(replacement)

San Jose Federated City Employees' Retirement System

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Quarterly Review June 30, 2018

1. The World Markets in the Second Quarter of 2018

2. Executive Summary

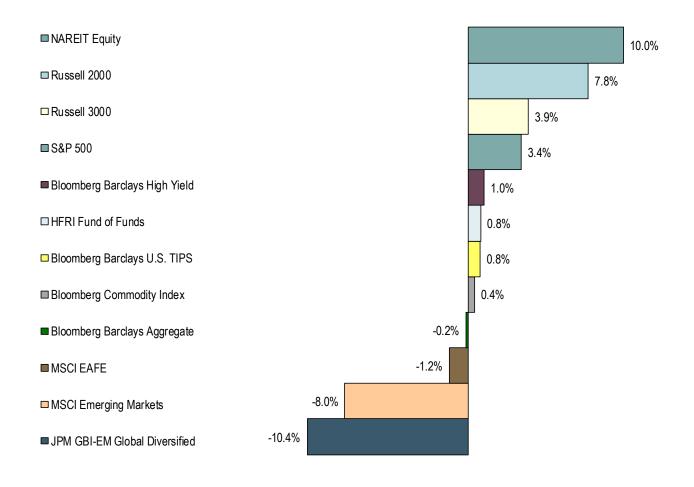
- Aggregate Plan Overview
- Manager Highlights
- Second Quarter Manager Summary
- Watch List
- Market Environment 2Q18 Overview

3. 2Q18 Review

4. Glossary and Notes

The World Markets Second Quarter of 2018

The World Markets¹ Second Quarter of 2018







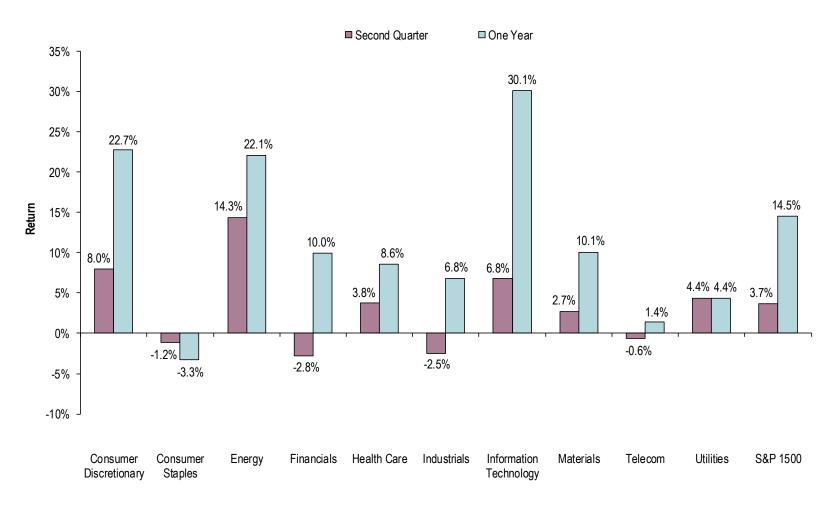
Index Returns¹

	2Q18 (%)	YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
Domestic Equity						
Russell 3000	3.9	3.2	14.8	11.6	13.3	10.2
Russell 1000	3.6	2.9	14.5	11.6	13.4	10.2
Russell 1000 Growth	5.8	7.3	22.5	15.0	16.4	11.8
Russell 1000 Value	1.2	-1.7	6.8	8.3	10.3	8.5
Russell MidCap	2.8	2.3	12.3	9.6	12.2	10.2
Russell MidCap Growth	3.2	5.4	18.5	10.7	13.4	10.5
Russell MidCap Value	2.4	-0.2	7.6	8.8	11.3	10.1
Russell 2000	7.8	7.7	17.6	11.0	12.5	10.6
Russell 2000 Growth	7.2	9.7	21.9	10.6	13.6	11.2
Russell 2000 Value	8.3	5.4	13.1	11.2	11.2	9.9
Foreign Equity						
MSCI ACWI (ex. U.S.)	-2.6	-3.8	7.3	5.1	6.0	2.5
MSCI EAFE	-1.2	-2.7	6.8	4.9	6.4	2.8
MSCI EAFE (Local Currency)	3.5	-1.0	6.1	5.2	8.9	5.0
MSCI EAFE Small Cap	-1.6	-1.3	12.4	10.1	11.3	6.8
MSCI Emerging Markets	-8.0	-6.7	8.2	5.6	5.0	2.3
MSCI Emerging Markets (Local Currency)	-3.5	-2.8	10.5	7.5	8.4	5.2
Fixed Income						
Bloomberg Barclays Universal	-0.3	-1.7	-0.3	2.1	2.6	4.1
Bloomberg Barclays Aggregate	-0.2	-1.6	-0.4	1.7	2.3	3.7
Bloomberg Barclays U.S. TIPS	0.8	0.0	2.1	1.9	1.7	3.0
Bloomberg Barclays High Yield	1.0	0.2	2.6	5.5	5.5	8.2
JPM GBI-EM Global Diversified	-10.4	-6.4	-2.3	2.0	-1.4	2.6
Other						
NAREIT Equity	10.0	1.0	3.5	8.1	8.3	7.9
Bloomberg Commodity Index	0.4	0.0	7.3	-4.5	-6.4	-9.0
HFRI Fund of Funds	0.8	1.0	5.5	2.0	3.5	1.4

¹ Source: InvestorForce.



S&P Sector Returns¹

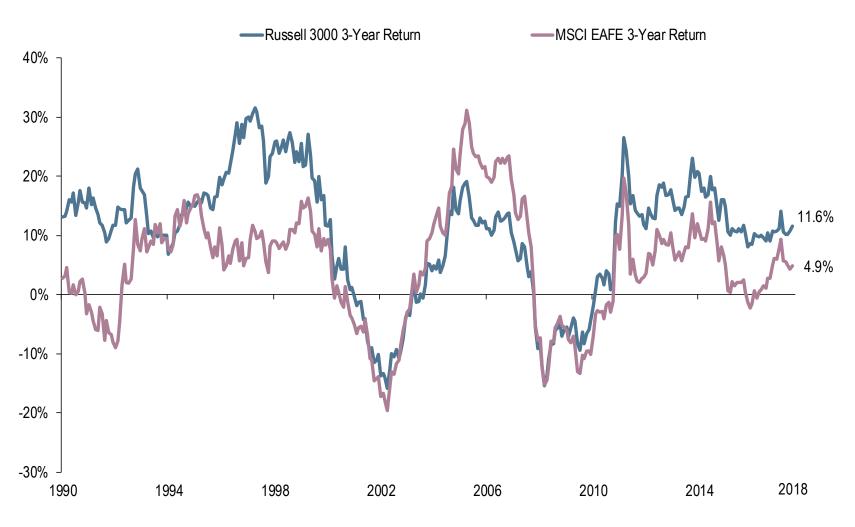


¹ Source: InvestorForce. Represents S&P 1500 (All Cap) data.



Prepared by Meketa Investment Group

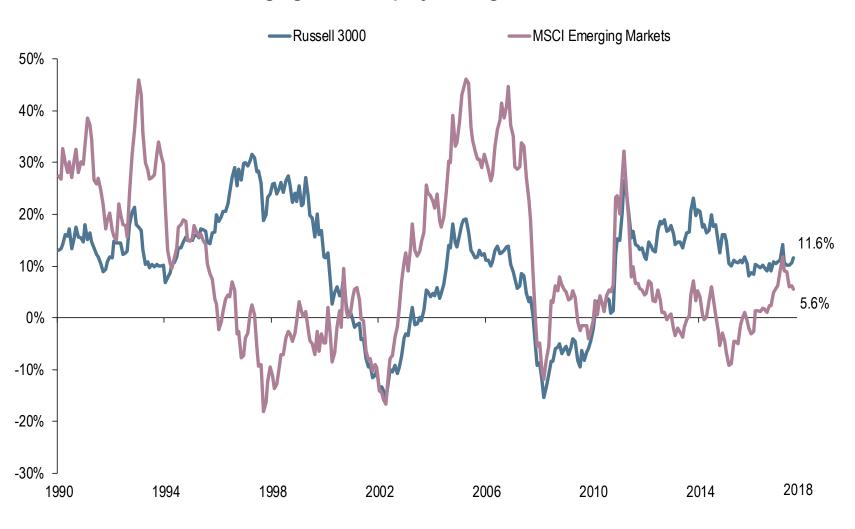
U.S. and Developed Market Foreign Equity Rolling Three-Year Returns¹



¹ Source: InvestorForce.



U.S. and Emerging Market Equity Rolling Three-Year Returns¹

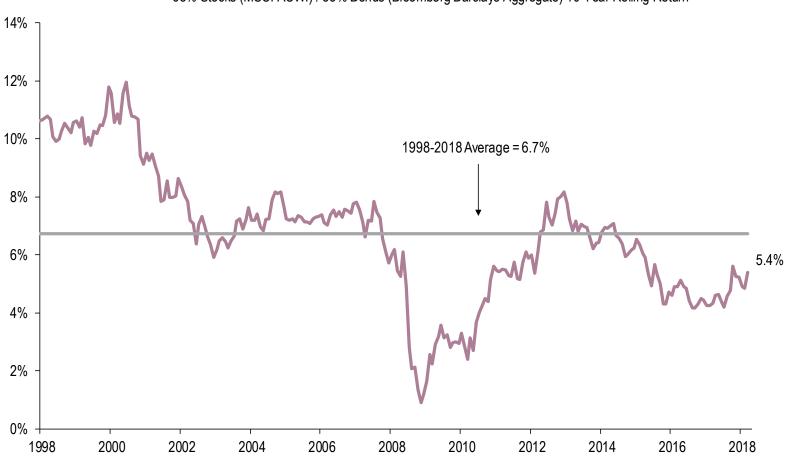


¹ Source: InvestorForce.



Rolling Ten-Year Returns: 65% Stocks and 35% Bonds¹

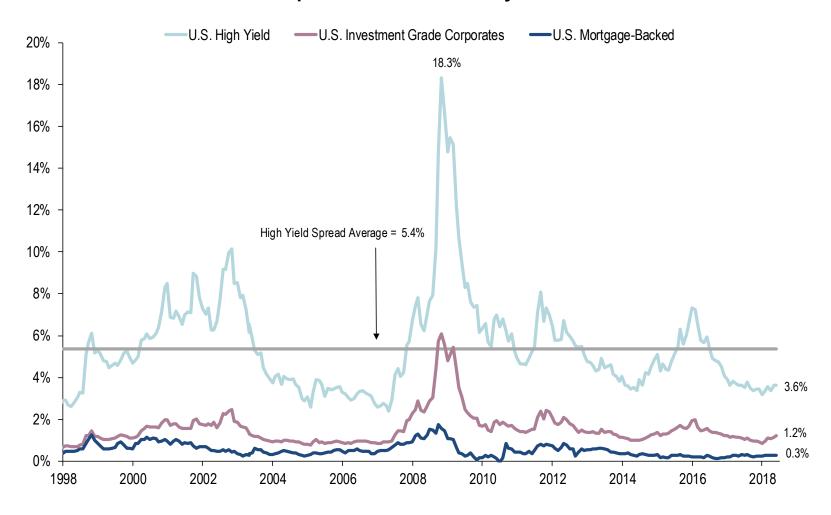
——65% Stocks (MSCI ACWI) / 35% Bonds (Bloomberg Barclays Aggregate) 10-Year Rolling Return







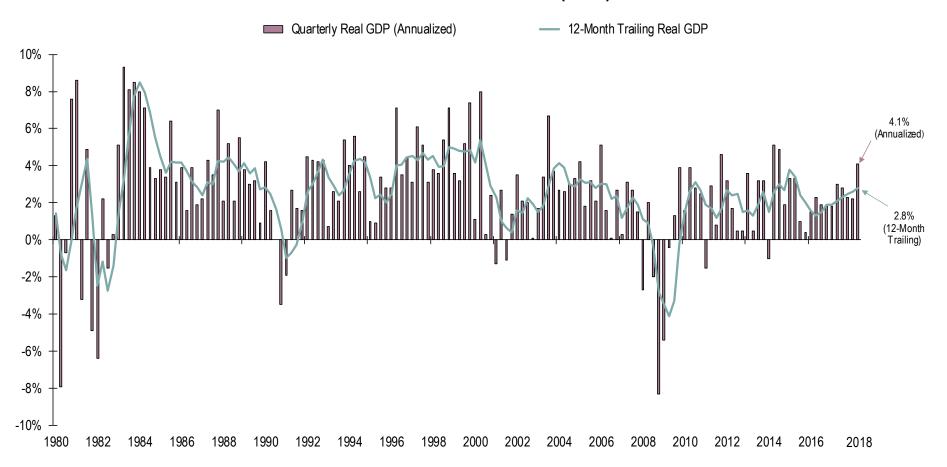
Credit Spreads vs. U.S. Treasury Bonds^{1, 2}



¹ Source: Barclays Live. ² The median high yield spread was 4.8% from 1997-2018.



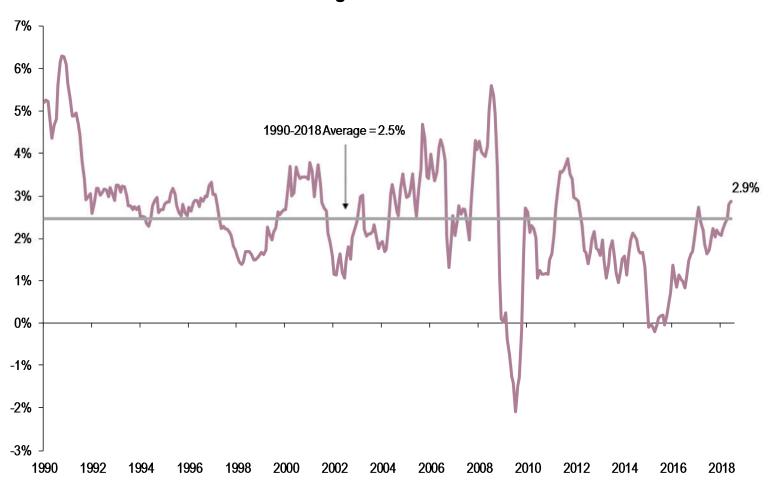
U.S. Real Gross Domestic Product (GDP) Growth¹



¹ Source: Bureau of Economic Analysis. Data is as of Q2 2018 and represents the first estimate.



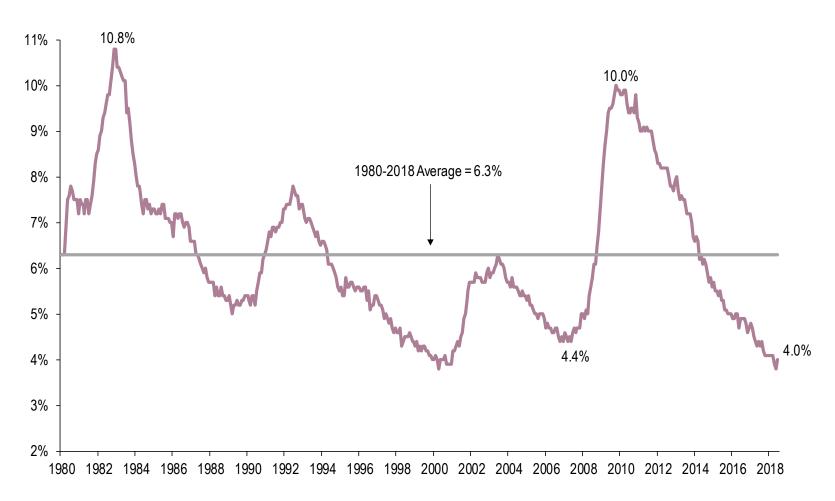
U.S. Inflation (CPI)
Trailing Twelve Months¹



¹ Source: Bureau of Labor Statistics. Data is non-seasonally adjusted CPI, which may be volatile in the short-term. Data is as of June 30, 2018.



U.S. Unemployment¹



¹ Source: Bureau of Labor Statistics. Data is as of June 30, 2018.



Executive Summary As of June 30, 2018

The value of the San Jose Federated City Employees' Retirement System assets was \$2,071.7 million on June 30, 2018, a decrease of approximately \$48.0 million from the end of the prior quarter. The System had net cash outflows of \$58.7 million during the quarter.

- The Retirement System's net of fees performance for the quarter was +0.4%, outperforming the Policy Benchmark (-0.4%) and Allocation Index (-0.2%). The Retirement System slightly underperformed the peer Public Defined Benefit Plans > \$1 Billion Universe's median return of +0.6%.
- The Retirement System returned +5.9% in the trailing one-year period, compared to +7.4% for the Policy Benchmark, +6.6% for the Allocation Index, and +8.0% for the peer median. The Retirement System's standard deviation of returns was 3.8% for the same period, exhibiting lower volatility than the peer median (4.5%).
 - Total Global Equity returned -0.6% for the quarter and +9.2% over the trailing one-year period, versus +0.7% and +11.1% for the MSCI ACWI IMI benchmark over the same periods, respectively. For the quarter, Global Equity returned +1.1%, U.S. Equity returned +4.3%, International Equity returned -0.9%, Emerging Markets Equity returned -10.8%, and Marketable Alternative Equity returned +1.9%.
 - Global Fixed Income returned -0.9% for the quarter and +1.0% over the trailing one-year period, versus -3.0% and +1.2% for the Custom Benchmark over the same periods, respectively. For the quarter, Global Core returned +0.4%, Non-Investment Grade Credit returned -0.5%, and Emerging Markets Debt returned -10.3%.
 - Real Assets returned +3.3% for the quarter and +11.1% over the trailing one-year period. For the quarter, Real Estate returned +2.4%, Commodities returned +4.6%, Infrastructure returned +3.0%, and Natural Resources returned +2.3%.
- The Retirement System added four investment managers during the quarter: Crestline Portfolio Financing (Private Equity), Innovation Endeavors II (Private Equity), Northern Trust Russell 3000 (Private Equity), and Torchlight Debt Opportunity VI (Real Estate).



Artisan

 Artisan Global Value returned -0.4% for the quarter, outperforming the MSCI ACWI Value benchmark by 90 basis points. Compared to peers, Artisan ranks in the 49th and 1st percentiles for the quarter and since inception periods, respectively. Consumer staples holdings were a source of strength in the portfolio while consumer discretionary holdings detracted from relative results. From a regional standpoint, performance remained well balanced.

Cove Street

• Cove Street Small Cap Value returned +3.8% for the quarter, underperforming the Russell 2000 Value benchmark by 450 basis points. Over the trailing one-year and since inception periods Cove Street has also underperformed the benchmark by 950 and 360 basis points, respectively. Stock selection within services and telecommunications were the largest detractors from performance.

GQG Partners

• GQG Partners Global Emerging Markets returned -9.1% for the quarter, underperforming the MSCI Emerging Markets benchmark by 110 basis points. Since inception in July 2017, GQG has outperformed the benchmark by 180 basis points while ranking in the 25th percentile compared to peers. A regional overweight in Russia was the largest detractor to GQG's overall performance.

BlueBay

• BlueBay Emerging Market Select Debt underperformed the J.P. Morgan Emerging Market Bond Index for the quarter (-10.3% vs. -7.0%) and one-year period (-3.1% vs. -1.9%). Compared to peers, BlueBay ranks in the 80th and 75th percentiles for the quarter and trailing one-year periods, respectively.



Net of management fees.

Second Quarter Manager Summary

Investment Manager	Asset Class	Changes/ Announcements	Performance Concerns	Meketa Recommendation ¹	Comments
Artisan Global Opportunities	Global Equity	Yes		Hold	Personnel Changes
Artisan Global Value	Global Equity	Yes		Hold	Personnel Changes
Cove Street Small Cap Value	U.S. Equity		Yes		Watch List
Oberweis International Opps.	International Equity				
Comgest Global EM	Emerging Markets Equity		Yes		Watch List
GQG Partners Global EM	Emerging Markets Equity				
Dimensional EM Value	Emerging Markets Equity	Yes		Hold	Personnel Changes
Senator Global Opportunity	Long-Short Equity		Yes		Watch List
Sandler Plus	Long-Short Equity				
Marshall Wace Eureka	Long-Short Equity				
Voya Securitized Credit	Global Credit				
Davidson Kempner Inst.	Non-Investment Grade Credit				
Claren Road Credit Fund	Long-Short Credit		Yes		Approved Termination
BlueBay EM Select Debt	Emerging Markets Debt		Yes		Watch List
Credit Suisse Risk Parity	Commodities				
Pinnacle Natural Resources	Commodities		Yes		Approved Termination

¹ The Meketa Investment Group recommendations are based on the noted organizational or resource changes at each manager.



Artisan

- During the quarter, an analyst joined the Growth team.
- During the quarter, a research associate and analyst joined the Global Value team.

Cove Street

• Over the three-year period, Cove Street (+6.3%) has underperformed the Russell 2000 Value by 490 basis points.

Comgest

• Since inception in March, 2017 Comgest (+2.9%) has underperformed the MSCI Emerging Markets SMID Cap by 710 basis points and ranked in the 92nd percentile compared to peers.

Dimensional

• During the quarter, there were four additions and two departures on the portfolio management team. Dimensional employs a team approach in all aspects of the firm's management.

Senator

• Over the three-year period, Senator (+2.4%) has underperformed the HFRI Equity Hedge Index by 220 basis points.

BlueBay

• Over the three-year period, BlueBay (+1.4%) has underperformed the JPM Blended Emerging Markets Index by 200 basis points.



Watch List

Watch List¹

Investment Manager	Asset Class	Watch List Status	Comments
Cove Street Small Cap Value	U.S. Equity	Monitoring	Underperformance
Comgest Global EM	Emerging Markets Equity	Monitoring	Underperformance
Senator Global Opportunity	Long-Short Equity	Monitoring	Underperformance
DE Shaw	Absolute Return	Monitoring	Transparency Concerns
Claren Road Credit Fund	Long-Short Credit	Approved Termination	Underperformance
BlueBay EM Select Debt	Emerging Markets Debt	Monitoring	Underperformance
Pinnacle Natural Resources	Real Assets	Approved Termination	Underperformance
Kepos Alpha Fund	Absolute Return	Monitoring	Underperformance

¹ Watch List excludes Private Markets Funds.



Market Environment – 2Q18 Overview

Benchmark	Scope	2Q18 (%)	YTD (%)	1 YR (%)	3 YR (%)	5YR (%)	10 YR (%)		
Global Equity								MSCI ACWI IMI	
MSCI ACWI IMI	World	0.7	-0.2	11.1	8.3	9.6	6.1	MSCI ACWI IMI Net (Local)	
MSCI ACWI IMI Net (Local)	World (Local Currency)	2.9	1.1	11.2	8.7	11.0	7.3	S&P 500	
Domestic Equity								Russell 1000	
S&P 500	Large Core	3.4	2.7	14.4	12.0	13.4	10.2		
Russell 1000	Large Core	3.6	2.9	14.5	11.7	13.4	10.2	Russell 1000 Growth	
Russell 1000 Growth	Large Growth	5.8	7.3	22.5	15.0	16.4	11.8	Russell 1000 Value	
Russell 1000 Value	Large Value	1.2	-1.7	6.8	8.3	10.3	8.5	Russell 2000	
Russell 2000	Small Core	7.8	7.7	17.6	11.0	12.5	10.6	Russell 2000 Growth	
Russell 2000 Growth	Small Growth	7.2	9.7	21.9	10.6	13.7	11.3	Russell 2000 Value	
Russell 2000 Value	Small Value	8.3	5.4	13.1	11.2	11.2	9.9	Russell 3000	
Russell 3000	All Cap Core	3.9	3.2	14.5	11.6	13.3	10.2		
International Equity	World ex-US	0.0	-2.8	7.0	4.0	6.2	2.6	MSCI World ex US	
MSCI World ex US MSCI EAFE	International Developed	-0.8 -1.4	-2.8 -2.5	7.0 7.7	4.9 5.7	6.2 7.2	2.6 3.4	MSCI EAFE =	
MSCI EAFE (Local)	International Developed	3.4	-2.5 -0.8	7.0	5.7 5.9	7.2 9.7	5.4 5.5	MSCI EAFE (Local)	
MSCI EAFE (LOCAL)	(Local Currency)	3.4	-0.0	7.0	5.9	9.1	5.5	MSCI EM	
MSCI EM	Emerging Markets	-8.0	-6.9	7.9	5.2	4.9	2.5	MSCI EM (Local)	
MSCI EM (Local)	Emerging Markets (Local Currency)	-3.5	-3.0	10.2	7.0	8.3	5.4	Barclays Global Aggregate Quarter	
Global Fixed Income								S&P Global Leveraged Loan	
Barclays Global Aggregate	Global Core Bonds	-2.8	-1.5	1.4	2.6	1.5	2.6	JPM GBI-EM GD	
S&P Global Leveraged Loan	Bank Loans	0.4	1.8	3.7	3.7	3.4	4.9	JPM EMBI Global TR	
JPM GBI-EM GD	Emerging Markets Bonds (Local Currency)	-10.4	-6.4	-2.3	2.0	1.4	2.6	Barclays US Aggregate	
JPM EMBI Global TR	Emerging Market Bonds	-3.5	-5.2	-1.6	4.6	5.2	6.8	Barclays US HY	
Domestic Fixed Income								Barclays US TIPS	
Barclays US Aggregate	Core Bonds	-0.2	-1.6	-0.4	1.7	2.3	3.7	Cambridge Assoc.PE ldx 1Q Lag	
Barclays US HY	High Yield	1.0	0.2	2.6	5.5	5.5	8.2	NCREIF Property	
Barclays US TIPS	Inflation	8.0	0.0	2.1	1.9	1.7	3.0		
Other								Bloomberg Commodity	
Cambridge Associates PE Index 1Qtr	Private Equity	2.6	8.0	18.3	12.3	12.4	9.6	DJ Brookfield Global Infra.	
Lag NCREIF Property	Real Estate	1.8	3.5	7.2	8.3	9.8	6.2	S&P Global Natural Resources	
Bloomberg Commodity	Commodities	0.4	0.0	7.4	-4.5	-6.4	-9.1	HFRI Macro (Total)	
DJ Brookfield Global Infrastructure	Infrastructure	4.2	-1.3	2.5	4.5	7.1	7.6	-10% -5% 0% 5% 10% 15% 20% 25%	,
S&P Global Natural Resources	Natural Resources	5.4	3.7	24.8	9.5	5.6	-0.6	-10 % -5 % 0 % 5 % 10 % 15 % 20 % 25 % Return	,
HFRI Macro	Hedge Funds	0.6	-1.5	1.8	-0.9	0.1	-2.5	Retuili	



2Q18 Review

Current	Overlay Net	Policy		Allocation vs	. Targets a	nd Policy			
				Current Balance	Current Allocation	Russell Overlay Net Position	Policy	Policy Range	Within IPS Range?
			Total Global Equity	\$610,953,731	29.5%	29.1%	28.0%	20.0% - 36.0%	Yes
29.5%	29.1%	28.0%	International Equity	\$206,054,561	9.9%	10.5%			
			Global Equity	\$180,249,721	8.7%	5.8%			
			US Equity	94,562,907	4.6%	5.7%			
			Emerging Markets Equity	\$67,041,086	3.2%	4.0%			
			Marketable Alternative Equity	\$63,045,456	3.0%	3.0%			
8.8%	8.8%	9.0%	Private Equity	\$182,532,521	8.8%	8.8%	9.0%	4.0% - 14.0%	Yes
			Global Fixed Income	\$661,102,237	31.9%	32.8%	33.0%	23.0% - 43.0%	Yes
			Global Core	\$551,196,404	26.6%	27.5%	25.0%	20.0% - 30.0%	Yes
			Non-Investment Grade Credit	\$39,799,264	1.9%	1.9%	4.0%	0.0% - 6.0%	Yes
			Emerging Markets Debt	\$70,106,569	3.4%	3.4%	4.0%	1.0% - 6.0%	Yes
		33.0%	Private Debt	\$77,408,163	3.7%	3.7%	6.0%	2.0% - 10.0%	Yes
31.9%	32.8%	33.0%	Real Assets	\$271,599,044	13.1%	13.1%	13.0%	8.0% - 18.0%	Yes
			Real Estate	\$153,769,703	7.4%	7.4%	8.0%	4.0% - 12.0%	Yes
			Commodities	\$94,000,747	4.5%	4.5%	4.0%	0.0% - 8.0%	Yes
			Infrastructure	\$23,701,755	1.1%	1.1%	1.0%	0.0% - 4.0%	Yes
3.7%	0.70/		Natural Resources	\$126,838	0.0%	0.0%	0.0%	0.0% - 5.0%	Yes
3.7 76	3.7%	6.0%	Absolute Return	\$255,426,872	12.3%	12.3%	11.0%	6.0% - 16.0%	Yes
			Opportunistic			0.0%	0.0%	0.0% - 5.0%	Yes
13.1%	13.1%	13.0%	Cash	\$12,684,977	0.6%	0.2%	0.0%	0.0% - 10.0%	Yes
			Total	\$2,071,707,551	100.0%	100.0%	100.0%		
12.3%	12.3%	11.0%							
-0-6%-	0.0%	0.0%							

Data in the column titled "Russell Overlay Net Position" is based on physical exposures, adjusted for synthetic positions provided by Russell Investments.
 Cash composite includes the cash account, cash collateral in the Russell Investments Overlay program, and residuals from terminated manager assets.



	Asset Class I	Net Perform	nance Su	mmary							
	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total Fund Aggregate	2,071,707,551	100.0	0.4	0.4	5.9	5.9	4.2	5.0	4.1	6.7	Jan-94
Policy Benchmark			-0.4	0.3	7.4	7.4	5.6	5.9	5.0	7.0	Jan-94
Allocation Index			-0.2	0.0	6.6	6.6	4.6	4.9	4.1		Jan-94
InvestorForce Public DB > \$1B Net Median			0.6	0.6	8.0	8.0	6.7	7.5	6.1	7.1	Jan-94
InvestorForce Public DB > \$1B Net Rank			60	56	99	99	99	99	99	68	Jan-94
Total Global Equity	610,953,731	29.5	-0.6	-0.7	9.2	9.2	7.2	8.8		8.5	May-10
MSCI ACWI IMI Net USD			0.7	-0.2	11.1	11.1	8.3	9.6		8.7	May-10
eV All Global Equity Net Median			1.3	0.1	10.4	10.4	7.6	9.4	6.8	9.3	May-10
eV All Global Equity Net Rank			77	64	59	59	59	64		65	May-10
Global Equity	180,249,721	8.7	1.1	0.4	10.0	10.0	9.9			9.9	Jul-15
MSCI ACWI IMI Net USD			0.7	-0.2	11.1	11.1	8.3			8.3	Jul-15
eV All Global Equity Net Median			1.3	0.1	10.4	10.4	7.6	9.4	6.8	7.6	Jul-15
eV All Global Equity Net Rank			55	46	53	53	23			23	Jul-15
US Equity	94,562,907	4.6	4.3	3.1	12.2	12.2	10.2			10.2	Jul-15
Russell 3000			3.9	3.2	14.8	14.8	11.6		[11.6	Jul-15
eV All US Equity Net Median			3.7	3.1	13.7	13.7	9.9	12.0	10.0	9.9	Jul-15
eV All US Equity Net Rank			44	50	60	60	47			47	Jul-15
International Equity	206,054,561	9.9	-0.9	-1.6	9.6	9.6	6.2			6.2	Jul-15
MSCI World ex USA			-0.7	-2.8	7.0	7.0	4.9		[4.9	Jul-15
eV All EAFE Equity Net Median			-1.5	-2.6	7.9	7.9	5.8	7.2	4.1	5.8	Jul-15
eV All EAFE Equity Net Rank			35	39	34	34	45			45	Jul-15

⁴ Returns for the Equity Aggregate are gross of fees through June 2015 and net of fees thereafter.



Fiscal Year begins July 1.
 Please see the Appendix for composition of the Policy Benchmark.
 Allocation Index consists of the individual benchmarks that comprise the Policy Benchmark weighted accordingly to actual allocations and re-adjusted monthly.

	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Emerging Markets Equity	67,041,086	3.2	-10.8	-9.0	2.9	2.9	2.8			2.8	Jul-15
MSCI Emerging Markets	1		-8.0	-6.7	8.2	8.2	5.6			5.6	Jul-15
eV Emg Mkts Equity Net Median			-8.5	-7.0	7.2	7.2	5.6	5.1	2.7	5.6	Jul-15
eV Emg Mkts Equity Net Rank	1		93	85	80	80	87			87	Jul-15
Marketable Alternative Equity	63,045,456	3.0	1.9	3.4	9.4	9.4	4.9			6.4	Oct-14
HFRI Equity Hedge (Total) Index	1		0.9	1.2	8.3	8.3	4.9			4.9	Oct-14
Private Equity	182,532,529	8.8	3.1	0.7	8.9	8.9	7.1	10.7	7.2	6.9	Jan-06
Cambridge PE Composite BM			2.6	8.0	18.3	18.3	12.3	12.4	9.6	11.2	Jan-06
Private Equity ex Russell 3000	70,593,416	3.4	3.3	0.8	9.0	9.0	7.2	10.7	7.3	6.9	Jan-06
Cambridge PE Composite BM			2.6	8.0	18.3	18.3	12.3	12.4	9.6	11.2	Jan-06
Global Fixed Income	661,102,237	31.9	-0.9	-0.8	1.0	1.0	1.8	1.8		2.4	Jan-12
Fixed Income Custom Benchmark			-3.0	-1.8	1.2	1.2	2.9	1.7		1.2	Jan-12
eV All Global Fixed Inc Net Median			-1.7	-1.8	1.0	1.0	3.0	2.8	4.1	3.4	Jan-12
eV All Global Fixed Inc Net Rank	1		39	33	51	51	84	72		66	Jan-12
Global Core	551,196,404	26.6	0.4	0.0	1.3	1.3	1.7			1.7	Jul-15
BBgBarc Global Aggregate TR			-2.8	-1.5	1.4	1.4	2.6			2.6	Jul-15
Non-Investment Grade Credit	39,799,264	1.9	-0.5	2.2	3.0	3.0	3.1	1.3		1.9	Feb-13
50% BAML Global HY / 50% S&P Global Leveraged Loan			0.2	0.6	3.0	3.0	4.5	5.8		5.6	Feb-13
Emerging Markets Debt	70,106,569	3.4	-10.3	-8.1	-3.1	-3.1	1.4			1.4	Jul-15
50% JPM EMBI GD / 50% JPM GBI-EM			-7.0	-5.8	-1.9	-1.9	3.4			3.4	Jul-15
eV All Emg Mkts Fixed Inc Net Median			-6.2	-6.0	-2.0	-2.0	3.6	3.1	5.7	3.6	Jul-15
eV All Emg Mkts Fixed Inc Net Rank			80	93	75	75	84			84	Jul-15

Returns for the Fixed income, Private Debt, and Real Assets Aggregates are gross of fees through June 2015 and net of fees thereafter.
 Prior to 7/1/2015, Fixed Income Custom Benchmark was 100% Barclays Global Aggregate. After 7/1/2015, Fixed Income Custom Benchmark consists of 80% Barclays Global Aggregate, 5% JPM GBI-EM GD, 5% JPM EMBI GD, 5% S&P Global Leveraged Loan, and 5% BAML Global HY Index.



	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Private Debt S&P Global Leveraged Loan +2%	77,408,163	3.7	0.9 -0.2	3.5 2.2	-5.4 6.2	-5.4 6.2	0.2 6.5	2.9 5.8		4.2 6.4	Dec-10 Dec-10
Real Assets Real Assets Benchmark	271,599,044	13.1	3.3 1.6	2.3 2.1	11.1 9.5	11.1 9.5	4.8 4.4	4.3 4.1		1.7 4.9	May-10 <i>May-10</i>
Real Estate NCREIF Property Index	153,769,704	7.4	2.4 1.8	5.2 3.5	10.6 7.2	10.6 7.2	12.0 8.3	14.2 9.8	4.8 6.2	9.4 9.4	Jan-94 <i>Jan-</i> 94
Commodities Bloomberg Commodity Index TR USD	94,000,747	4.5	4.6 0.4	3.4 0.0	10.2 7.3	10.2 7.3	-2.9 -4.5	-3.8 -6.4		-3.2 -4.9	May-10 <i>May-10</i>
Infrastructure DJ Brookfield Global Infrastructure Net TR USD	23,701,755	1.1	3.0 4.2	-2.0 -1.3	1.5 2.5	1.5 2.5	4.5 4.5	 	-	5.3 5.0	Mar-14 <i>Mar-14</i>
Natural Resources S&P Global Natural Resources Index TR USD	126,838	0.0	2.3 5.4	-0.6 3.7	19.0 24.8	19.0 24.8	5.4 9.5	2.8 5.6		0.2 3.2	Nov-12 <i>Nov-12</i>
Absolute Return HFRI Macro (Total) Index	255,426,872	12.3	0.4 -0.1	2.1 -1.7	4.8 1.2	4.8 1.2	2.0 0.2	3.2 1.2		3.4 1.1	Nov-12 <i>Nov-12</i>
Relative Value HFRI Relative Value (Total) Index	119,825,910	5.8	1.3 <i>1.2</i>	2.9 1.6	5.8 4.0	5.8 4.0	3.1 3.8	 	 	3.9 3.5	Oct-14 Oct-14
Macro HFRI Macro (Total) Index	135,600,962	6.5	-0.4 -0.1	1.3 -1.7	3.8 1.2	3.8 1.2	1.7 0.2	 	 	1.4 0.7	Oct-14 Oct-14
Opportunistic 60/40 MSCI ACWI IMI/BC Global	0	0.0	0.0 -0.7	0.0 -0.6	0.0 7.2	0.0 7.2	0.0 6.1	<u></u> 		0.0 6.1	Jul-15 <i>Jul-15</i>
Cash 91 Day T-Bills	6,340,188	0.3								·	

¹ Cash composite includes the cash account, cash collateral in the Russell Investments Overlay program, and residuals from terminated manager assets.



	Traili	ng Net Perf	ormance)							
	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total Fund Aggregate	2,071,707,551	100.0	0.4	0.4	5.9	5.9	4.2	5.0	4.1	6.7	Jan-94
Policy Benchmark			-0.4	0.3	7.4	7.4	5.6	5.9	5.0	7.0	Jan-94
Allocation Index			-0.2	0.0	6.6	6.6	4.6	4.9	4.1		Jan-94
InvestorForce Public DB > \$1B Net Median			0.6	0.6	8.0	8.0	6.7	7.5	6.1	7.1	Jan-94
InvestorForce Public DB > \$1B Net Rank			60	56	99	99	99	99	99	68	Jan-94
Total Global Equity	610,953,731	29.5	-0.6	-0.7	9.2	9.2	7.2	8.8		8.5	May-10
MSCI ACWI IMI Net USD			0.7	-0.2	11.1	11.1	8.3	9.6		8.7	May-10
eV All Global Equity Net Median			1.3	0.1	10.4	10.4	7.6	9.4	6.8	9.3	May-10
eV All Global Equity Net Rank			77	64	59	59	59	64	-	65	May-10
Global Equity	180,249,721	8.7	1.1	0.4	10.0	10.0	9.9			9.9	Jul-15
MSCI ACWI IMI Net USD			0.7	-0.2	11.1	11.1	8.3			8.3	Jul-15
eV All Global Equity Net Median			1.3	0.1	10.4	10.4	7.6	9.4	6.8	7.6	Jul-15
eV All Global Equity Net Rank			55	46	53	53	23			23	Jul-15
Artisan Global Value	123,384,609	6.0	-0.4	-2.2	7.6	7.6	9.2	10.3		11.4	Mar-11
MSCI ACWI Value NR USD			-1.3	-3.9	5.4	5.4	6.1	7.2		5.9	Mar-11
eV Global Value Equity Net Median			-0.5	-2.0	6.5	6.5	6.8	8.2	6.8	7.5	Mar-11
eV Global Value Equity Net Rank			49	53	40	40	14	10		1	Mar-11
Artisan Global Opportunities	56,856,675	2.7	1.2	4.3	14.8	14.8				14.8	Jul-17
MSCI ACWI Growth NR USD			2.3	3.0	16.1	16.1				16.1	Jul-17
eV All Global Equity Net Median			1.3	0.1	10.4	10.4	7.6	9.4	6.8	10.4	Jul-17
eV All Global Equity Net Rank			51	14	24	24			-	24	Jul-17
Russell Currency Hedge	8,437	0.0							- 1		



Returns for the Equity Aggregate are gross of fees through June 2015 and net of fees thereafter.
 Please see final page of the performance report for composition of the Policy Benchmark.

	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
US Equity	94,562,907	4.6	4.3	3.1	12.2	12.2	10.2			10.2	Jul-15
Russell 3000			3.9	3.2	14.8	14.8	11.6			11.6	Jul-15
eV All US Equity Net Median			3.7	3.1	13.7	13.7	9.9	12.0	10.0	9.9	Jul-15
eV All US Equity Net Rank			44	50	60	60	47			47	Jul-15
Northern Trust Russell 1000 Index	63,187,777	3.1	3.6	3.1	14.8	14.8				18.6	Nov-16
Russell 1000			3.6	2.9	14.5	14.5			-	18.4	Nov-16
Cove Street Small Cap Value	17,427,248	0.8	3.8	0.8	3.6	3.6	6.3			5.9	May-14
Russell 2000 Value			8.3	5.4	13.1	13.1	11.2			9.5	May-14
eV US Small Cap Value Equity Net Median			5.4	3.2	11.6	11.6	9.6	11.1	10.3	8.9	May-14
eV US Small Cap Value Equity Net Rank			74	82	95	95	86			88	May-14
Northern Trust Russell 2000 Value	13,947,883	0.7	8.3	5.8						5.8	Jan-18
Russell 2000 Value			8.3	5.4						5.4	Jan-18
International Equity	206,054,561	9.9	-0.9	-1.6	9.6	9.6	6.2			6.2	Jul-15
MSCI World ex USA			-0.7	-2.8	7.0	7.0	4.9			4.9	Jul-15
eV All EAFE Equity Net Median			-1.5	-2.6	7.9	7.9	5.8	7.2	4.1	5.8	Jul-15
eV All EAFE Equity Net Rank			35	39	34	34	45			45	Jul-15
Northern Trust MSCI World ex. U.S.	165,167,754	8.0	-0.8	-2.2	7.5	7.5				13.6	Nov-16
MSCI World ex USA			-0.7	-2.8	7.0	7.0				13.1	Nov-16
Oberweis International Opportunities	40,886,806	2.0	-1.2	0.9	19.3	19.3				14.5	Nov-15
MSCI World ex USA Small Cap Growth NR USD			0.3	1.0	15.7	15.7			[13.2	Nov-15
eV EAFE Small Cap Growth Net Median			0.3	1.7	17.8	17.8	13.0	13.8	8.2	14.9	Nov-15
eV EAFE Small Cap Growth Net Rank			66	69	22	22				68	Nov-15



	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Emerging Markets Equity	67,041,086	3.2	-10.8	-9.0	2.9	2.9	2.8			2.8	Jul-15
MSCI Emerging Markets			-8.0	-6.7	8.2	8.2	5.6			5.6	Jul-15
eV Emg Mkts Equity Net Median			-8.5	-7.0	7.2	7.2	5.6	5.1	2.7	5.6	Jul-15
eV Emg Mkts Equity Net Rank			93	85	80	80	87			87	Jul-15
GQG Partners Global Emerging Markets	27,318,991	1.3	-9.1	-5.9	10.0	10.0				10.0	Jul-17
MSCI Emerging Markets			-8.0	-6.7	8.2	8.2				8.2	Jul-17
eV Emg Mkts Equity Net Median			-8.5	-7.0	7.2	7.2	5.6	5.1	2.7	7.2	Jul-17
eV Emg Mkts Equity Net Rank			66	31	25	25				25	Jul-17
Dimensional Fund Advisors EM Value	24,147,274	1.2	-9.2	-7.2	5.7	5.7				11.8	Nov-16
MSCI Emerging Markets Value NR USD			-8.9	-7.5	4.3	4.3				9.0	Nov-16
eV Emg Mkts Equity Net Median			-8.5	-7.0	7.2	7.2	5.6	5.1	2.7	12.6	Nov-16
eV Emg Mkts Equity Net Rank			68	55	65	65				55	Nov-16
Comgest Global Emerging Markets	15,574,821	0.8	-14.1	-14.7	-2.0	-2.0				2.9	Mar-17
MSCI Emerging Markets SMID Cap			-8.2	-7.3	6.4	6.4				10.0	Mar-17
eV Emg Mkts Small Cap Equity Net Median			-8.6	-5.6	7.0	7.0	5.3	6.2	6.7	13.8	Mar-17
eV Emg Mkts Small Cap Equity Net Rank			99	99	85	85				92	Mar-17
Marketable Alternative Equity	63,045,456	3.0	1.9	3.4	9.4	9.4	4.9			6.4	Oct-14
HFRI Equity Hedge (Total) Index			0.9	1.2	8.3	8.3	4.9			4.9	Oct-14
Marshall Wace Eureka Fund	22,902,161	1.1	1.7	5.7	12.0	12.0	7.3			8.9	Apr-14
HFRI Equity Hedge (Total) Index			0.9	1.2	8.3	8.3	4.9			4.5	Apr-14
Senator Global Opportunity Offshore Fund	20,596,819	1.0	1.3	-0.9	5.0	5.0	2.4	6.2		6.6	Apr-13
HFRI Event-Driven (Total) Index			1.9	2.0	5.6	5.6	4.6	4.8		4.9	Apr-13
Sandler Plus Offshore Fund Ltd	19,546,476	0.9	2.9	7.0	14.9	14.9	9.7	9.7		9.1	May-13
HFRI Equity Hedge (Total) Index			0.9	1.2	8.3	8.3	4.9	5.8		5.6	<i>May-13</i>



	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Private Equity	182,532,529	8.8	3.1	0.7	8.9	8.9	7.1	10.7	7.2	6.9	Jan-06
Cambridge PE Composite BM			2.6	8.0	18.3	18.3	12.3	12.4	9.6	11.2	Jan-06
Northern Trust Russell 3000	111,939,105	5.4								0.7	Jun-18
Russell 3000										0.7	Jun-18
Private Equity ex Russell 3000	70,593,416	3.4	3.3	0.8	9.0	9.0	7.2	10.7	7.3	6.9	Jan-06
Cambridge PE Composite BM			2.6	8.0	18.3	18.3	12.3	12.4	9.6	11.2	Jan-06
PE Strategic Partnership LP	19,735,971	1.0	-0.3	-0.3			-			-5.8	Aug-17
Cambridge PE Composite BM			2.6	8.0						18.3	Aug-17
Pantheon USA Fund VII	20,403,951	1.0	6.5	6.5	14.3	14.3	10.9	14.1			Jan-07
Cambridge PE Composite BM			2.6	8.0	18.3	18.3	12.3	12.4			Jan-07
Partners Group Secondary 2011, L.P.	9,816,095	0.5	3.8	8.4	17.5	17.5	11.9	16.3		22.6	Nov-12
Cambridge PE Composite BM			2.6	8.0	18.3	18.3	12.3	12.4		13.2	Nov-12
Pantheon Global Secondary Fund III 'B'	5,068,934	0.2	-3.6	-3.6	3.0	3.0	0.4	2.1			Jan-07
Cambridge PE Composite BM			2.6	8.0	18.3	18.3	12.3	12.4			Jan-07
Crestline Portfolio Financing	4,970,014	0.2									Jun-18
Pathway Private Equity Fund VIII	4,415,183	0.2	-3.4	-3.8	4.4	4.4	0.8	7.5			Aug-04
Cambridge PE Composite BM			2.6	8.0	18.3	18.3	12.3	12.4			Aug-04
Great Hill Equity Partners IV, LP	4,169,546	0.2	13.7	21.4	81.9	81.9	39.4	37.2			Oct-08
Cambridge PE Composite BM			2.6	8.0	18.3	18.3	12.3	12.4	-		Oct-08
Partners Group Secondary 2008, L.P.	1,580,799	0.1	-2.5	1.7	7.6	7.6	4.3	7.0			Dec-08
Cambridge PE Composite BM			2.6	8.0	18.3	18.3	12.3	12.4	-		Dec-08



	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Innovation Endeavors II	432,923	0.0								0.0	Jun-18
Cambridge PE Composite BM										2.6	Jun-18
Global Fixed Income	661,102,237	31.9	-0.9	-0.8	1.0	1.0	1.8	1.8		2.4	Jan-12
Fixed Income Custom Benchmark			-3.0	-1.8	1.2	1.2	2.9	1.7		1.2	Jan-12
eV All Global Fixed Inc Net Median			-1.7	-1.8	1.0	1.0	3.0	2.8	4.1	3.4	Jan-12
eV All Global Fixed Inc Net Rank			39	33	51	51	84	72		66	Jan-12
Global Core	551,196,404	26.6	0.4	0.0	1.3	1.3	1.7		-	1.7	Jul-15
BBgBarc Global Aggregate TR			-2.8	-1.5	1.4	1.4	2.6			2.6	Jul-15
Northern Trust Intermediate Gov't 1-10 Year	173,845,840	8.4	0.1	-0.6	-0.7	-0.7	0.6	1.0		0.7	Oct-12
BBgBarc US Govt Int TR			0.1	-0.7	-0.7	-0.7	0.6	1.0		0.7	Oct-12
Northern Trust TIPS 0-5 Years	151,367,908	7.3	0.5	0.7	1.4	1.4	1.1			0.4	Jul-14
BBgBarc US Treasury TIPS 0-5 Yr TR			0.5	0.7	1.4	1.4	1.1			0.4	Jul-14
Voya Securitized Credit	97,593,592	4.7	1.0	1.6	4.7	4.7	5.7			5.7	Jul-15
BBgBarc Global Aggregate Securitized TR			-0.7	-1.3	0.5	0.5	1.5			1.5	Jul-15
BlackRock Global Agg ex US	50,320,162	2.4	0.5	1.4						3.0	Aug-17
BBgBarc Global Aggregate ex US TR			-4.8	-1.0						0.5	Aug-17
BBgBarc Global Aggregate ex US Tres Hedged TR			0.5	1.4						3.0	Aug-17
BlackRock US Debt Fund	39,389,750	1.9	-0.1	-1.5						-0.7	Aug-17
BBgBarc US Aggregate TR			-0.2	-1.6			-		-	-0.8	Aug-17
BlackRock Long Government Index	38,679,152	1.9	0.3	-2.8	0.1	0.1				-0.4	Jun-16
BBgBarc US Govt Long TR			0.3	-3.0	-0.1	-0.1				-0.7	Jun-16

¹ Returns for the Fixed Income Aggregate are gross of fees through June 2015 and net of fees thereafter.

² Prior to 7/1/2015, Fixed Income Custom Benchmark was 100% Barclays Global Aggregate. After 7/1/2015, Fixed Income Custom Benchmark consists of 80% Barclays Global Aggregate, 5% JPM GBI-EM GD, 5% JPM EMBI GD, 5% S&P Global Leveraged Loan, and 5% BAML GLobal HY Index.



	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Non-Investment Grade Credit	39,799,264	1.9	-0.5	2.2	3.0	3.0	3.1	1.3		1.9	Feb-13
50% BAML Global HY / 50% S&P Global Leveraged Loan			0.2	0.6	3.0	3.0	4.5	5.8		5.6	Feb-13
Davidson Kempner Institutional Partners, L.P.	39,728,279	1.9	-0.5	2.2	3.8	3.8	4.8	4.9		5.2	Feb-13
HFRI Event-Driven (Total) Index			1.9	2.0	5.6	5.6	4.6	4.8		5.0	Feb-13
Claren Road Credit Fund	70,985	0.0	0.5	1.9	-17.1	-17.1	-4.3	-5.9		-5.9	Jul-13
HFRI RV: Fixed Income-Corporate Index			0.1	0.9	4.7	4.7	5.0	4.5		4.5	Jul-13
Emerging Markets Debt	70,106,569	3.4	-10.3	-8.1	-3.1	-3.1	1.4	-		1.4	Jul-15
50% JPM EMBI GD / 50% JPM GBI-EM			-7.0	-5.8	-1.9	-1.9	3.4			3.4	Jul-15
eV All Emg Mkts Fixed Inc Net Median			-6.2	-6.0	-2.0	-2.0	3.6	3.1	5.7	3.6	Jul-15
eV All Emg Mkts Fixed Inc Net Rank			80	93	75	75	84			84	Jul-15
BlueBay Emerging Market Select Debt	70,106,569	3.4	-10.3	-8.1	-3.1	-3.1	1.4			1.4	Jul-15
50% JPM EMBI GD / 50% JPM GBI-EM			-7.0	-5.8	-1.9	-1.9	3.4			3.4	Jul-15
eV All Emg Mkts Fixed Inc Net Median			-6.2	-6.0	-2.0	-2.0	3.6	3.1	5.7	3.6	Jul-15
eV All Emg Mkts Fixed Inc Net Rank			80	93	75	75	84			84	Jul-15
Private Debt	77,408,163	3.7	0.9	3.5	-5.4	-5.4	0.2	2.9		4.2	Dec-10
S&P Global Leveraged Loan +2%			-0.2	2.2	6.2	6.2	6.5	5.8		6.4	Dec-10
Medley Opportunity Fund II	29,990,671	1.4	-1.4	-5.4	-5.7	-5.7	1.4	4.4		5.1	Jun-11
3-Month LIBOR + 5%			1.8	3.6	6.9	6.9	6.2	5.8		5.7	Jun-11
White Oak Direct Lending Account	20,675,403	1.0	2.4	21.1	-14.0	-14.0	-4.1	-0.5		0.9	Feb-11
3-Month LIBOR + 5%			1.8	3.6	6.9	6.9	6.2	5.8		5.7	Feb-11
GSO Direct Lending Account	11,627,748	0.6	2.8	1.1	1.4	1.4	0.0	2.3		7.2	Mar-11
3-Month LIBOR + 5%			1.8	3.6	6.9	6.9	6.2	5.8	-	5.7	Mar-11



	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Cross Ocean USD ESS II S&P Global Leveraged Loan +2%	9,980,529	0.5	1.7 -0.2	4.5 2.2	8.5 6.2	8.5 6.2			 	14.6 7.6	Aug-16 <i>Aug-16</i>
ArrowMark Co-Investment S&P Global Leveraged Loan +2%	5,133,811	0.2	2.8 -0.2	6.1 2.2		 		 			Dec-17 Dec-17
Real Assets	271,599,044	13.1	3.3	2.3	11.1	11.1	4.8	4.3		1.7	May-10
Real Assets Benchmark			1.6	2.1	9.5	9.5	4.4	4.1		4.9	May-10
Real Estate	153,769,704	7.4	2.4	5.2	10.6	10.6	12.0	14.2	4.8	9.4	Jan-94
NCREIF Property Index			1.8	3.5	7.2	7.2	8.3	9.8	6.2	9.4	Jan-94
American Realty	71,334,528	3.4	2.0	3.3	6.6	6.6	8.2	9.8	4.0	5.0	Jan-07
NCREIF ODCE Equal Weighted (Net)			1.9	3.9	7.7	7.7	8.7	10.2	4.2	5.0	Jan-07
PRISA	39,693,911	1.9	1.6	5.5	7.6	7.6	10.0	11.2	4.2	7.2	Jul-04
NCREIF ODCE Equal Weighted (Net)			1.9	3.9	7.7	7.7	8.7	10.2	4.2	6.9	Jul-04
DRA Growth & Income Fund VIII	12,841,106	0.6	2.8	2.6	13.5	13.5	12.4			12.0	Jan-15
NCREIF Property Index			1.8	3.5	7.2	7.2	8.3			9.1	Jan-15
DRA Growth and Income Fund VII	11,030,359	0.5	11.1	19.4	38.2	38.2	28.6	23.5		21.8	Apr-12
NCREIF Property Index	, ,		1.8	3.5	7.2	7.2	8.3	9.8		10.0	Apr-12
DRA Growth and Income Fund IX	7,253,546	0.4	4.0	8.2	13.8	13.8				12.7	Feb-17
NCREIF Property Index	,,-		1.8	3.5	7.2	7.2				7.5	Feb-17
Tristan Capital Partners	7,659,922	0.4	-3.1	4.1	9.6	9.6				8.3	Jan-16
NCREIF Property Index			1.8	3.5	7.2	7.2				7.4	Jan-16

¹ Returns for the Private Debt and Real Assets Aggregates are gross of fees through June 2015 and net of fees thereafter.



	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Torchlight Debt Opportunity VI NCREIF Property Index	2,191,603	0.1							 		Apr-18 <i>Apr-18</i>
DRA Growth and Income Fund VI NCREIF Property Index	1,183,566	0.1	-2.3 1.8	0.1 3.5	4.6 7.2	4.6 7.2	9.1 8.3	15.7 9.8	9.3 6.2	9.2 6.1	Jan-08 <i>Jan-</i> 08
GEM Realty Fund VI NCREIF Property Index	564,395	0.0	4.6 1.8	-18.1 3.5							Nov-17 <i>Nov-17</i>
DRA Growth and Income Fund V NCREIF Property Index	16,767	0.0	-3.2 1.8	76.7 3.5	198.1 7.2	198.1 7.2	63.9 8.3	43.2 9.8	17.6 6.2	16.3 7.7	Jan-06 <i>Jan-</i> 06
Commodities	94,000,747	4.5	4.6	3.4	10.2	10.2	-2.9	-3.8		-3.2	May-10
Bloomberg Commodity Index TR USD			0.4	0.0	7.3	7.3	-4.5	-6.4		-4.9	May-10
Credit Suisse Risk Parity Commodity Index Bloomberg Commodity Index TR USD	53,310,507	2.6	1.6 0.4	-0.4 0.0	7.3 7.3	7.3 7.3	-1.2 -4.5	-2.5 -6.4		-4.8 -8.4	Apr-11 <i>Apr-11</i>
Pinnacle Natural Resources, L.P. Bloomberg Commodity Index TR USD	40,690,240	2.0	10.1 <i>0.4</i>	11.5 <i>0.0</i>	15.2 7.3	15.2 7.3				0.7 5.3	Jan-16 <i>Jan-</i> 16
Infrastructure	23,701,755	1.1	3.0	-2.0	1.5	1.5	4.5			5.3	Mar-14
DJ Brookfield Global Infrastructure Net TR USD			4.2	-1.3	2.5	2.5	4.5			5.0	Mar-14
Global Infrastructure Partners III DJ Brookfield Global Infrastructure Net TR USD	12,902,651	0.6	-0.4 4.2	-0.1 -1.3	-10.6 2.5	-10.6 2.5			 	-6.2 6.1	Sep-16 Sep-16
Rhumbline DJ Brookfield Global Infrastructure DJ Brookfield Global Infrastructure Net TR USD	10,799,104	0.5	4.4 4.2	-1.1 -1.3	3.0 2.5	3.0 2.5	5.1 4.5			3.6 3.0	Jun-15 <i>Jun-15</i>



	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Natural Resources	126,838	0.0	2.3	-0.6	19.0	19.0	5.4	2.8		0.2	Nov-12
S&P Global Natural Resources Index TR USD			5.4	3.7	24.8	24.8	9.5	5.6		3.2	Nov-12
Rhumbline S&P Global Large MidCap Commodity & NR	126,838	0.0	2.8	0.0	19.7	19.7	5.6			3.7	Jun-15
S&P Global LargeMidCap Commodity and Resources GR USD			6.1	3.0	23.2	23.2	6.8			4.7	Jun-15
Absolute Return	255,426,872	12.3	0.4	2.1	4.8	4.8	2.0	3.2		3.4	Nov-12
HFRI Macro (Total) Index			-0.1	-1.7	1.2	1.2	0.2	1.2		1.1	Nov-12
Relative Value	119,825,910	5.8	1.3	2.9	5.8	5.8	3.1			3.9	Oct-14
HFRI Relative Value (Total) Index			1.2	1.6	4.0	4.0	3.8			3.5	Oct-14
DE Shaw	39,444,119	1.9	2.5	5.3	11.7	11.7	8.3	11.1		11.3	Apr-13
HFRI Fund Weighted Composite Index			0.9	0.8	5.7	5.7	3.7	4.4		4.2	Apr-13
Hudson Bay	31,183,521	1.5	1.4	2.5						3.9	Aug-17
HFRI Relative Value (Total) Index			1.2	1.6						3.3	Aug-17
Pine River Volatility Arbitrage	24,091,525	1.2	-1.8	-2.2	-1.9	-1.9				-2.7	Mar-17
HFRI Relative Value (Total) Index			1.2	1.6	4.0	4.0				3.6	Mar-17
JD Capital	22,246,367	1.1	2.9	5.3	8.0	8.0				6.2	Oct-16
HFRI Relative Value (Total) Index			1.2	1.6	4.0	4.0				4.9	Oct-16
Pine River Fund Ltd	2,860,378	0.1	-2.2	-0.7	-0.2	-0.2	-2.5	0.8		2.0	Jan-13
HFRI Relative Value (Total) Index			1.2	1.6	4.0	4.0	3.8	4.4		4.5	Jan-13



	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Macro	135,600,962	6.5	-0.4	1.3	3.8	3.8	1.7			1.4	Oct-14
HFRI Macro (Total) Index			-0.1	-1.7	1.2	1.2	0.2			0.7	Oct-14
Pharo Management, Ltd.	33,069,889	1.6	-2.3	5.9	6.8	6.8				11.7	Apr-16
HFRI Macro (Total) Index			-0.1	-1.7	1.2	1.2				0.0	Apr-16
Systematica	25,076,682	1.2	0.2	-4.9	0.9	0.9	_			0.9	Jul-17
Barclay BTOP50 Index TR USD			-1.1	-3.6	0.4	0.4				0.4	Jul-17
Dymon Asia Macro	26,141,009	1.3	0.7	1.0	1.2	1.2				1.7	Sep-15
HFRI Macro (Total) Index			-0.1	-1.7	1.2	1.2				0.4	Sep-15
Keynes Leveraged Quantitative Strategies Fund	19,969,600	1.0	-4.0	0.9	8.4	8.4				-0.1	Jan-16
Barclay BTOP50 Index TR USD			-1.1	-3.6	0.4	0.4				-3.6	Jan-16
AHL Frontier Fund	14,971,978	0.7	2.5	-2.2	9.8	9.8				7.6	Jun-16
Barclay BTOP50 Index TR USD			-1.1	-3.6	0.4	0.4				-4.7	Jun-16
Kepos Alpha Fund	16,371,804	0.8	3.5	7.9	-0.3	-0.3	-2.8	0.2		-1.8	Mar-13
HFRI Macro: Systematic Diversified Index			-0.9	-4.0	0.5	0.5	-1.4	0.9		0.6	Mar-13
Opportunistic	0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	Jul-15
60/40 MSCI ACWI IMI/BC Global			-0.7	-0.6	7.2	7.2	6.1			6.1	Jul-15
Cash	12,679,543	0.3									
91 Day T-Bills											
Internal Cash Account	6,340,188	0.3							ı		
Russell Investments Overlay	6,339,355	0.3									

¹ Cash composite includes the cash account, cash collateral in the Russell Investments Overlay program, and residuals from terminated manager assets.



											-,
	Fisc	al Year P	erformand	e							
	Fiscal 2018 (%)	Fiscal 2017 (%)	Fiscal 2016 (%)	Fiscal 2015 (%)	Fiscal 2014 (%)	Fiscal 2013 (%)	Fiscal 2012 (%)	Fiscal 2011 (%)	Fiscal 2010 (%)	Fiscal 2009 (%)	Fisca 2008 (%
Total Fund Aggregate	5.9	7.5	-0.7	-1.0	14.2	8.0	-3.3	18.9	13.7	-17.0	-3.
Policy Benchmark	7.4	8.1	1.3	-3.3	17.0	8.3	-2.4	22.0	12.1	-15.3	-3.
Allocation Index	6.6	6.6	0.7	-1.8	13.2	8.9	-3.2	18.6	11.4	-15.3	-2.
Total Global Equity	9.2	17.7	-4.3	0.8	22.6	17.8	-7.1	31.7			
MSCI ACWI IMI Net USD	11.1	19.0	-3.9	0.8	23.4	17.1	-6.9	31.0			
Global Equity	10.0	23.4	-2.3								
MSCI ACWI IMI Net USD	11.1	19.0	-3.9								
Artisan Global Value	7.6	23.6	-2.0	0.6	24.4	27.7	2.8				
MSCI ACWI Value NR USD	5.4	19.0	-4.8	-3.4	22.8	17.8	-7.8				
Artisan Global Opportunities	14.8										
MSCI ACWI Growth NR USD	16.1										
Russell Currency Hedge											
US Equity	12.2	18.4	0.6								
Russell 3000	14.8	18.5	2.1								
Northern Trust Russell 1000 Index	14.8										
Russell 1000	14.5										
Cove Street Small Cap Value	3.6	18.8	-2.3	-1.6							
Russell 2000 Value	13.1	24.9	-2.6	0.8							
Northern Trust Russell 2000 Value											
Russell 2000 Value											
International Equity	9.6	19.3	-8.4					-			
MSCI World ex USA	7.0	19.5	-9.8								
Northern Trust MSCI World ex. U.S.	7.5										
MSCI World ex USA	7.0										



	Fiscal 2018 (%)	Fiscal 2017 (%)	Fiscal 2016 (%)	Fiscal 2015 (%)	Fiscal 2014 (%)	Fiscal 2013 (%)	Fiscal 2012 (%)	Fiscal 2011 (%)	Fiscal 2010 (%)	Fiscal 2009 (%)	Fiscal 2008 (%)
Oberweis International Opportunities MSCI World ex USA Small Cap Growth NR USD	19.3 <i>15.7</i>	16.8 19.1	 								
Emerging Markets Equity MSCI Emerging Markets	2.9 8.2	17.7 23.7	-10.2 -12.1	 		 	 	 		 	-
GQG Partners Global Emerging Markets MSCI Emerging Markets	10.0 8.2	 		 							
Dimensional Fund Advisors EM Value MSCI Emerging Markets Value NR USD	5.7 4.3		 		 						
Comgest Global Emerging Markets MSCI Emerging Markets SMID Cap	-2.0 6.4		 								
Marketable Alternative Equity	9.4	7.6	-2.1								
HFRI Equity Hedge (Total) Index	8.3	12.1	-5.0								
Marshall Wace Eureka Fund HFRI Equity Hedge (Total) Index	12.0 8.3	9.9 12.1	0.4 -5.0	15.7 2.4	 	 	 	 	 	 	
Senator Global Opportunity Offshore Fund HFRI Event-Driven (Total) Index	5.0 5.6	12.8 12.5	-9.3 -3.8	9.0 -0.8	15.6 11.2	 		 	 		
Sandler Plus Offshore Fund Ltd HFRI Equity Hedge (Total) Index	14.9 8.3	7.7 12.1	6.8 -5.0	16.6 2.4	2.9 12.5	 	 	 	 	 	
Private Equity	8.9	10.3	2.4	13.3	19.3	9.6	9.7	17.4	12.6	-23.8	14.0
Cambridge PE Composite BM	18.3	12.0	6.8	5.8	19.6	13.2	9.6	19.1	23.1	-22.9	9.8
Northern Trust Russell 3000 Russell 3000	 										



	Fiscal 2018 (%)	Fiscal 2017 (%)	Fiscal 2016 (%)	Fiscal 2015 (%)	Fiscal 2014 (%)	Fiscal 2013 (%)	Fiscal 2012 (%)	Fiscal 2011 (%)	Fiscal 2010 (%)	Fiscal 2009 (%)	Fiscal 2008 (%)
Private Equity ex Russell 3000	9.0	10.3	2.4	13.3	19.3	9.6	9.7	17.4	12.6	-23.8	14.0
Cambridge PE Composite BM	18.3	12.0	6.8	5.8	19.6	13.2	9.6	19.1	23.1	-22.9	9.8
PE Strategic Partnership LP Cambridge PE Composite BM	 		 	 	 						
Pantheon USA Fund VII Cambridge PE Composite BM	14.3 <i>18.</i> 3	14.1 12.0	4.4 6.8	16.5 5.8	21.7 19.6	10.2 13.2	12.1 9.6	13.0 19.1	11.0 23.1		
Partners Group Secondary 2011, L.P. Cambridge PE Composite BM	17.5 18.3	9.0 12.0	9.4 6.8	24.8 5.8	21.6 19.6		 				
Pantheon Global Secondary Fund III 'B' Cambridge PE Composite BM	3.0 18.3	1.2 12.0	-2.9 6.8	0.1 5.8	9.4 19.6	2.0 13.2	-0.1 9.6	14.0 19.1	10.3 23.1		
Crestline Portfolio Financing											
Pathway Private Equity Fund VIII Cambridge PE Composite BM	4.4 18.3	2.1 12.0	-3.7 6.8	14.5 5.8	22.2 19.6	10.9 13.2	14.0 9.6	21.2 19.1	16.2 23.1	 	
Great Hill Equity Partners IV, LP Cambridge PE Composite BM	81.9 <i>18.</i> 3	33.5 12.0	11.6 6.8	41.9 5.8	26.4 19.6	29.0 13.2	69.1 9.6	-10.1 19.1	7.0 23.1	 	
Partners Group Secondary 2008, L.P. Cambridge PE Composite BM	7.6 18.3	8.2 12.0	-2.4 6.8	0.5 5.8	22.6 19.6	7.5 13.2	8.8 9.6	36.3 19.1	3.6 23.1		
Innovation Endeavors II Cambridge PE Composite BM		 									
Global Fixed Income	1.0	2.2	2.2	-0.7	4.5	3.6					
Fixed Income Custom Benchmark	1.2	-0.2	7.9	-7.1	7.4	-2.2					



	Fiscal 2018 (%)	Fiscal 2017 (%)	Fiscal 2016 (%)	Fiscal 2015 (%)	Fiscal 2014 (%)	Fiscal 2013 (%)	Fiscal 2012 (%)	Fiscal 2011 (%)	Fiscal 2010 (%)	Fiscal 2009 (%)	Fiscal 2008 (%)
Global Core	1.3	0.7	3.2								
BBgBarc Global Aggregate TR	1.4	-2.2	8.9								
Northern Trust Intermediate Gov't 1-10 Year	-0.7	-1.3	3.9	1.7	1.5						
BBgBarc US Govt Int TR	-0.7	-1.2	3.9	1.8	1.5						
Northern Trust TIPS 0-5 Years	1.4	0.3	1.6	-1.9							
BBgBarc US Treasury TIPS 0-5 Yr TR	1.4	0.3	1.7	-1.9							
Voya Securitized Credit	4.7	9.3	3.2								
BBgBarc Global Aggregate Securitized TR	0.5	0.2	3.9								
BlackRock Global Agg ex US											
BBgBarc Global Aggregate ex US TR											
BBgBarc Global Aggregate ex US Tres Hedged TR											
BlackRock US Debt Fund											
BBgBarc US Aggregate TR											
BlackRock Long Government Index	0.1	-6.7									
BBgBarc US Govt Long TR	-0.1	-7.0									
Non-Investment Grade Credit	3.0	9.6	-2.9	-9.8	7.6			-			
50% BAML Global HY / 50% S&P Global Leveraged Loan	3.0	9.9	0.9	-0.8	17.1						
Davidson Kempner Institutional Partners, L.P.	3.8	8.6	2.0	0.3	9.9						
HFRI Event-Driven (Total) Index	5.6	12.5	-3.8	-0.8	11.2						
Claren Road Credit Fund	-17.1	18.2	-10.4	-16.9	1.2						
HFRI RV: Fixed Income-Corporate Index	4.7	9.7	0.6	-1.4	9.0						
Emerging Markets Debt	-3.1	5.5	2.1								
50% JPM EMBI GD / 50% JPM GBI-EM	-1.9	6.3	6.0								
	-3.1	5.5	2.1								
BlueBay Emerging Market Select Debt 50% JPM EMBI GD / 50% JPM GBI-EM	-3.1 -1.9	5.5 6.3	2.1 6.0								
3070 St. M. EMBI GD / 0070 St. M. GDI EM	1.0	0.0	0.0	·	-	_	_	_	_	_	_



	Fiscal 2018 (%)	Fiscal 2017 (%)	Fiscal 2016 (%)	Fiscal 2015 (%)	Fiscal 2014 (%)	Fiscal 2013 (%)	Fiscal 2012 (%)	Fiscal 2011 (%)	Fiscal 2010 (%)	Fiscal 2009 (%)	Fiscal 2008 (%)
Private Debt	-5.4	2.7	3.6	4.0	10.2	11.5	9.3	-			
S&P Global Leveraged Loan +2%	6.2	10.4	3.0	-0.2	10.0	9.1	5.6				
Medley Opportunity Fund II	-5.7	8.0	2.6	7.9	10.2	9.7	4.6				
3-Month LIBOR + 5%	6.9	6.1	5.5	5.3	5.3	5.4	5.5				
White Oak Direct Lending Account	-14.0	-12.6	17.5	-1.4	12.2	15.0	-2.0				
3-Month LIBOR + 5%	6.9	6.1	5.5	5.3	5.3	5.4	5.5				
GSO Direct Lending Account	1.4	16.8	-15.5	3.8	7.9	14.0	27.4				
3-Month LIBOR + 5%	6.9	6.1	5.5	5.3	5.3	5.4	5.5				
Cross Ocean USD ESS II	8.5										
S&P Global Leveraged Loan +2%	6.2										
ArrowMark Co-Investment											
S&P Global Leveraged Loan +2%											
Real Assets	11.1	5.7	-1.9	-10.4	19.4	-10.1	-10.9	27.7			
Real Assets Benchmark	9.5	5.3	-1.4	-7.7	16.3	3.5	-2.4	28.0			
Real Estate	10.6	10.5	14.8	22.0	13.4	9.7	12.2	15.3	-23.3	-24.2	10.7
NCREIF Property Index	7.2	7.0	10.6	13.0	11.2	10.7	12.0	16.7	-1.5	-19.6	9.2
American Realty	6.6	5.8	12.3	12.9	11.5	10.3	11.0	16.5	-12.1	-26.2	9.4
NCREIF ODCE Equal Weighted (Net)	7.7	7.2	11.2	13.6	11.4	10.8	11.5	19.3	-8.5	-31.4	7.5
PRISA	7.6	9.1	13.3	13.3	12.7	9.7	12.6	20.5	-4.5	-37.7	7.0
NCREIF ODCE Equal Weighted (Net)	7.7	7.2	11.2	13.6	11.4	10.8	11.5	19.3	-8.5	-31.4	7.5
DRA Growth & Income Fund VIII	13.5	12.6	10.9								
NCREIF Property Index	7.2	7.0	10.6								
DRA Growth and Income Fund VII	38.2	24.8	23.3	17.3	15.2	16.6					
NCREIF Property Index	7.2	7.0	10.6	13.0	11.2	10.7					



	Fiscal 2018 (%)	Fiscal 2017 (%)	Fiscal 2016 (%)	Fiscal 2015 (%)	Fiscal 2014 (%)	Fiscal 2013 (%)	Fiscal 2012 (%)	Fiscal 2011 (%)	Fiscal 2010 (%)	Fiscal 2009 (%)	Fiscal 2008 (%)
DRA Growth and Income Fund IX NCREIF Property Index	13.8 7.2										
Tristan Capital Partners NCREIF Property Index	9.6 7.2	2.0 7.0	 								
Torchlight Debt Opportunity VI NCREIF Property Index	 	 						 	 		
DRA Growth and Income Fund VI NCREIF Property Index	4.6 7.2	2.3 7.0	21.5 10.6	36.8 13.0	16.6 11.2	5.1 10.7	28.4 12.0	11.4 16.7	-15.1 <i>-1.5</i>	-8.4 -19.6	
GEM Realty Fund VI NCREIF Property Index	 										
DRA Growth and Income Fund V NCREIF Property Index	198.1 7.2	20.7 7.0	22.4 10.6	27.0 13.0	7.8 11.2	3.7 10.7	4.6 12.0	8.4 16.7	-20.1 -1.5	-10.6 -19.6	17.2 9.2
Commodities	10.2	-1.8	-15.5	-22.4	16.0	-10.9	-11.8	27.2			
Bloomberg Commodity Index TR USD	7.3	-6.5	-13.3	-23.7	8.2	-8.0	-14.3	25.9			
Credit Suisse Risk Parity Commodity Index Bloomberg Commodity Index TR USD	7.3 7.3	1.3 -6.5	-11.4 -13.3	-19.7 -23.7	13.9 8.2	-7.4 -8.0	-10.0 -14.3	 	 		
Pinnacle Natural Resources, L.P. Bloomberg Commodity Index TR USD	15.2 7.3	-9.7 -6.5	 								
Infrastructure	1.5	8.2	3.9	-2.8							
DJ Brookfield Global Infrastructure Net TR USD	2.5	8.0	3.2	-3.7							
Global Infrastructure Partners III DJ Brookfield Global Infrastructure Net TR USD	-10.6 2.5	 					 	 	 		
Rhumbline DJ Brookfield Global Infrastructure DJ Brookfield Global Infrastructure Net TR USD	3.0 2.5	8.5 8.0	3.9 3.2	 	 	 				 	



	Fiscal 2018 (%)	Fiscal 2017 (%)	Fiscal 2016 (%)	Fiscal 2015 (%)	Fiscal 2014 (%)	Fiscal 2013 (%)	Fiscal 2012 (%)	Fiscal 2011 (%)	Fiscal 2010 (%)	Fiscal 2009 (%)	Fiscal 2008 (%)
Natural Resources	19.0	8.8	-9.5	-19.3	21.4			-			
S&P Global Natural Resources Index TR USD	24.8	15.3	-8.9	-17.6	21.7						
Rhumbline S&P Global Large MidCap Commodity & NR	19.7	8.8	-9.5								
S&P Global LargeMidCap Commodity and Resources GR USD	23.2	8.8	-9.2								
Absolute Return	4.8	1.4	0.0	5.0	4.9			-	-	-	
HFRI Macro (Total) Index	1.2	-2.4	1.8	4.1	1.5						
Relative Value	5.8	3.9	-0.3					-			
HFRI Relative Value (Total) Index	4.0	7.7	-0.2								
DE Shaw	11.7	6.0	7.2	17.2	13.7						
HFRI Fund Weighted Composite Index	5.7	7.9	-2.4	2.3	9.1						
Hudson Bay											
HFRI Relative Value (Total) Index											
Pine River Volatility Arbitrage	-1.9										
HFRI Relative Value (Total) Index	4.0										
JD Capital	8.0										
HFRI Relative Value (Total) Index	4.0										
Pine River Fund Ltd	-0.2	1.8	-8.8	7.5	4.4						
HFRI Relative Value (Total) Index	4.0	7.7	-0.2	1.8	9.0						
Macro	3.8	-0.5	1.8								
HFRI Macro (Total) Index	1.2	-2.4	1.8								
Pharo Management, Ltd.	6.8	14.2									
HFRI Macro (Total) Index	1.2	-2.4									
Systematica	0.9										
Barclay BTOP50 Index TR USD	0.4										



As of June 30, 2018

	Fiscal 2018 (%)	Fiscal 2017 (%)	Fiscal 2016 (%)	Fiscal 2015 (%)	Fiscal 2014 (%)	Fiscal 2013 (%)	Fiscal 2012 (%)	Fiscal 2011 (%)	Fiscal 2010 (%)	Fiscal 2009 (%)	Fiscal 2008 (%)
Dymon Asia Macro HFRI Macro (Total) Index	1.2 1.2	2.6 -2.4			 					 	
Keynes Leveraged Quantitative Strategies Fund Barclay BTOP50 Index TR USD	8.4 0.4	-5.3 -9.4	 								
AHL Frontier Fund Barclay BTOP50 Index TR USD	9.8 0.4	5.4 -9.4	 		 						
Kepos Alpha Fund HFRI Macro: Systematic Diversified Index	-0.3 0.5	-13.6 -7.4	6.6 3.1	4.7 8.6	4.9 0.2	 	 		 	 	
Opportunistic 60/40 MSCI ACWI IMI/BC Global	0.0 7.2	0.0 10.1	0.0 1.3			- 			 		

Cash

91 Day T-Bills

Internal Cash Account

Russell Investments Overlay



Cash Flow Summary Quarter Ending September 30, 2018							
	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Net Investment Change	Ending Market Value	
Aberdeen Frontier Markets	\$11,354,522	\$0	-\$10,130,841	-\$10,130,841	-\$1,223,681	\$0	
AHL Frontier Fund	\$14,606,587	\$0	\$0	\$0	\$365,390	\$14,971,978	
American Realty	\$57,687,182	\$12,500,000	-\$140,065	\$12,359,935	\$1,287,411	\$71,334,528	
ArrowMark Co-Investment	\$5,161,509	\$0	-\$170,926	-\$170,926	\$143,227	\$5,133,811	
Artisan Global Opportunities	\$56,162,988	\$0	\$0	\$0	\$693,687	\$56,856,675	
Artisan Global Value	\$123,936,220	\$21,204,900	-\$21,204,900	\$0	-\$551,612	\$123,384,609	
BlackRock Global Agg ex US	\$50,073,771	\$0	\$0	\$0	\$246,391	\$50,320,162	
BlackRock Long Government Index	\$38,545,911	\$0	\$0	\$0	\$133,241	\$38,679,152	
BlackRock US Debt Fund	\$39,440,735	\$0	\$0	\$0	-\$50,985	\$39,389,750	
BlueBay Emerging Market Select Debt	\$78,146,324	\$0	\$0	\$0	-\$8,039,754	\$70,106,569	
Brevan Howard Fund, Limited	\$490,829	\$0	-\$483,538	-\$483,538	-\$7,290	-	
Claren Road Credit Fund	\$216,410	\$0	-\$145,703	-\$145,703	\$279	\$70,985	
Comgest Global Emerging Markets	\$18,131,492	\$0	\$0	\$0	-\$2,556,671	\$15,574,821	
Cove Street Small Cap Value	\$16,784,536	\$0	\$0	\$0	\$642,712	\$17,427,248	
Credit Suisse Risk Parity Commodity Index	\$74,167,025	\$0	-\$22,072,363	-\$22,072,363	\$1,215,845	\$53,310,507	
Crestline Portfolio Financing		\$4,970,014	\$0	\$4,970,014	\$0	\$4,970,014	
Cross Ocean USD ESS II	\$9,935,207	\$0	-\$141,173	-\$141,173	\$186,495	\$9,980,529	
Davidson Kempner Institutional Partners, L.P.	\$39,920,894	\$0	-\$97,882	-\$97,882	-\$94,733	\$39,728,279	
DE Shaw	\$42,396,888	\$0	-\$4,271,245	-\$4,271,245	\$1,318,475	\$39,444,119	
Dimensional Fund Advisors EM Value	\$26,596,997	\$0	\$0	\$0	-\$2,449,723	\$24,147,274	
DRA Growth & Income Fund VIII	\$13,182,261	\$0	-\$778,894	-\$778,894	\$437,739	\$12,841,106	
DRA Growth and Income Fund IX	\$6,685,424	\$586,854	-\$329,706	\$257,148	\$310,974	\$7,253,546	
DRA Growth and Income Fund V	\$104,142	\$0	-\$84,000	-\$84,000	-\$3,375	\$16,767	
DRA Growth and Income Fund VI	\$1,211,819	\$0	-\$3,842	-\$3,842	-\$24,411	\$1,183,566	
DRA Growth and Income Fund VII	\$9,886,380	\$375,000	-\$370,594	\$4,406	\$1,139,574	\$11,030,359	
Dymon Asia Macro	\$25,953,693	\$0	\$0	\$0	\$187,317	\$26,141,009	



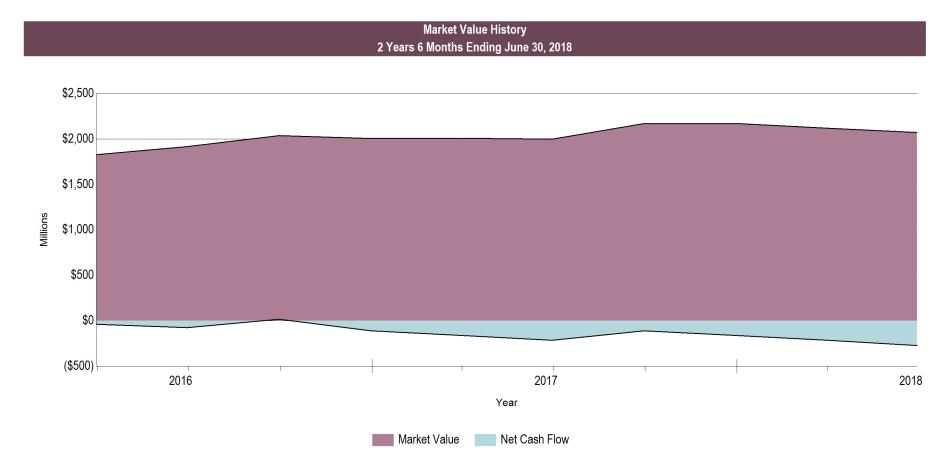
	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Net Investment Change	Ending Market Value
GEM Realty Fund VI	\$289,617	\$250,000	-\$24,438	\$225,562	\$49,216	\$564,395
Global Infrastructure Partners III	\$9,049,757	\$3,904,840	-\$91,356	\$3,813,484	\$39,410	\$12,902,651
GQG Partners Global Emerging Markets	\$30,060,778	\$0	-\$35,634	-\$35,634	-\$2,706,152	\$27,318,991
Great Hill Equity Partners IV, LP	\$3,657,561	\$11,250	-\$15,000	-\$3,750	\$515,735	\$4,169,546
GSO Direct Lending Account	\$11,814,304	\$0	-\$661,096	-\$661,096	\$474,540	\$11,627,748
Hudson Bay	\$30,744,499	\$0	\$0	\$0	\$439,022	\$31,183,521
Innovation Endeavors II	-	\$432,923	\$0	\$432,923	\$0	\$432,923
Internal Cash Account	\$36,134,067	\$228,229,973	-\$258,117,873	-\$29,887,900	\$94,020	\$6,340,188
JD Capital	\$21,622,006	\$0	-\$81,256	-\$81,256	\$705,617	\$22,246,367
Kepos Alpha Fund	\$15,821,989	\$0	-\$37,577	-\$37,577	\$587,393	\$16,371,804
Keynes Leveraged Quantitative Strategies Fund	\$20,809,400	\$0	\$0	\$0	-\$839,800	\$19,969,600
Marshall Wace Eureka Fund	\$22,518,034	\$0	-\$88,527	-\$88,527	\$472,654	\$22,902,161
Medley Opportunity Fund II	\$30,418,361	\$0	-\$87,459	-\$87,459	-\$340,231	\$29,990,671
Northern Trust Global LargeMid Natural Resources	\$7,526	\$7,768	-\$15,535	-\$7,768	\$241	
Northern Trust Intermediate Gov't 1-10 Year	\$138,596,478	\$35,000,000	\$0	\$35,000,000	\$249,362	\$173,845,840
Northern Trust MSCI World ex. U.S.	\$166,547,975	\$0	\$0	\$0	-\$1,380,221	\$165,167,754
Northern Trust Russell 1000 Index	\$61,013,065	\$0	\$0	\$0	\$2,174,712	\$63,187,777
Northern Trust Russell 2000 Value	\$12,877,303	\$0	\$0	\$0	\$1,070,579	\$13,947,883
Northern Trust Russell 3000		\$110,000,000	\$0	\$110,000,000	\$1,939,105	\$111,939,105
Northern Trust TIPS 0-5 Years	\$135,612,520	\$15,000,000	\$0	\$15,000,000	\$755,389	\$151,367,908
Oberweis International Opportunities	\$41,369,456	\$19,299,203	-\$19,299,203	\$0	-\$482,649	\$40,886,806
Pantheon Global Secondary Fund III 'B'	\$5,255,849	\$0	-\$121,694	-\$121,694	-\$65,221	\$5,068,934
Pantheon USA Fund VII	\$20,397,806	\$0	-\$1,407,973	-\$1,407,973	\$1,414,118	\$20,403,951
Partners Group Secondary 2008, L.P.	\$1,811,311	\$0	-\$185,174	-\$185,174	-\$45,339	\$1,580,799
Partners Group Secondary 2011, L.P.	\$10,539,684	\$0	-\$1,125,256	-\$1,125,256	\$401,667	\$9,816,095
Pathway Private Equity Fund VIII	\$4,777,925	\$0	-\$200,141	-\$200,141	-\$162,600	\$4,415,183



	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Net Investment Change	Ending Market Value
PE Strategic Partnership LP	\$12,355,016	\$7,475,000	-\$236,250	\$7,238,750	\$142,205	\$19,735,971
Pharo Management, Ltd.	\$33,844,923	\$0	\$0	\$0	-\$775,034	\$33,069,889
Pine River Fund Ltd	\$4,418,107	\$0	-\$1,503,210	-\$1,503,210	-\$54,519	\$2,860,378
Pine River Volatility Arbitrage	\$24,534,000	\$0	-\$29,859	-\$29,859	-\$412,616	\$24,091,525
Pinnacle Natural Resources, L.P.	\$36,964,680	\$0	\$0	\$0	\$3,725,560	\$40,690,240
PRISA	\$39,429,658	\$0	-\$353,658	-\$353,658	\$617,911	\$39,693,911
Rhumbline DJ Brookfield Global Infrastructure	\$56,730,986	\$23,688,198	-\$70,813,198	-\$47,125,000	\$1,193,118	\$10,799,104
Rhumbline S&P Global Large MidCap Commodity & NR	\$35,327,359	\$22,520,919	-\$59,504,977	-\$36,984,058	\$1,783,537	\$126,838
Russell Currency Hedge	\$61,588	\$70,891,068	-\$72,733,137	-\$1,842,069	\$1,788,917	\$8,437
Russell Investments Overlay	\$5,713,730	\$28,134,701	-\$28,134,701	\$0	\$625,625	\$6,339,355
Russell Private Equity Proxy	\$89,363,773	\$0	-\$90,633,411	-\$90,633,411	\$1,269,639	
Sandler Plus Offshore Fund Ltd	\$18,988,247	\$0	\$0	\$0	\$558,229	\$19,546,476
Senator Global Opportunity Offshore Fund	\$20,336,959	\$0	\$0	\$0	\$259,860	\$20,596,819
State Street Terminated Managers	\$3,039	\$99	-\$503	-\$405	\$2,800	\$5,434
Systematica	\$25,038,983	\$0	\$0	\$0	\$37,699	\$25,076,682
Torchlight Debt Opportunity VI	\$0	\$2,309,115	-\$117,512	\$2,191,603	\$0	\$2,191,603
Tristan Capital Partners	\$7,119,035	\$758,442	-\$48,410	\$710,032	-\$169,145	\$7,659,922
Voya Securitized Credit	\$96,658,712	\$0	\$0	\$0	\$934,879	\$97,593,592
White Oak Direct Lending Account	\$20,257,190	\$2,825,310	-\$2,967,074	-\$141,764	\$559,977	\$20,675,403
Total	\$2,119,673,004	\$610,375,576	-\$669,096,765	-\$58,721,189	\$10,755,728	\$2,071,707,543



Total Fund Asset Growth Summary



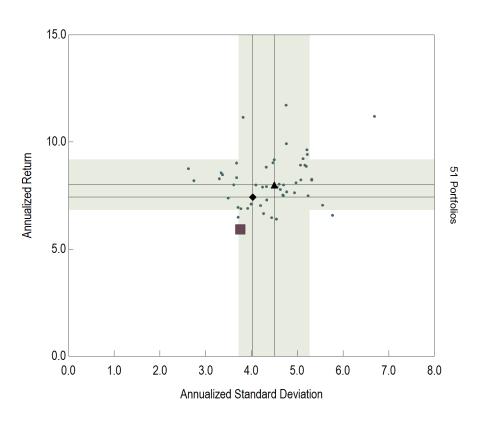
	Second Quarter	One Year	Fiscal Year-To-Date	Two Years
Beginning Market Value	\$2,119,673,004	\$1,998,468,931	\$1,998,468,931	\$1,838,701,588
Net Cash Flow	-\$58,721,189	-\$57,646,593	-\$57,646,593	-\$196,991,066
Net Investment Change	\$10,755,736	\$130,885,213	\$130,885,213	\$429,997,028
Ending Market Value	\$2,071,707,551	\$2,071,707,551	\$2,071,707,551	\$2,071,707,551



Total Fund Risk/Return

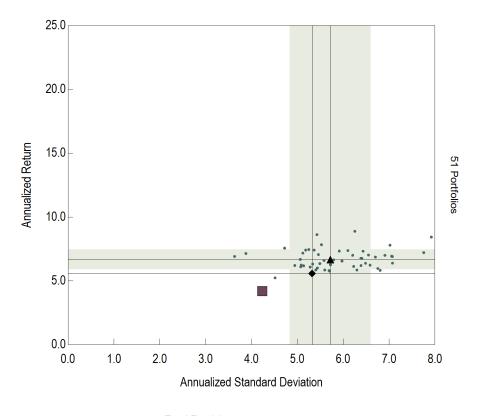
As of June 30, 2018

Annualized Return vs. Annualized Standard Deviation 1 Year Ending June 30, 2018



- Total Fund Aggregate
- Policy Benchmark
- ▲ Universe Median
- 68% Confidence Interval
- InvestorForce Public DB > \$1B Net

Annualized Return vs. Annualized Standard Deviation 3 Years Ending June 30, 2018



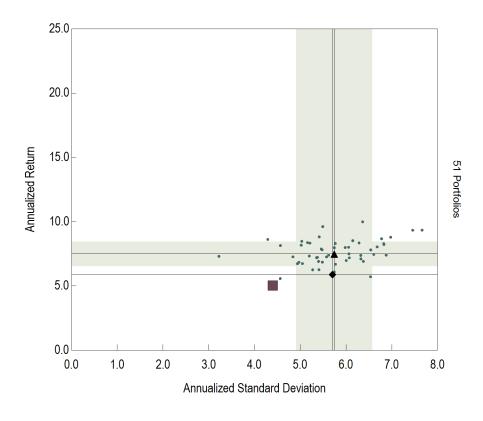
- Total Fund Aggregate
- Policy Benchmark
- ▲ Universe Median
- 68% Confidence Interval
- InvestorForce Public DB > \$1B Net



Total Fund Risk/Return

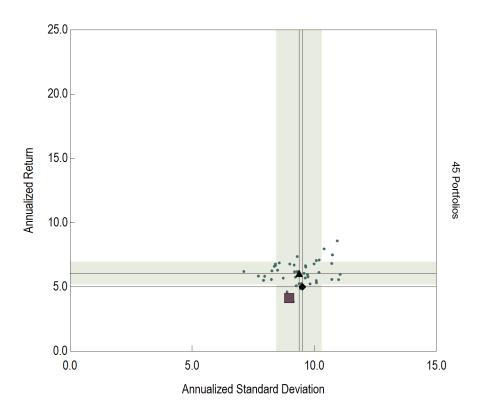
As of June 30, 2018

Annualized Return vs. Annualized Standard Deviation 5 Years Ending June 30, 2018



- Total Fund Aggregate
- Policy Benchmark
- ▲ Universe Median
- 68% Confidence Interval
- InvestorForce Public DB > \$1B Net

Annualized Return vs. Annualized Standard Deviation 10 Years Ending June 30, 2018



- Total Fund Aggregate
- Policy Benchmark
- ▲ Universe Median
- 68% Confidence Interval
- InvestorForce Public DB > \$1B Net



Total Fund Risk Statistics vs. Peer Universe (Trailing 1 Year)

As of June 30, 2018

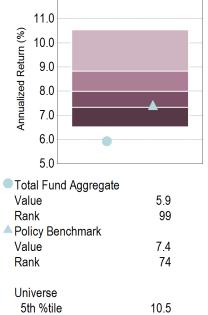
Annualized Return (%) vs. InvestorForce Public DB > \$1B Net

12.0

25th %tile

95th %tile

Median 75th %tile

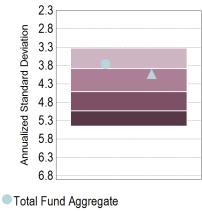


8.8

7.3

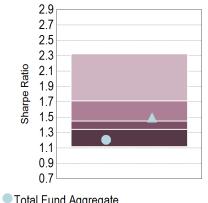
6.5

Annualized Standard Deviation vs. InvestorForce Public DB > \$1B Net



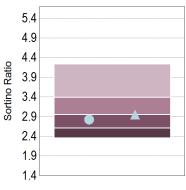
Total Fully Aggregate	
Value	3.8
Rank	22
Policy Benchmark	
Value	4.0
Rank	29
Universe	
5th %tile	3.3
25th %tile	3.9
Median	4.5
75th %tile	5.0
95th %tile	5.4

Sharpe Ratio vs. InvestorForce Public DB > \$1B Net



Total i uliu Ayyleyate	
Value	1.2
Rank	91
Policy Benchmark	
Value	1.5
Rank	43
Universe	
5th %tile	2.3
25th %tile	1.7
Median	1.5
75th %tile	1.3
95th %tile	1.1

Sortino Ratio vs. InvestorForce Public DB > \$1B Net



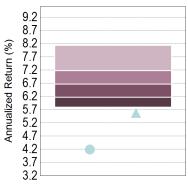
■ Total Fund Aggregate Value Rank ■ Policy Benchmark	2.8 60
Value	3.0
Rank	51
Universe	
5th %tile	4.2
25th %tile	3.4
Median	3.0
75th %tile	2.6
95th %tile	2.4

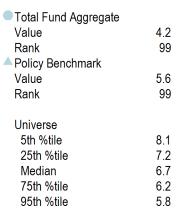


Total Fund Risk Statistics vs. Peer Universe (Trailing 3 Years)

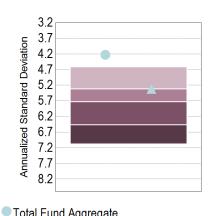
As of June 30, 2018

Annualized Return (%) vs. InvestorForce Public DB > \$1B Net



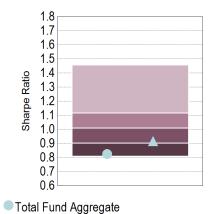


Annualized Standard Deviation vs. InvestorForce Public DB > \$1B Net



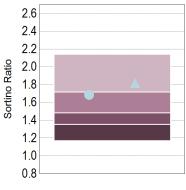
Total i unu Aggregate	
Value	4.2
Rank	4
Policy Benchmark	
Value	5.3
Rank	26
Universe	
5th %tile	4.6
25th %tile	5.3
Median	5.7
75th %tile	6.5
95th %tile	7 1

Sharpe Ratio vs. InvestorForce Public DB > \$1B Net



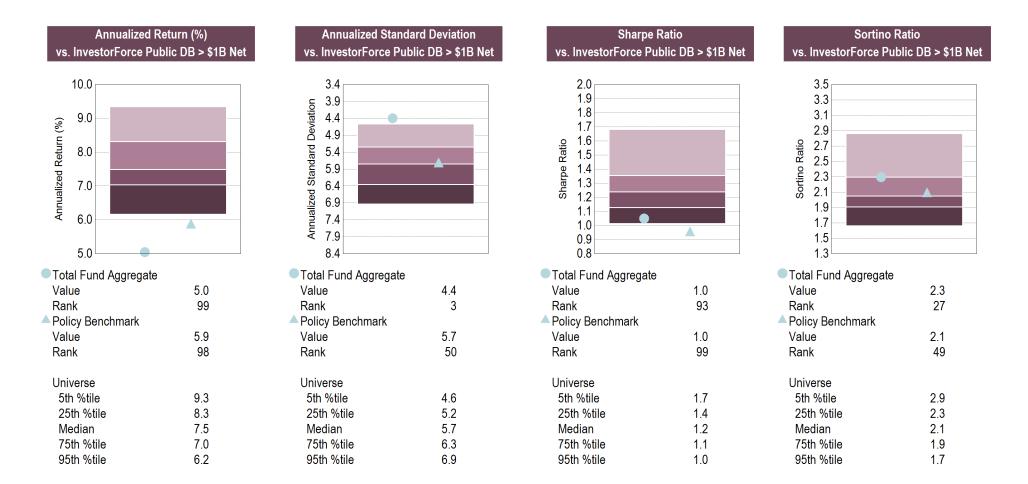
00 0	
Value	8.0
Rank	94
Policy Benchmark	
Value	0.9
Rank	73
Universe	4.5
5th %tile	1.5
25th %tile	1.1
Median	1.0
75th %tile	0.9
95th %tile	8.0

Sortino Ratio vs. InvestorForce Public DB > \$1B Net



■ Total Fund Aggregate Value Rank▲ Policy Benchmark Value Rank	1.7 31 1.8 16
Universe 5th %tile 25th %tile Median 75th %tile 95th %tile	2.1 1.7 1.5 1.4 1.2

Total Fund Risk Statistics vs. Peer Universe (Trailing 5 Years)

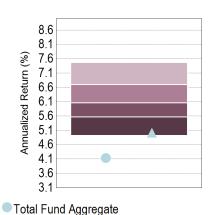


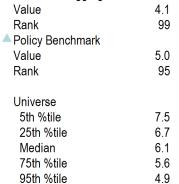


Total Fund Risk Statistics vs. Peer Universe (Trailing 10 Years)

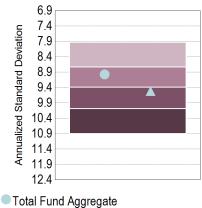
As of June 30, 2018





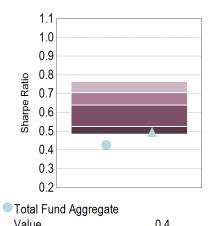


Annualized Standard Deviation vs. InvestorForce Public DB > \$1B Net



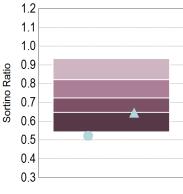
- Total Falla / Igglogato	
Value	9.0
Rank	30
Policy Benchmark	
Value	9.5
Rank	56
Universe	
5th %tile	7.9
25th %tile	8.7
Median	9.4
75th %tile	10.1
95th %tile	10.9

Sharpe Ratio vs. InvestorForce Public DB > \$1B Net



value	0.4
Rank	99
Policy Benchmark	
Value	0.5
Rank	91
Universe	
5th %tile	8.0
25th %tile	0.7
Median	0.6
75th %tile	0.5
95th %tile	0.5

Sortino Ratio vs. InvestorForce Public DB > \$1B Net



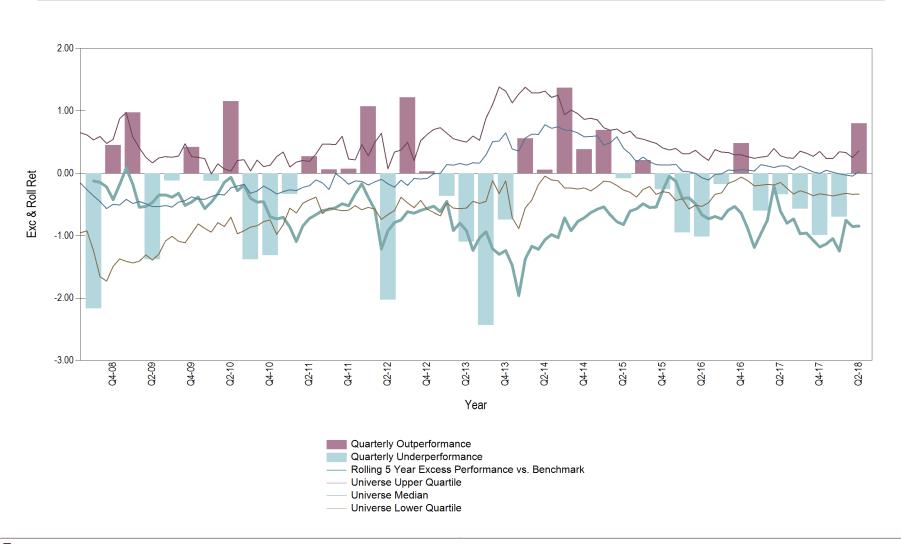
■ Total Fund Aggregate Value Rank ■ Policy Benchmark	0.5 99
Value	0.6
Rank	76
Universe 5th %tile	0.9
25th %tile	0.8
Median	0.7
75th %tile	0.6
95th %tile	0.5



Total Fund Rolling Excess Returns

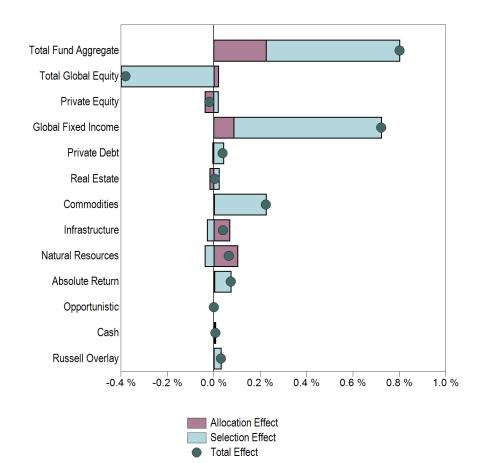
As of June 30, 2018

Rolling Annualized Excess Performance









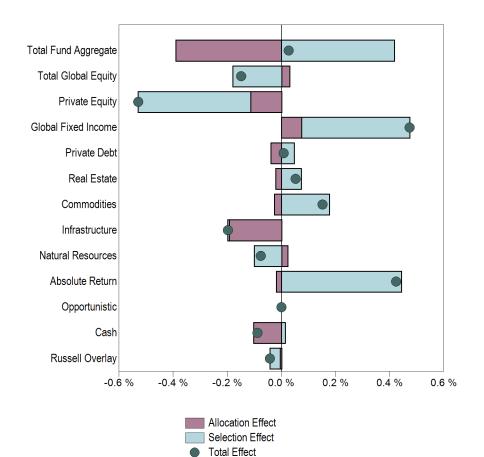
Attribution Summary 3 Months Ending June 30, 2018						
	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Total Effects
Total Global Equity	-0.6%	0.7%	-1.3%	-0.4%	0.0%	-0.4%
Private Equity	3.1%	2.6%	0.5%	0.0%	0.0%	0.0%
Global Fixed Income	-0.9%	-3.0%	2.1%	0.6%	0.1%	0.7%
Private Debt	0.9%	-0.2%	1.1%	0.0%	0.0%	0.0%
Real Estate	2.4%	1.8%	0.5%	0.0%	0.0%	0.0%
Commodities	4.6%	0.4%	4.2%	0.2%	0.0%	0.2%
Infrastructure	3.0%	4.2%	-1.2%	0.0%	0.1%	0.0%
Natural Resources	2.3%	5.4%	-3.1%	0.0%	0.1%	0.1%
Absolute Return	0.4%	-0.1%	0.6%	0.1%	0.0%	0.1%
Opportunistic	0.0%	-0.7%	0.7%	0.0%	0.0%	0.0%
Cash	0.5%	0.0%	0.5%	0.0%	0.0%	0.0%
Russell Overlay	10.9%	0.0%	10.9%	0.0%	0.0%	0.0%
Total	0.4%	-0.4%	0.8%	0.6%	0.2%	0.8%

¹ Difference in attribution returns and returns in the performance summary may occur as a result of the different calculation methodologies that are applied by InvestorForce.



As of June 30, 2018

Attribution Effects 6 Months Ending June 30, 2018



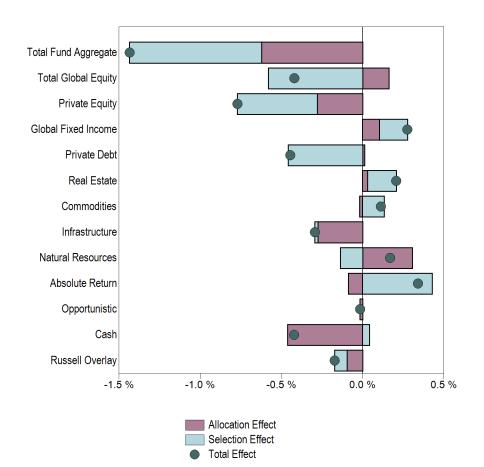
Attribution Summary 6 Months Ending June 30, 2018						
	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Total Effects
Total Global Equity	-0.7%	-0.2%	-0.5%	-0.2%	0.0%	-0.1%
Private Equity	0.7%	8.0%	-7.3%	-0.4%	-0.1%	-0.5%
Global Fixed Income	-0.8%	-1.8%	1.0%	0.4%	0.1%	0.5%
Private Debt	3.5%	2.2%	1.3%	0.0%	0.0%	0.0%
Real Estate	5.2%	3.5%	1.6%	0.1%	0.0%	0.1%
Commodities	3.4%	0.0%	3.4%	0.2%	0.0%	0.2%
Infrastructure	-2.0%	-1.3%	-0.7%	0.0%	-0.2%	-0.2%
Natural Resources	-0.6%	3.7%	-4.3%	-0.1%	0.0%	-0.1%
Absolute Return	2.1%	-1.7%	3.8%	0.4%	0.0%	0.4%
Opportunistic	0.0%	-0.6%	0.6%	0.0%	0.0%	0.0%
Cash	0.8%	0.0%	0.8%	0.0%	-0.1%	-0.1%
Russell Overlay	-2.2%	0.0%	-2.2%	0.0%	0.0%	0.0%
Total	0.3%	0.3%	0.0%	0.4%	-0.4%	0.0%

¹ Difference in attribution returns and returns in the performance summary may occur as a result of the different calculation methodologies that are applied by InvestorForce.



As of June 30, 2018

Attribution Effects 1 Year Ending June 30, 2018



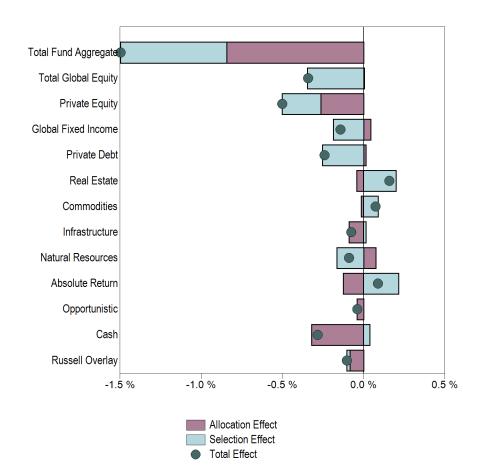
Attribution Summary 1 Year Ending June 30, 2018						
	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Total Effects
Total Global Equity	9.2%	11.1%	-1.9%	-0.6%	0.2%	-0.4%
Private Equity	8.9%	18.3%	-9.5%	-0.5%	-0.3%	-0.8%
Global Fixed Income	1.0%	1.2%	-0.2%	0.2%	0.1%	0.3%
Private Debt	-5.4%	6.2%	-11.6%	-0.5%	0.0%	-0.4%
Real Estate	10.6%	7.2%	3.4%	0.2%	0.0%	0.2%
Commodities	10.2%	7.3%	2.8%	0.1%	0.0%	0.1%
Infrastructure	1.5%	2.5%	-0.9%	0.0%	-0.3%	-0.3%
Natural Resources	19.0%	24.8%	-5.8%	-0.1%	0.3%	0.2%
Absolute Return	4.8%	1.2%	3.6%	0.4%	-0.1%	0.3%
Opportunistic	0.0%	7.2%	-7.2%	0.0%	0.0%	0.0%
Cash	1.3%	0.0%	1.3%	0.0%	-0.5%	-0.4%
Russell Overlay	-7.7%	0.0%	-7.7%	-0.1%	-0.1%	-0.2%
Total	6.0%	7.4%	-1.4%	-0.8%	-0.6%	-1.4%

¹ Difference in attribution returns and returns in the performance summary may occur as a result of the different calculation methodologies that are applied by InvestorForce.



As of June 30, 2018

Attribution Effects 3 Years Ending June 30, 2018



Attribution Summary 3 Years Ending June 30, 2018						
	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Total Effects
Total Global Equity	7.2%	8.3%	-1.2%	-0.3%	0.0%	-0.3%
Private Equity	7.1%	12.3%	-5.2%	-0.2%	-0.3%	-0.5%
Global Fixed Income	1.8%	2.9%	-1.1%	-0.2%	0.0%	-0.1%
Private Debt	0.2%	6.5%	-6.3%	-0.3%	0.0%	-0.2%
Real Estate	12.0%	8.3%	3.7%	0.2%	0.0%	0.2%
Commodities	-2.9%	-4.5%	1.6%	0.1%	0.0%	0.1%
Infrastructure	4.5%	4.5%	0.0%	0.0%	-0.1%	-0.1%
Natural Resources	5.4%	9.5%	-4.1%	-0.2%	0.1%	-0.1%
Absolute Return	2.0%	0.2%	1.8%	0.2%	-0.1%	0.1%
Opportunistic	0.0%	6.1%	-6.1%	0.0%	0.0%	0.0%
Cash	0.8%	0.0%	0.8%	0.0%	-0.3%	-0.3%
Russell Overlay	-2.2%	0.0%	-2.2%	0.0%	-0.1%	-0.1%
Total	4.1%	5.6%	-1.5%	-0.7%	-0.8%	-1.5%

¹ Difference in attribution returns and returns in the performance summary may occur as a result of the different calculation methodologies that are applied by InvestorForce.



Total Fund Risk Statistics (Net of Fees)

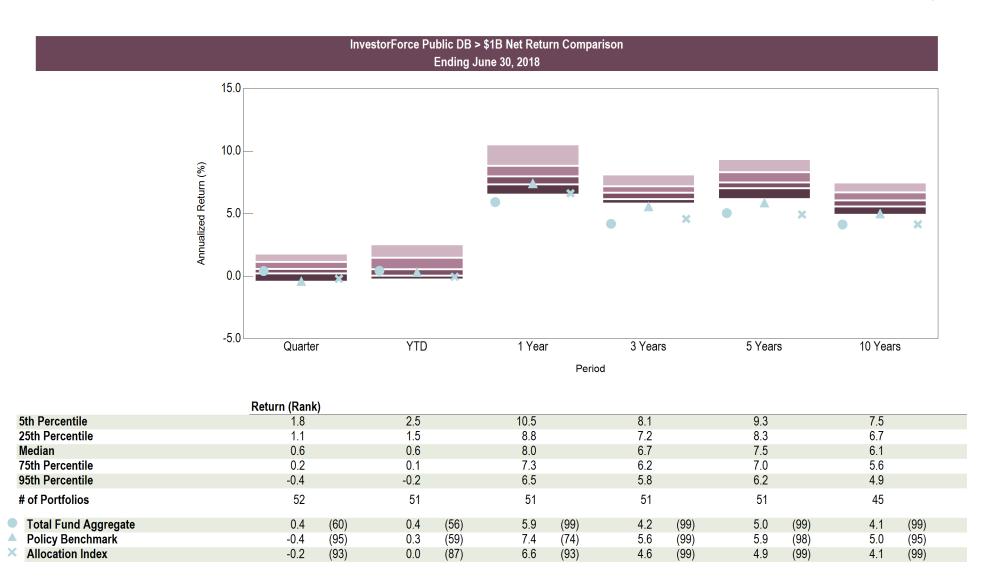
				3 Yea	ırs Ending Jı	une 30, 2018						
	% of Total MV	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Anlzd Alpha J	Anlzd Alpha J Rank	Tracking Error	Information Ratio	Information Ratio Rank	Beta	Sharpe Ratio
Total Fund Aggregate	100.00%	4.17%	99	4.23%	4	-0.15%	52	1.85%	-0.71	90	0.76	0.82
Policy Benchmark		5.48%	99	5.31%	26	0.00%	42	0.00%			1.00	0.90
Total Global Equity	29.49%	7.16%	59	8.79%	9	0.23%	49	2.49%	-0.47	76	0.82	0.73
MSCI ACWI IMI Net USD		8.34%	41	10.62%	44	0.00%	53	0.00%		-	1.00	0.72
Marketable Alternative Equity	3.04%	4.87%		3.86%		2.38%		4.44%	0.00		0.43	1.08
HFRI Equity Hedge (Total) Index		4.87%		5.73%		0.00%		0.00%			1.00	0.73
Private Equity	8.81%	7.09%		3.72%		4.11%		6.11%	-0.85		0.20	1.72
Cambridge PE Composite BM		12.29%		6.22%		0.00%		0.00%			1.00	1.86
Global Fixed Income	31.91%	1.81%	84	2.24%	8	0.23%	65	3.12%	-0.35	84	0.40	0.50
Fixed Income Custom Benchmark		2.92%	54	4.79%	53	0.00%	69	0.00%			1.00	0.46
Non-Investment Grade Credit	1.92%	3.13%		2.98%		2.33%		6.03%	-0.23		0.02	0.81
50% BAML Global HY / 50% S&P Global Leveraged Loan	-	4.54%		5.37%		0.00%		0.00%	-		1.00	0.71
Private Debt	3.74%	0.22%		7.48%		0.65%		8.44%	-0.74		-0.19	-0.06
S&P Global Leveraged Loan +2%		6.50%		3.31%		0.00%		0.00%			1.00	1.75
Real Assets	13.11%	4.82%		7.72%		0.65%		3.11%	0.14		0.94	0.53
Real Assets Benchmark		4.37%		7.50%		0.00%		0.00%			1.00	0.49
Real Estate	7.42%	11.96%		3.96%		15.01%		6.28%	0.59		-0.50	2.85
NCREIF Property Index		8.26%		3.46%		0.00%		0.00%			1.00	2.19
Commodities	4.54%	-2.93%		8.75%		-0.28%		6.20%	0.26		0.64	-0.42
Bloomberg Commodity Index TR USD		-4.54%		11.65%		0.00%		0.00%			1.00	-0.45



Total Fund Risk Statistics (Net of Fees)

	% of Total MV	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Anlzd Alpha J	Anlzd Alpha J Rank	Tracking Error	Information Ratio	Information Ratio Rank	Beta	Sharpe Ratio
Infrastructure	1.14%	4.51%		10.63%		0.07%		0.86%	-0.04		0.97	0.36
DJ Brookfield Global Infrastructure Net TR USD	-	4.54%		10.90%		0.00%		0.00%			1.00	0.35
Natural Resources	0.01%	5.41%		17.67%		-3.96%		2.71%	-1.49		0.99	0.27
S&P Global Natural Resources Index TR USD	-	9.46%		17.64%		0.00%		0.00%			1.00	0.50
Absolute Return	12.33%	2.01%		2.20%		1.44%		3.64%	0.50		0.26	0.59
HFRI Macro (Total) Index		0.18%		4.23%		0.00%		0.00%			1.00	-0.12
Relative Value	5.78%	3.12%		2.75%		2.49%		3.94%	-0.16		-0.02	0.88
HFRI Relative Value (Total) Index		3.76%		2.76%		0.00%		0.00%			1.00	1.11
Macro	6.55%	1.69%		4.26%		1.36%		3.25%	0.46		0.71	0.23
HFRI Macro (Total) Index		0.18%		4.23%		0.00%		0.00%			1.00	-0.12
Cash	0.31%	0.81%		0.17%		0.11%		0.14%	0.78		0.68	0.64
91 Day T-Bills	-	0.70%		0.17%		0.00%		0.00%		-	1.00	0.00

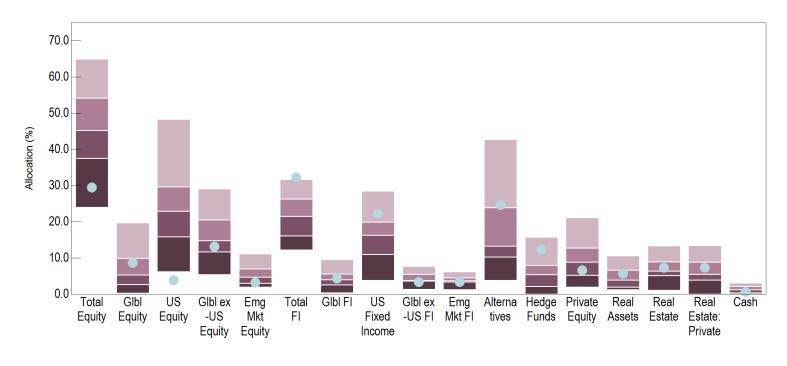






As of June 30, 2018

Total Plan Allocation vs. InvestorForce Public DB > \$1B Net As of June 30, 2018



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

 Total Fund Aggregate Rank

Allocati	ion																
64.9	19.7	48.3	29.1	11.2	31.6	9.58	28.4	7.70	6.20	42.7	15.7	21.1	10.6	13.4	13.5	3.13	
54.2	10.0	29.7	20.6	7.05	26.4	5.72	20.0	5.55	4.62	24.0	8.04	12.8	6.71	9.03	8.95	2.22	
45.3	5.45	22.9	14.8	4.81	21.5	4.06	16.3	3.95	3.79	13.4	5.46	8.92	3.96	6.51	5.55	1.32	
37.6	2.74	15.9	11.8	3.10	16.2	2.71	11.0	3.69	3.47	10.4	2.24	5.33	2.04	5.20	3.96	0.44	
24.1	0.35	6.26	5.46	2.04	12.3	0.43	3.92	1.40	1.35	3.92	0.08	2.01	1.30	1.19	0.13	0.07	
49	17	43	47	39	50	21	44	25	22	47	35	44	26	42	39	49	
29.4	8.70	3.89	13.1	3.23	32.2	4.33	22.2	3.38	3.38	24.6	12.3	6.63	5.68	7.31	7.31	0.61	
93	39	99	65	72	4	41	22	80	77	25	11	64	27	47	36	69	



Major Benchmark Returns Periods Ending June 30, 2018						
Name	Q2-18	1 Yr	3 Yrs	5 Yrs	10 Yrs	
US Equity						
Russell 3000	3.9	14.8	11.6	13.3	10.2	
S&P 500	3.4	14.4	11.9	13.4	10.2	
Russell 1000	3.6	14.5	11.6	13.4	10.2	
Russell 1000 Growth	5.8	22.5	15.0	16.4	11.8	
Russell 1000 Value	1.2	6.8	8.3	10.3	8.5	
Russell MidCap	2.8	12.3	9.6	12.2	10.2	
Russell 2000	7.8	17.6	11.0	12.5	10.6	
Russell 2000 Growth	7.2	21.9	10.6	13.6	11.2	
Russell 2000 Value	8.3	13.1	11.2	11.2	9.9	
International Equity						
MSCI ACWI	0.5	10.7	8.2	9.4	5.8	
MSCI World ex USA	-0.7	7.0	4.9	6.2	2.6	
MSCI EAFE	-1.2	6.8	4.9	6.4	2.8	
MSCI Emerging Markets	-8.0	8.2	5.6	5.0	2.3	
Fixed Income						
91 Day T-Bills	0.5	1.4	0.7	0.4	0.3	
BBgBarc US Aggregate TR	-0.2	-0.4	1.7	2.3	3.7	
BBgBarc US Govt/Credit TR	-0.3	-0.6	1.8	2.3	3.8	
BBgBarc US Municipal TR	0.9	1.6	2.9	3.5	4.4	
BBgBarc US High Yield TR	1.0	2.6	5.5	5.5	8.2	
Citi WGBI	-3.4	1.9	2.8	1.1	2.1	
Citi WGBI ex US	-5.1	3.2	3.7	1.0	1.8	
Real Estate						
FTSE NAREIT All REIT	8.3	4.8	9.2	9.0	8.5	
NCREIF Property Index	1.8	7.2	8.3	9.8	6.2	
Alternatives						
HFRI Fund of Funds Composite Index	0.4	5.1	1.9	3.5	1.4	
Inflation						
Consumer Price Index	1.0	2.9	1.8	1.5	1.4	



		Benchmark History
		As of June 30, 2018
Total Fund Aggrega	te	
11/1/2017	Present	28% MSCI ACWI IMI Net USD / 9% Cambridge PE Composite BM / 33% Fixed Income Custom Benchmark / 6% S&P Global Leveraged Loan +2% / 8% NCREIF Property Index / 4% Bloomberg Commodity Index TR USD / 1% DJ Brookfield Global Infrastructure Net TR USD / 11% HFRI Macro (Total) Index
7/1/2015	10/31/2017	28% MSCI ACWI IMI Net USD / 9% Cambridge Associates Private Equity Composite / 19% Fixed Income Custom Benchmark / 5% S&P Global Leveraged Loan +2% / 7% NCREIF Property Index / 6% Bloomberg Commodity Index TR USD / 5% DJ Brookfield Global Infrastructure Net TR USD / 5% S&P Global LargeMidCap Commodity and Resources GR USD / 11% HFRI Macro (Total) Index / 5% 60/40 MSCI ACWI IMI/BC Global
Total Global Equity		
5/1/2010	Present	MSCI ACWI IMI Net USD
US Equity		
7/1/2015	Present	Russell 3000
International Equity		
7/1/2015	Present	MSCI World ex USA
Emerging Markets B	Equity	
7/1/2015	Present	MSCI Emerging Markets
Marketable Alternat	ive Equity	
10/1/2014	Present	HFRI Equity Hedge (Total) Index
Private Equity		
1/1/2006	Present	Cambridge PE Composite BM
Global Core		
7/1/2015	Present	BBgBarc Global Aggregate TR
Non-Investment Gra	ade Credit	
2/1/2013	Present	50% ICE BofAML Global High Yield Constrained Hedged TR / 50% S&P/LSTA Leveraged Loan TR
Emerging Markets [Debt	
7/1/2015	Present	50% JP Morgan GBI EM Global Diversified TR USD / 50% JP Morgan EMBI Global Diversified
Private Debt		
12/1/2010	Present	S&P Global Leveraged Loan + 2%



Real Estate		
1/1/1994	Present	NCREIF Property Index
Commodities		
5/1/2010	Present	Bloomberg Commodity Index TR USD
Infrastructure		
3/1/2014	Present	DJ Brookfield Global Infrastructure Net TR USD
Natural Resources		
11/1/2012	Present	S&P Global Natural Resources Index TR USD
Relative Value		
10/1/2014	Present	HFRI Relative Value (Total) Index
Macro		
10/1/2014	Present	HFRI Macro (Total) Index
Cash		
	Present	91 Day T-Bills



Glossary and Notes

Credit Risk: Refers to the risk that the issuer of a fixed income security may default (i.e., the issuer will be unable to make timely principal and/or interest payments on the security.)

Duration: Measure of the sensitivity of the price of a bond to a change in its yield to maturity. Duration summarizes, in a single number, the characteristics that cause bond prices to change in response to a change in interest rates. For example, the price of a bond with a duration of three years will rise by approximately 3% for each 1% decrease in its yield to maturity. Conversely, the price will decrease 3% for each 1% increase in the bond's yield. Price changes for two different bonds can be compared using duration. A bond with a duration of six years will exhibit twice the percentage price change of a bond with a three-year duration. The actual calculation of a bond's duration is somewhat complicated, but the idea behind the calculation is straightforward. The first step is to measure the time interval until receipt for each cash flow (coupon and principal payments) from a bond. The second step is to compute a weighted average of these time intervals. Each time interval is measured by the present value of that cash flow. This weighted average is the duration of the bond measured in years.

Information Ratio: This statistic is a measure of the consistency of a portfolio's performance relative to a benchmark. It is calculated by subtracting the benchmark return from the portfolio return (excess return), and dividing the resulting excess return by the standard deviation (volatility) of this excess return. A positive information ratio indicates outperformance versus the benchmark, and the higher the information ratio, the more consistent the outperformance.

Jensen's Alpha: A measure of the average return of a portfolio or investment in excess of what is predicted by its beta or "market" risk. Portfolio Return- [Risk Free Rate+Beta*(market return-Risk Free Rate)].

Market Capitalization: For a firm, market capitalization is the total market value of outstanding common stock. For a portfolio, market capitalization is the sum of the capitalization of each company weighted by the ratio of holdings in that company to total portfolio holdings; thus it is a weighted-average capitalization. Meketa Investment Group considers the largest 65% of the broad domestic equity market as large capitalization, the next 25% of the market as medium capitalization, and the smallest 10% of stocks as small capitalization.

Market Weighted: Stocks in many indices are weighted based on the total market capitalization of the issue. Thus, the individual returns of higher market-capitalization issues will more heavily influence an index's return than the returns of the smaller market-capitalization issues in the index.

Maturity: The date on which a loan, bond, mortgage, or other debt/security becomes due and is to be paid off.



Prepayment Risk: The risk that prepayments will increase (homeowners will prepay all or part of their mortgage) when mortgage interest rates decline; hence, investors' monies will be returned to them in a lower interest rate environment. Also, the risk that prepayments will slow down when mortgage interest rates rise; hence, investors will not have as much money as previously anticipated in a higher interest rate environment. A prepayment is any payment in excess of the scheduled mortgage payment.

Price-Book Value (P/B) Ratio: The current market price of a stock divided by its book value per share. Meketa Investment Group calculates P/B as the current price divided by Compustat's quarterly common equity. Common equity includes common stock, capital surplus, retained earnings, and treasury stock adjusted for both common and nonredeemable preferred stock. Similar to high P/E stocks, stocks with high P/B's tend to be riskier investments.

Price-Earnings (P/E) Ratio: A stock's market price divided by its current or estimated future earnings. Lower P/E ratios often characterize stocks in low growth or mature industries, stocks in groups that have fallen out of favor, or stocks of established blue chip companies with long records of stable earnings and regular dividends. Sometimes a company that has good fundamentals may be viewed unfavorably by the market if it is an industry that is temporarily out of favor. Or a business may have experienced financial problems causing investors to be skeptical about is future. Either of these situations would result in lower relative P/E ratios. Some stocks exhibit above-average sales and earnings growth or expectations for above average growth. Consequently, investors are willing to pay more for these companies' earnings, which results in elevated P/E ratios. In other words, investors will pay more for shares of companies whose profits, in their opinion, are expected to increase faster than average. Because future events are in no way assured, high P/E stocks tend to be riskier and more volatile investments. Meketa Investment Group calculates P/E as the current price divided by the I/B/E/S consensus of twelve-month forecast earnings per share.

Quality Rating: The rank assigned a security by such rating services as Fitch, Moody's, and Standard & Poor's. The rating may be determined by such factors as (1) the likelihood of fulfillment of dividend, income, and principal payment of obligations; (2) the nature and provisions of the issue; and (3) the security's relative position in the event of liquidation of the company. Bonds assigned the top four grades (AAA, AA, A, BBB) are considered investment grade because they are eligible bank investments as determined by the controller of the currency.

Sharpe Ratio: A commonly used measure of risk-adjusted return. It is calculated by subtracting the risk free return (usually three-month Treasury bill) from the portfolio return and dividing the resulting excess return by the portfolio's total risk level (standard deviation). The result is a measure of return per unit of total risk taken. The higher the Sharpe ratio, the better the fund's historical risk adjusted performance.



Standard Deviation: A measure of the total risk of an asset or a portfolio. Standard deviation measures the dispersion of a set of numbers around a central point (e.g., the average return). If the standard deviation is small, the distribution is concentrated within a narrow range of values. For a normal distribution, about two thirds of the observations will fall within one standard deviation of the mean, and 95% of the observations will fall within two standard deviations of the mean.

STIF Account: Short-term investment fund at a custodian bank that invests in cash-equivalent instruments. It is generally used to safely invest the excess cash held by portfolio managers.

Style: The description of the type of approach and strategy utilized by an investment manager to manage funds. For example, the style for equities is determined by portfolio characteristics such as price-to-book value, price-to-earnings ratio, and dividend yield. Equity styles include growth, value, and core.

Yield to Maturity: The yield, or return, provided by a bond to its maturity date; determined by a mathematical process, usually requiring the use of a "basis book." For example, a 5% bond pays \$5 a year interest on each \$100 par value. To figure its current yield, divide \$5 by \$95—the market price of the bond—and you get 5.26%. Assume that the same bond is due to mature in five years. On the maturity date, the issuer is pledged to pay \$100 for the bond that can be bought now for \$95. In other words, the bond is selling at a discount of 5% below par value. To figure yield to maturity, a simple and approximate method is to divide 5% by the five years to maturity, which equals 1% pro rata yearly. Add that 1% to the 5.26% current yield, and the yield to maturity is roughly 6.26%.

Sources: Investment Terminology, International Foundation of Employee Benefit Plans, 1999.

The Handbook of Fixed Income Securities, Fabozzi, Frank J., 1991.

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Throughout this report, numbers may not sum due to rounding.

Returns for periods greater than one year are annualized throughout this report.

Values shown are in millions of dollars, unless noted otherwise.

