6.6	Oct-11
Summit Credit- Net			-11.6	--	-1.9	--	-1.3	--	6.3	--	6.9	--	6.6	
<i>Credit Suisse Leveraged Loan + 2%</i>			4.2	--	4.1	--	5.3	--	7.9	--	5.9	--	6.9	Oct-11

1. See Policy Index and Benchmark History.

++ Returns are one-quarter lag.

Total Fund
Performance Summary

Period Ending: March 31, 2019

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Inception (%)	Inception Date
Summit Credit II- Gross	24,083,706	0.3	-2.2	--	1.8	--	2.6	--	9.4	--	--	--	5.9	Nov-14
Summit Credit II- Net			-2.2	--	1.8	--	2.6	--	9.4	--	--	--	5.9	
<i>Credit Suisse Leveraged Loan + 2%</i>			4.2	--	4.1	--	5.3	--	7.9	--	5.9	--	6.0	Nov-14
Summit Credit III- Gross	21,108,398	0.2	0.9	--	--	--	--	--	--	--	--	--	0.9	Oct-18
Summit Credit III- Net			0.9	--	--	--	--	--	--	--	--	--	0.9	
<i>Credit Suisse Leveraged Loan + 2%</i>			4.2	--	4.1	--	5.3	--	7.9	--	5.9	--	1.5	Oct-18
TCP Direct Lending VIII- Gross	42,829,235	0.5	1.0	--	3.7	--	3.1	--	--	--	--	--	2.9	Feb-18
TCP Direct Lending VIII- Net			1.0	--	3.7	--	3.1	--	--	--	--	--	2.9	
<i>Credit Suisse Leveraged Loan + 2%</i>			4.2	--	4.1	--	5.3	--	7.9	--	5.9	--	5.4	Feb-18
Growth Oriented Absolute Return- Gross****	291,940,505	3.1	6.3	--	-2.2	--	-0.1	--	6.4	--	3.0	--	4.7	Aug-04
Growth Oriented Absolute Return- Net			6.3	--	-2.2	--	-0.1	--	6.4	--	3.0	--	4.7	
<i>HFRI FoF Composite Index + 1%</i>			4.9	--	0.4	--	1.2	--	4.5	--	4.7	--	6.0	Aug-04
Grosvenor SCARF Growth- Gross	146,481,032	1.5	3.7	62	-1.7	72	0.3	63	7.1	26	2.7	58	5.7	Nov-11
Grosvenor SCARF Growth- Net			3.7	62	-1.7	72	0.3	63	7.1	26	2.7	58	5.7	
<i>HFRI FoF Composite Index + 1%</i>			4.9	48	0.4	40	1.2	56	4.5	63	4.7	27	4.8	Nov-11
<i>eV Alt Fund of Funds - Multi-Strategy Median</i>			4.8		-0.2		1.4		5.2		3.2		5.0	Nov-11
JANA Partners- Gross	4,144,713	0.0	2.2	63	-10.0	93	-3.7	77	3.1	77	-0.1	92	1.5	Jul-13
JANA Partners- Net			2.2	63	-10.0	93	-3.7	77	3.1	77	-0.1	92	1.5	
<i>HFRI FoF Composite Index + 1%</i>			4.9	32	0.4	57	1.2	60	4.5	64	4.7	37	4.8	Jul-13
<i>eV Alt All Event Driven Median</i>			2.9		1.3		2.9		6.1		3.7		4.3	Jul-13

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

** Composite reflects net returns from Cliffwater up to March 2017.

Total Fund Performance Summary

Period Ending: March 31, 2019

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Inception (%)	Inception Date
Lakewood- Gross	44,058,633	0.5	13.0	22	1.5	32	0.3	49	5.6	61	4.9	46	5.5	Jun-13
Lakewood- Net			13.0	22	1.5	32	0.3	49	5.6	61	4.9	46	5.5	
<i>HFRI FoF Composite Index + 1%</i>			4.9	65	0.4	39	1.2	44	4.5	69	4.7	49	4.8	Jun-13
<i>eV Alt Fundamental - Long/Short Equity Median</i>			7.1		-1.9		0.0		7.0		4.5		6.1	Jun-13
OZ Domestic II- Gross	49,371,277	0.5	8.0	16	1.3	47	3.3	37	8.4	28	5.0	41	7.2	Dec-11
OZ Domestic II- Net			8.0	16	1.3	47	3.3	37	8.4	28	5.0	41	7.1	
<i>HFRI FoF Composite Index + 1%</i>			4.9	31	0.4	53	1.2	50	4.5	53	4.7	44	4.8	Dec-11
<i>eV Alt All Multi-Strategy Median</i>			3.2		0.7		1.0		4.9		4.1		5.3	Dec-11
Third Point Offshore Fund- Gross*	47,884,849	0.5	9.1	13	-3.8	78	-2.4	71	7.5	42	4.4	37	8.9	Apr-12
Third Point Offshore Fund- Net			9.1	13	-3.8	78	-2.4	71	7.5	42	4.4	37	8.9	
<i>HFRI FoF Composite Index + 1%</i>			4.9	32	0.4	57	1.2	60	4.5	64	4.7	37	4.8	Apr-12
<i>eV Alt All Event Driven Median</i>			2.9		1.3		2.9		6.1		3.7		5.3	Apr-12
Diversifying Asset Category- Gross	2,190,047,310	23.0	2.5	--	2.6	--	1.8	--	--	--	--	--	2.5	Mar-17
Diversifying Asset Category- Net			2.5	--	2.6	--	1.7	--	--	--	--	--	2.4	
<i>Diversifying Custom¹</i>			2.7	--	3.1	--	2.8	--	--	--	--	--	2.9	Mar-17
Core/Core Plus Fixed Income- Gross	899,038,200	9.5	3.5	--	5.0	--	5.1	--	3.2	--	3.4	--	3.2	Jun-11
Core/Core Plus Fixed Income- Net			3.5	--	4.9	--	4.9	--	3.0	--	3.2	--	3.1	
<i>BBgBarc US Aggregate TR</i>			2.9	--	4.6	--	4.5	--	2.0	--	2.7	--	2.9	Jun-11
Prudential- Gross	454,338,365	4.8	3.8	10	5.2	14	5.1	10	4.2	3	--	--	4.1	Jul-14
Prudential- Net			3.7	11	5.1	20	4.9	23	4.0	3	--	--	3.9	
<i>BBgBarc US Aggregate TR</i>			2.9	80	4.6	76	4.5	75	2.0	87	2.7	89	2.5	Jul-14
<i>eV US Core Fixed Inc Gross Median</i>			3.3		4.8		4.7		2.5		3.0		2.9	Jul-14
TCW MetWest Fixed- Gross	444,699,835	4.7	3.2	54	4.9	35	5.0	18	2.9	23	3.2	39	5.8	Dec-01
TCW MetWest Fixed- Net			3.2	56	4.8	51	4.9	28	2.7	37	3.0	62	5.6	
<i>BBgBarc US Aggregate TR</i>			2.9	80	4.6	76	4.5	75	2.0	87	2.7	89	4.4	Dec-01
<i>eV US Core Fixed Inc Gross Median</i>			3.3		4.8		4.7		2.5		3.0		4.8	Dec-01

1. See Policy Index and Benchmark History.

+ Preliminary quarterly returns as of 3/31/2019 (Market Values estimated based on preliminary performance numbers provided by the manager.)

Total Fund Performance Summary

Period Ending: March 31, 2019

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Inception (%)	Inception Date
U.S. Treasury- Gross	446,490,189	4.7	2.1	--	4.1	--	4.2	--	--	--	--	--	4.8	Feb-18
U.S. Treasury- Net			2.1	--	4.1	--	4.2	--	--	--	--	--	4.7	
<i>BBgBarc US Treasury TR</i>			2.1	--	4.1	--	4.2	--	1.0	--	2.2	--	4.8	Feb-18
Neuberger Berman- Gross ⁺	446,490,189	4.7	2.1	55	4.1	39	4.2	47	2.1	1	2.9	1	6.4	Jun-88
Neuberger Berman- Net			2.1	56	4.1	40	4.2	55	2.1	1	2.8	1	6.3	
<i>BBgBarc US Govt TR</i>			2.1	56	4.1	40	4.2	54	1.1	99	2.1	69	5.8	Jun-88
<i>eV US Government Fixed Inc Gross Median</i>			2.2		4.0		4.2		1.5		2.3		--	Jun-88
Global Fixed Income- Gross	244,550,077	2.6	3.3	--	1.3	--	-5.3	--	2.7	--	2.1	--	2.1	May-13
Global Fixed Income- Net			3.2	--	1.0	--	-5.7	--	2.3	--	1.7	--	1.8	
<i>Brandywine Custom¹</i>			2.0	--	2.2	--	-2.7	--	1.5	--	0.4	--	0.7	May-13
Brandywine Global- Gross	244,550,077	2.6	3.3	55	1.3	82	-5.3	92	2.7	61	2.1	57	2.1	May-13
Brandywine Global- Net			3.2	56	1.0	85	-5.7	93	2.3	69	1.7	62	1.8	
<i>Brandywine Custom</i>			2.0	82	2.2	71	-2.7	84	1.5	83	0.4	87	0.7	May-13
<i>eV All Global Fixed Inc Gross Median</i>			3.5		3.2		1.9		3.4		2.5		2.7	May-13
Diversifying Absolute Return- Gross⁺⁺	599,968,843	6.3	1.0	--	-1.5	--	-1.7	--	1.1	--	0.7	--	1.8	Nov-11
Diversifying Absolute Return- Net			1.0	--	-1.5	--	-1.7	--	1.1	--	0.7	--	1.8	
<i>HFRI FoF Conservative Index¹</i>			3.2	--	0.6	--	1.7	--	3.9	--	4.3	--	4.6	Nov-11
AQR DELTA II- Gross	60,026,382	0.6	-1.8	93	-8.4	90	-13.9	93	-3.7	91	1.3	80	1.4	May-13
AQR DELTA II- Net			-1.8	93	-8.4	90	-13.9	93	-3.7	91	1.3	80	1.4	
<i>HFRI FoF Conservative Index</i>			3.2	51	0.6	52	1.7	47	3.9	56	4.3	47	4.4	May-13
<i>eV Alt All Multi-Strategy Median</i>			3.2		0.7		1.0		4.9		4.1		4.3	May-13

1. See Policy Index and Benchmark History.

+ Account converted to U.S. Treasury from Core Fixed Income in February 2018. Reflects linked historical returns up to February 2018.

* Composite reflects net returns from Cliffwater up to March 2017.

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

Total Fund
Performance Summary

Period Ending: March 31, 2019

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Inception (%)	Inception Date
Brevan Howard US- Gross	0	0.0	-0.2	75	3.4	25	11.7	11	3.2	37	1.7	57	1.6	Feb-14
Brevan Howard US- Net			-0.2	75	3.4	25	11.7	11	3.2	37	1.7	57	1.6	
<i>HFRI FoF Conservative Index</i>			3.2	45	0.6	41	1.7	36	3.9	35	4.3	28	4.4	Feb-14
<i>HFRI Fund of Funds Composite Index</i>			4.6	34	-0.3	48	0.2	45	3.9	34	2.2	51	2.0	Feb-14
<i>eV Alt All Macro Median</i>			2.6		-1.0		-0.4		2.0		2.3		2.2	Feb-14
Elliot Associates- Gross*	54,939,073	0.6	1.3	78	0.6	56	2.1	54	7.4	43	6.1	26	7.2	Apr-12
Elliot Associates- Net			1.3	78	0.6	56	2.1	54	7.4	43	6.1	26	7.2	
<i>HFRI FoF Conservative Index</i>			3.2	48	0.6	56	1.7	57	3.9	70	4.3	38	4.5	Apr-12
<i>eV Alt All Event Driven Median</i>			2.9		1.3		2.9		6.1		3.7		5.3	Apr-12
Graham Global Inv II- Gross	31,614,104	0.3	4.1	34	-3.0	68	-5.1	72	--	--	--	--	-4.3	Feb-17
Graham Global Inv II- Net			4.1	34	-3.0	68	-5.1	72	--	--	--	--	-4.3	
<i>HFRI FoF Conservative Index</i>			3.2	38	0.6	52	1.7	50	3.9	26	4.3	41	3.2	Feb-17
<i>eV Alt All Managed Futures Median</i>			0.7		0.7		1.5		0.1		3.7		0.0	Feb-17
Grosvenor SCARF Diversifying- Gross	120,560,232	1.3	0.8	95	-1.5	71	-1.5	78	0.2	98	-1.0	99	1.2	Nov-11
Grosvenor SCARF Diversifying- Net			0.8	95	-1.5	71	-1.5	78	0.2	98	-1.0	99	1.2	
<i>HFRI FoF Conservative Index</i>			3.2	69	0.6	36	1.7	44	3.9	70	4.3	32	4.6	Nov-11
<i>eV Alt Fund of Funds - Multi-Strategy Median</i>			4.8		-0.2		1.4		5.2		3.2		5.0	Nov-11
Grosvenor SCARF B Diversifying- Gross	167,853,800	1.8	1.5	92	-1.3	68	-2.3	83	-1.7	99	-1.4	99	0.2	Jan-13
Grosvenor SCARF B Diversifying- Net			1.5	92	-1.3	68	-2.3	83	-1.7	99	-1.4	99	0.2	
<i>HFRI FoF Conservative Index</i>			3.2	69	0.6	36	1.7	44	3.9	70	4.3	32	4.5	Jan-13
<i>eV Alt Fund of Funds - Multi-Strategy Median</i>			4.8		-0.2		1.4		5.2		3.2		4.4	Jan-13

+ Preliminary quarterly returns as of 3/31/2019 (Market Values estimated based on preliminary performance numbers provided by the manager.)

Total Fund
Performance Summary

Period Ending: March 31, 2019

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Inception (%)	Inception Date
KLS Diversified Fund- Gross	40,264,664	0.4	0.7	52	--	--	--	--	--	--	--	--	0.7	Dec-18
KLS Diversified Fund- Net			0.7	52	--	--	--	--	--	--	--	--	0.7	
<i>HFRI FoF Conservative Index</i>			3.2	15	0.6	58	1.7	48	3.9	47	4.3	56	3.2	Dec-18
<i>eV Alt Relative Value - Multi-Market Arbitrage Median</i>			0.8		1.5		1.1		3.6		5.1		0.8	Dec-18
Laurion Capital- Gross	46,955,044	0.5	1.4	73	2.4	45	4.2	30	5.4	41	6.0	45	6.0	Mar-14
Laurion Capital- Net			1.4	73	2.4	45	4.2	30	5.4	41	6.0	45	6.0	
<i>HFRI FoF Conservative Index</i>			3.2	48	0.6	56	1.7	34	3.9	45	4.3	59	4.3	Mar-14
<i>eV Alt Relative Value - Equity Relative Value Median</i>			3.0		1.7		1.0		1.9		4.7		4.7	Mar-14
MW Global Opportunities Fund- Gross	40,412,543	0.4	1.0	84	--	--	--	--	--	--	--	--	1.0	Dec-18
MW Global Opportunities Fund- Net			1.0	84	--	--	--	--	--	--	--	--	1.0	
<i>HFRI FoF Conservative Index</i>			3.2	76	0.6	37	1.7	41	3.9	74	4.3	52	3.2	Dec-18
<i>eV Alt Fundamental - Long/Short Equity Median</i>			7.1		-1.9		0.0		7.0		4.5		7.1	Dec-18
Winton Diversified Futures- Gross	37,343,001	0.4	1.2	49	-0.3	55	2.6	44	--	--	--	--	2.9	Dec-16
Winton Diversified Futures- Net			1.2	49	-0.3	55	2.6	44	--	--	--	--	2.9	
<i>HFRI FoF Conservative Index</i>			3.2	38	0.6	52	1.7	50	3.9	26	4.3	41	3.4	Dec-16
<i>eV Alt All Managed Futures Median</i>			0.7		0.7		1.5		0.1		3.7		0.3	Dec-16

Total Fund Performance Summary

Period Ending: March 31, 2019

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Inception (%)	Inception Date
Real Return (with SSgA RA Overlay Proxy)- Gross	1,551,609,013	16.3	2.7	--	3.0	--	5.9	--	--	--	--	--	9.2	Mar-17
Real Return (with SSgA RA Overlay Proxy)- Net			2.7	--	2.9	--	5.7	--	--	--	--	--	9.0	
<i>Real Return Custom¹</i>			1.1	--	2.8	--	4.5	--	--	--	--	--	6.5	Mar-17
Real Return Asset Category- Gross	1,410,466,110	14.8	2.3	--	3.5	--	6.5	--	--	--	--	--	10.7	Mar-17
Real Return Asset Category- Net			2.3	--	3.4	--	6.3	--	--	--	--	--	10.5	
<i>Real Return Custom</i>			1.1	--	2.8	--	4.5	--	--	--	--	--	6.5	Mar-17
Real Estate- Gross	894,760,261	9.4	2.0	9	1.1	98	4.7	94	9.7	4	11.0	6	11.4	Jun-11
Real Estate- Net			1.9	9	0.9	99	4.3	95	9.3	7	10.2	14	10.6	
<i>Real Estate Custom¹</i>			2.2	7	5.6	10	7.8	18	7.7	36	9.5	40	10.1	Jun-11
<i>InvestorForce All DB Real Estate Priv Net Median</i>			1.3		4.8		6.9		7.1		9.2		9.8	Jun-11
Core RE -Separate- Gross	33,165,508	0.3	13.0	--	11.9	--	18.4	--	13.8	--	12.5	--	7.2	Sep-08
Core RE -Separate- Net			13.0	--	9.3	--	15.4	--	12.3	--	11.0	--	6.1	
<i>NFI-ODCE</i>			1.4	--	5.4	--	7.5	--	8.0	--	10.2	--	5.6	Sep-08
BlackRock RE Leveraged- Gross	31,990,508	0.3	13.5	--	14.6	--	20.5	--	14.2	--	14.3	--	10.4	Dec-98
BlackRock RE Leveraged- Net			13.5	--	12.9	--	18.4	--	13.1	--	12.9	--	--	
<i>NFI-ODCE</i>			1.4	--	5.4	--	7.5	--	8.0	--	10.2	--	8.5	Dec-98
Cornerstone Leveraged- Gross ⁺	1,175,000	0.0												
Cornerstone Leveraged- Net														
BlackRock RE Unleveraged- Gross	--	--	9.2	--	5.4	--	10.2	--	10.7	--	11.5	--	10.3	Oct-95
BlackRock RE Unleveraged- Net			9.2	--	6.3	--	10.3	--	9.9	--	10.5	--	--	
<i>NFI-ODCE</i>			1.4	--	5.4	--	7.5	--	8.0	--	10.2	--	9.2	Oct-95

1. See Policy Index and Benchmark History.

+ Liquidating as of 9/30/2018.

Total Fund
Performance Summary

Period Ending: March 31, 2019

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Inception (%)	Inception Date
Core RE -Limited Partnership- Gross	665,875,757	7.0	1.6	--	5.7	--	8.0	--	10.2	--	11.5	--	5.0	Sep-08
Core RE -Limited Partnership- Net			1.6	--	5.5	--	7.7	--	10.0	--	11.1	--	4.4	
<i>NFI-ODCE</i>			1.4	--	5.4	--	7.5	--	8.0	--	10.2	--	5.6	Sep-08
Brookfield Premier RE Partners- Gross*	102,915,946	1.1	2.0	--	--	--	--	--	--	--	--	--	4.0	Sep-18
Brookfield Premier RE Partners- Net			2.0	--	--	--	--	--	--	--	--	--	4.0	
<i>NFI-ODCE</i>			1.4	--	5.4	--	7.5	--	8.0	--	10.2	--	3.2	Sep-18
Clarion Lion Properties- Gross	154,823,529	1.6	2.0	--	--	--	--	--	--	--	--	--	4.1	Sep-18
Clarion Lion Properties- Net			1.8	--	--	--	--	--	--	--	--	--	3.6	
<i>NFI-ODCE</i>			1.4	--	5.4	--	7.5	--	8.0	--	10.2	--	3.2	Sep-18
Jamestown Premier Property- Gross	17,985,379	0.2	-0.4	--	2.2	--	4.1	--	8.5	--	10.5	--	10.6	Dec-13
Jamestown Premier Property- Net			-0.4	--	2.2	--	4.1	--	8.5	--	10.5	--	10.6	
<i>NFI-ODCE</i>			1.4	--	5.4	--	7.5	--	8.0	--	10.2	--	10.2	Dec-13
Metlife Core Property- Gross	60,486,702	0.6	2.5	--	5.3	--	8.2	--	8.6	--	11.0	--	11.7	Dec-13
Metlife Core Property- Net			2.4	--	4.9	--	7.7	--	8.1	--	10.4	--	11.2	
<i>NFI-ODCE</i>			1.4	--	5.4	--	7.5	--	8.0	--	10.2	--	10.2	Dec-13
Prime Property- Gross	61,035,011	0.6	1.3	--	5.8	--	8.0	--	9.4	--	11.8	--	11.9	Sep-13
Prime Property- Net			1.3	--	5.3	--	7.2	--	8.4	--	10.6	--	10.8	
<i>NFI-ODCE</i>			1.4	--	5.4	--	7.5	--	8.0	--	10.2	--	10.3	Sep-13
Principal US Property- Gross	46,570,732	0.5	1.7	--	5.5	--	7.8	--	8.3	--	--	--	8.7	Oct-15
Principal US Property- Net			1.7	--	5.5	--	7.8	--	8.3	--	--	--	8.7	
<i>NFI-ODCE</i>			1.4	--	5.4	--	7.5	--	8.0	--	10.2	--	8.7	Oct-15
Prologis Targeted Euro Logistics- Gross	39,146,500	0.4	1.6	--	6.6	--	5.4	--	12.3	--	--	--	12.3	Oct-15
Prologis Targeted Euro Logistics- Net			1.6	--	6.6	--	5.4	--	12.3	--	--	--	12.3	
<i>NFI-ODCE</i>			1.4	--	5.4	--	7.5	--	8.0	--	10.2	--	8.7	Oct-15
Prologis Targeted US Logistics- Gross	71,109,008	0.7	2.9	--	9.6	--	13.4	--	16.8	--	--	--	16.6	Jul-15
Prologis Targeted US Logistics- Net			2.9	--	9.6	--	13.4	--	16.8	--	--	--	16.6	
<i>NFI-ODCE</i>			1.4	--	5.4	--	7.5	--	8.0	--	10.2	--	9.1	Jul-15

+ Preliminary quarterly returns as of 3/31/2019 (Market Values estimated based on preliminary performance numbers provided by the manager.)

Total Fund
Performance Summary

Period Ending: March 31, 2019

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Inception (%)	Inception Date
Townsend Real Estate- Gross*	111,802,950	1.2	0.0	--	3.7	--	6.0	--	9.1	--	--	--	9.1	Mar-16
Townsend Real Estate- Net			0.0	--	3.7	--	6.0	--	9.1	--	--	--	9.1	
<i>NFI-ODCE</i>			1.4	--	5.4	--	7.5	--	8.0	--	10.2	--	8.0	Mar-16
Non-Core RE -Opportunistic- Gross**	141,888,714	1.5	2.2	--	-13.5	--	-9.9	--	10.2	--	23.5	--	23.0	Feb-14
Non-Core RE -Opportunistic- Net			2.2	--	-13.5	--	-9.9	--	9.9	--	22.5	--	22.1	
<i>NFI-ODCE net +1% 1Q Lag</i>			3.6	--	6.0	--	8.4	--	8.3	--	10.4	--	10.9	Feb-14
Carlyle China Realty- Gross	6,838,490	0.1	0.3	--	50.0	--	62.5	--	--	--	--	--	19.7	Jun-17
Carlyle China Realty- Net			0.3	--	50.0	--	62.5	--	--	--	--	--	19.7	
<i>NFI-ODCE net +1% 1Q Lag</i>			3.6	--	6.0	--	8.4	--	8.3	--	10.4	--	8.1	Jun-17
Carlyle China Rome Logistics- Gross	30,303,783	0.3	0.8	--	-20.0	--	-13.6	--	--	--	--	--	-11.0	Jun-17
Carlyle China Rome Logistics- Net			0.8	--	-20.0	--	-13.6	--	--	--	--	--	-11.0	
<i>NFI-ODCE net +1% 1Q Lag</i>			3.6	--	6.0	--	8.4	--	8.3	--	10.4	--	8.1	Jun-17
CIM Opportunity VIII- Gross	35,258,892	0.4	1.9	--	6.3	--	11.3	--	6.7	--	--	--	6.8	Feb-15
CIM Opportunity VIII- Net			1.9	--	6.3	--	11.3	--	6.1	--	--	--	5.4	
<i>NFI-ODCE net +1% 1Q Lag</i>			3.6	--	6.0	--	8.4	--	8.3	--	10.4	--	10.5	Feb-15
Kohlberg Kravis Roberts- Gross	8,889,761	0.1	-0.9	--	-59.0	--	-58.1	--	-11.0	--	9.8	--	9.7	Feb-14
Kohlberg Kravis Roberts- Net			-0.9	--	-59.0	--	-58.1	--	-11.0	--	9.6	--	9.4	
<i>NFI-ODCE net +1% 1Q Lag</i>			3.6	--	6.0	--	8.4	--	8.3	--	10.4	--	10.9	Feb-14
NREP Nordic Strat FCP-FIS- Gross	13,888,946	0.1	4.6	--	-0.6	--	4.0	--	26.5	--	--	--	25.6	Dec-14
NREP Nordic Strat FCP-FIS- Net			4.6	--	-0.6	--	4.0	--	26.5	--	--	--	25.6	
<i>NFI-ODCE net +1% 1Q Lag</i>			3.6	--	6.0	--	8.4	--	8.3	--	10.4	--	10.1	Dec-14
NREP Nordic Strat II- Gross	32,139,376	0.3	5.0	--	5.8	--	9.6	--	--	--	--	--	16.7	Jun-16
NREP Nordic Strat II- Net			5.0	--	5.8	--	9.6	--	--	--	--	--	16.7	
<i>NFI-ODCE net +1% 1Q Lag</i>			3.6	--	6.0	--	8.4	--	8.3	--	10.4	--	8.2	Jun-16

** Returns are one-quarter lag.

* Preliminary quarterly return as of 3/31/2019 (Returns are not available at reporting period.)

Total Fund
Performance Summary

Period Ending: March 31, 2019

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Inception (%)	Inception Date
NREP Nordic Strat III- Gross	1,553,665	0.0	-14.2	--	--	--	--	--	--	--	--	--	-6.3	Jul-18
NREP Nordic Strat III- Net			-14.2	--	--	--	--	--	--	--	--	--	-6.3	
<i>NFI-ODCE net +1% 1Q Lag</i>			3.6	--	6.0	--	8.4	--	8.3	--	10.4	--	5.9	Jul-18
OZ RE III- Gross	13,015,801	0.1	3.0	--	8.5	--	14.4	--	22.0	--	--	--	5.6	Sep-14
OZ RE III- Net			3.0	--	8.5	--	14.4	--	20.2	--	--	--	1.3	
<i>NFI-ODCE net +1% 1Q Lag</i>			3.6	--	6.0	--	8.4	--	8.3	--	10.4	--	10.2	Sep-14
Non-Core RE -Value Added- Gross	53,830,282	0.6	-0.7	--	1.1	--	2.6	--	4.9	--	8.2	--	-2.9	Sep-08
Non-Core RE -Value Added- Net			-0.7	--	1.1	--	2.6	--	4.5	--	7.5	--	-4.1	
<i>NFI-ODCE net +1% 1Q Lag</i>			3.6	--	6.0	--	8.4	--	8.4	--	10.9	--	8.0	Sep-08
ECE Euro Prime Shopping II- Gross	19,273,728	0.2	-1.2	--	0.3	--	4.0	--	15.9	--	--	--	16.2	Jul-15
ECE Euro Prime Shopping II- Net			-1.2	--	0.3	--	4.0	--	14.6	--	--	--	14.9	
<i>NFI-ODCE net +1% 1Q Lag</i>			3.6	--	6.0	--	8.4	--	8.4	--	10.9	--	9.9	Jul-15
European RE Debt II- Gross	13,946,022	0.1	-2.6	--	-6.0	--	-1.9	--	6.4	--	5.3	--	4.8	Nov-13
European RE Debt II- Net			-2.6	--	-6.0	--	-1.9	--	6.4	--	5.3	--	4.8	
<i>NFI-ODCE net +1% 1Q Lag</i>			3.6	--	6.0	--	8.4	--	8.4	--	10.9	--	11.3	Nov-13
Hammes II- Gross	17,256,730	0.2	3.1	--	17.8	--	20.0	--	-1.1	--	--	--	4.1	Jul-15
Hammes II- Net			3.1	--	17.8	--	20.0	--	-2.3	--	--	--	1.5	
<i>NFI-ODCE net +1% 1Q Lag</i>			3.6	--	6.0	--	8.4	--	8.4	--	10.9	--	9.9	Jul-15
Hammes III- Gross	578,307	0.0	-35.1	--	--	--	--	--	--	--	--	--	-35.1	Oct-18
Hammes III- Net			-35.1	--	--	--	--	--	--	--	--	--	-35.1	
<i>NFI-ODCE net +1% 1Q Lag</i>			3.6	--	6.0	--	8.4	--	8.4	--	10.9	--	3.9	Oct-18
Hines US Office II- Gross	19,661	0.0												
Hines US Office II- Net														
UBS RE- Gross	2,755,834	0.0	0.1	--	-21.3	--	-23.6	--	-3.1	--	1.9	--	-1.5	Sep-06
UBS RE- Net			0.1	--	-21.3	--	-23.6	--	-3.2	--	1.6	--	-2.8	
<i>NFI-ODCE net +1% 1Q Lag</i>			3.6	--	6.0	--	8.4	--	8.4	--	10.9	--	--	Sep-06

Total Fund Performance Summary

Period Ending: March 31, 2019

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Inception (%)	Inception Date
Private Real Assets- Gross**	489,871,820	5.2	2.6	--	9.6	--	11.2	--	16.0	--	19.9	--	5.6	Jan-13
Private Real Assets- Net			2.6	--	9.6	--	11.2	--	16.0	--	19.9	--	5.6	
<i>Private Real Assets Custom¹</i>			-1.5	--	2.4	--	4.0	--	7.2	--	6.2	--	6.4	Jan-13
<i>CPI-U Headline +5%</i>			1.7	--	4.7	--	6.9	--	7.2	--	6.3	--	6.5	Jan-13
ACM II- Gross	12,686,363	0.1	2.0	--	-0.3	--	-1.4	--	--	--	--	--	-5.2	Sep-16
ACM II- Net			2.0	--	-0.3	--	-1.4	--	--	--	--	--	-5.2	
<i>NCREIF Farmland 1 Qtr Lag</i>			2.9	--	5.4	--	6.7	--	6.7	--	8.6	--	6.9	Sep-16
ArcLight Energy VI- Gross	38,437,213	0.4	-1.9	--	23.7	--	24.3	--	14.3	--	--	--	9.7	Aug-15
ArcLight Energy VI- Net			-1.9	--	23.7	--	24.3	--	14.3	--	--	--	9.7	
<i>Cambridge Associates Private Infrastructure 1 Qtr Lag</i>			1.2	--	4.3	--	7.0	--	11.9	--	10.0	--	12.9	Aug-15
Atalaya SMA- Gross	16,638,966	0.2	1.2	--	6.2	--	12.7	--	9.4	--	--	--	8.5	May-15
Atalaya SMA- Net			1.2	--	6.2	--	12.7	--	9.4	--	--	--	8.5	
<i>Cambridge Associates Private Infrastructure 1 Qtr Lag</i>			1.2	--	4.3	--	7.0	--	11.9	--	10.0	--	11.5	May-15
Brookfield Infra III- Gross	26,417,613	0.3	1.0	--	1.2	--	4.8	--	--	--	--	--	10.8	May-16
Brookfield Infra III- Net			1.0	--	1.2	--	4.8	--	--	--	--	--	10.8	
<i>Cambridge Associates Private Infrastructure 1 Qtr Lag</i>			1.2	--	4.3	--	7.0	--	11.9	--	10.0	--	12.6	May-16
Carlyle Power II- Gross	17,234,304	0.2	3.6	--	15.5	--	-6.4	--	6.8	--	--	--	-0.4	Oct-15
Carlyle Power II- Net			3.6	--	15.5	--	-6.4	--	6.8	--	--	--	-0.4	
<i>Cambridge Associates Private Infrastructure 1 Qtr Lag</i>			1.2	--	4.3	--	7.0	--	11.9	--	10.0	--	11.8	Oct-15
EnCap Energy IX- Gross	22,877,680	0.2	-8.7	--	3.5	--	-1.2	--	14.5	--	11.7	--	-0.3	Jan-13
EnCap Energy IX- Net			-8.7	--	3.5	--	-1.2	--	14.5	--	11.7	--	-0.3	
<i>Cambridge Associates Private Energy 1 Qtr Lag</i>			-6.8	--	-1.2	--	-0.5	--	7.9	--	-0.7	--	1.3	Jan-13
EnCap Energy X- Gross	34,134,998	0.4	8.4	--	10.2	--	10.6	--	14.7	--	--	--	-0.3	Apr-15
EnCap Energy X- Net			8.4	--	10.2	--	10.6	--	14.7	--	--	--	-0.3	
<i>Cambridge Associates Private Energy 1 Qtr Lag</i>			-6.8	--	-1.2	--	-0.5	--	7.9	--	-0.7	--	0.1	Apr-15

1. See Policy Index and Benchmark History.

** Returns are one-quarter lag.

Total Fund
Performance Summary

Period Ending: March 31, 2019

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Inception (%)	Inception Date
EnCap Flatrock Midstream III- Gross	14,485,165	0.2	-0.3	--	0.8	--	0.2	--	11.4	--	--	--	7.6	Jul-14
EnCap Flatrock Midstream III- Net			-0.3	--	0.8	--	0.2	--	11.4	--	--	--	7.6	
<i>Cambridge Associates Private Infrastructure 1 Qtr Lag</i>			1.2	--	4.3	--	7.0	--	11.9	--	10.0	--	10.3	Jul-14
EnCap Flatrock Midstream IV- Gross	6,208,014	0.1	-1.3	--	-11.4	--	-19.3	--	--	--	--	--	-18.0	Feb-18
EnCap Flatrock Midstream IV- Net			-1.3	--	-11.4	--	-19.3	--	--	--	--	--	-18.0	
<i>Cambridge Associates Private Infrastructure 1 Qtr Lag</i>			1.2	--	4.3	--	7.0	--	11.9	--	10.0	--	10.2	Feb-18
First Reserve- Gross	23,121,455	0.2	0.8	--	6.7	--	5.3	--	31.6	--	--	--	-2.3	Dec-14
First Reserve- Net			0.8	--	6.7	--	5.3	--	31.6	--	--	--	-2.3	
<i>Cambridge Associates Private Infrastructure 1 Qtr Lag</i>			1.2	--	4.3	--	7.0	--	11.9	--	10.0	--	10.7	Dec-14
IFM Global Infrastructure US LP- Gross	91,345,008	1.0	2.9	--	10.3	--	18.2	--	--	--	--	--	14.2	Apr-17
IFM Global Infrastructure US LP- Net			2.9	--	10.3	--	18.2	--	--	--	--	--	14.2	
<i>Cambridge Associates Private Infrastructure 1 Qtr Lag</i>			1.2	--	4.3	--	7.0	--	11.9	--	10.0	--	13.7	Apr-17
ISQ Global Infrastructure Fund II- Gross	12,673,137	0.1	1.9	--	--	--	--	--	--	--	--	--	1.9	Oct-18
ISQ Global Infrastructure Fund II- Net			1.9	--	--	--	--	--	--	--	--	--	1.9	
<i>Cambridge Associates Private Infrastructure 1 Qtr Lag</i>			1.2	--	4.3	--	7.0	--	11.9	--	10.0	--	3.3	Oct-18
Meridiam Infra N America III- Gross	349,318	0.0	-63.3	--	-89.9	--	-94.4	--	--	--	--	--	-95.0	Sep-17
Meridiam Infra N America III- Net			-63.3	--	-89.9	--	-94.4	--	--	--	--	--	-95.0	
<i>Cambridge Associates Private Infrastructure 1 Qtr Lag</i>			1.2	--	4.3	--	7.0	--	11.9	--	10.0	--	10.6	Sep-17
Pantheon Ventures- Gross	87,677,468	0.9	2.3	--	8.0	--	11.4	--	17.1	--	--	--	27.6	Jul-14
Pantheon Ventures- Net			2.3	--	8.0	--	11.4	--	17.1	--	--	--	27.6	
<i>Cambridge Associates Private Infrastructure 1 Qtr Lag</i>			1.2	--	4.3	--	7.0	--	11.9	--	10.0	--	10.3	Jul-14
Quantum Energy VI- Gross	34,166,797	0.4	7.0	--	25.5	--	25.2	--	36.9	--	--	--	27.1	Nov-14
Quantum Energy VI- Net			7.0	--	25.5	--	25.2	--	36.9	--	--	--	27.1	
<i>Cambridge Associates Private Energy 1 Qtr Lag</i>			-6.8	--	-1.2	--	-0.5	--	7.9	--	-0.7	--	-3.2	Nov-14
Quantum Energy VII- Gross	15,483,450	0.2	6.0	--	4.1	--	2.5	--	--	--	--	--	-0.7	Aug-17
Quantum Energy VII- Net			6.0	--	4.1	--	2.5	--	--	--	--	--	-0.7	
<i>Cambridge Associates Private Energy 1 Qtr Lag</i>			-6.8	--	-1.2	--	-0.5	--	7.9	--	-0.7	--	2.9	Aug-17

Total Fund Performance Summary

Period Ending: March 31, 2019

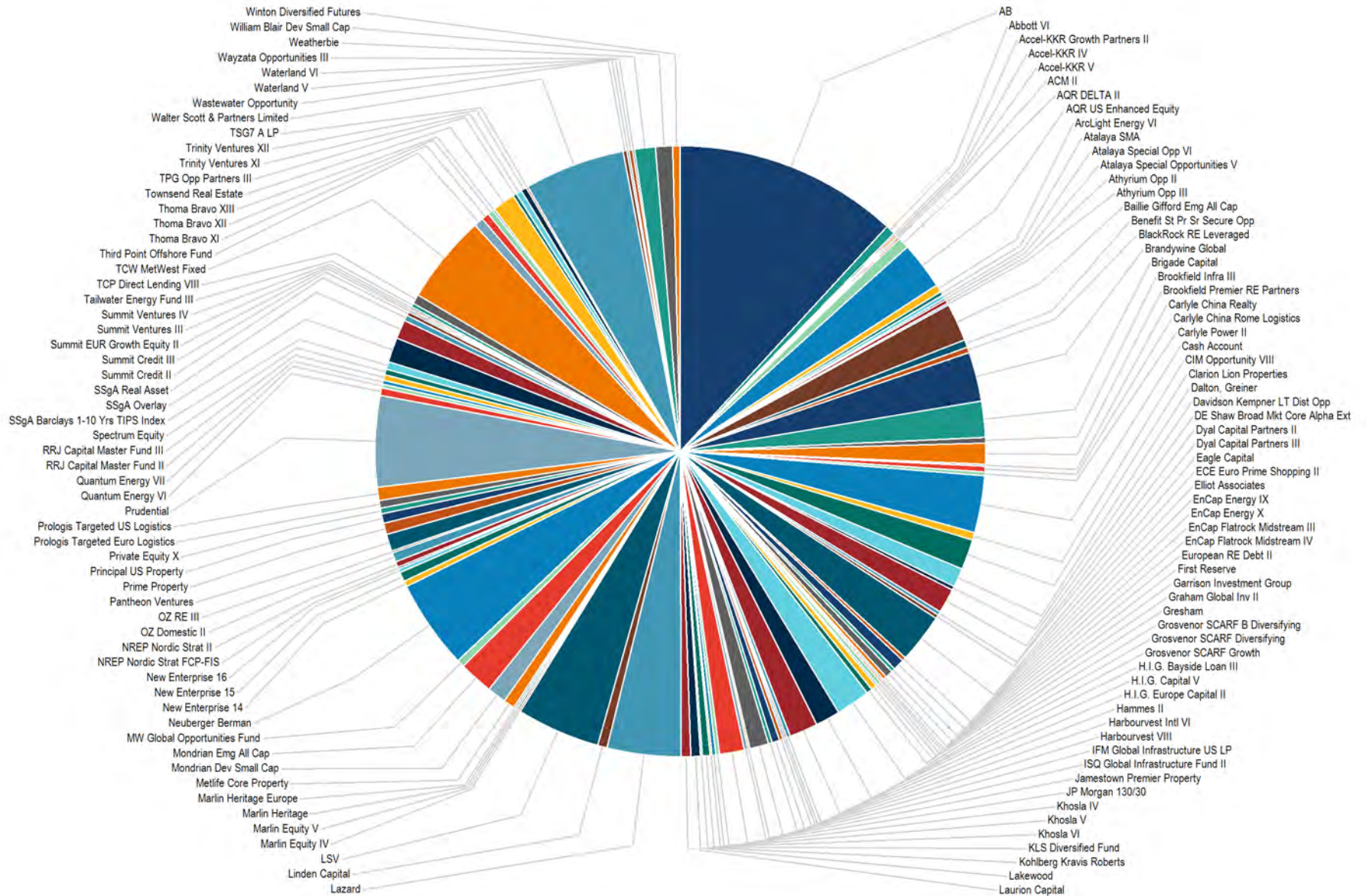
	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	Inception (%)	Inception Date
Tailwater Energy Fund III- Gross	20,064,139	0.2	11.5	--	--	--	--	--	--	--	--	--	1.6	Sep-18
Tailwater Energy Fund III- Net			11.5	--	--	--	--	--	--	--	--	--	1.6	
<i>Cambridge Associates Private Energy 1 Qtr Lag</i>			-6.8	--	-1.2	--	-0.5	--	7.9	--	-0.7	--	-4.7	Sep-18
Wastewater Opportunity- Gross	15,870,732	0.2	13.1	--	9.8	--	7.7	--	-13.5	--	--	--	-26.7	Dec-15
Wastewater Opportunity- Net			13.1	--	9.8	--	7.7	--	-13.5	--	--	--	-26.7	
<i>Cambridge Associates Private Infrastructure 1 Qtr Lag</i>			1.2	--	4.3	--	7.0	--	11.9	--	10.0	--	11.9	Dec-15
Commodities- Gross	25,834,029	0.3	7.6	--	-6.3	--	-4.2	--	0.6	--	-9.2	--	-6.2	May-08
Commodities- Net			7.4	--	-6.8	--	-4.9	--	0.0	--	-9.8	--	--	
<i>Bloomberg Commodity Index TR USD</i>			6.3	--	-5.6	--	-5.3	--	2.2	--	-8.9	--	-8.1	May-08
Gresham- Gross	25,834,029	0.3	7.6	--	-6.3	--	-4.4	--	4.3	--	-7.7	--	-7.3	Apr-08
Gresham- Net			7.4	--	-6.8	--	-5.0	--	3.6	--	-8.4	--	--	
<i>Bloomberg Commodity Index TR USD</i>			6.3	--	-5.6	--	-5.3	--	2.2	--	-8.9	--	-7.8	Apr-08
Opportunities Asset Category- Gross*	8,177,193	0.1	2.0	--	6.1	--	5.2	--	5.3	--	6.5	--	15.5	Oct-07
Opportunities Asset Category- Net			2.0	--	6.1	--	5.2	--	5.3	--	6.5	--	15.5	
<i>Policy Index</i>			6.1	--	3.1	--	4.0	--	8.3	--	6.2	--	7.7	Oct-07
Atalaya Special Opportunities V- Gross	8,177,193	0.1	2.0	--	6.1	--	5.2	--	4.8	--	6.7	--	5.2	Jul-13
Atalaya Special Opportunities V- Net			2.0	--	6.1	--	5.2	--	4.8	--	6.7	--	5.2	
<i>Thomson Reuters CJA All PE 1 Qtr Lag</i>			-1.3	--	7.7	--	10.7	--	13.6	--	12.0	--	14.1	Jul-13
SSgA Real Asset Overlay Proxy- Gross	141,142,903	1.5	8.4	--	3.1	--	5.4	--	6.4	--	1.1	--	1.5	Jan-08
SSgA Real Asset Overlay Proxy- Net			8.4	--	3.1	--	5.3	--	6.2	--	0.9	--	1.3	
<i>SSgA Real Asset¹</i>			8.3	--	2.9	--	5.1	--	6.3	--	0.8	--	--	Jan-08
Cash - Gross	283,097,805	3.0	0.7	--	2.2	--	2.6	--	2.0	--	1.6	--	3.2	Jun-92
Cash - Net			0.7	--	2.2	--	2.6	--	2.0	--	1.6	--	--	
<i>91 Day T-Bills</i>			0.6	--	1.7	--	2.1	--	1.2	--	0.8	--	2.4	Jun-92
Cash Account- Gross	283,097,805	3.0	0.7	--	2.2	--	2.6	--	2.0	--	1.6	--	3.2	Jun-92
Cash Account- Net			0.7	--	2.2	--	2.6	--	2.0	--	1.6	--	--	
<i>91 Day T-Bills</i>			0.6	--	1.7	--	2.1	--	1.2	--	0.8	--	2.4	Jun-92

1. See Policy Index and Benchmark History.

* Composite reflects net returns from Cliffwater up to March 2017.

Total Fund Manager Allocation Analysis

Period Ending: March 31, 2019



Total Fund
 Manager Allocation Analysis

Period Ending: March 31, 2019

	Current	%
AB	\$1,118,732,551	11.8%
AQR US Enhanced Equity	\$237,245,467	2.5%
JP Morgan 130/30	\$128,092,089	1.3%
DE Shaw Broad Mkt Core Alpha Ext	\$123,865,273	1.3%
Brown Advisory	\$44	0.0%
Eagle Capital	\$246,041,919	2.6%
Huber Capital	\$30,140	0.0%
UBS	\$16	0.0%
Weatherbie	\$103,751,599	1.1%
Dalton, Greiner	\$91,854,759	1.0%
WEDGE Capital	\$1,438	0.0%
CenterSquare	\$277	0.0%
Lazard	\$368,439,549	3.9%
Walter Scott & Partners Limited	\$501,408,495	5.3%
LSV	\$418,070,748	4.4%
Mondrian Dev Small Cap	\$91,209,021	1.0%
William Blair Dev Small Cap	\$82,644,051	0.9%
Baillie Gifford Emg All Cap	\$191,887,947	2.0%
Mondrian Emg All Cap	\$169,425,034	1.8%
CBRE Clarion	\$21,211	0.0%
Abbott VI	\$49,537,032	0.5%
Accel-KKR IV	\$14,256,838	0.1%
Accel-KKR V	\$10,932,879	0.1%
Accel-KKR Growth Partners II	\$8,931,671	0.1%
Atalaya Special Opp VI	\$21,594,062	0.2%
Davidson Kempner LT Dist Opp	\$20,269,048	0.2%
Dyal Capital Partners II	\$15,000,124	0.2%
Dyal Capital Partners III	\$17,573,712	0.2%

Total Fund
 Manager Allocation Analysis

Period Ending: March 31, 2019

	Current	%
Garrison Investment Group	\$13,380,727	0.1%
Harbourvest VIII	\$15,566,092	0.2%
Harbourvest Intl VI	\$34,246,501	0.4%
H.I.G. Bayside Loan III	\$18,311,347	0.2%
H.I.G. Capital V	\$12,211,040	0.1%
H.I.G. Europe Capital II	\$8,397,090	0.1%
Khosla IV	\$17,108,232	0.2%
Khosla V	\$21,830,808	0.2%
Khosla VI	\$7,664,670	0.1%
Linden Capital	\$46,172,078	0.5%
Linden Capital Partners IV	\$1,107,654	0.0%
Marlin Equity IV	\$13,707,393	0.1%
Marlin Equity V	\$5,020,208	0.1%
Marlin Heritage	\$9,491,581	0.1%
Marlin Heritage II	\$4,279,079	0.0%
Marlin Heritage Europe	\$5,884,253	0.1%
New Enterprise 14	\$30,868,422	0.3%
New Enterprise 15	\$43,462,410	0.5%
New Enterprise 16	\$16,414,201	0.2%
Private Equity X	\$27,432,561	0.3%
RCP Multi-Fund Feeder	\$4,250,000	0.0%
RRJ Capital Master Fund II	\$19,519,804	0.2%
RRJ Capital Master Fund III	\$33,267,079	0.3%
Spectrum Equity	\$30,069,959	0.3%
Spectrum Equity Fund VIII	\$3,540,048	0.0%
Summit EUR Growth Equity II	\$8,195,741	0.1%
Summit Ventures III	\$13,746,544	0.1%
Summit Ventures IV	\$12,381,992	0.1%

Total Fund
 Manager Allocation Analysis

Period Ending: March 31, 2019

	Current	%
Thoma Bravo XI	\$40,735,444	0.4%
Thoma Bravo XII	\$30,694,777	0.3%
Thoma Bravo XIII	\$6,476,718	0.1%
TPG Opp Partners III	\$23,393,491	0.2%
Trinity Ventures XI	\$32,547,163	0.3%
Trinity Ventures XII	\$27,648,902	0.3%
TSG7 A LP	\$11,830,761	0.1%
TSG7 B LP	\$1,107,285	0.0%
TSG8 LP	\$225,709	0.0%
TSSP Opportunities Partners IV	\$1,798,490	0.0%
Waterland V	\$12,112,587	0.1%
Waterland VI	\$22,292,182	0.2%
Wayzata Opportunities III	\$6,205,514	0.1%
Brigade Capital	\$179,233,966	1.9%
Athyrium Opp II	\$14,444,511	0.2%
Athyrium Opp III	\$12,115,445	0.1%
Benefit St Pr Sr Secure Opp	\$40,116,066	0.4%
Summit Credit	\$2,736,406	0.0%
Summit Credit II	\$24,083,706	0.3%
Summit Credit III	\$21,108,398	0.2%
TCP Direct Lending VIII	\$42,829,235	0.5%
Grosvenor SCARF Growth	\$146,481,032	1.5%
Grosvenor SCARF B Growth	\$0	0.0%
JANA Partners	\$4,144,713	0.0%
Lakewood	\$44,058,633	0.5%
OZ Domestic II	\$49,371,277	0.5%
Third Point Offshore Fund	\$47,884,849	0.5%
Prudential	\$454,338,365	4.8%

Total Fund
 Manager Allocation Analysis

Period Ending: March 31, 2019

	Current	%
TCW MetWest Fixed	\$444,699,835	4.7%
Neuberger Berman	\$446,490,189	4.7%
Brandywine Global	\$244,550,077	2.6%
AQR DELTA II	\$60,026,382	0.6%
Brevan Howard US	\$0	0.0%
Elliot Associates	\$54,939,073	0.6%
Graham Global Inv II	\$31,614,104	0.3%
Grosvenor SCARF Diversifying	\$120,560,232	1.3%
Grosvenor SCARF B Diversifying	\$167,853,800	1.8%
KLS Diversified Fund	\$40,264,664	0.4%
Laurion Capital	\$46,955,044	0.5%
MW Global Opportunities Fund	\$40,412,543	0.4%
Winton Diversified Futures	\$37,343,001	0.4%
BlackRock RE Leveraged	\$31,990,508	0.3%
Cornerstone Leveraged	\$1,175,000	0.0%
Brookfield Premier RE Partners	\$102,915,946	1.1%
Clarion Lion Properties	\$154,823,529	1.6%
Jamestown Premier Property	\$17,985,379	0.2%
Metlife Core Property	\$60,486,702	0.6%
Prime Property	\$61,035,011	0.6%
Principal US Property	\$46,570,732	0.5%
Prologis Targeted Euro Logistics	\$39,146,500	0.4%
Prologis Targeted US Logistics	\$71,109,008	0.7%
Townsend Real Estate	\$111,802,950	1.2%
Carlyle China Realty	\$6,838,490	0.1%
Carlyle China Rome Logistics	\$30,303,783	0.3%
CIM Opportunity VIII	\$35,258,892	0.4%
Kohlberg Kravis Roberts	\$8,889,761	0.1%

Total Fund
 Manager Allocation Analysis

Period Ending: March 31, 2019

	Current	%
NREP Nordic Strat FCP-FIS	\$13,888,946	0.1%
NREP Nordic Strat II	\$32,139,376	0.3%
NREP Nordic Strat III	\$1,553,665	0.0%
OZ RE III	\$13,015,801	0.1%
ECE Euro Prime Shopping II	\$19,273,728	0.2%
European RE Debt II	\$13,946,022	0.1%
Hammes II	\$17,256,730	0.2%
Hammes III	\$578,307	0.0%
Hines US Office II	\$19,661	0.0%
UBS RE	\$2,755,834	0.0%
ACM II	\$12,686,363	0.1%
ArcLight Energy VI	\$38,437,213	0.4%
Atalaya SMA	\$16,638,966	0.2%
Brookfield Infra III	\$26,417,613	0.3%
Cartyle Power II	\$17,234,304	0.2%
EnCap Energy IX	\$22,877,680	0.2%
EnCap Energy X	\$34,134,998	0.4%
EnCap Flatrock Midstream III	\$14,485,165	0.2%
EnCap Flatrock Midstream IV	\$6,208,014	0.1%
First Reserve	\$23,121,455	0.2%
IFM Global Infrastructure US LP	\$91,345,008	1.0%
ISQ Global Infrastructure Fund II	\$12,673,137	0.1%
Meridiam Infra N America III	\$349,318	0.0%
Pantheon Ventures	\$87,677,468	0.9%
Quantum Energy VI	\$34,166,797	0.4%
Quantum Energy VII	\$15,483,450	0.2%

Total Fund
 Manager Allocation Analysis

Period Ending: March 31, 2019

	Current	%
Tailwater Energy Fund III	\$20,064,139	0.2%
Wastewater Opportunity	\$15,870,732	0.2%
Gresham	\$25,834,029	0.3%
Atalaya Special Opportunities V	\$8,177,193	0.1%
Cash Account	\$283,097,805	3.0%
Transition Account	\$477	0.0%
Heitman Adv JMB V	\$8,390	0.0%
SSgA Overlay	\$121,790,571	1.3%
SSgA Barclays 1-10 Yrs TIPS Index	\$42,299,814	0.4%
SSgA Real Asset	\$98,843,089	1.0%
Total	\$9,508,752,528	100.0%

Statistics Summary

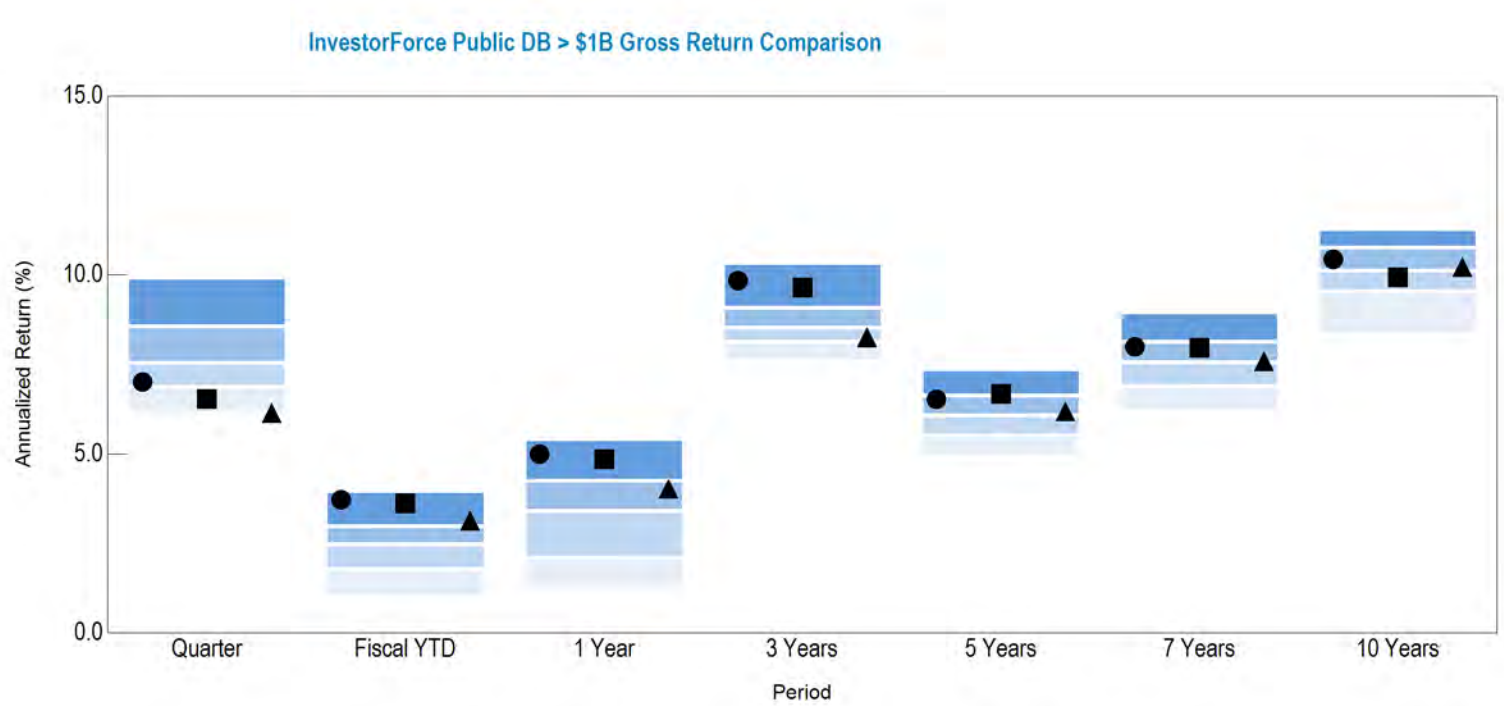
3 Years

	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	9.8%	8	5.2%	16	1.7	4	1.0	4	1.6%	98
Policy Index	8.3%	63	4.5%	5	1.6	5	--	--	0.0%	1
Total Fund ex Overlay	9.6%	11	4.9%	13	1.7	3	0.9	11	1.5%	97
Policy Index	8.3%	63	4.5%	5	1.6	5	--	--	0.0%	1

Statistics Summary

5 Years

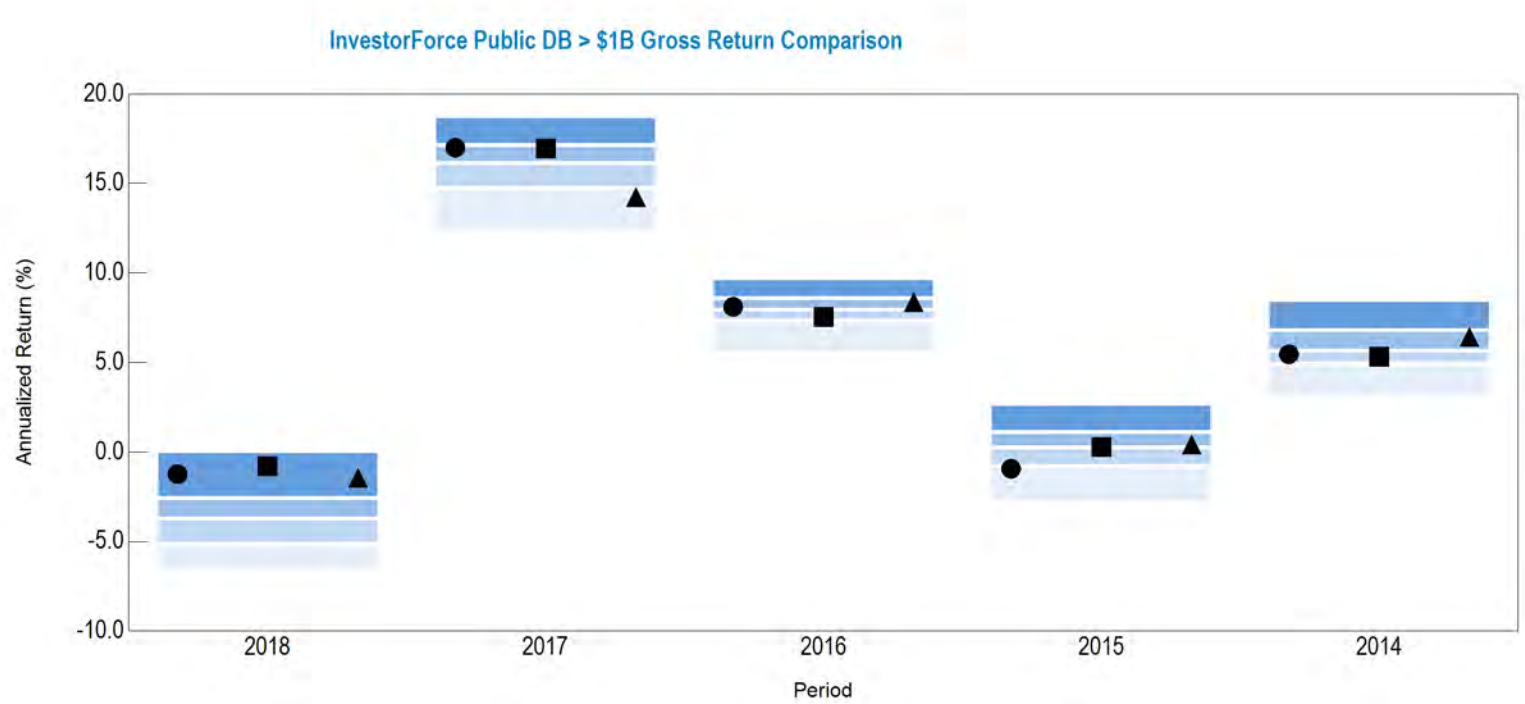
	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Sharpe Ratio	Sharpe Ratio Rank	Information Ratio	Information Ratio Rank	Tracking Error	Tracking Error Rank
Total Fund	6.5%	30	5.9%	33	1.0	20	0.2	35	1.8%	99
Policy Index	6.2%	47	5.1%	5	1.1	10	--	--	0.0%	1
Total Fund ex Overlay	6.7%	23	5.6%	17	1.1	9	0.3	30	1.5%	90
Policy Index	6.2%	47	5.1%	5	1.1	10	--	--	0.0%	1



	Quarter		Fiscal YTD		1 Year		3 Years		5 Years		7 Years		10 Years	
5th Percentile	9.9	4.0	5.4	10.3	7.4	8.9	11.3							
25th Percentile	8.6	3.0	4.3	9.1	6.6	8.1	10.8							
Median	7.6	2.5	3.4	8.5	6.1	7.6	10.1							
75th Percentile	6.9	1.8	2.1	8.1	5.5	6.9	9.6							
95th Percentile	6.1	1.0	1.3	7.6	5.0	6.2	8.3							
# of Portfolios	45	44	44	44	44	43	42							
● Total Fund	7.0 (73)	3.7 (9)	5.0 (13)	9.8 (8)	6.5 (30)	8.0 (31)	10.4 (34)							
■ Total Fund ex Overlay	6.5 (83)	3.6 (9)	4.9 (13)	9.6 (11)	6.7 (23)	8.0 (31)	9.9 (64)							
▲ Policy Index	6.1 (95)	3.1 (22)	4.0 (29)	8.3 (63)	6.2 (47)	7.6 (50)	10.2 (42)							

Total Fund
Peer Universe Comparison (Calendar Years)

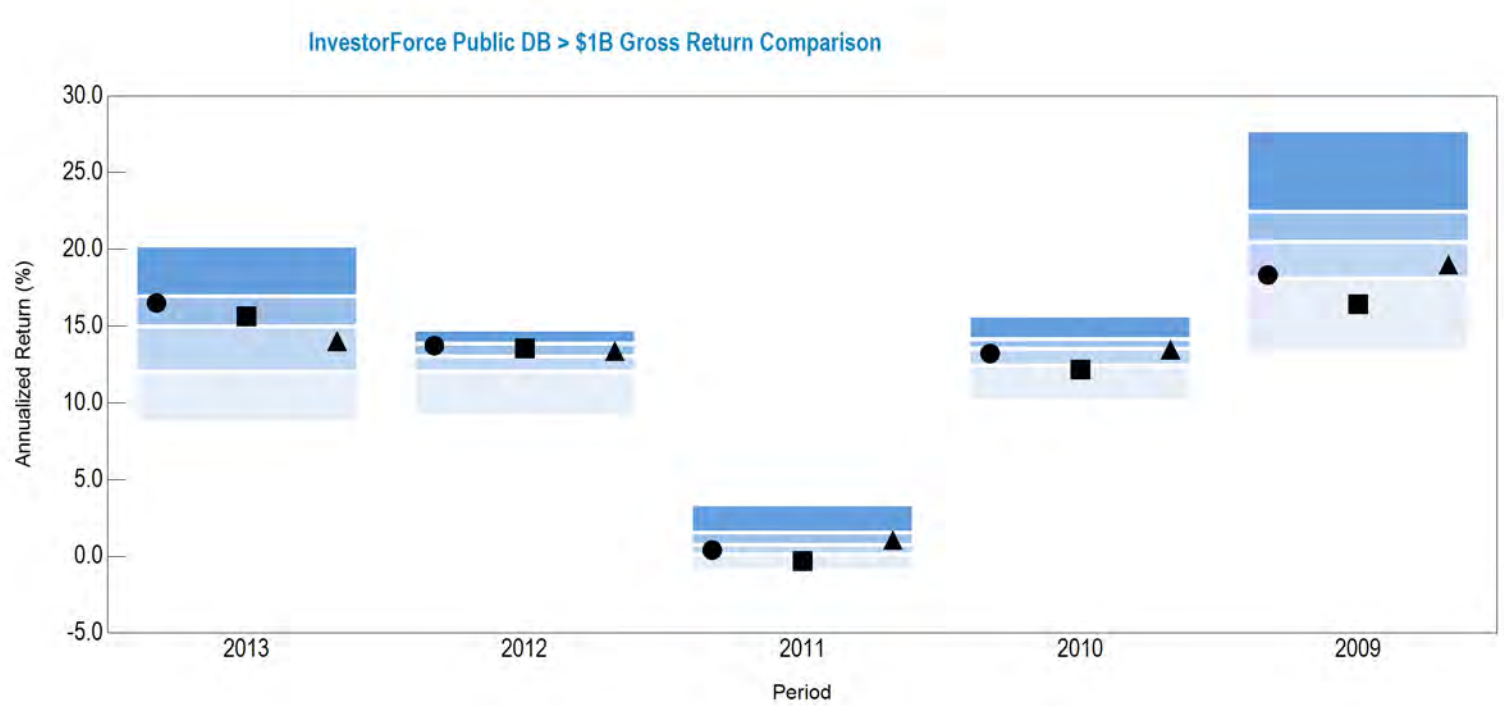
Period Ending: March 31, 2019



	2018		2017		2016		2015		2014	
Return (Rank)										
5th Percentile	0.0		18.8		9.7		2.7		8.5	
25th Percentile	-2.6		17.2		8.6		1.1		6.8	
Median	-3.7		16.2		8.0		0.3		5.7	
75th Percentile	-5.1		14.8		7.4		-0.7		4.9	
95th Percentile	-6.6		12.4		5.5		-2.8		3.1	
# of Portfolios	71		98		92		98		79	
● Total Fund	-1.2	(10)	17.0	(31)	8.1	(43)	-0.9	(83)	5.5	(61)
■ Total Fund ex Overlay	-0.8	(7)	17.0	(31)	7.5	(69)	0.3	(51)	5.3	(65)
▲ Policy Index	-1.4	(10)	14.2	(82)	8.4	(34)	0.4	(46)	6.4	(34)

Total Fund
Peer Universe Comparison (Calendar Years)

Period Ending: March 31, 2019



	2013		2012		2011		2010		2009	
Return (Rank)										
5th Percentile	20.2		14.7		3.3		15.7		27.7	
25th Percentile	17.0		13.9		1.6		14.2		22.5	
Median	15.0		13.0		0.8		13.5		20.5	
75th Percentile	12.0		12.1		0.1		12.5		18.1	
95th Percentile	8.7		9.2		-0.9		10.2		13.4	
# of Portfolios	67		74		68		66		66	
● Total Fund	16.5	(31)	13.7	(36)	0.4	(60)	13.2	(62)	18.3	(73)
■ Total Fund ex Overlay	15.6	(43)	13.6	(41)	-0.3	(86)	12.2	(81)	16.4	(86)
▲ Policy Index	14.0	(64)	13.4	(42)	1.0	(38)	13.5	(53)	19.0	(62)

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%								
ICE 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%									
FTSE BIG										23.0%
FTSE 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%	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%

Growth Benchmark	As of:	
	7/1/17	4/1/17
91 Day T-Bill +5%		5.08%
ICE 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 CJA 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 CJA All PE 1 Qtr Lag	100.0%		
	100.0%	100.0%	100.0%

Public Credit Benchmark	As of:
	4/1/17
ICE 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 Treasury	20.0%	20.0%
FTSE 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
FTSE 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
Real Estate Benchmark	43.75%
Private Real Assets Benchmark	43.75%
Bloomberg Commodity	12.50%
	100.0%

Real Estate Benchmark	As of:	
	7/1/17	7/1/2011
NCREIF		100.0%
NFI-ODCE	65.0%	
NFI-ODCE net +1% 1Q Lag	35.0%	
	100.0%	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%

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
FTSE WGBI ex US Unhedged	80.0%
JPM GBI EM Diversified	20.0%
	100.0%

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

SSgA Real Asset Benchmark	As of:		
	3/2/2018	10/1/15	2/1/08
BBgBarc US Govt Inflation-Linked 1-10 Yrs		10.0%	
BBgBarc US TIPS		10.0%	20.0%
BBgBarc 1-10 Yr US TIPS	30.0%		
BBgBarc Roll Select Commodity TR	10.0%	20.0%	
BBgBarc USD Floating Rate Note <5yr	10.0%		
DJ US Select REIT			30.0%
FTSE EPRA/NAREIT Developed Liquid	15.0%	10.0%	
MSCI World Natural Resources		20.0%	25.0%
S&P Global Large Mid Cap Commodity Resources	10.0%		
S&P Global Infrastructure	25.0%	20.0%	
S&P GS Commodities			25.0%
S&P MLP		10.0%	
	100.0%	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: Portfolio Return - [Risk-free Rate + Portfolio Beta x (Market Return - Risk-free Rate)].

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Disclaimer

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

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

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

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

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