



PA Public School Employees' Retirement System | Second Quarter 2017

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## Quarterly Investment Review

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Market Highlights

Performance(%)

	1 Quarter	Year To Date	FYTD	1 Year	3 Years	5 Years	10 Years	15 Years	20 Years	Since Inception	Inception Date
<b>Equity</b>											
Dow Jones U.S. Total Stock Market Index	3.01	8.97	18.52	18.52	9.04	14.51	7.32	8.85	7.50	10.26	01/01/1987
S&P 500 Index	3.09	9.34	17.90	17.90	9.61	14.63	7.18	8.34	7.15	10.10	01/01/1926
MSCI USA IMI	2.98	9.05	18.43	18.43	9.14	14.59	7.41	8.87	7.54	9.73	06/01/1994
MSCI USA Large Cap Index	3.17	9.68	18.11	18.11	9.77	14.56	7.28	8.19	6.80	9.32	06/01/1994
MSCI USA Small Cap Index	2.20	5.99	21.10	21.10	7.44	14.58	8.02	10.23	N/A	9.77	01/01/2001
MSCI EAFE Index (Net)	6.12	13.81	20.27	20.27	1.15	8.69	1.03	6.31	4.29	8.82	01/01/1970
MSCI EAFE Index (hedged)	2.02	6.37	20.22	20.22	4.52	9.65	-0.47	3.05	2.37	7.14	01/01/1970
MSCI EAFE Index (Price)	5.03	11.83	17.08	17.08	-1.53	5.76	-1.82	3.51	1.84	6.38	01/01/1970
MSCI EAFE Small Cap Index (Net)	8.10	16.72	23.18	23.18	5.60	12.94	3.41	9.99	N/A	8.79	01/01/2001
MSCI AC World ex USA IMI Index (Net)	5.85	14.30	20.43	20.43	1.14	7.58	1.38	7.32	4.73	5.12	06/01/1994
MSCI AC World ex USA Index (Net)	5.78	14.10	20.45	20.45	0.80	7.22	1.13	6.90	4.65	4.77	01/01/2001
MSCI Emerging Markets Index (Net)	6.27	18.43	23.75	23.75	1.07	3.96	1.92	10.60	5.48	10.47	02/01/1988
<b>Fixed Income</b>											
Bimbg. Barc. U.S. Aggregate	1.45	2.27	-0.31	-0.31	2.48	2.21	4.48	4.48	5.24	7.51	01/01/1976
Bimbg. Barc. U.S. Treasury Long	3.96	5.41	-7.22	-7.22	5.58	2.76	7.34	6.84	7.33	8.34	01/01/1973
Barclays Global Agg GDP Weighted Dev x U.S. Index (unhedged)	4.22	6.14	-1.87	-1.87	-2.13	0.47	3.37	N/A	N/A	2.68	01/01/2005
Barclays Global Agg GDP Weighted Dev x U.S. Index (hedged)	0.71	0.87	-0.21	-0.21	3.76	4.18	4.68	N/A	N/A	4.41	01/01/2005
Bimbg. Barc. U.S. Corp. High Yield	2.17	4.93	12.70	12.70	4.48	6.89	7.67	9.06	6.98	9.05	07/01/1983
Bimbg. Barc. Emerging Market 10% Country Cap Index	3.30	9.88	4.85	4.85	-1.94	0.77	N/A	N/A	N/A	3.08	07/01/2008
Bimbg. Barc. Global Inflation-Linked: U.S. TIPS	-0.40	0.85	-0.63	-0.63	0.63	0.27	4.27	4.86	N/A	5.50	10/01/1997
Barclays World Inflation Linked Bonds (hedged)	-0.42	0.28	1.93	1.93	4.20	2.97	5.12	5.28	6.05	6.00	01/01/1997
Barclays Universal Index	1.52	2.63	0.91	0.91	2.76	2.73	4.73	4.87	5.44	6.30	01/01/1990
Libor (3 month)	0.30	0.56	0.99	0.99	0.58	0.46	0.94	1.62	2.47	5.71	01/01/1977
BofA Merrill Lynch 3 Month US T-Bill	0.20	0.30	0.49	0.49	0.23	0.17	0.58	1.30	2.17	5.03	01/01/1978
BofA Merrill Lynch US Treasury Bills 0-3M	0.20	0.30	0.44	0.44	0.19	0.14	0.50	1.22	2.08	2.56	07/01/1992

Market Highlights

Performance(%)

	1 Quarter	Year To Date	FYTD	1 Year	3 Years	5 Years	10 Years	15 Years	20 Years	Since Inception	Inception Date	
<b>Infrastructure</b>												
FTSE Dev. Core Infrast 50/50 Index (Net) (Hedged)	3.63	10.55	10.15	10.15	8.46	12.70	N/A	N/A	N/A	11.08	01/01/2010	
FTSE Developed Core Infrast 50/50 Index (Net)	5.10	13.22	9.82	9.82	5.48	10.76	N/A	N/A	N/A	10.12	01/01/2010	
<b>MLP</b>												
S&P MLP Index	-6.38	-2.92	3.23	3.23	-11.25	2.48	5.99	11.13	N/A	10.19	08/01/2001	
<b>Commodities</b>												
Bloomberg Commodity Index Total Return	-3.00	-5.26	-6.50	-6.50	-14.81	-9.25	-6.49	-0.01	0.23	2.18	02/01/1991	
Bloomberg Gold Subindex Total Return	-0.77	7.39	-6.94	-6.94	-2.67	-5.54	5.85	8.80	6.39	4.60	02/01/1991	
<b>Real Estate</b>												
Burgiss (Lagged) - Opportunistic	0.16	2.45	1.03	1.03	5.58	7.64	1.72	9.23	10.42	7.99	01/01/1989	
Burgiss (Lagged) - Value Added	0.94	3.02	5.56	5.56	9.69	9.46	1.82	6.14	7.55	6.33	07/01/1988	
NCREIF ODOE NOF 1 Quarter Lag	1.54	3.45	7.36	7.36	10.77	10.93	4.62	7.24	8.23	7.67	04/01/1978	
FTSE EPRA/NAREIT Developed Index (Net)	2.71	4.84	0.21	0.21	3.67	7.50	1.98	N/A	N/A	5.91	03/01/2005	
FTSE EPRA NAREIT Custom Dev 100% Hedged USD (Net)	1.91	2.95	1.41	1.41	6.18	9.51	N/A	N/A	N/A	11.42	01/01/2012	
Wishire US Real Estate Securities Index	1.91	2.42	-1.23	-1.23	8.82	9.70	5.70	10.11	9.58	11.90	01/01/1978	
<b>Risk Parity</b>												
Blended Policy (Risk Parity)	1.98	6.17	5.81	5.81	3.33	4.81	8.22	10.01	9.67	3.82	10/01/2012	
<b>Private Markets</b>												
Burgiss (Lagged) - PE/PDVC/Int	0.70	1.63	3.00	3.00	3.50	4.33	3.02	4.21	N/A	3.20	04/01/1998	
Burgiss (Lagged) - PE/PO	0.79	2.24	3.92	3.92	4.06	4.83	3.36	N/A	N/A	5.09	01/01/2003	
Burgiss (Lagged) - VC	0.13	-2.67	-2.51	-2.51	-0.04	0.80	-0.56	N/A	N/A	-1.07	01/01/2003	
Burgiss (Lagged) - Int	0.67	2.30	1.44	1.44	1.06	-2.69	N/A	N/A	N/A	-4.41	04/01/2012	

As of June 30, 2017

## Trailing Period Performance

	Performance(%)											Inception Date
	1 Quarter	2 Quarters	3 Quarters	FYTD	1 Year	3 Years	5 Years	10 Years	15 Years	20 Years	Since Inception	
PSERS Total Fund	1.60	4.90	6.21	10.14	10.14	4.75	7.35	3.80	7.24	5.69	9.75	07/01/1982
Blended Policy (Total Plan)	1.20	4.22	3.62	6.39	6.39	3.49	5.47	2.60	5.76	N/A	N/A	
Value Added	0.40	0.68	2.59	3.75	3.75	1.27	1.88	1.00	1.48	N/A	N/A	
Total Public Market Composite	0.94	4.56	5.16	9.37	9.37	3.15	6.10	3.32	5.58	N/A	6.54	06/01/2002
Blended Policy (Public Market) (Hedged)	1.38	4.97	3.96	7.57	7.57	2.50	5.08	2.49	5.71	N/A	5.26	
Value Added	-0.44	-0.41	1.20	1.80	1.80	0.65	1.02	0.83	0.87	N/A	1.28	
Blended Policy (Public Market) (Unhedged)	2.10	6.05	3.63	6.98	6.98	1.80	4.69	2.29	5.58	N/A	5.12	
Value Added	-1.16	-1.49	1.53	2.39	2.39	1.35	1.41	1.03	1.00	N/A	1.42	
Total Private Market Composite	3.58	5.93	9.28	12.38	12.38	8.38	10.03	5.21	10.36	9.74	9.92	12/01/1952
Blended Policy (Private Market)	0.67	2.09	2.59	3.06	3.06	5.05	5.97	4.05	5.78	N/A	N/A	
Value Added	2.91	3.84	6.69	9.32	9.32	3.33	4.06	1.16	4.58	N/A	N/A	

\*PSERS Total Fund and Public Markets Composites incorporate the levered returns for the PSERS Gold and PSERS U.S. Long Treasuries accounts.

\*\*Total Fund Blended Policy Benchmark incorporates the performance of the Public Market Blended Policy Benchmark (Hedged).

As of June 30, 2017

## Trailing Period Performance

Performance (%)

Since  
July 2011

PSERS Total Fund

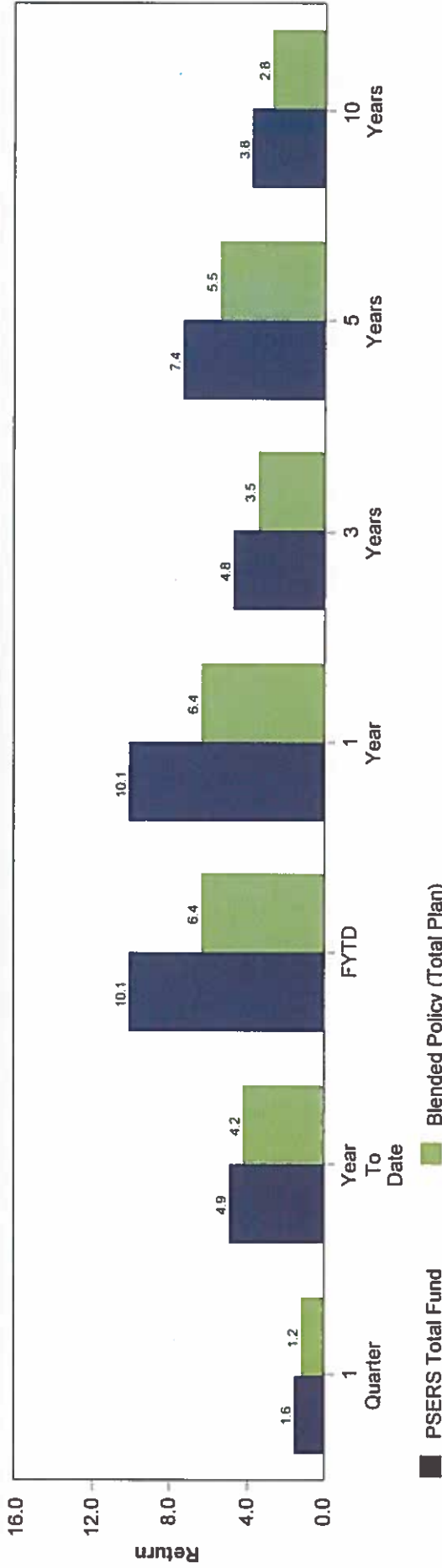
*Blended Policy (Total Plan)*

6.59

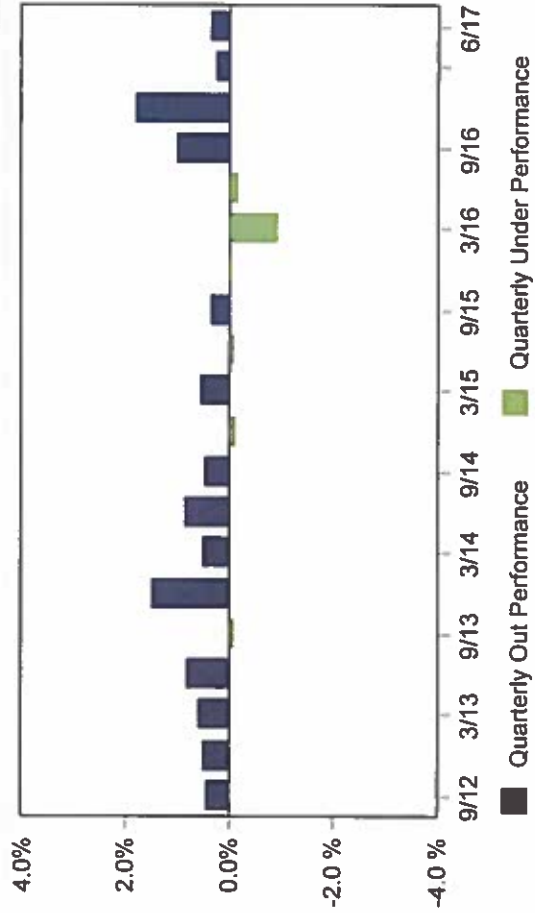
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Performance Summary

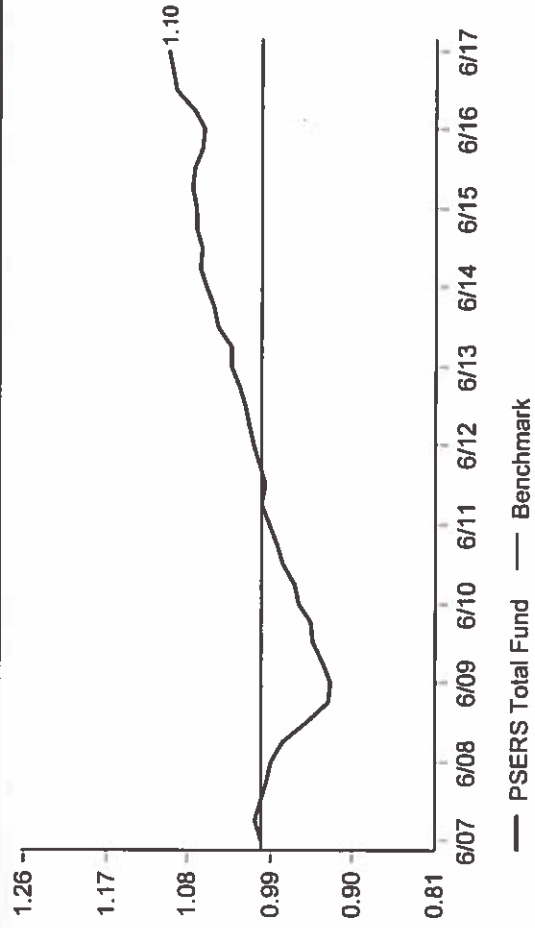
Return Summary



Quarterly Excess Performance

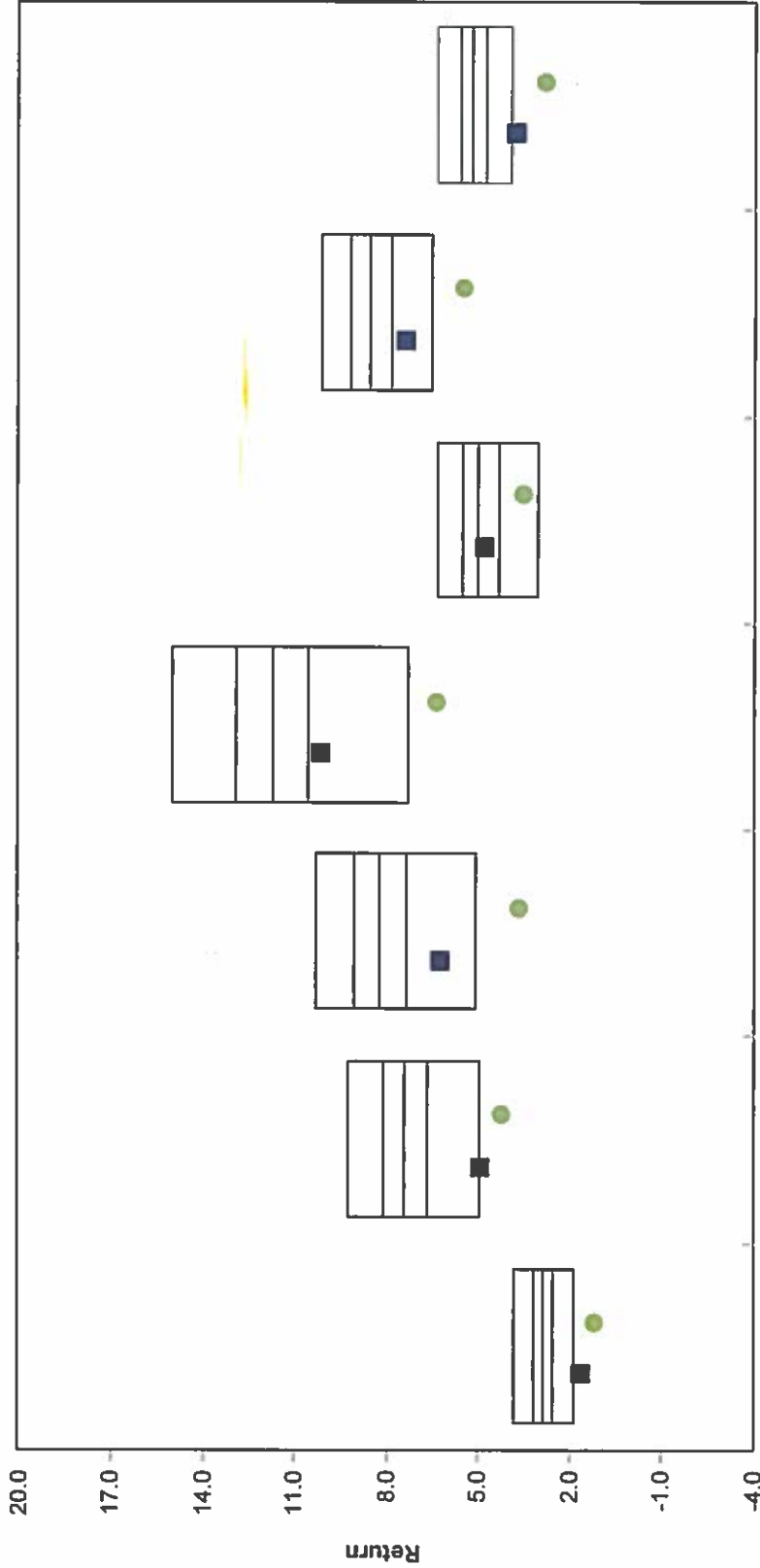


Ratio of Cumulative Wealth - 10 Years



Peer Group Analysis

All Public Plans-Total Fund



	1 Quarter	2 Quarters Ending Jun-2017	3 Quarters Ending Jun-2017	1 Year	3 Years	5 Years	10 Years
PSERS Total Fund	1.60 (98)	4.90 (96)	6.21 (92)	10.14 (82)	4.76 (62)	7.35 (87)	3.80 (97)
Blended Policy (Total Plan)	1.20 (99)	4.22 (98)	3.62 (98)	6.39 (97)	3.49 (93)	5.47 (97)	2.80 (99)

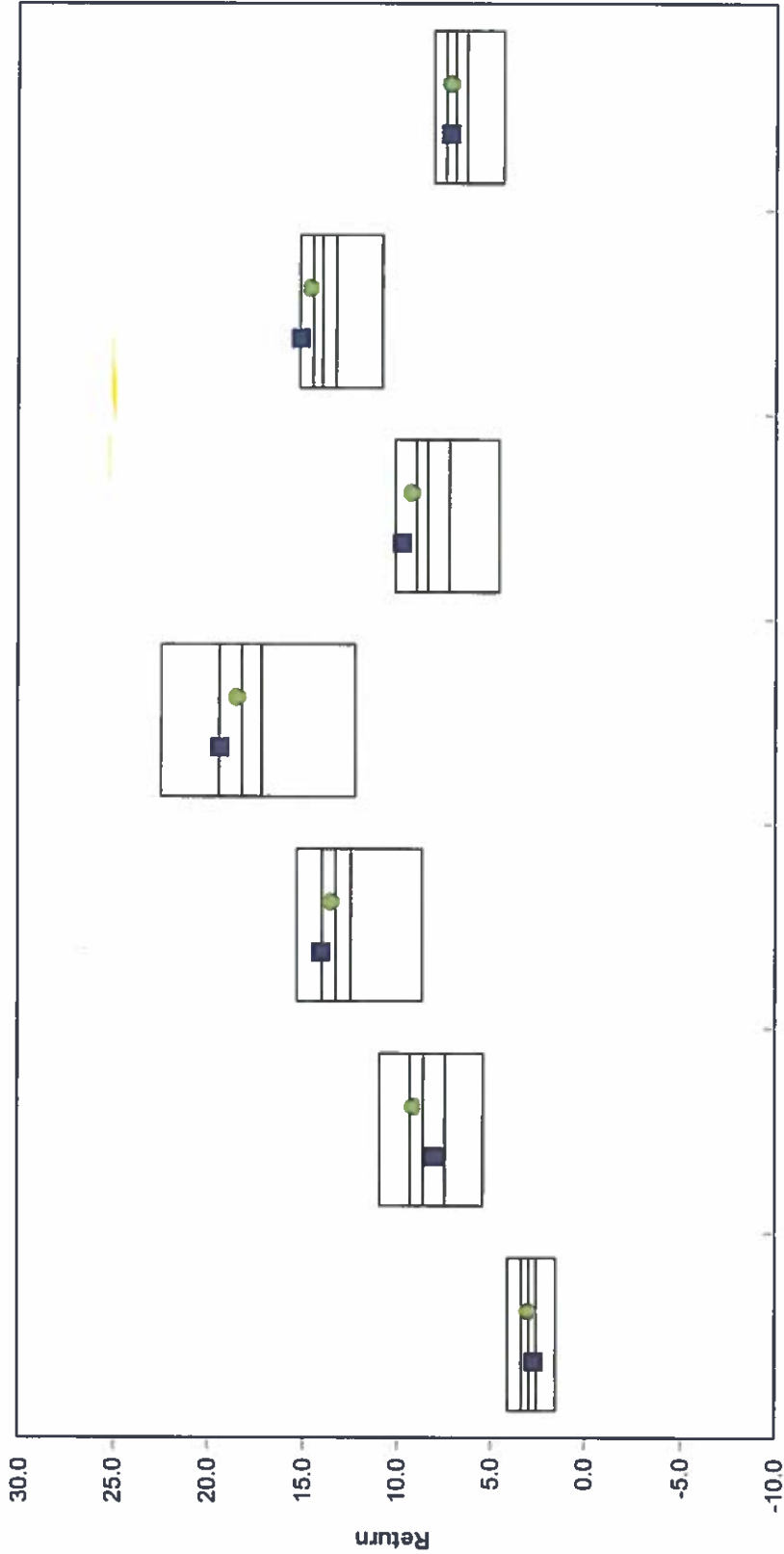
5th Percentile	3.85	9.27	10.32	14.99	6.34	10.16	6.34
1st Quartile	3.21	8.10	9.06	12.90	5.56	9.18	5.61
Median	2.88	7.42	8.25	11.73	5.04	8.58	5.20
3rd Quartile	2.54	6.70	7.36	10.59	4.35	7.84	4.80
95th Percentile	1.88	4.94	5.07	7.33	3.08	6.54	3.96

Population	398	398	389	386	366	356	283
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Parenttheses contain percentile rankings.

Plan Sponsor Peer Group Analysis

All Public Plans-US Equity Segment



	1 Quarter	2 Quarters	3 Quarters	1 Year	3 Years	5 Years	10 Years
■ Total US Equity Composite	2.73 (71)	7.95 (70)	13.94 (26)	19.32 (28)	9.68 (7)	15.04 (6)	7.15 (35)
● Blended Policy (Tot US Eq)	2.98 (52)	9.05 (33)	13.41 (43)	18.43 (44)	9.14 (22)	14.59 (18)	7.21 (32)
5th Percentile	4.14	10.93	15.29	22.52	10.14	15.15	8.07
1st Quartile	3.41	9.32	14.01	19.47	9.03	14.44	7.46
Median	2.99	8.57	13.25	18.20	8.34	13.95	6.95
3rd Quartile	2.61	7.50	12.47	17.24	7.23	13.25	6.37
95th Percentile	1.61	5.44	8.68	12.18	4.62	10.78	4.44
Population	109	108	98	96	87	74	42

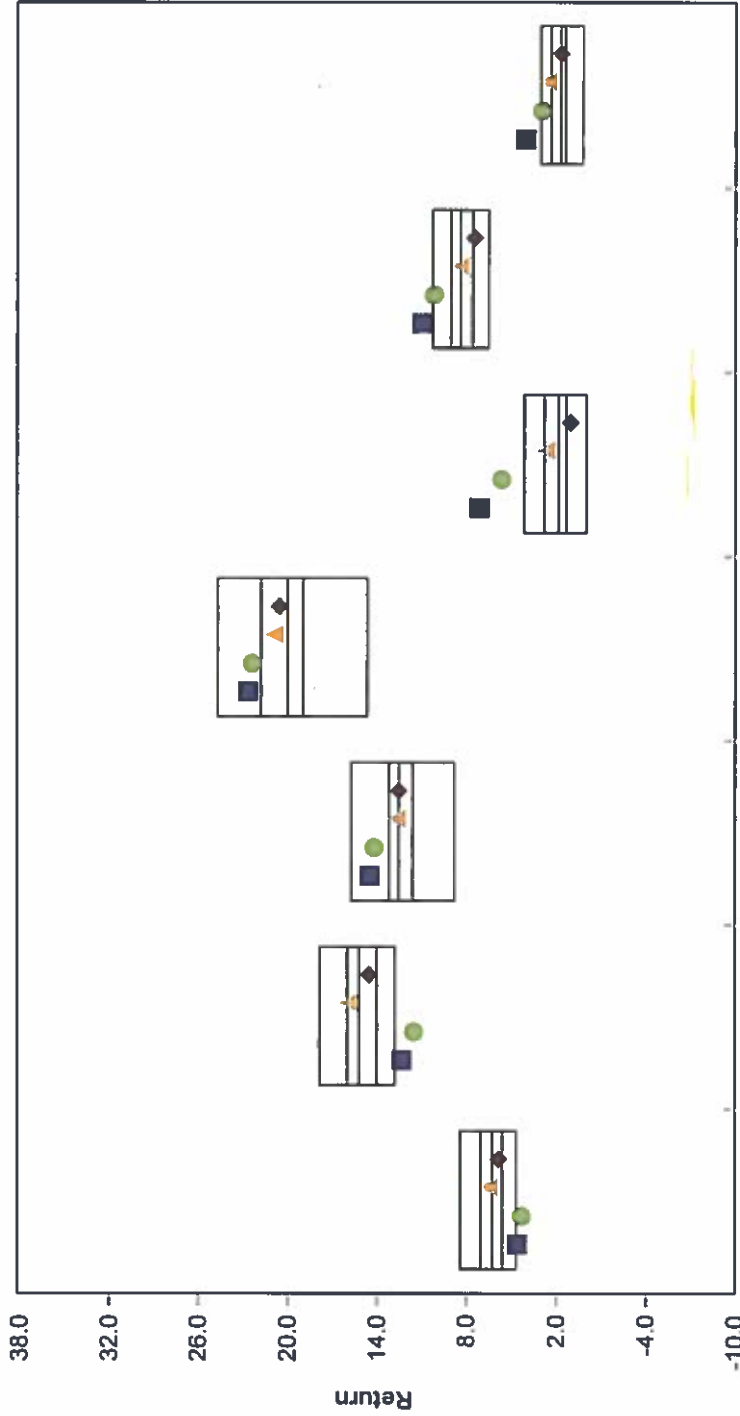
Parenttheses contain percentile rankings.





Plan Sponsor Peer Group Analysis

All Public Plans-Intl. Equity Segment



	1 Quarter	2 Quarters	3 Quarters	1 Year	3 Years	5 Years	10 Years
■ Total Non-U.S. Equity Composite (hedged)	4.57 (96)	12.24 (96)	14.35 (11)	22.57 (16)	7.12 (1)	10.97 (1)	3.96 (2)
● Blended Policy (Total Non-US Eq) (Hedged)	4.25 (97)	11.51 (97)	14.17 (14)	22.32 (20)	5.60 (1)	10.19 (6)	2.96 (6)
▲ Total Non-U.S. Equity Composite (unhedged)	6.54 (43)	15.89 (31)	12.69 (47)	20.81 (35)	2.69 (29)	8.37 (51)	2.73 (10)
◆ Blended Policy (Total Non-US Eq) (Unhedged)	5.86 (70)	14.48 (67)	12.55 (51)	20.57 (38)	1.06 (82)	7.53 (80)	1.71 (50)

5th Percentile	8.36	17.88	15.75	24.67	4.17	10.24	3.02
1st Quartile	7.01	16.04	13.26	21.71	2.77	9.06	2.34
Median	6.28	15.15	12.55	20.00	1.93	8.39	1.69
3rd Quartile	5.65	13.96	11.62	18.96	1.36	7.65	1.40
95th Percentile	4.60	12.75	8.79	14.72	-0.05	6.58	0.29

Population

105

105

99

97

84

69

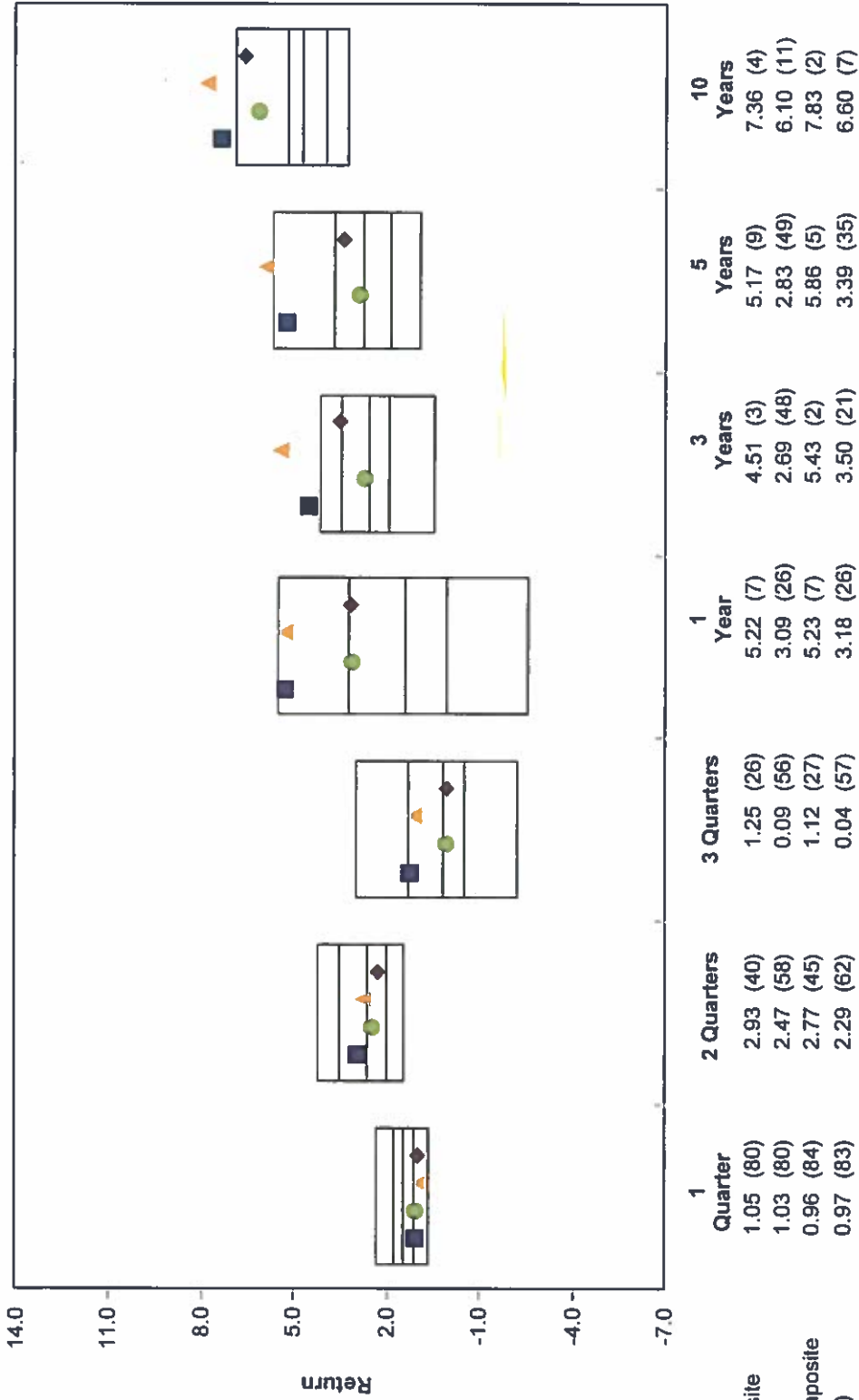
38

Parenttheses contain percentile rankings.



Plan Sponsor Peer Group Analysis

All Public Plans-US Fixed Income Segment



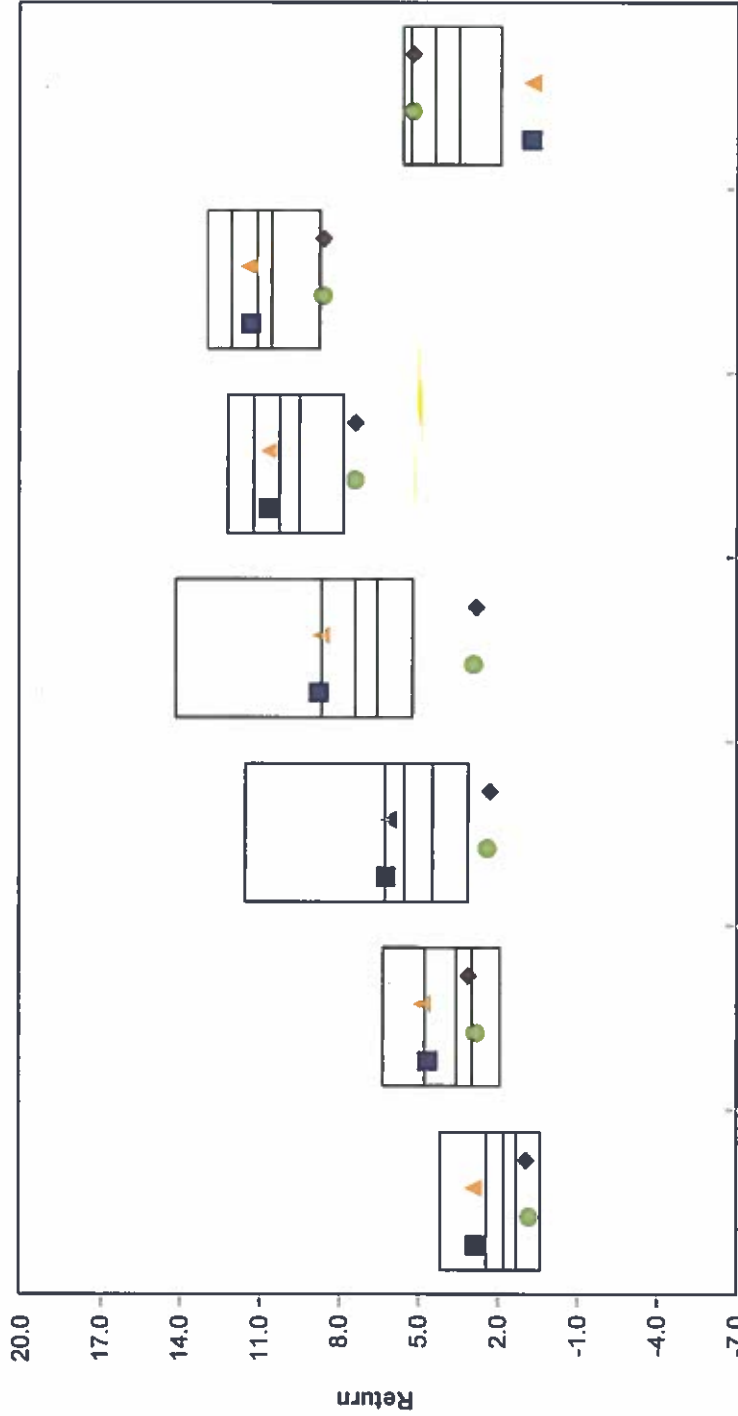
5th Percentile	2.31	4.19	2.97	5.50	4.13	5.67	6.90
1st Quartile	1.74	3.47	1.26	3.18	3.44	3.68	5.22
Median	1.44	2.62	0.19	1.38	2.56	2.77	4.71
3rd Quartile	1.13	1.96	-0.54	0.04	1.93	1.86	3.99
95th Percentile	0.66	1.47	-2.19	-2.55	0.46	0.93	3.25
Population	99	99	95	94	85	76	45

Parenttheses contain percentile rankings.



Plan Sponsor Peer Group Analysis

All Public Plans-Real Estate Segment



	1 Quarter	2 Quarters	3 Quarters	1 Year	3 Years	5 Years	10 Years
Total Real Estate (levered/hedged)	2.81 (14)	4.50 (29)	6.22 (26)	8.79 (22)	10.62 (40)	11.34 (39)	0.73 (100)
Blended Policy (Total Real Estate) (Hedged)	0.83 (93)	2.82 (80)	2.38 (99)	2.92 (100)	7.38 (99)	8.59 (97)	5.20 (30)
Total Real Estate (levered/unhedged)	2.90 (13)	4.83 (24)	6.11 (28)	8.68 (24)	10.64 (39)	11.34 (39)	0.74 (100)
Blended Policy (Total Real Estate) (Unhedged)	0.97 (90)	3.13 (70)	2.30 (99)	2.86 (100)	7.40 (99)	8.60 (97)	5.21 (30)

5th Percentile	4.16	6.37	11.50	14.16	12.23	12.93	5.57
1st Quartile	2.43	4.80	6.25	8.66	11.24	12.08	5.29
Median	1.77	3.58	5.56	7.42	10.25	11.08	4.38
3rd Quartile	1.31	2.98	4.51	6.59	9.51	10.54	3.51
95th Percentile	0.42	1.91	3.14	5.24	7.89	8.72	1.95

Population

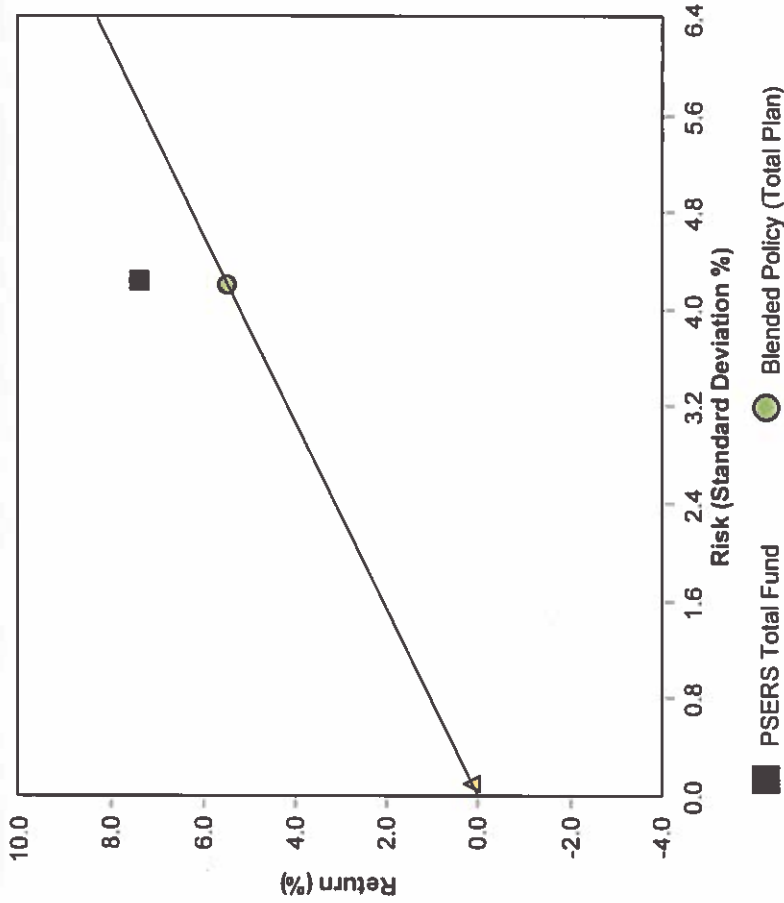
52 47 40 36 26 23 10

Parenttheses contain percentile rankings.

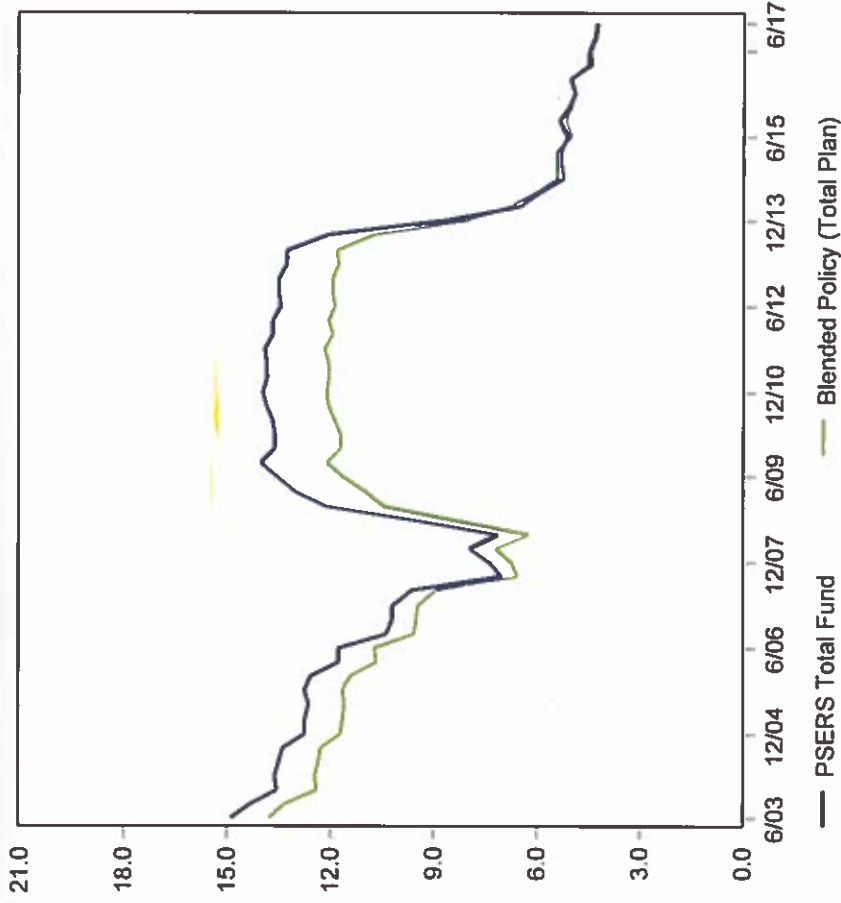


Risk Profile

Annualized Return vs. Annualized Standard Deviation  
5 Years



Rolling 5 Years Standard Deviation



5 Years Historical Statistics

	Active Return	Tracking Error	Information Ratio	R-Squared	Sharpe Ratio	Alpha	Beta	Return	Standard Deviation	Actual Correlation
PSERS Total Fund	1.80	1.23	1.47	0.92	1.68	1.99	0.97	7.35	4.25	0.96
Blended Policy (Total Plan)	0.00	0.00	N/A	1.00	1.26	0.00	1.00	5.47	4.21	1.00
Citigroup 3 Month T-Bill	-5.30	4.20	-1.26	0.03	N/A	0.13	0.00	0.15	0.09	0.16

Trailing Period Performance

	Performance(%)											Inception Date
	1 Quarter	2 Quarters	3 Quarters	FYTD	1 Year	3 Years	5 Years	10 Years	15 Years	20 Years	Since Inception	
<b>Total Public and Private Equity Exposure (Hedged)</b>	3.85	8.70	12.01	18.12	19.12	N/A	N/A	N/A	N/A	N/A	7.22	10/01/2014
<b>Total Public Equity Composite (Hedged)</b>	3.78	10.51	14.04	21.18	21.18	7.85	12.60	5.32	8.42	N/A	6.78	07/01/1998
Blended Policy (Public Equity) (Hedged)	3.75	10.56	13.93	20.85	20.85	6.97	12.09	4.86	8.04	N/A	5.85	
Value Added	0.03	-0.05	0.11	0.33	0.33	0.88	0.51	0.46	0.38	N/A	0.93	
<b>Total US Equity Composite</b>	2.73	7.95	13.94	19.32	19.32	9.68	15.04	7.15	8.62	N/A	6.27	01/01/2000
Blended Policy (Tot US Eq)	2.98	9.05	13.41	18.43	18.43	9.14	14.59	7.21	8.77	N/A	5.30	
Value Added	-0.25	-1.10	0.53	0.89	0.89	0.54	0.45	-0.06	-0.15	N/A	0.97	
<b>Total Non-U.S. Equity Composite (Hedged)</b>	4.57	12.24	14.35	22.57	22.57	7.12	10.97	3.66	9.16	N/A	5.64	01/01/2000
Blended Policy (Total Non-US Eq) (Hedged)	4.25	11.51	14.17	22.32	22.32	5.60	10.19	2.96	8.26	N/A	4.67	
Value Added	0.32	0.73	0.18	0.25	0.25	1.52	0.78	1.00	0.90	N/A	1.00	
<b>Emerging Markets Equity Composite</b>	9.19	20.13	6.30	13.21	13.21	0.93	4.14	1.77	10.36	N/A	8.10	07/01/1988
Blended Policy (MSCI EM net)	6.27	18.43	13.50	23.75	23.75	1.07	3.96	1.94	10.73	N/A	8.71	
Value Added	2.92	1.70	-7.20	-10.54	-10.54	-0.14	0.18	-0.17	-0.37	N/A	-0.61	
<b>Total Alternative Investments (Hedged)</b>	3.97	6.71	10.91	14.35	14.35	5.68	8.89	7.74	11.59	N/A	10.00	07/01/1998
Burgess (Lagged) - PE/PDVC/Int	0.70	1.63	2.52	3.00	3.00	3.50	4.33	3.02	4.21	N/A	3.20	04/01/1998
Burgess (Lagged) - Int	0.67	2.30	1.69	1.44	1.44	1.06	-2.69	N/A	N/A	N/A	-4.41	04/01/2012
Burgess (Lagged) - VC	0.13	-2.67	-2.58	-2.51	-2.51	-0.04	0.80	-0.56	N/A	N/A	-1.07	01/01/2003
Burgess (Lagged) - PE/PD	0.79	2.24	3.34	3.92	3.92	4.06	4.83	3.36	N/A	N/A	5.09	01/01/2003
<b>Total Fixed Income Composite (Hedged)</b>	1.05	2.93	1.25	5.22	5.22	4.51	5.17	7.35	7.03	N/A	6.70	07/01/1998
Blended Policy (Total FI)	1.03	2.47	0.09	3.09	3.09	2.69	2.83	6.10	5.89	N/A	5.83	
Value Added	0.02	0.46	1.16	2.13	2.13	1.82	2.34	1.26	1.34	N/A	0.87	
<b>Investment Grade Composite</b>	3.82	5.65	-2.80	-1.84	-1.84	N/A	N/A	N/A	N/A	N/A	4.87	10/01/2014
Blended Policy (Investment Grade)	2.20	3.16	-2.84	-2.57	-2.57	2.92	2.19	5.38	N/A	N/A	3.03	
Value Added	1.62	2.49	0.04	0.73	0.73	3.68	3.78	N/A	N/A	N/A	1.84	
<b>US Core Plus Fixed Income Composite</b>	1.99	3.40	1.65	3.39	3.39	3.68	3.78	5.56	N/A	N/A	5.19	10/01/2004
Blended Policy (Barclays Aggregate Index)	1.45	2.27	-0.77	-0.31	-0.31	2.48	2.21	4.38	4.64	5.26	4.22	
Value Added	0.54	1.13	2.42	3.70	3.70	1.40	1.57	1.18	N/A	N/A	0.97	
<b>Non-US Developed Markets Fixed Income</b>	0.94	1.65	0.37	1.49	1.49	-1.52	0.74	3.90	5.04	N/A	4.73	07/01/1998
Blended Policy (Barclays Global Agg GDP weighted)	0.71	0.87	-1.10	-0.21	-0.21	-2.53	0.22	3.30	N/A	N/A	N/A	
Value Added	0.13	0.78	1.47	1.70	1.70	1.01	0.52	0.69	N/A	N/A	N/A	
<b>U.S. Long Treasuries Composite (unlevered)</b>	3.66	4.87	-8.13	-9.17	-9.17	4.16	1.70	N/A	N/A	N/A	1.70	07/01/2012
Blended Policy (U.S. Treasury Long)	3.96	5.41	-6.89	-7.22	-7.22	5.59	2.76	7.34	6.84	7.33	2.76	
Value Added	-0.10	-0.54	-1.24	-1.95	-1.95	-1.42	-1.06	N/A	N/A	N/A	-1.06	
<b>Credit-Related (Hedged)</b>	1.71	4.57	7.54	12.09	12.09	N/A	N/A	N/A	N/A	N/A	4.73	10/01/2014
Blended Policy (Credit-Related)	2.30	5.47	6.30	11.37	11.37	N/A	N/A	N/A	N/A	N/A	4.36	
Value Added	-0.59	-0.90	1.24	0.72	0.72	N/A	N/A	N/A	N/A	N/A	0.37	
<b>Emerging Markets Fixed Income</b>	3.59	9.32	8.10	13.54	13.54	0.45	2.62	N/A	N/A	N/A	3.98	04/01/2010
Blended Policy (Barclays Emerging Mkt 10% Country Cap)	3.30	9.88	2.37	4.85	4.85	-1.94	0.77	4.66	N/A	N/A	2.44	
Value Added	0.29	-0.56	5.73	8.69	8.69	2.39	1.75	N/A	N/A	N/A	1.54	
<b>High Yield Fixed Income Composite (Hedged)</b>	1.57	4.22	7.50	11.99	11.99	5.49	8.49	7.42	9.28	N/A	7.90	10/01/1999
Blended Policy (Barclays Corporate HY)	2.17	4.93	6.77	12.70	12.70	4.48	6.89	7.64	9.02	7.25	7.73	
Value Added	-0.60	-0.71	0.73	-0.72	-0.72	1.01	1.60	-0.22	0.26	N/A	0.17	
<b>Inflation Protected (unlevered)</b>	-0.74	-0.29	-1.16	1.98	1.98	3.89	3.35	8.85	N/A	N/A	7.41	04/01/2004
Blended Policy (Barclays World Inflation Linked Bond - Hedged)	-0.42	0.28	-1.78	1.93	1.93	2.07	1.12	4.72	5.16	N/A	4.18	
Value Added	-0.32	-0.57	0.62	0.05	0.05	1.82	2.23	4.13	N/A	N/A	3.23	
<b>TIPS Composite (unlevered)</b>	-0.74	-0.29	-1.16	1.98	1.98	3.89	3.35	8.85	N/A	N/A	7.41	04/01/2004
Blended Policy (Barclays World Inflation Linked Bond - Hedged)	-0.42	0.28	-1.78	1.93	1.93	2.07	1.12	4.72	5.16	N/A	4.18	
Value Added	-0.32	-0.57	0.62	0.05	0.05	1.82	2.23	4.13	N/A	N/A	3.23	

\*The indicated index in parenthesis of Blended Policy represents current benchmark. Description of Blended Policy is provided in Appendix of this report

As of June 30, 2017

Trailing Period Performance

	Performance(%)											Since Inception	Inception Date	
	1	2	3	3	3	3	3	5	10	15	20	Years		
	Quarter	Quarters	Quarters	Quarters	Year	Years	Years	Years	Years	Years	Years	Years	Years	Years
	1	2	3	4	1	2	3	4	5	6	7	8	9	10
	Value Added	Value Added	Value Added	Value Added	FYTD	Value Added	Value Added	Value Added	Value Added	Value Added	Value Added	Value Added	Value Added	Value Added
<b>PIMCO Multi-Sector Strategy</b>	1.48	2.86	-0.20	1.32	1.32	1.95	3.26	3.20	4.98	4.92	5.50	3.26	0.06	3.20
Blended Policy (PIMCO Multi-Sector)	1.49	2.11	-1.83	-1.30	-1.30	1.84	3.20	3.20	4.98	4.92	5.50	3.26	0.06	3.20
Value Added	-0.01	0.75	1.63	2.62	2.62	0.11	0.06	0.06	N/A	N/A	N/A	N/A	N/A	0.06
<b>Real Assets (unlevered/hedged)</b>	-0.56	2.10	2.37	4.12	4.12	N/A	N/A	N/A	N/A	N/A	N/A	1.97	N/A	1.97
Blended Policy (Real Assets) (Hedged)	-0.98	1.49	0.75	0.64	0.64	N/A	N/A	N/A	N/A	N/A	N/A	-0.37	N/A	-0.37
Value Added	0.42	0.61	1.62	3.48	3.48	N/A	N/A	N/A	N/A	N/A	N/A	2.24	N/A	2.24
<b>Infrastructure Composite (unlevered/hedged)</b>	4.53	11.52	10.37	10.86	10.86	N/A	N/A	N/A	N/A	N/A	N/A	12.02	N/A	12.02
FTSE Dev. Core Infrast. 50/50 Index (Net) (Hedged)	3.63	10.55	9.42	10.15	10.15	8.46	12.70	N/A	N/A	N/A	N/A	10.88	N/A	10.88
Value Added	0.90	0.97	0.95	0.71	0.71	N/A	N/A	N/A	N/A	N/A	N/A	1.14	N/A	1.14
<b>MLP Composite</b>	-6.56	-3.33	-0.62	4.19	4.19	-11.25	2.48	5.99	11.13	N/A	N/A	14.99	N/A	14.99
S&P MLP Index	-6.38	-2.92	0.30	3.23	3.23	-11.25	2.48	5.99	11.13	N/A	N/A	14.99	N/A	14.99
Value Added	-0.18	-0.41	-0.62	0.96	0.96	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Commodities Composite (unlevered)</b>	-2.20	0.20	-2.82	-3.48	-3.48	-8.02	-4.62	-3.42	N/A	N/A	N/A	-1.58	N/A	-1.58
Blended Policy (Commodities)	-2.15	-0.63	-3.88	-6.41	-6.41	-10.45	-6.49	-5.08	N/A	N/A	N/A	-4.33	N/A	-4.33
Value Added	-0.05	0.83	1.26	2.93	2.93	2.43	1.87	1.66	N/A	N/A	N/A	2.75	N/A	2.75
<b>Total Real Estate (unlevered/hedged)</b>	2.65	4.35	5.91	8.38	8.38	10.36	11.18	0.65	7.92	8.72	9.46	8.03	N/A	8.03
Blended Policy (Total Real Estate) (Hedged)	0.83	2.82	2.38	2.92	2.92	7.38	8.59	5.20	8.51	8.51	9.46	8.40	N/A	8.40
Value Added	1.82	1.54	3.53	5.46	5.46	2.98	2.59	-4.54	-0.59	-0.74	-0.32	-0.32	N/A	-0.32
<b>Private Real Estate Composite</b>	2.99	4.87	6.94	9.58	9.58	10.82	11.64	0.44	8.42	8.42	8.86	9.23	N/A	9.23
Blended Policy (Private Real Estate)	0.62	2.79	2.67	3.13	3.13	7.22	8.49	5.15	8.47	8.47	9.43	9.47	N/A	9.47
Value Added	2.37	2.08	4.27	6.45	6.45	3.60	3.15	-4.71	-0.05	-0.57	-0.24	-0.24	N/A	-0.24
<b>PTRES Composite (unlevered/hedged)</b>	0.65	1.36	-0.91	0.32	0.32	4.46	6.65	2.32	9.13	8.30	N/A	9.02	N/A	9.02
Blended Policy (PTRES) (Hedged)	1.91	2.95	0.29	1.41	1.41	3.65	7.42	2.09	8.30	8.30	N/A	8.33	N/A	8.33
Value Added	-1.26	-1.59	-1.20	-1.09	-1.09	0.81	-0.77	0.23	0.83	0.83	N/A	0.69	N/A	0.69
<b>Risk Parity Composite (vol adjusted)</b>	1.08	4.44	3.36	7.17	7.17	2.05	N/A	N/A	N/A	N/A	N/A	3.12	N/A	3.12
Blended Policy (Risk Parity)	1.98	6.17	2.00	5.81	5.81	3.33	4.81	8.22	10.01	10.01	9.67	3.82	N/A	3.82
Value Added	-0.90	-1.73	1.36	1.36	1.36	-1.28	N/A	N/A	N/A	N/A	N/A	-0.70	N/A	-0.70
<b>Total Absolute Return</b>	0.13	1.81	6.39	9.00	9.00	3.16	4.09	4.99	7.11	7.11	7.33	6.86	N/A	6.86
Blended Policy (3-month Libor + 3.5%)	1.17	2.31	3.43	4.53	4.53	4.10	5.45	6.67	7.11	7.11	7.33	6.86	N/A	6.86
Value Added	-1.04	-0.50	2.96	4.47	4.47	-0.94	-1.36	-1.68	-0.60	-0.60	-0.60	-1.60	N/A	-1.60
<b>Unallocated Cash &amp; Cash Equivalents</b>	0.19	0.12	0.21	0.34	0.34	0.32	0.37	0.00	0.70	0.70	N/A	0.41	N/A	0.41
BoA Merrill Lynch 3 Month US T-Bill	0.20	0.30	0.39	0.49	0.49	0.23	0.17	0.58	1.30	1.30	2.17	2.01	N/A	2.01
Value Added	-0.01	-0.18	-0.18	-0.15	-0.15	0.09	0.20	-0.58	-0.60	-0.60	-0.60	-1.60	N/A	-1.60

\*The indicated index in parenthesis of Blended Policy represents current benchmark. Description of Blended Policy is provided in Appendix of this report



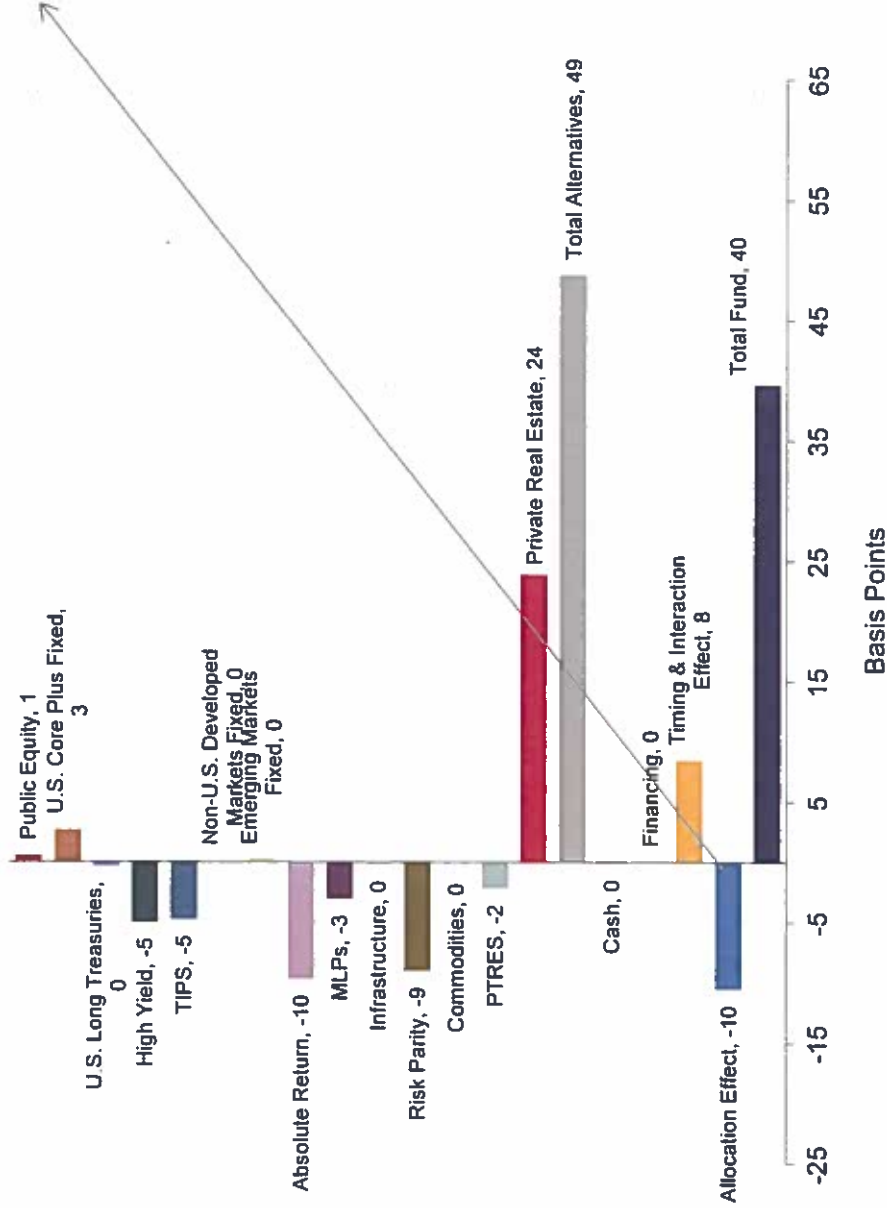
As of June 30, 2017

## Trailing Period Performance

	Performance(%)											Inception Date
	1 Quarter	2 Quarters	3 Quarters	FYTD	1 Year	3 Years	5 Years	10 Years	15 Years	20 Years	Since Inception	
<b>PERS Total Fund</b>	1.90	4.90	6.21	10.14	10.14	4.76	7.35	3.90	7.24	6.69	9.75	07/01/1982
Blended Policy (Total Plan)	1.20	4.22	3.62	6.39	6.39	3.49	5.47	2.80	5.76	N/A	N/A	
Value Added	0.40	0.68	2.59	3.75	3.75	1.27	1.88	1.00	1.48	N/A	N/A	
<b>Total Public and Private Equity Exposure (hedged)</b>	3.65	8.76	12.61	18.12	18.12	N/A	N/A	N/A	N/A	N/A	7.22	10/01/2014
Blended Policy (Total Equity Exposure)	2.44	6.52	8.69	12.51	12.51	5.64	8.55	4.42	7.04	N/A	5.82	
Value Added	1.41	2.24	3.92	5.61	5.61	N/A	N/A	N/A	N/A	N/A	1.40	
<b>Total Fixed Income Composite (hedged)</b>	1.05	2.93	1.25	5.22	5.22	4.51	5.17	7.36	7.03	N/A	6.70	07/01/1998
Blended Policy (Total FI)	1.03	2.47	0.09	3.09	3.09	2.69	2.83	6.10	5.69	N/A	5.83	
Value Added	0.02	0.46	1.16	2.13	2.13	1.82	2.34	1.26	1.34	N/A	0.87	
<b>Real Assets (unlevered/hedged)</b>	-0.56	2.10	2.37	4.12	4.12	N/A	N/A	N/A	N/A	N/A	1.67	10/01/2014
Blended Policy (Real Assets) (Hedged)	-0.98	1.49	0.75	0.64	0.64	N/A	N/A	N/A	N/A	N/A	-0.37	
Value Added	0.42	0.61	1.62	3.48	3.48	N/A	N/A	N/A	N/A	N/A	2.24	
<b>Risk Parity Composite (vol adjusted)</b>	1.98	4.44	3.36	7.17	7.17	2.05	N/A	N/A	N/A	N/A	3.12	10/01/2012
Blended Policy (Risk Parity)	1.98	6.17	2.00	5.81	5.81	3.33	4.81	8.22	10.01	9.67	3.82	
Value Added	-0.90	-1.73	1.36	1.36	1.36	-1.28	N/A	N/A	N/A	N/A	-0.70	
<b>Total Absolute Return</b>	0.13	1.81	6.39	9.00	9.00	3.16	4.09	4.99	N/A	N/A	5.26	10/01/2005
Blended Policy (3-month Libor + 3.5%)	1.17	2.31	3.43	4.53	4.53	4.10	5.45	6.67	7.11	7.33	6.86	
Value Added	-1.04	-0.50	2.96	4.47	4.47	-0.94	-1.36	-1.68	N/A	N/A	-1.60	

\*The indicated index in parenthesis of Blended Policy represents current benchmark. Description of Blended Policy is provided in Appendix of this report

Performance Attribution – Total Fund



Asset Class	Allocation Effect (in bps)
Public Equity	0
U.S. Core Fixed	0
U.S. Long Treasuries	0
High Yield	0
TIPS	-2
Non-U.S. Fixed	0
Emerging Markets Fixed	-1
Absolute Return	0
MLPs	-7
Infrastructure	0
Risk Parity	0
Commodities	1
PTRES	0
Private Real Estate	0
Total Alternatives	0
Cash	0
Financing	-1

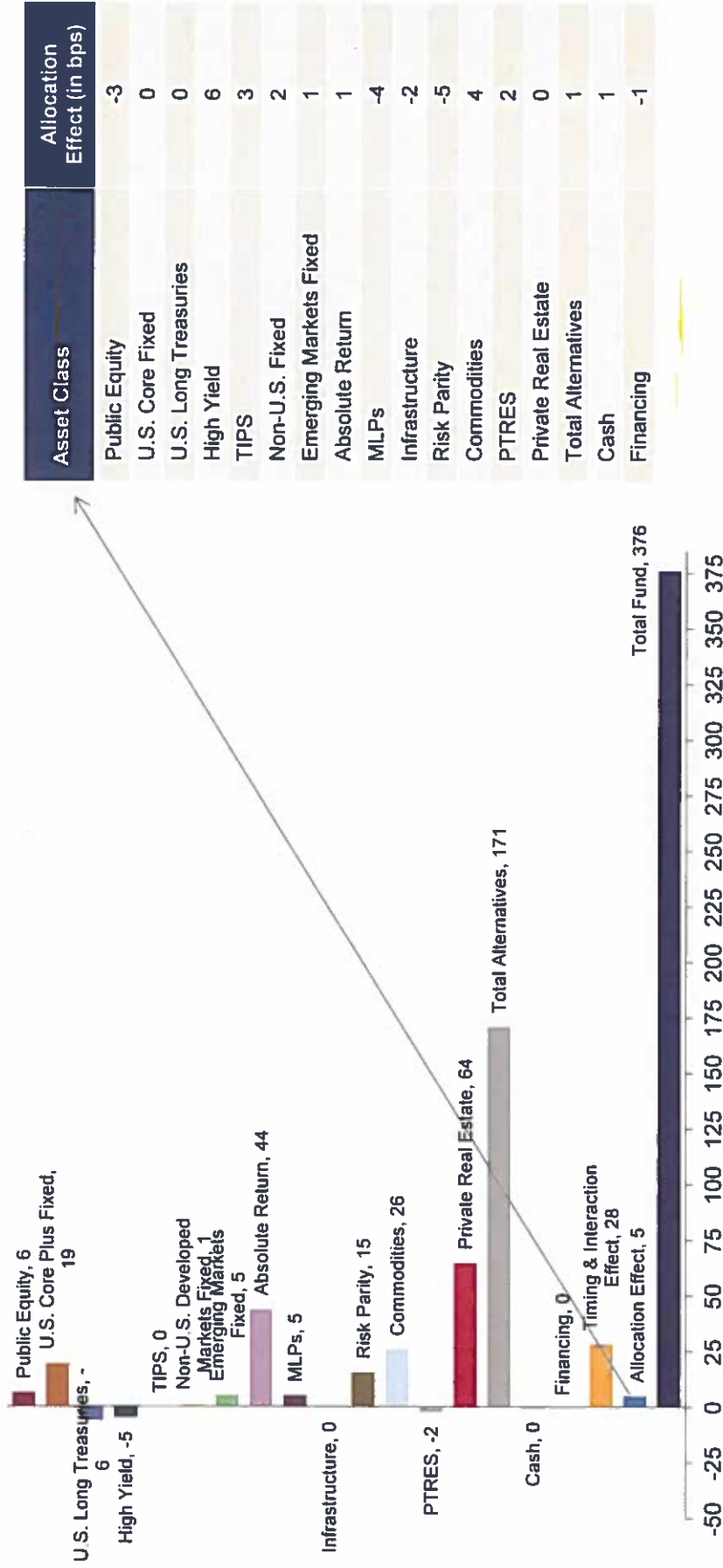
- The Selection Effect (shown by each composite bar above) represents the impact each composite had on Total Fund performance, based on its weight in the asset class and its performance relative to its blended asset class policy benchmark.
- The Allocation Effect represents the favorable or unfavorable impact of being over or under weight to each asset class relative to policy targets.
- The Timing & Interaction Effect captures the impact of intra-month cash flows on Total Fund return.





1 Year Ending June 30, 2017

Performance Attribution – Total Fund



- The Selection Effect (shown by each composite bar above) represents the impact each composite had on Total Fund performance, based on its weight in the asset class and its performance relative to its blended asset class policy benchmark.
- The Allocation Effect represents the favorable or unfavorable impact of being over or under weight to each asset class relative to policy targets.
- The Timing & Interaction Effect captures the impact of intra-month cash flows on Total Fund return.





## Total Fund

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As of June 30, 2017

### Trailing Period Performance

Performance (%)

	1 Quarter	2 Quarters Ending Jun-2017	3 Quarters Ending Jun-2017	FYTD	1 Year	3 Years	5 Years	10 Years	15 Years	20 Years	Since Inception	Inception Date
PSERS Total Fund	1.50	4.99	5.21	10.14	10.14	4.76	7.35	3.50	7.24	5.69	9.75	07/01/1982
Blended Policy (Total Plan)	1.20	4.22	3.62	6.39	6.39	3.49	5.47	2.80	5.76	N/A	N/A	
Value Added	0.40	0.68	2.59	3.75	3.75	1.27	1.88	1.00	1.48	N/A	N/A	
Total Public Markets Composite	0.94	4.56	5.16	9.37	9.37	3.15	6.10	3.32	6.58	N/A	5.54	06/01/2002
Blended Policy (Public Market) (Hedged)	1.38	4.97	3.96	7.57	7.57	2.50	5.08	2.49	5.71	N/A	5.26	
Value Added	-0.44	-0.41	1.20	1.80	1.80	0.65	1.02	0.83	0.87	N/A	1.28	
Blended Policy (Public Market) (Unhedged)	2.10	6.05	3.63	6.98	6.98	1.80	4.69	2.29	5.58	N/A	5.12	
Value Added	-1.16	-1.49	1.53	2.39	2.39	1.35	1.41	1.03	1.00	N/A	1.42	
Total Public Equity Composite	3.78	10.51	14.04	21.18	21.18	7.65	12.50	5.32	8.42	N/A	6.78	07/01/1998
Blended Policy (Public Equity) (Hedged)	3.75	10.56	13.93	20.85	20.85	6.97	12.09	4.86	8.04	N/A	5.85	
Value Added	0.03	-0.05	0.11	0.33	0.33	0.88	0.51	0.46	0.38	N/A	0.93	
Blended Policy (Public Equity) (Unhedged)	4.33	11.49	13.00	19.39	19.39	5.20	11.08	4.39	7.71	N/A	5.60	
Value Added	-0.55	-0.98	1.04	1.79	1.79	2.65	1.52	0.93	0.71	N/A	1.18	
Total US Equity Composite	2.73	7.95	13.94	19.32	19.32	9.68	15.04	7.15	8.62	N/A	6.27	01/01/2000
Blended Policy (Tot US Eq)	2.98	9.05	13.41	18.43	18.43	9.14	14.59	7.21	8.77	N/A	5.30	
Value Added	-0.25	-1.10	0.53	0.89	0.89	0.54	0.45	-0.06	-0.15	N/A	0.97	
PSERS-S&P 500 Index Composite	3.09	9.24	13.92	18.86	18.86	10.16	15.13	7.66	8.69	N/A	6.37	07/01/1998
S&P 500 Index	3.09	9.34	13.52	17.90	17.90	9.61	14.63	7.18	8.34	N/A	6.06	
Value Added	0.00	-0.10	0.40	0.96	0.96	0.55	0.50	0.48	0.35	N/A	0.31	
Total US Small Cap Composite	1.70	4.32	14.05	20.52	20.52	7.73	14.38	7.58	10.03	N/A	9.95	12/01/2001
MSCI USA Small Cap Index	2.20	5.99	13.37	21.10	21.10	7.44	14.58	8.02	10.23	N/A	9.72	
Value Added	-0.50	-1.67	0.68	-0.28	-0.28	0.29	-0.20	-0.04	-0.20	N/A	0.14	
PSERS Small Cap Index Composite	1.70	4.32	14.05	20.82	20.82	9.32	15.78	9.23	10.90	N/A	10.75	12/01/2001
PSERS-S&P 400 Index Composite	2.04	6.11	14.06	19.03	19.03	8.77	15.12	9.14	10.83	N/A	10.52	07/01/1998
S&P MidCap 400	1.97	5.99	13.85	18.57	18.57	8.53	14.92	8.56	10.40	N/A	10.15	
Value Added	0.07	0.12	0.21	0.46	0.46	0.24	0.20	0.58	0.43	N/A	0.37	
PSERS-S&P 600 Index Composite	1.35	2.55	14.15	22.83	22.83	9.86	18.37	9.50	11.12	N/A	9.83	06/01/1998
S&P SmallCap 600	1.71	2.79	14.24	22.47	22.47	9.32	15.47	8.44	10.38	N/A	9.34	
Value Added	-0.36	-0.23	-0.09	0.36	0.36	0.54	0.90	1.06	0.74	N/A	0.59	
Total Non-US Equity Composite (Hedged)	4.57	12.24	14.35	22.57	22.57	7.12	10.97	3.96	9.16	N/A	5.64	01/01/2000
Blended Policy (Total Non-US Eq) (Hedged)	4.25	11.51	14.17	22.32	22.32	5.60	10.19	2.96	8.26	N/A	4.87	
Value Added	0.32	0.73	0.18	0.25	0.25	1.52	0.78	1.00	0.90	N/A	0.97	
Total Non-US Equity Composite (Unhedged)	6.54	15.89	12.69	20.81	20.81	2.89	8.37	2.73	8.30	N/A	4.93	01/01/2000
Blended Policy (Total Non-US Eq) (Unhedged)	5.86	14.48	12.55	20.57	20.57	1.06	7.53	1.71	7.38	N/A	3.94	
Value Added	0.68	1.41	0.14	0.24	0.24	1.63	0.84	1.02	0.92	N/A	0.99	
Emerging Markets Equity Composite	3.16	20.13	6.30	13.31	13.31	0.93	-1.14	1.77	10.36	N/A	8.10	07/01/1998
Blended Policy (MSCI EM net)	2.92	18.43	13.50	23.75	23.75	1.07	3.96	1.94	10.73	N/A	8.71	
Value Added	0.24	1.70	-7.20	-10.54	-10.54	-0.14	0.18	-0.17	-0.37	N/A	-0.61	
MSCI Emerging Markets IMI (Net)	5.78	18.11	12.86	22.82	22.82	1.03	4.09	2.02	7.75	N/A	4.40	
Value Added	3.41	2.02	-6.56	-9.61	-9.61	-0.10	0.05	-0.25	-0.31	N/A	0.35	
Wasatch EM Small Cap	9.19	20.13	6.30	13.21	13.21	0.71	4.30	N/A	N/A	N/A	7.75	07/01/2008
Blended Policy (Wasatch EM)	3.65	16.03	9.50	16.91	16.91	0.16	4.96	2.22	11.77	N/A	4.33	
Value Added	5.54	4.10	-3.20	-3.70	-3.70	0.55	-0.66	N/A	N/A	N/A	3.42	
Total Non-US Equity & Emerging Markets Composite (Hedged)	4.07	11.99	14.73	23.01	23.01	7.67	N/A	N/A	N/A	N/A	8.31	04/01/2014
Blended Policy (Non-US Equity x EM) (Hedged)	4.16	11.21	14.19	22.26	22.26	6.12	10.51	3.11	8.36	N/A	6.97	
Value Added	0.21	0.68	0.54	0.75	0.75	N/A	N/A	N/A	1.34	N/A	1.34	
Inflight Everest - Intl Eq (proportional)	-2.86	-4.81	2.49	2.42	2.42	6.25	3.15	1.67	N/A	N/A	1.41	07/01/2006
Currency Hedge Benchmark	-2.80	-4.73	2.60	2.59	2.59	6.34	3.11	1.76	N/A	N/A	1.50	





As of June 30, 2017

Trailing Period Performance

Performance (%)

	1 Quarter	2 Quarters Ending Jun-2017	3 Quarters Ending Jun-2017	FYTD	1 Year	3 Years	5 Years	10 Years	15 Years	20 Years	Since Inception	Inception Date
Value Added	-0.06	-0.08	-0.11	-0.17	-0.17	-0.09	0.04	-0.09	N/A	N/A	-0.09	
Total Non-US Equity x Emerging Markets Composite (unhedged)	5.42	15.70	13.00	21.19	21.18	2.68	9.13	2.43	7.95	6.22	6.22	07/01/1997
Blended Policy (Non-US Equity x EM) (Unhedged)	5.85	14.30	12.50	20.43	20.43	1.14	7.58	1.74	7.40	N/A	N/A	
Value Added	0.57	1.40	0.50	0.75	0.75	1.54	1.55	0.69	0.45	N/A	N/A	
Non-US Large Cap Equity Composite	6.20	15.26	13.31	21.62	21.62	2.38	8.45	2.10	7.57	N/A	5.93	07/01/1993
Blended Policy (MSCI World AC Word ex USA net)	5.78	14.10	12.67	20.45	20.45	0.80	7.22	1.17	7.08	4.96	4.90	
Value Added	0.42	1.16	0.64	1.17	1.17	1.58	1.23	0.93	0.49	N/A	1.03	
PSERS ACWI x US Index Fund	5.74	14.36	13.26	21.13	21.13	1.48	7.84	1.83	7.26	N/A	5.05	07/01/1998
MSCI ACWI ex USA Index Blend	5.78	14.10	12.67	20.45	20.45	0.80	7.22	1.13	6.69	4.57	4.49	
Value Added	-0.04	0.26	0.59	0.68	0.68	0.68	0.62	0.70	0.56	N/A	0.56	
BlackRock EMNA	6.08	19.41	14.74	26.14	26.14	N/A	N/A	N/A	N/A	N/A	6.06	07/01/2015
MSCI Emerging Markets Index (Net)	6.27	18.43	13.50	23.75	23.75	1.07	3.96	1.92	10.60	5.48	4.32	
Value Added	-0.19	0.98	1.24	2.39	2.39	N/A	N/A	N/A	N/A	N/A	1.74	
Active Non-US Large Cap Composite	6.74	16.30	13.37	22.32	22.32	3.56	9.14	2.96	8.14	N/A	6.41	07/01/1998
MSCI AC World ex USA Index (Net)	5.78	14.10	12.67	20.45	20.45	0.80	7.22	1.13	6.90	4.65	4.63	
Value Added	0.96	2.20	0.70	1.87	1.87	2.76	1.92	1.83	1.24	N/A	1.58	
Baillie Gilford	9.04	19.33	14.81	26.71	26.71	5.35	10.20	4.52	9.69	N/A	9.69	07/01/2002
MSCI AC World ex USA Index (Net)	5.78	14.10	12.67	20.45	20.45	0.80	7.22	1.13	6.90	4.65	6.90	
Value Added	3.26	5.23	2.14	6.26	6.26	4.55	2.98	3.39	2.79	N/A	2.79	
Marathon Asset Mgmt	6.56	14.61	12.96	20.66	20.66	2.74	9.97	4.17	9.92	N/A	9.14	07/01/1996
Blended Benchmark (MSCI ACWI ex USA net)	5.78	14.10	12.67	20.45	20.45	0.80	7.22	1.14	7.05	4.80	4.97	
Value Added	0.78	0.51	0.29	0.21	0.21	1.94	2.75	3.03	2.87	4.17	4.17	
BlackRock Global Composite	2.89	13.91	11.43	17.54	17.54	1.27	6.31	2.13	N/A	N/A	7.30	10/01/2004
MSCI AC World ex USA Index (Net)	5.78	14.10	12.67	20.45	20.45	0.80	7.22	1.13	6.90	4.65	6.75	
Value Added	-2.89	-0.19	-1.24	-2.91	-2.91	0.47	-0.91	1.00	N/A	N/A	1.15	
Non-US Small Cap Equity Composite	7.76	18.52	11.12	18.41	18.41	5.44	13.64	4.17	N/A	N/A	9.59	07/01/2005
MSCI AC World ex USA Small Cap (Net)	6.24	15.56	11.50	20.32	20.32	3.31	10.02	2.91	10.09	6.48	7.26	
Value Added	1.52	2.96	-0.38	-1.91	-1.91	2.13	3.62	1.26	N/A	N/A	1.73	
Academy Asset Mgmt	6.89	19.70	18.88	29.10	29.10	6.14	14.47	4.42	N/A	N/A	10.73	07/01/2005
Blended Benchmark (MSCI AC World ex USA Small Cap net)	6.24	15.56	11.50	20.32	20.32	3.31	10.02	3.30	N/A	N/A	6.75	
Value Added	0.65	4.14	7.38	8.78	8.78	2.83	4.45	1.12	N/A	N/A	3.98	
Wasatch Int'l Small Cap	8.76	18.82	5.18	11.10	11.10	5.17	12.11	5.97	N/A	N/A	9.27	10/01/2005
Blended Benchmark (MSCI AC World ex USA Small Cap net)	6.24	15.56	11.50	20.32	20.32	3.31	10.02	3.30	N/A	N/A	6.18	
Value Added	2.52	3.26	-6.32	-9.22	-9.22	1.86	2.09	2.67	N/A	N/A	3.09	
Oberweis Asset Mgmt	8.75	20.19	10.93	15.94	15.94	6.82	20.46	N/A	N/A	N/A	8.67	07/01/2008
MSCI AC World ex USA Small Cap (Net)	6.24	15.56	11.50	20.32	20.32	3.31	10.02	2.91	10.09	6.48	5.25	
Value Added	2.51	4.63	-0.57	-4.38	-4.38	3.51	10.44	N/A	N/A	N/A	3.42	
QS Investors	5.02	15.53	12.61	22.29	22.29	5.19	12.60	N/A	N/A	N/A	6.48	07/01/2008
MSCI AC World ex USA Small Cap (Net)	6.24	15.56	11.50	20.32	20.32	3.31	10.02	2.91	10.09	6.48	5.25	
Value Added	-1.22	-0.03	1.11	1.97	1.97	1.88	2.58	N/A	N/A	N/A	1.23	
Fidelity Institutional Int'l Small Cap	7.91	16.09	9.74	17.02	17.02	3.44	10.21	N/A	N/A	N/A	9.29	10/01/2008
MSCI AC World ex USA Small Cap (Net)	6.24	15.56	11.50	20.32	20.32	3.31	10.02	2.91	10.09	6.48	8.97	
Value Added	1.67	0.53	-1.76	-3.30	-3.30	0.13	0.19	N/A	N/A	N/A	0.32	
Total Fixed Income Compos. (a)	1.05	2.93	1.25	5.22	5.22	-4.51	5.17	7.95	7.03	N/A	6.70	07/01/1998
Blended Policy (Total FI)	1.03	2.47	0.09	3.09	3.09	2.69	2.83	6.10	5.69	N/A	5.83	
Value Added	0.02	0.46	1.16	2.13	2.13	1.82	2.34	1.26	1.34	N/A	0.87	
Global Fixed Income Composite	2.10	3.94	2.28	4.34	4.34	2.07	2.92	N/A	N/A	N/A	2.92	07/01/2012
Blended Policy (Global FI)	1.60	3.13	-0.35	0.65	0.65	0.69	1.60	N/A	N/A	N/A	1.60	



As of June 30, 2017

Trailing Period Performance

Performance (%)

	1 Quarter	2 Quarters Ending Jun-2017	3 Quarters Ending Jun-2017	FYTD	1 Year	3 Years	5 Years	10 Years	15 Years	20 Years	Since Inception	Inception Date
Value Added	0.50	0.81	2.63	3.69	3.69	1.38	1.32	N/A	N/A	N/A	1.32	
Total US Fixed Income Composite	0.96	2.77	1.12	5.23	5.23	5.43	5.86	7.83	N/A	N/A	6.99	10/01/2004
Blended Policy (Total US FI)	0.97	2.29	0.04	3.18	3.18	3.50	3.39	6.60	5.88	6.30	5.83	
Value Added	-0.01	0.48	1.08	2.05	2.05	1.93	2.47	1.23	N/A	N/A	1.16	
Total US Fixed Income ex-TIPS Composite	2.47	4.85	3.44	6.50	6.50	5.92	7.25	7.90	7.16	N/A	6.56	07/01/1998
Investment Grade Composite	3.82	5.65	-2.80	-1.84	-1.84	N/A	N/A	N/A	N/A	N/A	4.87	10/01/2014
Blended Policy (Investment Grade)	2.20	3.16	-2.84	-2.57	-2.57	2.92	2.19	5.38	N/A	N/A	3.03	
Value Added	1.62	2.49	0.73	2.49	2.49	N/A	N/A	N/A	N/A	N/A	1.84	
US Core Plus Fixed Income Composite	1.99	3.40	1.65	3.39	3.39	3.88	3.78	5.55	N/A	N/A	5.19	10/01/2004
Blended Policy (Barclays Aggregate Index)	1.45	2.27	-0.77	-0.31	-0.31	2.48	2.21	4.38	4.64	5.26	4.22	
Value Added	0.54	1.13	2.42	3.70	3.70	1.40	1.57	1.18	N/A	N/A	0.97	
Pugh Capital Management	1.64	2.44	-0.78	-0.27	-0.27	2.47	2.43	5.00	5.11	N/A	5.11	07/01/2005
Bimbg. Barc. U.S. Aggregate	1.45	2.27	-0.77	-0.31	-0.31	2.48	2.21	4.48	4.48	5.24	4.63	
Value Added	0.19	0.17	-0.01	0.04	0.04	-0.01	0.22	0.52	N/A	N/A	0.48	
PSERS Active Core Plus Fixed Income	1.54	2.77	-0.04	0.90	0.90	3.46	3.08	5.81	5.65	N/A	6.06	07/01/1998
Value Added	1.45	2.27	-0.77	-0.31	-0.31	2.48	2.21	4.48	4.48	5.24	4.97	
Bimbg. Barc. U.S. Aggregate	0.09	0.50	0.73	1.21	1.21	0.98	0.87	1.33	1.17	N/A	1.09	
Value Added	2.67	4.18	3.52	6.09	6.09	4.60	5.29	7.39	N/A	N/A	7.39	07/01/2007
BlackRock Global Alpha	1.45	2.27	-0.77	-0.31	-0.31	2.48	2.21	4.38	4.64	5.26	4.38	
Value Added	1.22	1.91	4.29	6.40	6.40	2.12	3.08	3.01	N/A	N/A	3.01	
SEI Investment Management	1.88	4.76	8.06	14.10	14.10	4.38	N/A	N/A	N/A	N/A	4.20	03/01/2014
BoA Merrill Lynch Corporate 1-3 Year	0.60	1.31	1.09	1.43	1.43	1.56	1.98	3.33	3.58	4.38	1.60	
Value Added	1.08	3.45	6.97	12.67	12.67	2.82	N/A	N/A	N/A	N/A	2.60	
Non-US Developed Markets Fixed Income Composite	0.84	1.65	0.37	1.49	1.49	-1.52	0.74	3.99	5.04	N/A	4.73	07/01/1998
Blended Policy (Barclays GlobalAgg GDP Weighted Dev xUS hedged)	0.71	0.87	-1.10	-0.21	-0.21	-2.53	0.22	3.30	N/A	N/A	N/A	
Value Added	0.13	0.78	1.47	1.70	1.70	1.01	0.52	0.69	N/A	N/A	N/A	
Alliance Bernstein Global Fixed	0.84	1.65	0.37	1.49	1.49	-1.87	0.78	N/A	N/A	N/A	0.95	01/01/2012
Spiced Barclays GlobalAgg GDPWeighted Dev xUS	0.71	0.87	-1.10	-0.21	-0.21	-2.53	0.22	3.24	N/A	N/A	0.48	
Value Added	0.13	0.78	1.47	1.70	1.70	0.66	0.56	0.56	N/A	N/A	0.47	
U.S. Long Treasuries (levered)	33.76	45.01	47.30	-74.88	-74.88	-5.03	-33.97	N/A	N/A	N/A	-23.67	07/01/2012
Bimbg. Barc. U.S. Treasury: Long	3.96	5.41	-6.89	-7.22	-7.22	5.59	2.76	7.34	6.84	7.33	2.76	
Value Added	29.80	40.60	-65.41	-67.66	-67.66	-10.61	-26.43	N/A	N/A	N/A	-26.43	
PSERS U.S. Long Treasuries (unlevered)	3.86	4.87	-8.13	-9.17	-9.17	4.16	1.70	N/A	N/A	N/A	1.70	07/01/2012
Bimbg. Barc. U.S. Treasury: Long	3.96	5.41	-6.89	-7.22	-7.22	5.58	2.76	7.34	6.84	7.33	2.76	
Value Added	-0.10	-0.54	-1.24	-1.95	-1.95	-1.42	-1.06	N/A	N/A	N/A	-1.86	
Credit-Related	1.71	4.57	7.54	12.09	12.09	N/A	N/A	N/A	N/A	N/A	4.73	10/01/2014
Blended Policy (Credit-Related)	2.30	5.47	6.30	11.37	11.37	N/A	N/A	N/A	N/A	N/A	4.36	
Value Added	-0.59	-0.90	1.24	0.72	0.72	N/A	N/A	N/A	N/A	N/A	0.37	
Emerging Markets Fixed Income Composite	3.59	9.32	8.10	13.54	13.54	0.45	2.52	N/A	N/A	N/A	3.98	04/01/2010
Blended Policy (Barclays Emerging Mkt 10% Country Cap)	3.30	9.88	2.37	4.85	4.85	-1.94	0.77	4.66	N/A	N/A	2.44	
Value Added	0.29	-0.56	5.73	8.69	8.69	2.39	1.75	1.52	N/A	N/A	1.54	
Franklin Templeton Emerging Fixed Income	3.59	9.32	8.10	13.54	13.54	2.80	5.22	N/A	N/A	N/A	7.80	10/01/2008
Blended Benchmark (Barclays Emerging Mkt 10% Country Cap)	3.30	9.88	2.37	4.85	4.85	-1.94	1.09	4.78	5.84	6.39	4.32	
Value Added	0.29	-0.56	5.73	8.69	8.69	4.74	4.13	N/A	N/A	N/A	3.48	
High Yield Fixed Income Composite (hedged)	1.57	4.22	7.50	11.98	11.98	5.49	8.49	7.42	9.28	N/A	7.90	10/01/1999
Blended Policy (Barclays Corporate HY)	2.17	4.93	6.77	12.70	12.70	4.48	6.89	7.64	9.02	7.25	7.73	
Value Added	-0.60	-0.71	0.73	-0.72	-0.72	1.01	1.60	-0.22	0.26	N/A	0.17	
High Yield Fixed Income x Internal Composite (hedged)	1.58	4.26	7.55	N/A	N/A	N/A	N/A	N/A	N/A	N/A	7.55	10/01/2016





Trailing Period Performance

Performance (%)

	1 Quarter	2 Quarters Ending Jun-2017	3 Quarters Ending Jun-2017	FYTD	1 Year	3 Years	5 Years	10 Years	15 Years	20 Years	Since Inception	Inception Date
Blended Policy (Barclays Corporate HY)	2.17	4.93	6.77	12.70	12.70	4.48	6.89	7.64	9.02	7.25	6.77	
Value Added	-0.59	-0.67	0.78	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.78	
Insight Oxygen - HY (notional)	-5.83	-6.77	-0.24	-1.06	-1.06	N/A	N/A	N/A	N/A	N/A	0.03	07/01/2015
HY Currency Hedge Benchmark	-5.89	-6.85	-0.52	-1.30	-1.30	6.53	2.17	0.71	N/A	N/A	-0.30	
Value Added	0.06	0.08	0.28	0.24	0.24	N/A	N/A	N/A	N/A	N/A	0.33	
High Yield Fixed Income Composite (Unhedged)	2.05	4.81	7.30	11.97	11.97	5.43	8.45	7.40	9.27	N/A	7.99	10/01/1999
Blended Policy (Barclays Corporate HY)	2.17	4.93	6.77	12.70	12.70	4.48	6.89	7.64	9.02	7.25	7.73	
Value Added	-0.11	-0.08	0.62	-0.73	-0.73	0.95	1.57	-0.24	0.25	N/A	0.16	
High Yield Fixed Income x Internal Composite (unhedged)	2.07	4.88	7.44	N/A	N/A	N/A	N/A	N/A	N/A	N/A	7.44	10/01/2016
Blended Policy (Barclays Corporate HY)	2.17	4.93	6.77	12.70	12.70	4.48	6.89	7.64	9.02	7.25	6.77	
Value Added	-0.10	-0.05	0.67	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.67	
Mezzanine High Yield Composite	4.95	5.19	5.13	4.43	4.43	N/A	N/A	N/A	N/A	N/A	-2.78	05/01/2015
BlmBg. U.S. Corp. High Yield	2.17	4.93	6.77	12.70	12.70	4.48	6.89	7.67	9.06	6.98	5.96	
Value Added	2.79	0.26	-1.64	-8.21	-8.21	N/A	N/A	N/A	N/A	N/A	-8.74	
Internally Managed Private Debt Co-Investment	0.00	-6.87	-7.66	-8.30	-8.30	-22.74	N/A	N/A	N/A	N/A	-15.62	09/01/2013
BlmBg. U.S. Corp. High Yield	2.17	4.93	6.77	12.70	12.70	4.48	6.89	7.67	9.06	6.98	5.88	
Value Added	-2.17	-11.80	-14.43	-21.00	-21.00	-27.22	N/A	N/A	N/A	N/A	-21.50	
Mezzanine High Yield Composite x Internal	5.10	5.58	5.53	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5.53	10/01/2016
BlmBg. U.S. Corp. High Yield	2.17	4.93	6.77	12.70	12.70	4.48	6.89	7.67	9.06	6.98	6.77	
Value Added	2.93	0.63	-1.24	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-1.24	
Carlyle Energy Mezz. Opp. Fund	-8.40	-9.43	-5.96	-18.66	-18.66	-20.10	N/A	N/A	N/A	N/A	-6.92	10/01/2012
BlmBg. U.S. Corp. High Yield	2.17	4.93	6.77	12.70	12.70	4.48	6.89	7.67	9.06	6.98	6.27	
Value Added	-10.57	-14.36	-12.73	-31.36	-31.36	-24.58	N/A	N/A	N/A	N/A	-13.19	
Carlyle Energy Mezz. Opp. Fund II	-2.39	-3.59	-7.44	-25.54	-25.54	N/A	N/A	N/A	N/A	N/A	-15.10	11/01/2015
BlmBg. U.S. Corp. High Yield	2.17	4.93	6.77	12.70	12.70	4.48	6.89	7.67	9.06	6.98	9.96	
Value Added	-4.56	-8.52	-14.21	-38.24	-38.24	N/A	N/A	N/A	N/A	N/A	-25.06	
ICG Europe Fund V	15.23	12.18	9.81	13.97	13.97	3.46	N/A	N/A	N/A	N/A	7.76	01/01/2013
BlmBg. U.S. Corp. High Yield	2.17	4.93	6.77	12.70	12.70	4.48	6.89	7.67	9.06	6.98	5.87	
Value Added	13.06	7.25	3.04	1.27	1.27	-1.02	N/A	N/A	N/A	N/A	1.89	
ICG Europe Fund VI	16.67	28.25	28.57	47.09	47.09	N/A	N/A	N/A	N/A	N/A	92.80	02/01/2016
BlmBg. U.S. Corp. High Yield	2.17	4.93	6.77	12.70	12.70	4.48	6.89	7.67	9.06	6.98	17.00	
Value Added	14.50	23.32	22.80	34.39	34.39	N/A	N/A	N/A	N/A	N/A	75.80	
Bain Capital Middle Market Credit 2010 L.P.	-1.43	1.81	1.30	0.80	0.80	0.66	5.66	N/A	N/A	N/A	6.56	06/01/2010
BlmBg. U.S. Corp. High Yield	2.17	4.93	6.77	12.70	12.70	4.48	6.89	7.67	9.06	6.98	8.24	
Value Added	-3.60	-3.12	-5.47	-11.90	-11.90	-3.82	-1.23	N/A	N/A	N/A	-1.98	
Bain Capital Middle Market Credit 2014 L.P.	2.35	4.28	6.01	8.40	8.40	4.46	N/A	N/A	N/A	N/A	4.88	11/01/2013
BlmBg. U.S. Corp. High Yield	2.17	4.93	6.77	12.70	12.70	4.48	6.89	7.67	9.06	6.98	5.47	
Value Added	0.18	-0.65	-0.76	-4.30	-4.30	-0.02	N/A	N/A	N/A	N/A	-0.58	
Opportunistic High Yield Composite	0.51	3.05	7.59	14.40	14.40	N/A	N/A	N/A	N/A	N/A	7.77	05/01/2015
BlmBg. U.S. Corp. High Yield	2.17	4.93	6.77	12.70	12.70	4.48	6.89	7.67	9.06	6.98	5.96	
Value Added	-1.66	-1.88	1.11	1.70	1.70	N/A	N/A	N/A	N/A	N/A	1.81	
Apollo European Principal Fund II	2.17	4.93	6.77	12.66	12.66	10.95	N/A	N/A	N/A	N/A	7.85	10/01/2012
BlmBg. U.S. Corp. High Yield	2.17	4.93	6.77	12.70	12.70	4.48	6.89	7.67	9.06	6.98	6.27	
Value Added	3.73	1.98	2.35	-0.04	-0.04	6.47	N/A	N/A	N/A	N/A	1.58	
Bain Capital Credit Opp. Fund IV	3.86	9.05	7.52	8.74	8.74	0.84	3.29	N/A	N/A	N/A	7.36	10/01/2008
BlmBg. U.S. Corp. High Yield	2.17	4.93	6.77	12.70	12.70	4.48	6.89	7.67	9.06	6.98	10.26	
Value Added	1.69	4.12	0.75	-3.96	-3.96	-3.64	-3.60	N/A	N/A	N/A	-2.90	
Bain Capital Distressed and Special Situations 2013	1.01	2.90	5.52	14.21	14.21	3.53	N/A	N/A	N/A	N/A	5.51	10/01/2012

Trailing Period Performance

Performance (%)

	1 Quarter	2 Quarters Ending Jun-2017	3 Quarters Ending Jun-2017	FYTD	1 Year	3 Years	5 Years	10 Years	15 Years	20 Years	Since Inception	Inception Date
Bimbg. Barc. U.S. Corp. High Yield Value Added	2.17	4.93	6.77	12.70	12.70	4.48	6.89	7.67	9.06	6.98	6.27	
Bain Capital Distressed and Special Situations 2016 (A), L.P.	-1.16	-2.03	-1.25	1.51	1.51	-0.95	N/A	N/A	N/A	N/A	-0.76	11/01/2015
Bimbg. Barc. U.S. Corp. High Yield Value Added	2.17	4.93	6.77	12.70	12.70	4.48	6.89	7.67	9.06	6.98	9.96	
TPG Opportunities Partners II, LP Value Added	-0.34	-0.56	1.54	9.68	9.68	N/A	N/A	N/A	N/A	N/A	9.63	
Bimbg. Barc. U.S. Corp. High Yield Value Added	0.47	2.50	3.38	5.30	5.30	13.55	14.10	N/A	N/A	N/A	12.87	04/01/2012
TPG Opportunities Partners III, LP Value Added	-1.70	-2.43	-3.39	-7.40	-7.40	9.07	7.21	N/A	N/A	N/A	5.75	
Bimbg. Barc. U.S. Corp. High Yield Value Added	2.27	6.32	7.71	13.83	13.83	6.91	N/A	N/A	N/A	N/A	3.42	02/01/2014
TPG Opportunities Partners III, LP Value Added	2.17	4.93	6.77	12.70	12.70	4.48	6.89	7.67	9.06	6.98	5.34	
Bimbg. Barc. U.S. Corp. High Yield Value Added	0.10	1.39	0.94	1.13	1.13	2.43	N/A	N/A	N/A	N/A	-1.92	
TOP NPL (A) Value Added	-2.80	-1.74	-2.36	-7.61	-7.61	12.29	14.06	N/A	N/A	N/A	13.60	04/01/2012
Bimbg. Barc. U.S. Corp. High Yield Value Added	2.17	4.93	6.77	12.70	12.70	4.48	6.89	7.67	9.06	6.98	6.82	
TPG TAO Value Added	-4.97	-6.67	-9.13	-20.31	-20.31	7.81	7.17	N/A	N/A	N/A	6.88	
Bimbg. Barc. U.S. Corp. High Yield Value Added	2.17	4.93	6.77	12.70	12.70	4.48	6.89	7.67	9.06	6.98	8.17	01/01/2015
Brigade Distressed Value	0.67	5.88	10.92	17.50	17.50	4.43	7.83	N/A	N/A	N/A	7.50	10/01/2011
1-Month Libor + 5% Value Added	1.49	2.95	4.37	5.78	5.78	5.43	5.34	5.82	6.56	7.47	5.33	
Brigade Structured Credit Offshore Fund Value Added	-0.82	2.93	6.55	11.72	11.72	-1.00	2.49	N/A	N/A	N/A	2.17	
Barclays Corporate High Yield + 0.25% Value Added	-0.34	4.35	10.69	19.43	19.43	N/A	N/A	N/A	N/A	N/A	8.64	11/01/2014
Avenue Energy Opportunities Fund Value Added	2.24	5.06	6.97	12.98	12.98	4.75	7.16	7.94	9.34	7.24	5.60	
Bimbg. Barc. U.S. Corp. High Yield Value Added	-2.58	-0.71	3.72	6.45	6.45	N/A	N/A	N/A	N/A	N/A	3.04	
Avenue Energy Opportunities Fund Value Added	-3.41	-3.22	8.70	20.70	20.70	N/A	N/A	N/A	N/A	N/A	1.01	02/01/2015
Bimbg. Barc. U.S. Corp. High Yield Value Added	2.17	4.93	6.77	12.70	12.70	4.48	6.89	7.67	9.06	6.98	6.58	
Avenue Europe SS III Value Added	-5.58	-8.16	1.93	8.00	8.00	N/A	N/A	N/A	N/A	N/A	-5.57	
Bimbg. Barc. U.S. Corp. High Yield Value Added	1.94	5.24	20.21	17.43	17.43	N/A	N/A	N/A	N/A	N/A	7.44	01/01/2016
Real Asset High Yield Composite Value Added	2.17	4.93	6.77	12.70	12.70	4.48	6.89	7.67	9.06	6.98	14.74	
Bimbg. Barc. U.S. Corp. High Yield Value Added	-0.23	0.31	13.44	4.73	4.73	N/A	N/A	N/A	N/A	N/A	-7.30	06/01/2015
Blended Benchmark (Barclays US MBS) Value Added	2.76	5.87	6.14	6.46	6.46	N/A	N/A	N/A	N/A	N/A	5.90	
Galton Onshore Mortgage Recovery Fund III, LP Value Added	2.17	4.93	6.77	12.70	12.70	4.48	6.89	7.67	9.06	6.98	5.96	
Meriner/Galton RMBS Value Added	0.59	0.94	-0.63	-4.24	-4.24	N/A	N/A	N/A	N/A	N/A	-0.06	
Blended Benchmark (Barclays US MBS) Value Added	2.41	4.55	4.18	7.30	7.30	6.05	6.45	N/A	N/A	N/A	8.42	05/01/2010
Galton Onshore Mortgage Recovery Fund III, LP Value Added	0.87	1.35	-0.65	-0.06	-0.06	2.17	4.39	N/A	N/A	N/A	5.32	
Bimbg. Barc. U.S. Corp. High Yield Value Added	1.54	3.20	4.83	7.36	7.36	3.88	4.06	N/A	N/A	N/A	3.10	
Meriner International Infrastructure Value Added	4.92	10.90	10.76	12.49	12.49	2.48	N/A	N/A	N/A	N/A	1.81	11/01/2013
Bimbg. Barc. U.S. Corp. High Yield Value Added	2.17	4.93	6.77	12.70	12.70	4.48	6.89	7.67	9.06	6.98	5.47	
Meriner International Infrastructure Value Added	2.75	5.97	3.99	-0.21	-0.21	-2.02	N/A	N/A	N/A	N/A	-3.66	
Bimbg. Barc. U.S. Corp. High Yield Value Added	4.06	5.74	6.28	8.53	8.53	5.08	N/A	N/A	N/A	N/A	3.20	12/01/2013
The Verde Scratch and Dent Fund, LP Value Added	2.17	4.93	6.77	12.70	12.70	4.48	6.89	7.67	9.06	6.98	5.45	
Bimbg. Barc. U.S. Corp. High Yield Value Added	1.89	0.81	-0.49	-4.17	-4.17	0.60	N/A	N/A	N/A	N/A	-2.25	
The Verde Scratch and Dent Fund, LP Value Added	2.17	4.93	6.77	12.70	12.70	4.48	6.89	7.67	9.06	6.98	5.81	12/01/2014
The Verde Scratch and Dent Fund Feed I-A Value Added	-1.30	-0.74	-1.66	-5.41	-5.41	N/A	N/A	N/A	N/A	N/A	2.82	
Bimbg. Barc. U.S. Corp. High Yield Value Added	0.67	2.33	5.45	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	08/01/2016
Latitude Management Real Estate Capital IV Value Added	2.17	4.93	6.77	12.70	12.70	4.48	6.89	7.67	9.06	6.98	9.73	
Latitude Management Real Estate Capital IV Value Added	-1.50	-2.60	-1.32	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	





Trailing Period Performance

Performance (%)

	1 Quarter	2 Quarters Ending Jun-2017	3 Quarters Ending Jun-2017	FYTD	1 Year	3 Years	5 Years	10 Years	15 Years	20 Years	Since Inception	Inception Date
Bimbg. Barc. U.S. Corp. High Yield Value Added	2.17	4.93	6.77	12.70	12.70	4.48	6.89	7.67	9.06	6.98	1.01	
Senior Loans High Yield Composite	2.77	6.69	8.14	13.04	13.04	N/A	N/A	N/A	N/A	N/A	-3.10	06/01/2015
Bimbg. Barc. U.S. Corp. High Yield Value Added	2.17	4.93	6.77	12.70	12.70	4.48	6.89	7.67	9.06	6.98	5.96	
Value Added	0.60	1.76	1.37	0.34	0.34	N/A	N/A	N/A	N/A	N/A	2.56	
Carbanus Levered Loan Fund I	1.75	3.36	5.35	7.23	7.23	3.57	5.25	7.67	9.06	6.98	5.88	01/01/2012
Bimbg. Barc. U.S. Corp. High Yield Value Added	-0.42	-1.57	-1.42	-5.47	-5.47	-0.91	-1.64	N/A	N/A	N/A	-1.73	
Carbanus Levered Loan Fund II	0.48	1.35	2.17	4.27	4.27	6.49	N/A	N/A	N/A	N/A	8.52	01/01/2013
Bimbg. Barc. U.S. Corp. High Yield Value Added	2.17	4.93	6.77	12.70	12.70	4.48	6.89	7.67	9.06	6.98	5.87	
Value Added	-1.69	-3.58	-4.60	-8.43	-8.43	2.01	N/A	N/A	N/A	N/A	2.65	
Carbanus PSERS Levered Loan Opportunities Fund	4.41	11.33	17.35	27.07	27.07	N/A	N/A	N/A	N/A	N/A	38.91	10/01/2015
Bimbg. Barc. U.S. Corp. High Yield Value Added	2.17	4.93	6.77	12.70	12.70	4.48	6.89	7.67	9.06	6.98	11.17	
Value Added	2.24	6.40	10.58	14.37	14.37	N/A	N/A	N/A	N/A	N/A	27.74	
LBC Credit Partners II	10.61	23.28	27.85	32.31	32.31	17.94	20.22	N/A	N/A	N/A	12.43	01/01/2008
Bimbg. Barc. U.S. Corp. High Yield Value Added	2.17	4.93	6.77	12.70	12.70	4.48	6.89	7.67	9.06	6.98	13.17	
Value Added	8.44	18.35	21.08	19.61	19.61	13.46	13.33	N/A	N/A	N/A	-0.74	
LBC Credit Partners III	-0.55	-0.48	1.48	4.05	4.05	11.40	N/A	N/A	N/A	N/A	13.45	04/01/2013
Bimbg. Barc. U.S. Corp. High Yield Value Added	2.17	4.93	6.77	12.70	12.70	4.48	6.89	7.67	9.06	6.98	5.51	
Value Added	-2.72	-5.41	-5.29	-8.65	-8.65	6.92	N/A	N/A	N/A	N/A	7.94	
LBC-P Credit Fund LP	6.16	15.56	17.35	N/A	N/A	N/A	N/A	N/A	N/A	N/A	17.35	10/01/2016
Bimbg. Barc. U.S. Corp. High Yield Value Added	2.17	4.93	6.77	12.70	12.70	4.48	6.89	7.67	9.06	6.98	6.77	
Value Added	3.99	10.63	10.58	N/A	N/A	N/A	N/A	N/A	N/A	N/A	10.58	
Summit Partners Credit Fund II LP	2.37	6.36	9.69	14.17	14.17	N/A	N/A	N/A	N/A	N/A	6.09	11/01/2014
Bimbg. Barc. U.S. Corp. High Yield Value Added	2.17	4.93	6.77	12.70	12.70	4.48	6.89	7.67	9.06	6.98	5.34	
Value Added	0.20	1.43	2.92	1.47	1.47	N/A	N/A	N/A	N/A	N/A	0.75	
Oaktree Loan Fund 2X, LP	-0.81	-1.33	1.70	-2.73	-2.73	-10.82	-2.63	N/A	N/A	N/A	2.74	01/01/2008
Bimbg. Barc. U.S. Corp. High Yield Value Added	2.17	4.93	6.77	12.70	12.70	4.48	6.89	7.67	9.06	6.98	8.20	
Value Added	-2.98	-8.26	-5.07	-15.43	-15.43	-15.30	-9.52	N/A	N/A	N/A	-5.46	
Bain Capital Credit Managed Account (PSERS), LP	1.87	5.26	9.18	16.10	16.10	3.90	6.03	N/A	N/A	N/A	7.84	07/01/2009
Bimbg. Barc. U.S. Corp. High Yield Value Added	2.17	4.93	6.77	12.70	12.70	4.48	6.89	7.67	9.06	6.98	10.32	
Value Added	-0.30	0.33	2.41	3.40	3.40	-0.58	-0.86	N/A	N/A	N/A	-2.48	
Park Square Credit Opportunities	1.66	3.74	5.44	9.88	9.88	N/A	N/A	N/A	N/A	N/A	15.87	11/01/2015
Bimbg. Barc. U.S. Corp. High Yield Value Added	2.17	4.93	6.77	12.70	12.70	4.48	6.89	7.67	9.06	6.98	9.96	
Value Added	-0.21	-1.19	-1.33	-2.82	-2.82	N/A	N/A	N/A	N/A	N/A	5.91	
Hayfin Special Opportunities Credit LP	6.69	13.17	7.95	11.38	11.38	1.54	N/A	N/A	N/A	N/A	4.83	03/01/2013
Bimbg. Barc. U.S. Corp. High Yield Value Added	2.17	4.93	6.77	12.70	12.70	4.48	6.89	7.67	9.06	6.98	5.65	
Value Added	4.52	8.24	1.18	-1.32	-1.32	-2.94	N/A	N/A	N/A	N/A	-0.82	
Hayfin SOF II USD Co-Invest	3.33	3.61	6.20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	06/01/2016
Bimbg. Barc. U.S. Corp. High Yield Value Added	2.17	4.93	6.77	12.70	12.70	4.48	6.89	7.67	9.06	6.98	9.73	
Value Added	1.16	-1.32	-0.57	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Hayfin SOF II USD LP	0.78	16.94	4.73	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	09/01/2016
Bimbg. Barc. U.S. Corp. High Yield Value Added	2.17	4.93	6.77	12.70	12.70	4.48	6.89	7.67	9.06	6.98	7.48	
Value Added	-1.39	12.01	-2.04	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Inflation Protected (levered)	-1.80	-0.91	-2.94	3.18	3.18	N/A	N/A	N/A	N/A	N/A	5.83	10/01/2014
Inflation Protected (unlevered)	-0.74	-0.29	-1.16	1.98	1.98	N/A	N/A	N/A	N/A	N/A	4.88	10/01/2014
Blended Policy (Barclays World Inflation Linked Bond - Hedged) Value Added	-0.42	0.28	-1.78	1.93	1.93	2.07	1.12	4.72	5.16	N/A	3.03	
	-0.32	-0.57	0.62	0.05	0.05	N/A	N/A	N/A	N/A	N/A	1.85	



As of June 30, 2017

Trailing Period Performance

Performance (%)

	1 Quarter	2 Quarters Ending Jun-2017	3 Quarters Ending Jun-2017	FYTD	1 Year	3 Years	5 Years	10 Years	15 Years	20 Years	Since Inception	Inception Date
TIPS Composite (levered)	-1.80	-0.91	-2.94	3.18	3.18	4.70	3.52	8.79	N/A	N/A	7.34	04/01/2004
Blended Policy (Barclays World Inflation Linked Bond - Hedged)	-0.42	0.28	-1.78	1.93	1.93	2.07	1.12	4.72	5.16	N/A	4.18	
Value Added	-1.38	-1.19	-1.16	1.25	1.25	2.63	2.50	4.07	N/A	N/A	3.16	
Blended Policy (Net Levered TIPS)	-1.17	-0.04	-4.43	2.66	-4.43	3.27	1.49	N/A	N/A	N/A	N/A	
Value Added	-0.63	-0.87	1.49	0.52	0.52	1.43	2.13	N/A	N/A	N/A	N/A	
TIPS Composite (Unlevered)	-0.74	-0.29	-1.16	1.98	1.98	3.89	3.35	8.55	5.16	N/A	7.41	04/01/2004
Blended Policy (Barclays World Inflation Linked Bond - Hedged)	-0.42	0.28	-1.78	1.93	1.93	2.07	1.12	4.72	5.16	N/A	4.18	
Value Added	-0.32	-0.57	0.05	0.05	0.05	1.82	2.23	4.13	N/A	N/A	3.23	
Bridgewater TIPS (unlevered)	-1.08	-1.22	-1.38	3.06	3.06	N/A	N/A	N/A	N/A	N/A	1.80	02/01/2015
BGI Custom IL Bond Index (unlevered)	-0.40	-0.75	-2.70	1.50	1.50	N/A	N/A	N/A	N/A	N/A	N/A	
Value Added	-0.68	-0.47	1.32	1.56	1.56	N/A	N/A	N/A	N/A	N/A	N/A	
Bridgewater TIPS (levered)	-2.41	-2.61	-3.20	5.56	5.56	6.98	5.72	12.02	N/A	N/A	10.35	07/01/2004
BGI Custom IL Bond Index (levered)	-1.12	-1.84	-5.90	2.27	2.27	7.02	N/A	N/A	N/A	N/A	N/A	
Value Added	-1.29	-0.77	2.70	3.29	3.29	-0.04	N/A	N/A	N/A	N/A	N/A	
Garda Inflation Opportunity Composite (levered)	-1.59	2.65	-6.73	-1.73	-1.73	N/A	N/A	N/A	N/A	N/A	2.29	08/01/2014
Blended Benchmark (Garda)	-3.44	1.62	-9.59	-6.01	-6.01	-1.57	N/A	N/A	N/A	N/A	-1.18	
Value Added	1.85	1.06	2.86	4.28	4.28	N/A	N/A	N/A	N/A	N/A	3.47	
Garda Inflation Opportunity Composite (unlevered)	-0.31	1.10	-1.36	-0.19	-0.19	N/A	N/A	N/A	N/A	N/A	N/A	01/01/2015
Bimbg. Barc. Global Inflation-Linked U.S. TIPS	-0.40	0.85	-1.58	-0.63	-0.63	0.63	0.27	4.27	4.86	N/A	1.60	
Value Added	0.09	0.25	0.22	0.44	0.44	N/A	N/A	N/A	N/A	N/A	N/A	
Blended Benchmark (Garda)	-3.49	1.26	-10.46	-5.21	-5.21	0.59	N/A	N/A	N/A	N/A	-2.24	03/01/2013
Value Added	-3.44	1.62	-9.59	-6.01	-6.01	-1.57	N/A	N/A	N/A	N/A	-4.91	
Garda Inflation Opp. Fund CI B (levered)	-0.05	-0.36	-0.87	0.80	0.80	2.16	N/A	N/A	N/A	N/A	2.67	
Garda Inflation Opp. Fund CI B (unlevered)	-0.50	0.86	-1.80	-0.75	-0.75	N/A	N/A	N/A	N/A	N/A	1.01	02/01/2015
Bimbg. Barc. Global Inflation-Linked U.S. TIPS	-0.40	0.85	-1.58	-0.63	-0.63	0.63	0.27	4.27	4.86	N/A	0.36	
Value Added	-0.10	0.01	-0.22	-0.12	-0.12	N/A	N/A	N/A	N/A	N/A	0.65	
Garda Fixed Income Relative Value Opportunity Fund Ltd. (TIPS)	1.84	3.98	5.29	8.68	8.68	N/A	N/A	N/A	N/A	N/A	4.53	06/01/2014
PSERS Total TIPS (levered)	-0.88	0.62	-1.15	0.45	0.45	1.27	0.90	6.04	N/A	N/A	5.23	04/01/2004
PSERS Total TIPS (unlevered)	-0.54	0.72	-0.77	0.75	0.75	1.37	0.96	4.89	N/A	N/A	4.37	04/01/2004
Bimbg. Barc. Global Inflation-Linked U.S. TIPS	-0.40	0.85	-1.58	-0.63	-0.63	0.63	0.27	4.27	4.86	N/A	3.84	
Value Added	-0.14	-0.13	0.81	1.38	1.38	0.74	0.69	0.62	N/A	N/A	0.53	
PSERS TIPS (levered)	-0.32	1.08	-1.30	0.19	0.19	1.18	0.84	6.01	N/A	N/A	5.21	04/01/2004
PSERS TIPS (unlevered)	-0.32	1.08	-1.30	0.19	0.19	1.18	0.84	4.83	N/A	N/A	4.32	04/01/2004
Bimbg. Barc. Global Inflation-Linked U.S. TIPS	-0.40	0.85	-1.58	-0.63	-0.63	0.63	0.27	4.27	4.86	N/A	3.84	
Value Added	0.08	0.23	0.28	0.82	0.82	0.55	0.57	0.56	N/A	N/A	0.48	
PIMCO Multi-Sector Strategy	1.48	2.86	-0.20	1.32	1.32	1.95	3.26	N/A	N/A	N/A	3.26	07/01/2012
Blended Policy (PIMCO Multi-Sector)	1.49	2.11	-1.83	-1.30	-1.30	1.84	3.20	4.98	4.82	5.50	3.20	
Value Added	-0.01	0.75	1.63	2.62	2.62	0.11	0.06	N/A	N/A	N/A	0.06	
Real Assets (levered/hedged)	-0.68	2.59	3.03	5.23	5.23	N/A	N/A	N/A	N/A	N/A	3.15	10/01/2014
Real Assets (unlevered/hedged)	-0.56	2.32	2.37	-4.12	-4.12	N/A	N/A	N/A	N/A	N/A	-0.37	10/01/2014
Blended Policy (Real Assets) (Hedged)	-0.98	1.49	0.75	0.64	0.64	N/A	N/A	N/A	N/A	N/A	2.24	
Value Added	0.42	0.61	1.62	3.48	3.48	N/A	N/A	N/A	N/A	N/A	2.24	
Real Assets (levered/unhedged)	-0.50	3.03	2.93	5.16	5.16	N/A	N/A	N/A	N/A	N/A	3.18	10/01/2014
Real Assets (unlevered/unhedged)	-0.41	2.37	2.30	-4.06	-4.06	N/A	N/A	N/A	N/A	N/A	1.50	10/01/2014
Blended Policy (Real Assets) (Unhedged)	-0.81	1.83	0.69	0.59	0.59	N/A	N/A	N/A	N/A	N/A	-0.35	
Value Added	0.40	0.54	1.61	3.47	3.47	N/A	N/A	N/A	N/A	N/A	2.25	

As of June 30, 2017

Trailing Period Performance

Performance (%)

	1 Quarter	2 Quarters Ending Jun-2017	3 Quarters Ending Jun-2017	FYTD	1 Year	3 Years	5 Years	10 Years	15 Years	20 Years	Since Inception	Inception Date
Real Assets x Private Real Estate/Infra (levered/unhedged)	-4.12	0.60	-0.79	0.97	0.97	N/A	N/A	N/A	N/A	N/A	-7.84	10/01/2014
Real Assets x Private Real Estate/Infra (unlevered/hedged)	-2.73	0.38	-0.49	0.68	0.68	N/A	N/A	N/A	N/A	N/A	-10.00	10/01/2014
Blended Policy (Real Assets x Private RE) (Hedged)	-1.99	0.62	-0.57	-1.04	-1.04	N/A	N/A	N/A	N/A	N/A	-8.84	
Value Added	-0.24	-0.24	0.09	1.72	1.72	N/A	N/A	N/A	N/A	N/A	-1.16	
Real Assets x Private Real Estate/Infra (levered/unhedged)	-3.76	1.29	-1.00	0.80	0.80	N/A	N/A	N/A	N/A	N/A	-7.78	10/01/2014
Real Assets x Private Real Estate/Infra (unlevered/hedged)	-2.49	0.93	-0.60	0.50	0.50	N/A	N/A	N/A	N/A	N/A	-9.96	10/01/2014
Blended Policy (Real Assets x Private RE) (Unhedged)	-1.72	1.15	-0.72	-1.16	-1.16	N/A	N/A	N/A	N/A	N/A	-8.83	
Value Added	-0.77	-0.33	0.12	1.74	1.74	N/A	N/A	N/A	N/A	N/A	-1.13	
Infrastructure Composite (levered/hedged)	9.32	24.31	21.60	22.44	22.44	N/A	N/A	N/A	N/A	N/A	22.36	11/01/2015
Infrastructure Composite (unlevered/hedged)	4.53	11.52	10.37	10.86	10.86	N/A	N/A	N/A	N/A	N/A	12.02	11/01/2015
FTSE Dev. Core Infrast 50/50 100% Hdq Index - Net	3.63	10.55	9.42	10.15	10.15	8.46	12.70	N/A	N/A	N/A	10.88	
Value Added	0.90	0.97	0.95	0.71	0.71	N/A	N/A	N/A	N/A	N/A	1.14	
Inflight Nevada - Infra (notional)	-2.90	-4.85	0.86	0.23	0.23	N/A	N/A	N/A	N/A	N/A	-2.17	12/01/2015
Infra Currency Hedge Benchmark	-2.80	-4.70	1.05	0.50	0.50	N/A	N/A	N/A	N/A	N/A	-1.98	
Value Added	-0.10	-0.15	-0.19	-0.27	-0.27	N/A	N/A	N/A	N/A	N/A	-0.19	
Infrastructure Composite (levered/unhedged)	10.85	28.54	18.04	19.52	19.52	N/A	N/A	N/A	N/A	N/A	22.92	11/01/2015
Infrastructure Composite (unlevered/hedged)	5.42	13.56	9.17	9.97	9.97	N/A	N/A	N/A	N/A	N/A	11.36	11/01/2015
FTSE Developed Core Infrast 50/50 Index (Net)	5.10	13.22	8.85	9.82	9.82	5.46	10.76	N/A	N/A	N/A	11.22	
Value Added	0.32	0.34	0.32	0.15	0.15	N/A	N/A	N/A	N/A	N/A	0.14	
Private Infrastructure Composite	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.27	05/01/2017
PSERS Infrastructure Private	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.27	05/01/2017
Publicly-Traded Infrastructure Composite (levered)	10.95	28.54	19.04	19.52	19.52	N/A	N/A	N/A	N/A	N/A	22.92	11/01/2015
Publicly-Traded Infrastructure Composite (unlevered)	5.02	13.13	8.76	9.55	9.55	N/A	N/A	N/A	N/A	N/A	12.29	11/01/2015
FTSE Developed Core Infrast 50/50 Index (Net)	5.10	13.22	8.85	9.82	9.82	5.46	10.76	N/A	N/A	N/A	11.22	
Value Added	-0.08	-0.09	-0.09	-0.27	-0.27	N/A	N/A	N/A	N/A	N/A	1.07	
PSERS Infrastructure Index (levered)	9.73	27.24	16.31	16.31	16.31	N/A	N/A	N/A	N/A	N/A	22.18	11/01/2015
PSERS Infrastructure Index (unlevered)	5.02	13.13	8.76	9.55	9.55	N/A	N/A	N/A	N/A	N/A	11.11	11/01/2015
FTSE Developed Core Infrast 50/50 Index (Net)	5.10	13.22	8.85	9.82	9.82	5.46	10.76	N/A	N/A	N/A	11.22	
Value Added	-0.08	-0.09	-0.09	-0.27	-0.27	N/A	N/A	N/A	N/A	N/A	-0.11	
MLP Composite	-6.96	-3.33	-0.52	4.19	4.19	-3.71	7.23	N/A	N/A	N/A	14.93	10/01/2008
S&P MLP Index	-6.38	-2.92	0.30	3.23	3.23	-11.25	2.48	5.99	11.13	N/A	10.91	
Value Added	-0.58	-0.41	-0.82	0.96	0.96	2.54	4.75	N/A	N/A	N/A	4.07	
PSERS MLP	-6.20	-2.69	0.47	3.41	3.41	N/A	N/A	N/A	N/A	N/A	-4.76	08/01/2015
MLP Internal Blended Benchmark	-6.47	-3.01	0.21	3.14	3.14	-11.28	2.46	5.99	11.12	N/A	-6.76	
Value Added	0.27	0.32	0.26	0.27	0.27	N/A	N/A	N/A	N/A	N/A	2.00	
External MLP Composite	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-0.33	09/01/2017
S&P MLP Index	-6.38	-2.92	0.30	3.23	3.23	-11.25	2.48	5.99	11.13	N/A	-0.24	
Value Added	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-0.09	
Atlantic Trust	-7.31	-4.34	-1.16	3.98	3.98	-7.87	N/A	N/A	N/A	N/A	6.11	09/01/2012
S&P MLP Index	-6.38	-2.92	0.30	3.23	3.23	-11.25	2.48	5.99	11.13	N/A	1.18	
Value Added	-0.93	-1.42	-1.46	0.75	0.75	3.38	N/A	N/A	N/A	N/A	4.93	
PSERS Harvest Funds MLP	-6.85	-2.86	-1.27	2.97	2.97	-7.85	7.27	N/A	N/A	N/A	15.00	10/01/2008
S&P MLP Index	-6.38	-2.92	0.30	3.23	3.23	-11.25	2.48	5.99	11.13	N/A	10.91	
Value Added	-0.47	0.06	-1.57	-0.26	-0.26	3.40	4.79	N/A	N/A	N/A	4.09	
Salient	-7.38	-3.44	0.25	6.61	6.61	-10.78	N/A	N/A	N/A	N/A	6.09	08/01/2012
S&P MLP Index	-6.38	-2.92	0.30	3.23	3.23	-11.25	2.48	5.99	11.13	N/A	1.50	
Value Added	-1.00	-0.52	-0.05	3.38	3.38	0.47	N/A	N/A	N/A	N/A	4.59	





Trailing Period Performance

Performance (%)

	1 Quarter	2 Quarters Ending Jun-2017	3 Quarters Ending Jun-2017	FYTD	1 Year	3 Years	5 Years	10 Years	15 Years	20 Years	Since Inception	Inception Date
Commodities Composite (levered)	-4.58	0.53	-5.68	-7.44	-7.44	-12.28	-7.51	-4.89	N/A	N/A	-2.98	11/01/2006
Commodities Composite (unlevered)	-2.20	0.20	-2.62	-3.48	-3.48	-8.02	-4.62	-3.42	N/A	N/A	-1.58	11/01/2006
Blended Policy (Commodities)	-2.15	-0.63	-3.68	-6.41	-6.41	-10.45	-6.49	-5.08	N/A	N/A	-4.33	
Value Added	-0.05	0.83	1.76	2.93	2.93	2.43	1.87	1.66	N/A	N/A	2.75	
PSERS Commodity Beta + PCAF Composite	-2.43	-2.55	0.64	-1.65	-1.65	-11.27	N/A	N/A	N/A	N/A	-11.20	05/01/2014
Bloomberg Commodity Index Total Return	-3.00	-5.26	-2.74	-6.50	-6.50	-14.81	-9.25	-6.49	-0.01	0.23	-14.72	
Value Added	0.57	2.40	3.38	5.44	5.44	3.54	N/A	N/A	N/A	N/A	3.52	
PSERS Commodity Beta (levered)	-6.94	-9.10	-2.37	-9.12	-9.12	-15.14	N/A	N/A	N/A	N/A	-14.87	05/01/2014
PSERS Commodity Beta (unlevered)	-2.72	-3.62	-0.90	-3.63	-3.63	-12.61	N/A	N/A	N/A	N/A	-12.48	05/01/2014
Bloomberg Commodity Index Total Return	-3.00	-5.26	-2.74	-6.50	-6.50	-14.81	-9.25	-6.49	-0.01	0.23	-14.72	
Value Added	0.28	1.64	1.84	2.87	2.87	2.20	N/A	N/A	N/A	N/A	2.24	
PIMCO Commodity Alpha Fund	1.85	5.41	10.85	19.37	19.37	N/A	N/A	N/A	N/A	N/A	14.15	03/01/2015
Labor (3 month)	0.30	0.56	0.80	0.99	0.99	0.58	0.46	0.94	1.62	2.47	0.68	
Value Added	1.65	4.85	10.05	18.38	18.38	N/A	N/A	N/A	N/A	N/A	13.47	
Gresham	-2.54	-4.09	-0.07	-3.23	-3.23	-14.11	-7.89	N/A	N/A	N/A	-5.16	10/01/2007
Bloomberg Commodity Index Total Return	-3.00	-5.26	-2.74	-6.50	-6.50	-14.81	-9.25	-6.49	-0.01	0.23	-14.72	
Value Added	0.46	1.17	2.67	3.27	3.27	0.70	1.36	N/A	N/A	N/A	2.07	
Wellington Management Company	-4.39	-5.65	-2.85	1.06	1.06	-11.58	-5.30	-3.30	N/A	N/A	-1.79	01/01/2007
Blended Benchmark (WMC)	-3.38	-5.14	-0.29	-0.28	-0.28	-11.79	-4.77	-1.99	N/A	N/A	-0.80	
Value Added	-1.01	-0.51	-2.56	1.34	1.34	0.21	-0.53	-1.31	N/A	N/A	-0.99	
PSERS Gold Fund (unlevered)	-0.97	7.03	-6.68	-7.45	-7.45	-2.88	-5.14	N/A	N/A	N/A	-4.57	06/01/2012
Bloomberg Gold Subindex Total Return	-0.77	7.39	-6.25	-6.94	-6.94	-2.67	-5.54	5.85	8.80	6.39	-4.98	
Value Added	-0.20	-0.36	-0.43	-0.51	-0.51	-0.21	0.40	N/A	N/A	N/A	0.41	
PTRES Composite (levered/hedged)	1.05	2.04	-1.45	0.34	0.34	5.80	7.46	2.71	9.41	N/A	9.24	07/01/1998
PTRES Composite (unlevered/hedged)	0.65	1.36	-0.91	0.32	0.32	4.46	6.65	2.32	9.13	N/A	9.02	07/01/1998
Blended Policy (PTRES) (Hedged)	1.91	2.95	1.29	1.41	1.41	3.65	7.42	2.09	8.30	N/A	8.33	
Value Added	-1.26	-1.59	-1.20	-1.09	-1.09	0.81	-0.77	0.23	0.83	N/A	0.69	
Insight Sierra - REIT (notional)	-1.74	-4.03	2.76	2.41	2.41	N/A	N/A	N/A	N/A	N/A	-1.43	12/01/2015
REIT Currency Hedge Benchmark	-1.70	-3.93	2.87	2.57	2.57	N/A	N/A	N/A	N/A	N/A	-1.27	
Value Added	-0.04	-0.10	-0.11	-0.16	-0.16	N/A	N/A	N/A	N/A	N/A	-0.16	
PTRES Composite (levered/unhedged)	2.08	4.43	-2.87	-0.99	-0.99	5.97	7.57	2.76	9.44	N/A	9.27	07/01/1998
PTRES Composite (unlevered/unhedged)	1.29	2.82	-1.85	-0.53	-0.53	4.58	6.72	2.35	9.15	N/A	9.04	07/01/1998
Blended Policy (PTRES) (Unhedged)	2.71	4.84	-1.03	0.21	0.21	3.70	7.46	2.11	8.31	N/A	8.34	
Value Added	-1.42	-2.02	-0.82	-0.74	-0.74	0.68	-0.74	0.24	0.84	N/A	0.70	
PSERS REIT Index (levered)	5.21	9.43	-2.74	-0.53	-0.53	N/A	N/A	N/A	N/A	N/A	8.20	11/01/2015
PSERS REIT Index (unlevered)	2.65	4.85	-0.93	0.27	0.27	N/A	N/A	N/A	N/A	N/A	4.54	11/01/2015
FTSE EPRA/NAREIT Developed Index (Net)	2.71	4.84	-1.03	0.21	0.21	3.67	7.50	1.98	N/A	N/A	4.46	
Value Added	-0.06	0.01	0.10	0.06	0.06	N/A	N/A	N/A	N/A	N/A	0.08	
Security Capital Preferred Growth	-3.58	-4.15	-6.53	-5.05	-5.05	5.29	7.16	N/A	N/A	N/A	7.38	07/01/2008
Wishare US Real Estate Securities Index	1.91	2.42	0.17	-1.23	-1.23	8.82	9.70	5.70	10.11	9.58	8.35	
Value Added	-5.49	-6.57	-6.70	-3.62	-3.62	-3.53	-2.54	N/A	N/A	N/A	-0.97	
Risk Parity Composite (vol adjusted)	1.08	4.44	3.36	7.17	7.17	2.05	3.22	N/A	N/A	N/A	3.72	10/01/2012
Blended Policy (Risk Parity)	1.98	6.17	2.00	5.81	5.81	3.33	4.81	8.22	10.01	9.67	3.82	
Value Added	-0.90	-1.73	1.36	1.36	1.36	-1.28	N/A	N/A	N/A	N/A	-0.70	
PSERS Risk Parity (vol adjusted)	1.46	5.41	3.67	7.82	7.82	4.00	N/A	N/A	N/A	N/A	3.47	02/01/2013
Bridgewater All Weather @15% (vol adjusted)	0.86	4.51	2.25	6.11	6.11	1.60	N/A	N/A	N/A	N/A	2.75	10/01/2012
DE Shaw Orientier HV (vol adjusted)	1.35	4.54	1.71	5.80	5.80	N/A	N/A	N/A	N/A	N/A	9.63	02/01/2016
BlackRock Market Advantage II (vol adjusted)	2.07	6.10	5.41	9.32	9.32	N/A	N/A	N/A	N/A	N/A	3.39	04/01/2015

As of June 30, 2017

Trailing Period Performance

Performance (%)

	1 Quarter	2 Quarters Ending Jun-2017	3 Quarters Ending Jun-2017	FYTD	1 Year	3 Years	5 Years	10 Years	15 Years	20 Years	Since Inception	Inception Date
Bridgewater Optimal (not adjusted)	-1.80	-1.96	5.67	10.15	10.15	N/A	N/A	N/A	N/A	N/A	2.41	11/01/2015
Total Absolute Return	0.13	1.81	6.39	9.00	9.00	3.16	4.09	4.99	N/A	N/A	5.25	10/01/2005
Blended Policy (3-month Libor + 3.5%)	1.17	2.31	3.43	4.53	4.53	4.10	5.45	6.67	7.11	7.33	6.86	
Value Added	-1.04	-0.50	2.96	4.47	4.47	-0.94	-1.36	-1.68	N/A	N/A	-1.60	
Apollo Aviation/SASOF III LP	10.61	11.50	34.64	29.53	29.53	N/A	N/A	N/A	N/A	N/A	-5.65	02/01/2015
Libor (1 month)	0.26	0.47	0.62	0.75	0.75	0.41	0.32	0.78	1.49	2.36	0.48	
Value Added	10.35	11.03	34.02	28.78	28.78	N/A	N/A	N/A	N/A	N/A	-6.13	
Oceanwood Opportunities Fund	4.28	11.03	15.97	22.41	22.41	N/A	N/A	N/A	N/A	N/A	4.94	09/01/2014
Libor (1 month)	0.26	0.47	0.62	0.75	0.75	0.41	0.32	0.78	1.49	2.36	0.43	
Value Added	4.02	10.56	15.35	21.66	21.66	N/A	N/A	N/A	N/A	N/A	4.51	
Perry Partners LP	-4.27	-8.12	2.15	2.14	2.14	-7.14	N/A	N/A	N/A	N/A	-4.85	12/01/2013
Libor (1 month)	0.26	0.47	0.62	0.75	0.75	0.41	0.32	0.78	1.49	2.36	0.37	
Value Added	-4.53	-8.59	1.53	1.39	1.39	-7.55	N/A	N/A	N/A	N/A	-5.22	
Elis Lake Domestic Fund, LP	-0.92	-1.67	-45.67	-45.32	-45.32	-26.22	N/A	N/A	N/A	N/A	-17.29	04/01/2013
Libor (1 month)	0.26	0.47	0.62	0.75	0.75	0.41	0.32	0.78	1.49	2.36	0.34	
Value Added	-1.18	-2.14	-46.29	-46.07	-46.07	-26.63	N/A	N/A	N/A	N/A	-17.63	
Garda Fixed Income Relative Value Opportunity Fund Ltd.	1.83	3.98	5.28	8.67	8.67	4.62	5.54	7.78	1.49	2.36	5.66	01/01/2012
Libor (1 month)	0.26	0.47	0.62	0.75	0.75	0.41	0.32	0.78	1.49	2.36	0.32	
Value Added	1.57	3.51	4.66	7.92	7.92	4.21	5.22	7.00	N/A	N/A	5.34	
Capula Global Relative Value Fund Limited	0.57	2.57	6.01	8.19	8.19	8.17	7.53	N/A	N/A	N/A	6.86	04/01/2011
Libor (1 month)	0.26	0.47	0.62	0.75	0.75	0.41	0.32	0.78	1.49	2.36	0.31	
Value Added	0.31	2.10	5.39	7.44	7.44	7.76	7.21	N/A	N/A	N/A	6.55	
PIMCO PARS/GCOFMAV Composite	1.65	0.83	2.24	2.25	2.25	3.24	4.38	N/A	N/A	N/A	6.82	03/01/2008
Libor (1 month)	0.26	0.47	0.62	0.75	0.75	0.41	0.32	0.78	1.49	2.36	0.50	
Value Added	1.39	0.36	1.62	1.50	1.50	2.83	4.06	N/A	N/A	N/A	6.12	
PIMCO Absolute Return Strategy V Offshore Fund, Ltd.	2.57	2.84	0.14	2.76	2.76	6.18	N/A	N/A	N/A	N/A	6.07	10/01/2012
Value Added	0.05	-0.46	5.62	7.54	7.54	6.47	N/A	N/A	N/A	N/A	8.49	10/01/2012
PIMCO Global Credit Opportunity Offshore Fund, Ltd.	2.57	0.13	3.81	2.92	2.92	4.32	N/A	N/A	N/A	N/A	2.20	10/01/2012
Value Added	2.29	0.60	3.17	2.17	2.17	3.91	N/A	N/A	N/A	N/A	1.70	
PIMCO Multi-Asset Volatility Onshore Fund, LLC	2.87	7.65	8.92	12.86	12.86	2.84	2.85	N/A	N/A	N/A	1.48	03/01/2009
Capital Structure Investments Offshore Fund, Ltd.	0.26	0.47	0.62	0.75	0.75	0.41	0.32	0.78	1.49	2.36	0.30	
Libor (1 month)	2.61	7.18	8.30	12.11	12.11	2.23	2.53	N/A	N/A	N/A	1.19	
Value Added	0.71	4.58	7.22	13.44	13.44	3.02	4.70	N/A	N/A	N/A	5.66	10/01/2007
Brigade Leveraged Capital Structures Offshore Fund, Ltd.	0.26	0.47	0.62	0.75	0.75	0.41	0.32	0.78	1.49	2.36	0.66	
Libor (1 month)	0.45	4.11	6.60	12.69	12.69	2.61	4.38	N/A	N/A	N/A	5.00	
Value Added	-0.71	3.53	7.99	12.60	12.60	-0.22	3.99	N/A	N/A	N/A	3.20	04/01/2011
Caspian Select Credit International, Ltd.	0.26	0.47	0.62	0.75	0.75	0.41	0.32	0.78	1.49	2.36	0.31	
Libor (1 month)	-0.97	3.06	7.37	11.85	11.85	-0.63	3.67	N/A	N/A	N/A	2.89	
Value Added	2.29	5.63	6.69	11.46	11.46	N/A	N/A	N/A	N/A	N/A	13.45	06/01/2016
Caspian Keystone Focused Fund, Ltd.	0.26	0.47	0.62	0.75	0.75	0.41	0.32	0.78	1.49	2.36	0.72	
Libor (1 month)	2.03	5.16	6.07	10.71	10.71	N/A	N/A	N/A	N/A	N/A	12.73	
Value Added	-3.92	-3.82	1.13	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.58	09/01/2016
Venor Capital Offshore, Ltd	0.19	0.30	0.36	0.42	0.42	0.18	0.12	0.42	1.16	1.94	0.39	
Clitgroup 1 Month T-Bill	-4.11	-4.12	0.77	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.19	
Value Added	0.82	1.36	2.82	10.44	10.44	13.74	15.86	N/A	N/A	N/A	15.66	06/01/2012
Asolus Property Catastrophe Keystone PF Fund, LP	0.26	0.47	0.62	0.75	0.75	0.41	0.32	0.78	1.49	2.36	0.32	
Libor (1 month)	0.56	0.89	2.20	9.69	9.69	13.33	15.54	N/A	N/A	N/A	15.34	
Value Added												





As of June 30, 2017

Trailing Period Performance

Performance (%)

	1 Quarter	2 Quarters Ending Jun-2017	3 Quarters Ending Jun-2017	FYTD	1 Year	3 Years	5 Years	10 Years	15 Years	20 Years	Since Inception	Inception Date
Nephila / Palmietto Fund Ltd.	0.58	0.77	0.60	2.72	2.72	4.81	6.14	N/A	N/A	N/A	6.03	07/01/2011
Libor (1 month)	0.26	0.47	0.62	0.75	0.75	0.41	0.32	0.78	1.49	2.36	0.31	
Value Added	0.32	0.30	-0.02	1.97	1.97	4.40	5.82	N/A	N/A	N/A	5.72	
Independence Reinsurance Partners Composite	1.62	3.55	4.44	7.44	7.44	N/A	N/A	N/A	N/A	N/A	8.99	01/01/2016
Libor (1 month)	0.26	0.47	0.62	0.75	0.75	0.41	0.32	0.78	1.49	2.36	0.64	
Value Added	1.36	3.09	3.82	6.69	6.69	N/A	N/A	N/A	N/A	N/A	8.35	
DeVinci Reinsurance Ltd.	3.26	6.55	7.68	10.99	10.99	N/A	N/A	N/A	N/A	N/A	12.48	01/01/2016
Renaissancecrite Medic Fund Ltd.	0.68	1.60	2.32	5.09	5.09	N/A	N/A	N/A	N/A	N/A	5.38	02/01/2016
Upston Diversified Fund Ltd.	1.18	3.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	12/01/2016
Two Sigma Risk Premia Enhanced Fund LP	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	04/01/2017
Capula Tail Risk Fund Limited	-1.68	-5.88	-5.35	-5.07	-5.07	-1.18	-2.88	N/A	N/A	N/A	-1.70	07/01/2011
Libor (1 month)	0.26	0.47	0.62	0.75	0.75	0.41	0.32	0.78	1.49	2.36	0.31	
Value Added	-1.94	-6.35	-5.97	-5.82	-5.82	-1.59	-3.20	N/A	N/A	N/A	-2.01	
Bridgewater Pure Alpha Fund II Ltd.	-4.49	-2.22	11.77	13.87	13.87	1.40	5.30	12.93	N/A	N/A	11.82	01/01/2006
Libor (3 month)	0.30	0.56	0.80	0.99	0.99	0.58	0.46	0.94	1.62	2.47	1.49	
Value Added	-4.79	-2.78	10.97	12.88	12.88	0.82	4.84	11.99	N/A	N/A	10.33	
OWS Credit Opportunity Offshore Fund III Ltd.	3.69	8.48	11.44	19.58	19.58	N/A	N/A	N/A	N/A	N/A	11.35	12/01/2015
Libor (3 month)	0.30	0.56	0.80	0.99	0.99	0.58	0.46	0.94	1.62	2.47	0.85	
Value Added	3.39	7.92	10.64	18.59	18.59	N/A	N/A	N/A	N/A	N/A	10.50	
Unallocated Cash & Cash Equivalents	0.19	0.12	0.21	0.31	0.31	0.22	0.37	0.00	0.70	N/A	0.41	07/01/1968
BoFA Merrill Lynch 3 Month US T-Bill	0.20	0.30	0.39	0.49	0.49	0.23	0.17	0.58	1.30	2.17	2.01	
Value Added	-0.01	-0.18	-0.18	-0.15	-0.15	0.09	0.20	-0.58	-0.60	N/A	-1.60	
PSERS Cash Management	0.19	0.12	0.21	0.34	0.34	0.19	0.29	-0.71	0.22	0.24	2.44	07/01/1985
RE Conversions	0.00	0.00	0.00	0.00	0.00	N/A	N/A	N/A	N/A	N/A	0.00	09/01/2015
PSERS Prop Fund	0.26	0.46	0.61	0.75	0.75	0.43	0.36	N/A	N/A	N/A	0.43	01/01/2009
BoFA Merrill Lynch US Treasury Bills 0-3M	0.20	0.30	0.37	0.44	0.44	0.19	0.14	0.50	1.22	2.08	0.12	
Value Added	0.06	0.16	0.24	0.31	0.31	0.24	0.22	N/A	N/A	N/A	0.31	
LIBOR Composite	0.42	0.67	1.07	1.50	1.62	1.19	1.24	N/A	N/A	N/A	1.47	04/01/2008
PSERS LIBOR	0.39	0.76	1.09	1.48	1.48	0.95	0.89	1.57	N/A	N/A	1.76	01/01/2007
Libor (3 month)	0.30	0.56	0.80	0.99	0.99	0.58	0.46	0.94	1.62	2.47	1.14	
Value Added	0.09	0.20	0.29	0.49	0.49	0.37	0.43	0.63	N/A	N/A	0.82	
Capula LIBOR Tail Risk	-1.67	-5.87	-5.34	-5.06	-5.06	N/A	N/A	N/A	N/A	N/A	-3.65	10/01/2015
Libor (3 month)	0.30	0.56	0.80	0.99	0.99	0.58	0.46	0.94	1.62	2.47	0.81	
Value Added	-1.97	-6.43	-5.14	-5.05	-5.05	N/A	N/A	N/A	N/A	N/A	-4.46	
Redcliffe Ultra Short Duration	0.65	1.53	2.16	3.35	3.35	2.74	2.82	N/A	N/A	N/A	2.78	06/01/2012
Libor (3 month)	0.30	0.56	0.80	0.99	0.99	0.58	0.46	0.94	1.62	2.47	0.46	
Value Added	0.55	0.97	1.36	2.36	2.36	2.16	2.36	N/A	N/A	N/A	2.32	
Penn Mutual Asset Management	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.23	05/01/2017
Libor (3 month)	0.30	0.56	0.80	0.99	0.99	0.58	0.46	0.94	1.62	2.47	0.20	
Value Added	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.03	
PSERS Healthcare E.I.IOP	0.26	0.47	0.65	0.90	0.90	0.62	0.54	1.45	2.04	N/A	2.91	01/01/1998
PSERS Healthcare - Premium Assets	0.20	0.30	0.39	0.49	0.49	0.23	0.17	0.58	1.30	2.17	2.09	
BoFA Merrill Lynch 3 Month US T-Bill	0.06	0.17	0.26	0.41	0.41	0.39	0.37	0.87	0.74	N/A	0.82	



Trailing Period Performance

Performance (%)

	1 Quarter	2 Quarters Ending Jun-2017	3 Quarters Ending Jun-2017	FYTD	1 Year	3 Years	5 Years	10 Years	15 Years	20 Years	Since Inception	Inception Date
<b>PSERS Healthcare - HOP</b>	0.27	0.47	0.62	0.76	0.76	0.45	0.36	0.90	1.68	N/A	1.63	02/01/2002
BoA Merrill Lynch 3 Month US T-Bill	0.20	0.30	0.39	0.49	0.49	0.23	0.17	0.58	1.30	2.17	1.31	
Value Added	0.07	0.17	0.23	0.27	0.27	0.22	0.19	0.32	0.38	N/A	0.32	
<b>E/M Total Program Composite</b>	1.29	2.47	2.15	3.62	3.62	2.11	0.32	2.52	5.80	N/A	3.30	01/01/2000
E/M US Core Plus FI Composite	1.04	2.41	-0.78	-0.27	-0.27	2.32	2.37	1.19	N/A	N/A	1.56	11/01/2004
<b>Pugh Capital Management</b>	1.64	2.44	-0.78	-0.27	-0.27	2.47	2.43	5.00	N/A	N/A	5.11	07/01/2006
Bimbg. Barc. U.S. Aggregate	1.45	2.27	-0.77	-0.31	-0.31	2.48	2.21	4.48	4.49	5.24	4.63	
Value Added	0.19	0.17	-0.01	0.04	0.04	-0.01	0.22	0.52	N/A	N/A	0.48	
<b>E/M Absolute Return Composite</b>	-0.92	-1.67	-45.67	-45.32	-45.32	-26.22	N/A	N/A	N/A	N/A	-13.46	07/01/2013
Ellis Lake	-0.82	-1.67	-45.67	-45.32	-45.32	-26.22	N/A	N/A	N/A	N/A	-17.29	04/01/2013
Libor (1 month)	0.26	0.47	0.62	0.75	0.75	0.41	0.32	0.78	1.49	2.36	0.34	
Value Added	-1.18	-2.14	-46.29	-46.07	-46.07	-26.63	N/A	N/A	N/A	N/A	-17.63	
<b>E/M Short Duration Cash</b>	1.24	2.50	3.00	4.66	4.66	N/A	N/A	N/A	N/A	N/A	4.03	10/01/2014
Radcliffe Ultra Short Duration	0.85	1.53	2.16	3.35	3.35	2.74	2.82	N/A	N/A	N/A	2.78	06/01/2012
Libor (3 month)	0.30	0.56	0.80	0.99	0.99	0.58	0.46	0.94	1.62	2.47	0.46	
Value Added	0.55	0.97	1.36	2.36	2.36	2.16	2.36	N/A	N/A	N/A	2.32	
<b>Radcliffe Specialty Finance Debt</b>	1.54	3.27	3.68	5.73	5.73	N/A	N/A	N/A	N/A	N/A	4.62	10/01/2014
3-Month Libor + 0.60%	0.45	0.87	1.25	1.60	1.60	1.18	1.07	1.55	2.23	3.09	1.22	
Value Added	1.09	2.40	2.43	4.13	4.13	N/A	N/A	N/A	N/A	N/A	3.40	

As of June 30, 2017

Trailing Period Performance

Performance (%)

	1 Quarter	2 Quarters Ending Jun-2017	3 Quarters Ending Jun-2017	FYTD	1 Year	3 Years	5 Years	10 Years	15 Years	20 Years	Since Inception	Inception Date
Total Private Market Composites (hedged)	3.57	9.97	9.33	12.45	12.45	8.40	10.04	5.21	10.36	9.74	9.92	10/03/1992
Blended Policy (Private Market)	0.67	2.09	2.59	3.06	3.06	5.05	5.97	4.05	5.78	N/A	N/A	
Value Added	2.90	3.88	6.74	9.39	9.39	3.35	4.07	1.16	4.58	N/A	N/A	
Total Private Market Composites (unhedged)	3.50	5.93	9.28	12.38	12.38	9.38	10.03	5.21	10.36	9.74	9.92	10/03/1992
Blended Policy (Private Market)	0.67	2.09	2.59	3.06	3.06	5.05	5.97	4.05	5.78	N/A	N/A	
Value Added	2.91	3.84	6.69	9.32	9.32	3.33	4.06	1.16	4.58	N/A	N/A	
Total Alternative Investments (hedged)	3.97	6.71	10.91	14.36	14.36	6.68	8.89	7.74	11.59	N/A	10.60	07/01/1998
Burgiss (Lagged) - PE/PDVC/Int	0.70	1.63	2.52	3.00	3.00	3.50	4.33	3.02	4.21	N/A	3.19	
Value Added	3.27	5.08	8.39	11.36	11.36	3.18	4.56	4.72	7.38	N/A	6.81	
Burgiss (Lagged) - Int	0.67	2.30	1.69	1.44	1.44	1.06	-2.69	N/A	N/A	N/A	N/A	
Value Added	3.30	4.41	9.22	12.92	12.92	5.62	11.58	N/A	N/A	N/A	N/A	
Burgiss (Lagged) - PE/PD	0.79	2.24	3.34	3.92	3.92	4.06	4.83	3.36	N/A	N/A	N/A	
Value Added	3.18	4.47	7.57	10.44	10.44	2.62	4.06	4.38	N/A	N/A	N/A	
Burgiss (Lagged) - VC	0.13	-2.67	-2.58	-2.51	-2.51	-0.04	0.80	-0.56	N/A	N/A	N/A	
Value Added	3.84	9.38	13.49	16.87	16.87	6.72	8.09	8.30	N/A	N/A	N/A	
Total Alternative Investments (unhedged)	3.98	6.64	10.83	14.24	14.24	6.64	8.57	7.73	11.58	N/A	9.93	07/01/1998
Burgiss (Lagged) - PE/PDVC/Int	0.70	1.63	2.52	3.00	3.00	3.50	4.33	3.02	4.21	N/A	3.19	
Value Added	3.28	5.01	8.31	11.24	11.24	3.14	4.54	4.71	7.37	N/A	6.80	
Burgiss (Lagged) - Int	0.67	2.30	1.69	1.44	1.44	1.06	-2.69	N/A	N/A	N/A	N/A	
Value Added	3.31	4.34	9.14	12.80	12.80	5.58	11.56	N/A	N/A	N/A	N/A	
Burgiss (Lagged) - PE/PD	0.79	2.24	3.34	3.92	3.92	4.06	4.83	3.36	N/A	N/A	N/A	
Value Added	3.19	4.40	7.49	10.32	10.32	2.58	4.04	4.37	N/A	N/A	N/A	
Burgiss (Lagged) - VC	0.13	-2.67	-2.58	-2.51	-2.51	-0.04	0.80	-0.56	N/A	N/A	N/A	
Value Added	3.85	9.31	13.41	16.75	16.75	6.68	8.07	8.29	N/A	N/A	N/A	
Priv. Eq/ Venture Cap/ Priv. Debt/Co-Invest	4.01	6.67	10.87	14.27	14.27	6.65	8.87	N/A	N/A	N/A	9.80	04/01/2012
Insight Wilson - PE (notional)	-0.95	5.55	5.71	9.77	9.77	N/A	N/A	N/A	N/A	N/A	4.39	10/01/2015
PE Currency Hedge Custom Benchmark	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Value Added	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Private Equity Co-Investment Composite	5.42	8.56	17.17	23.97	23.97	26.33	34.70	N/A	N/A	N/A	32.80	03/01/2012
PA Penn Investment Fund - PE Composite	5.50	12.19	18.91	23.23	23.23	N/A	N/A	N/A	N/A	N/A	15.39	12/01/2015
PA Penn Investment Fund - PE Internal	0.00	0.00	0.00	0.00	0.00	N/A	N/A	N/A	N/A	N/A	5.15	12/01/2015
PA Penn Investment Fund - PE External	6.10	13.85	22.26	27.77	27.77	N/A	N/A	N/A	N/A	N/A	15.87	12/01/2015
Woodstream	12.67	13.85	32.49	47.13	47.13	N/A	N/A	N/A	N/A	N/A	26.86	12/01/2015
ERT	11.10	35.88	35.11	34.20	34.20	N/A	N/A	N/A	N/A	N/A	34.20	07/01/2016
Lasko	-2.98	-5.57	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-5.57	01/01/2017
Evans Network	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-0.13	05/01/2017
Internally Managed PE Composite	5.41	8.58	16.98	23.93	23.93	26.49	34.81	N/A	N/A	N/A	32.80	04/01/2012
Private Eq/ Venture Cap/ Priv. Debt	3.92	6.52	10.50	13.73	13.73	6.06	8.44	7.56	11.45	N/A	9.91	07/01/1998
Private Debt Composite	3.76	1.23	4.12	6.34	6.34	2.51	6.58	6.19	9.50	N/A	7.30	04/01/2001
Private Equity Venture Capital Composite	3.94	7.48	11.83	15.03	15.03	6.72	8.77	7.59	11.55	N/A	9.63	07/01/1998
Burgiss (Lagged) - PE/PDVC/Int	0.70	1.63	2.52	3.00	3.00	3.50	4.33	3.02	4.21	N/A	3.19	
Value Added	3.24	5.85	9.14	12.08	12.08	3.22	4.44	4.57	7.34	N/A	6.64	
Private Equity	3.88	8.42	12.61	15.86	15.86	6.84	8.83	7.70	12.48	N/A	10.74	04/01/2001
Private Equity x Tobacco Composite	3.99	8.42	12.61	15.86	15.86	7.00	8.93	7.75	12.52	N/A	10.77	04/01/2001
Venture Capital	3.67	2.58	6.69	11.10	11.10	6.67	8.69	6.63	4.50	N/A	3.52	04/01/2001
Total Real Estate (levered/hedged)	2.81	4.00	6.22	8.79	8.79	10.62	11.34	0.73	7.97	8.76	8.11	04/01/1998



As of June 30, 2017

## Trailing Period Performance

Performance (%)

	1 Quarter	2 Quarters Ending Jun-2017	3 Quarters Ending Jun-2017	FYTD	1 Year	3 Years	5 Years	10 Years	15 Years	20 Years	Since Inception	Inception Date
Total Real Estate (Unlevered/Unhedged)	2.65	4.36	5.91	8.38	8.98	10.95	11.18	0.66	7.92	8.72	8.08	04/01/1981
Blended Policy (Total Real Estate) (Hedged)	0.83	2.82	2.38	2.92	2.92	7.38	8.59	5.20	8.51	9.46	8.40	
Value Added	1.82	1.54	3.53	5.46	5.46	2.98	2.59	-4.54	-0.59	-0.74	-0.32	
Total Real Estate (Levered/Unhedged)	2.90	4.63	6.11	8.68	9.68	10.54	11.34	0.74	7.97	8.75	8.11	04/01/1981
Total Real Estate (Unlevered/Unhedged)	2.65	4.36	5.91	8.38	8.98	10.36	11.18	0.66	7.92	8.72	8.08	04/01/1981
Blended Policy (Total Real Estate) (Unhedged)	0.97	3.13	2.30	2.86	2.86	7.40	8.60	5.21	8.51	9.46	8.41	
Value Added	1.68	1.23	3.61	5.52	5.52	2.96	2.58	-4.55	-0.59	-0.74	-0.33	
Private Real Estate Composite	2.99	4.97	6.94	9.58	9.58	10.92	11.54	0.43	8.42	9.86	9.23	07/01/1996
Blended Policy (Private Real Estate)	0.62	2.79	2.67	3.13	3.13	7.22	8.49	5.15	8.47	9.43	9.47	
Value Added	2.37	2.08	4.27	6.45	6.45	3.60	3.15	-4.71	-0.05	-0.57	-0.24	
Private Real Estate x Internal	3.01	4.83	6.87	9.50	9.50	10.73	11.56	0.22	7.69	8.37	8.76	07/01/1996
Internally Managed Private Real Estate	2.11	7.09	10.32	13.70	13.70	18.95	N/A	N/A	N/A	N/A	24.84	07/01/2013



As of June 30, 2017

Calendar Year Performance

	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
<b>PSERS Total Fund</b>	10.81	-1.80	8.75	8.66	11.35	4.31	14.22	12.06	-29.70	13.83
<i>Blended Policy (Total Plan)</i>	8.83	-2.61	6.88	5.62	8.85	2.39	10.32	12.94	-25.96	10.43
Value Added	1.98	0.81	1.87	3.04	2.50	1.92	3.90	-0.88	-3.74	3.40
<b>Total Public Markets Composite</b>	11.18	-4.70	6.58	6.64	10.98	1.01	15.33	28.30	-34.67	10.15
<i>Blended Policy (Public Market) (Hedged)</i>	11.05	-5.66	5.19	4.76	9.81	-0.36	11.76	24.17	-32.01	9.44
Value Added	0.13	0.96	1.39	1.88	1.17	1.37	3.57	4.13	-2.66	0.71
<i>Blended Policy (Public Market) (Unhedged)</i>	9.70	-6.28	4.16	4.69	9.81	-0.36	11.76	24.17	-32.01	9.44
Value Added	1.48	1.58	2.42	1.95	1.17	1.37	3.57	4.13	-2.66	0.71
<b>Total Public Equity Composite</b>	9.23	0.92	8.15	24.43	17.07	-6.96	16.95	41.00	-42.75	10.56
<i>Blended Policy (Public Equity) (Hedged)</i>	8.89	-0.51	7.93	24.18	16.73	-7.83	14.34	37.59	-41.03	10.10
Value Added	0.34	1.43	0.22	0.25	0.34	0.87	2.61	3.41	-1.72	0.46
<i>Blended Policy (Public Equity) (Unhedged)</i>	8.72	-1.88	4.14	23.89	16.73	-7.83	14.34	37.59	-41.03	10.10
Value Added	0.51	2.80	4.01	0.54	0.34	0.87	2.61	3.41	-1.72	0.46
<b>Total US Equity Composite</b>	16.49	0.40	11.71	34.04	15.65	1.65	18.37	33.94	-41.49	4.68
<i>Blended Policy (Tot US Eq)</i>	12.66	0.64	12.51	33.39	16.42	0.80	16.52	28.22	-37.23	5.62
Value Added	3.83	-0.24	-0.80	0.65	-0.77	0.85	1.85	5.72	-4.26	-0.94
<b>PSERS-S&amp;P 500 Index Composite</b>	13.90	1.43	13.66	32.85	16.09	2.03	16.03	28.52	-37.07	5.60
<i>S&amp;P 500 Index</i>	11.96	1.38	13.69	32.39	16.00	2.11	15.06	26.46	-37.00	5.49
Value Added	1.94	0.05	-0.03	0.46	0.09	-0.08	0.97	2.06	-0.07	0.11
<b>Total US Small Cap Composite</b>	24.56	-2.31	3.57	37.99	15.08	-1.14	26.20	38.03	-35.83	2.82
<i>MSCI USA Small Cap Index</i>	19.80	-3.65	7.55	38.26	18.22	-3.03	27.96	39.74	-35.88	-3.00
Value Added	4.76	1.34	-3.98	-0.27	-3.14	1.89	-1.76	-1.71	0.05	5.82
<b>PSERS Small Cap Index Composite</b>	24.56	-1.79	8.00	38.32	18.36	-0.14	27.43	35.33	-33.93	4.01
<i>PSERS-S&amp;P 400 Index Composite</i>	21.34	-2.20	9.87	33.45	18.78	-1.60	27.42	41.12	-35.91	8.08
<i>S&amp;P MidCap 400</i>	20.74	-2.18	9.77	33.50	17.88	-1.73	26.64	37.38	-36.23	7.98
Value Added	0.60	-0.02	0.10	-0.05	0.90	0.13	0.78	3.74	0.32	0.10
<b>PSERS-S&amp;P 600 Index Composite</b>	28.05	-1.47	6.23	43.13	17.70	1.64	27.47	29.62	-30.67	-0.14
<i>S&amp;P SmallCap 600</i>	26.56	-1.97	5.76	41.31	16.33	1.02	26.31	25.57	-31.07	-0.30
Value Added	1.49	0.50	0.47	1.82	1.37	0.62	1.16	4.05	0.40	0.16
<b>Total Non-U.S. Equity Composite (hedged)</b>	5.15	2.68	5.09	15.95	18.39	-13.34	16.00	45.88	-43.80	16.34
<i>Blended Policy (Total Non-US Eq) (Hedged)</i>	6.43	-0.50	3.97	16.36	17.03	-14.30	12.73	45.38	-44.31	14.66
Value Added	-1.28	3.18	1.12	-0.41	1.36	0.96	3.27	0.50	0.51	1.68
<b>Total Non-U.S. Equity Composite (unhedged)</b>	2.96	-1.98	-3.27	15.95	18.39	-13.34	16.00	45.88	-43.80	16.34
<i>Blended Policy (Total Non-US Eq) (Unhedged)</i>	4.67	-5.11	-3.99	15.82	17.03	-14.30	12.73	45.38	-44.31	14.66
Value Added	-1.71	3.13	0.72	0.13	1.36	0.96	3.27	0.50	0.51	1.68
<b>Emerging Markets Equity Composite</b>	-3.95	-8.21	1.48	-0.24	21.03	-17.81	17.04	71.83	-52.69	37.99
<i>Blended Policy (MSCI EM net)</i>	11.19	-14.92	-2.19	-2.60	18.23	-18.42	18.87	78.48	-53.27	39.79
Value Added	-15.14	6.71	3.67	2.36	2.80	0.61	-1.83	-6.65	0.58	-1.80
<b>MSCI Emerging Markets IMI (Net)</b>	9.90	-13.86	-1.79	-2.20	18.69	-19.49	19.90	82.36	-53.78	39.77



As of June 30, 2017

Calendar Year Performance

	Performance (%)										
	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	
Value Added	-13.85	5.65	3.27	1.96	2.34	1.68	-2.86	-10.53	1.09	-1.78	
Wasatch EM Small Cap	-3.95	-10.36	2.13	1.87	28.06	-12.98	42.87	119.09	N/A	N/A	
Blended Policy (Wasatch EM)	4.03	-9.81	1.49	1.01	22.60	-26.96	27.47	114.32	-58.10	42.57	
Value Added	-7.98	-0.55	0.64	0.86	5.46	13.98	15.40	4.77	N/A	N/A	
Total Non-U.S. Equity x Emerging Markets Composite (hedged)	5.60	3.70	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Blended Policy (Non-US Equity x EM) (Hedged)	6.25	0.66	4.75	16.36	17.03	-14.30	12.73	45.38	-44.31	14.66	
Value Added	-0.65	3.04	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Insight Everest - Int'l Eq (nonfossil)	4.02	7.13	10.98	-0.37	-1.46	0.00	1.39	1.84	3.15	-4.46	
Currency Hedge Benchmark	4.18	7.24	11.05	-1.39	0.00	0.00	0.00	3.39	3.81	-5.01	
Value Added	-0.16	-0.11	-0.07	1.02	-1.46	0.00	1.39	-1.55	-0.66	0.55	
Total Non-U.S. Equity x Emerging Markets Composite (unhedged)	3.29	-1.46	-3.43	19.23	18.82	-12.39	14.77	42.06	-45.82	15.61	
Blended Policy (Non-US Equity x EM) (Unhedged)	4.41	-4.60	-3.89	15.82	17.03	-14.30	12.73	45.38	-44.31	14.66	
Value Added	-1.12	3.14	0.46	3.41	1.79	1.91	2.04	-3.32	-1.51	0.95	
Non-US Large Cap Equity Composite	3.99	-2.76	-3.41	17.33	17.78	-11.96	12.69	40.38	-44.76	16.43	
Blended Policy (MSCI World AC World ex USA net)	4.50	-5.66	-3.87	15.29	16.83	-13.71	11.15	41.45	-45.33	17.12	
Value Added	-0.51	2.90	0.46	2.04	0.95	1.75	1.54	-1.07	0.57	-0.69	
PSERS ACWI x US Index Fund	5.35	-5.24	-3.41	16.07	17.57	-13.06	11.85	42.86	-44.91	17.01	
MSCI ACWI/EAFE Index Blend	4.50	-5.66	-3.87	15.29	16.83	-13.71	11.15	41.45	-45.53	16.65	
Value Added	0.85	0.42	0.46	0.78	0.74	0.65	0.70	1.41	0.62	0.36	
BlackRock EMAX	13.37	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
MSCI Emerging Markets Index (Net)	11.19	-14.92	-2.19	-2.60	18.23	-18.42	18.88	78.51	-53.33	39.38	
Value Added	2.18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Active Non-US Large Cap Composite	2.28	0.72	-3.88	19.34	18.60	-8.26	15.23	37.57	-44.60	15.83	
MSCI AC World ex USA Index (Net)	4.50	-5.66	-3.87	15.29	16.83	-13.71	11.15	41.45	-45.53	16.65	
Value Added	-2.22	6.38	-0.01	4.05	1.77	5.45	4.08	-3.88	0.93	-0.82	
Baillie Gifford	5.65	-1.91	-2.19	17.46	21.25	-11.41	15.75	49.51	-46.12	28.43	
MSCI AC World ex USA Index (Net)	4.50	-5.66	-3.87	15.29	16.83	-13.71	11.15	41.45	-45.53	16.65	
Value Added	1.15	3.75	1.68	2.17	4.42	2.30	4.60	8.06	-0.59	11.78	
Marathon Asset Mgmt	1.25	3.53	-5.35	25.79	18.82	-9.23	17.59	35.96	-40.50	17.53	
Blended Benchmark (MSCI ACWI ex USA net)	4.50	-5.66	-3.87	15.29	16.83	-13.71	11.15	41.45	-45.53	17.12	
Value Added	-3.25	9.19	-1.48	10.50	1.99	4.48	6.44	-5.49	5.03	0.41	
BlackRock Global Composite	-1.59	-0.93	-3.52	13.89	18.71	-4.14	21.12	35.38	-45.67	14.99	
MSCI AC World ex USA Index (Net)	4.50	-5.66	-3.87	15.29	16.83	-13.71	11.15	41.45	-45.53	16.65	
Value Added	-6.09	4.73	0.35	-1.40	1.88	9.57	9.97	-6.07	-0.14	-1.66	
Non-US Small Cap Equity Composite	-0.91	9.41	-3.47	30.37	25.17	-15.55	29.62	52.97	-52.32	8.09	
MSCI AC World ex USA Small Cap (Net)	3.91	2.60	-4.03	19.73	18.52	-18.50	25.21	62.91	-50.23	10.76	
Value Added	-4.82	6.81	0.56	10.64	6.65	2.95	4.41	-9.94	-2.09	-2.67	
Acadian Asset Mgmt	8.76	3.08	-0.19	24.86	25.11	-16.94	26.02	59.84	-55.59	23.01	
Blended Benchmark (MSCI AC World ex USA Small Cap net)	3.91	2.60	-4.03	19.73	18.52	-18.50	25.21	62.91	-50.23	10.76	





## Calendar Year Performance

	Performance (%)										
	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	
Value Added	4.85	0.48	3.84	5.13	6.59	1.56	0.81	-3.07	-7.21	14.38	
Wasatch Int'l Small Cap	-7.75	14.73	-7.31	28.25	33.41	-13.75	34.70	69.89	-52.34	14.56	
Blended Benchmark (MSCI AC World ex USA Small Cap net)	3.91	2.60	-4.03	19.73	18.52	-18.50	25.21	62.91	-48.38	8.63	
Value Added	-11.66	12.13	-3.28	8.52	14.89	4.75	9.49	6.98	-3.96	5.93	
Oberweis Asset Mgmt	-4.84	16.17	-2.82	59.12	31.95	-14.60	31.03	62.42	N/A	N/A	
MSCI AC World ex USA Small Cap (Net)	3.91	2.60	-4.03	19.73	18.52	-18.50	25.21	62.91	-50.23	10.76	
Value Added	-8.75	13.57	1.21	39.39	13.43	3.90	5.82	-0.49	N/A	N/A	
QS Investors	3.28	4.60	-0.18	26.34	21.71	-12.22	26.52	41.36	N/A	N/A	
MSCI AC World ex USA Small Cap (Net)	3.91	2.60	-4.03	19.73	18.52	-18.50	25.21	62.91	-50.23	10.76	
Value Added	-0.63	2.00	3.85	6.61	3.19	6.28	1.31	-21.55	N/A	N/A	
Fidelity Institutional Int'l Small Cap	0.16	5.14	-4.16	19.81	22.81	-18.54	24.04	60.57	N/A	N/A	
MSCI AC World ex USA Small Cap (Net)	3.91	2.60	-4.03	19.73	18.52	-18.50	25.21	62.91	-50.23	10.76	
Value Added	-3.75	2.54	-0.13	0.08	4.29	-0.04	-1.17	-2.34	N/A	N/A	
Total Fixed Income Composite	10.94	-1.40	10.29	-2.52	11.76	9.54	14.11	22.14	-7.24	7.35	
Blended Policy (Total FI)	9.49	-2.62	5.19	-4.69	9.86	7.27	10.27	24.60	-4.55	7.99	
Value Added	1.45	1.22	5.10	2.17	1.90	2.27	3.84	-2.46	-2.69	-0.64	
Global Fixed Income Composite	4.64	-0.92	3.69	-1.89	N/A	N/A	N/A	N/A	N/A	N/A	
Blended Policy (Global FI)	4.55	-3.35	2.65	-2.76	7.49	5.36	8.07	9.49	N/A	N/A	
Value Added	0.09	2.43	1.04	0.87	N/A	N/A	N/A	N/A	N/A	N/A	
Total US Fixed Income Composite	11.27	-0.54	12.94	-2.35	11.42	10.83	14.58	22.49	-7.78	7.28	
Blended Policy (Total US FI)	9.61	-1.72	5.60	-2.92	9.48	8.46	10.45	27.91	-6.09	7.79	
Value Added	1.66	1.18	7.34	0.57	1.94	2.37	4.13	-5.42	-1.69	-0.51	
Total US Fixed Income ex TIPS Composite	8.21	-0.14	13.46	3.53	13.15	4.98	13.50	24.35	-10.83	5.66	
Investment Grade Composite	2.62	-0.22	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Blended Policy (Investment Grade)	2.23	-0.58	11.06	-5.59	4.39	14.57	7.30	-0.22	11.04	8.38	
Value Added	0.39	0.36	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
US Core Plus Fixed Income Composite	3.95	1.70	7.12	-0.85	8.06	9.31	10.25	14.84	-5.70	5.86	
Blended Policy (Barclays Aggregate Index)	2.65	0.55	5.97	-2.02	4.21	7.06	7.16	8.60	2.38	6.50	
Value Added	1.30	1.15	1.15	1.16	3.85	2.25	3.09	6.24	-8.08	-0.64	
Pugh Capital Management	2.63	0.56	6.22	-1.89	5.52	8.02	7.24	8.65	5.43	6.45	
Bimbg. Barc. U.S. Aggregate	2.65	0.55	5.97	-2.02	4.21	7.84	6.54	5.93	5.24	6.97	
Value Added	-0.02	0.01	0.25	0.13	1.31	0.18	0.70	2.72	0.19	-0.52	
PSERS Active Core Plus Fixed Income	3.50	1.59	7.27	-2.01	5.78	9.34	8.54	15.38	1.57	6.95	
Bimbg. Barc. U.S. Aggregate	2.65	0.55	5.97	-2.02	4.21	7.84	6.54	5.93	5.24	6.97	
Value Added	0.85	1.04	1.30	0.01	1.57	1.50	2.00	9.45	-3.67	-0.02	
BlackRock Global Alpha	4.31	2.25	7.79	1.52	12.05	11.18	13.67	19.95	-5.12	N/A	
Blended Policy (Barclays Aggregate Index)	2.65	0.55	5.97	-2.02	4.21	7.06	7.16	8.60	2.38	6.50	
Value Added	1.66	1.70	1.82	3.54	7.84	4.12	6.51	11.35	-7.50	N/A	
SEI Investment Management	7.34	0.04	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

## Calendar Year Performance

	Performance (%)										
	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	
<b>BofA Merrill Lynch Corporate 1-3 Year Value Added</b>	2.39	1.01	1.19	1.78	4.49	1.76	4.86	14.69	-2.68	5.67	
<b>Non-U.S. Developed Markets Fixed Income Composite</b>	6.23	-5.57	-1.09	-2.49	7.16	3.79	8.63	19.43	-3.08	8.28	
<b>Blended Policy (Barclays GlobalAgg GDP Weighted Dev xUS hedged) Value Added</b>	4.90	-5.56	-2.28	-1.49	6.70	4.48	5.84	8.04	3.76	9.23	
<b>Alliance Bernstein Global Fixed</b>	1.33	-0.01	1.19	-1.00	0.46	-0.69	2.79	11.39	-6.84	-0.95	
<b>Spiced Barclays GlobalAgg GDPWeighted Dev xUS Value Added</b>	6.23	-5.71	-1.80	-1.82	7.30	N/A	N/A	N/A	N/A	N/A	
<b>U.S. Long Treasuries (levered)</b>	4.90	-5.56	-2.28	-1.49	6.70	3.95	3.47	9.49	2.77	11.03	
<b>Bimbg. Barc. U.S. Treasury: Long Value Added</b>	1.33	-0.15	0.48	-0.33	0.60	N/A	N/A	N/A	N/A	N/A	
<b>PSERS U.S. Long Treasuries (unlevered)</b>	-65.74	-9.37	427.01	-88.18	N/A	N/A	N/A	N/A	N/A	N/A	
<b>Value Added</b>	1.33	-1.21	25.07	-12.66	3.56	29.93	9.38	-12.92	24.03	9.81	
<b>Emerging Markets Fixed Income Composite</b>	-67.07	-8.16	401.94	-75.52	N/A	N/A	N/A	N/A	N/A	N/A	
<b>Blended Policy (Barclays Emerging Mkt 10% Country Cap) Value Added</b>	-0.04	-1.84	19.66	-12.10	N/A	N/A	N/A	N/A	N/A	N/A	
<b>Franklin Templeton Emerging Fixed Income</b>	1.33	-1.21	25.07	-12.66	3.56	29.93	9.38	-12.92	24.03	9.81	
<b>Value Added</b>	-1.37	-0.63	-5.41	0.56	N/A	N/A	N/A	N/A	N/A	N/A	
<b>Credit-Related</b>	11.05	-1.46	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
<b>Blended Policy (Credit-Related) Value Added</b>	15.99	-6.30	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
<b>Emerging Markets Fixed Income Composite</b>	-4.94	4.84	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
<b>Blended Policy (Barclays Emerging Mkt 10% Country Cap) Value Added</b>	9.28	-6.50	-3.52	-4.08	16.81	0.82	N/A	N/A	N/A	N/A	
<b>Value Added</b>	6.85	-11.72	-3.14	-5.39	16.00	-1.49	15.68	21.98	-5.22	18.11	
<b>Franklin Templeton Emerging Fixed Income</b>	2.43	5.22	-0.38	1.31	0.81	2.31	N/A	N/A	N/A	N/A	
<b>Value Added</b>	9.04	-1.75	-1.66	0.87	18.99	1.96	14.19	56.43	N/A	N/A	
<b>Blended Benchmark (Barclays Emerging Mkt 10% Country Cap) Value Added</b>	6.85	-11.72	-3.14	-5.39	19.47	4.47	10.95	8.00	8.00	8.00	
<b>Value Added</b>	2.19	9.97	1.48	6.26	-0.48	-2.51	3.24	48.43	N/A	N/A	
<b>High Yield Fixed Income Composite (hedged)</b>	11.11	-0.29	8.54	10.17	17.31	1.64	15.95	34.90	-20.97	3.59	
<b>Blended Policy (Barclays Corporate HY) Value Added</b>	17.13	-4.47	2.45	7.44	15.81	4.98	15.12	57.95	-26.17	2.65	
<b>Value Added</b>	-6.02	4.18	6.09	2.73	1.50	-3.34	0.83	-23.05	5.20	0.94	
<b>High Yield Fixed Income x Internal Composite (hedged)</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
<b>Blended Policy (Barclays Corporate HY) Value Added</b>	17.13	-4.47	2.45	7.44	15.81	4.98	15.12	57.95	-26.17	2.65	
<b>Value Added</b>	4.29	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
<b>Insight Oxygen - HY (notional)</b>	4.01	10.55	13.41	-4.63	-2.06	1.12	4.49	-4.83	1.53	-8.96	
<b>HY Currency Hedge Benchmark Value Added</b>	0.28	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
<b>High Yield Fixed Income Composite (Unhedged)</b>	10.71	-0.69	8.54	10.17	17.31	1.64	15.95	34.90	-20.97	3.59	
<b>Blended Policy (Barclays Corporate HY) Value Added</b>	17.13	-4.47	2.45	7.44	15.81	4.98	15.12	57.95	-26.17	2.65	
<b>Value Added</b>	-6.42	3.78	6.09	2.73	1.50	-3.34	0.83	-23.05	5.20	0.94	
<b>High Yield Fixed Income x Internal Composite (unhedged)</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
<b>Blended Policy (Barclays Corporate HY) Value Added</b>	17.13	-4.47	2.45	7.44	15.81	4.98	15.12	57.95	-26.17	2.65	
<b>Value Added</b>	-7.51	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
<b>Mezzanine High Yield Composite</b>											



## Calendar Year Performance

	Performance (%)										
	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	
Bimbg. Barc. U.S. Corp. High Yield	17.13	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	
Value Added	-24.64	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Internally Managed Private Debt Co-Investment	-32.79	-33.14	15.79	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Bimbg. Barc. U.S. Corp. High Yield	17.13	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	
Value Added	-49.92	-28.67	13.34	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Mezzanine High Yield Composite x Internal	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Bimbg. Barc. U.S. Corp. High Yield	17.13	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	
Value Added	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Carlyle Energy Mezz. Opp. Fund	-41.34	-9.01	19.08	20.66	N/A	N/A	N/A	N/A	N/A	N/A	
Bimbg. Barc. U.S. Corp. High Yield	17.13	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	
Value Added	-58.47	-4.54	16.63	13.22	N/A	N/A	N/A	N/A	N/A	N/A	
Carlyle Energy Mezz. Opp. Fund II	-10.87	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Bimbg. Barc. U.S. Corp. High Yield	17.13	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	
Value Added	-28.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
ICG Europe Fund V	6.38	-2.00	4.03	15.07	N/A	N/A	N/A	N/A	N/A	N/A	
Bimbg. Barc. U.S. Corp. High Yield	17.13	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	
Value Added	-10.75	2.47	1.58	7.63	N/A	N/A	N/A	N/A	N/A	N/A	
ICG Europe Fund VI	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Bimbg. Barc. U.S. Corp. High Yield	17.13	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	
Value Added	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Bain Capital Middle Market Credit 2010, L.P.	-6.05	4.81	6.37	11.04	19.37	8.64	N/A	N/A	N/A	N/A	
Bimbg. Barc. U.S. Corp. High Yield	17.13	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	
Value Added	-23.18	9.28	3.92	3.60	3.56	3.66	N/A	N/A	N/A	N/A	
Bain Capital Middle Market Credit 2014, L.P.	5.91	0.81	7.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Bimbg. Barc. U.S. Corp. High Yield	17.13	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	
Value Added	-11.22	5.28	4.55	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Opportunistic High Yield Composite	18.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Bimbg. Barc. U.S. Corp. High Yield	17.13	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	
Value Added	0.88	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Apollo European Principal Fund II	14.56	6.31	8.80	-0.83	N/A	N/A	N/A	N/A	N/A	N/A	
Bimbg. Barc. U.S. Corp. High Yield	17.13	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	
Value Added	-2.57	10.78	6.35	-8.27	N/A	N/A	N/A	N/A	N/A	N/A	
Bain Capital Credit Opp. Fund IV	2.05	-7.15	1.69	9.20	6.47	0.81	13.76	39.72	N/A	N/A	
Bimbg. Barc. U.S. Corp. High Yield	17.13	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	
Value Added	-15.08	-2.68	-0.76	1.76	-9.34	-4.17	-1.36	-18.49	N/A	N/A	
Bain Capital Distressed and Special Situations 2013	7.00	-3.02	10.46	10.06	N/A	N/A	N/A	N/A	N/A	N/A	
Bimbg. Barc. U.S. Corp. High Yield	17.13	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	
Value Added	-10.13	1.45	8.01	2.62	N/A	N/A	N/A	N/A	N/A	N/A	
Bain Capital Distressed and Special Situations 2016 (A), L.P.	29.32	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

As of June 30, 2017

Calendar Year Performance

	Performance (%)									
	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Bimbg. Barc. U.S. Corp: High Yield Value Added	17.13	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87
TPG Opportunities Partners II, LP	6.52	21.82	25.75	13.76	N/A	N/A	N/A	N/A	N/A	N/A
Bimbg. Barc. U.S. Corp: High Yield Value Added	17.13	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87
TPG Opportunities Partners III, LP	-10.61	26.29	23.30	6.32	N/A	N/A	N/A	N/A	N/A	N/A
Bimbg. Barc. U.S. Corp: High Yield Value Added	17.10	3.39	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bimbg. Barc. U.S. Corp: High Yield Value Added	17.13	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87
TOP NPL (A)	-0.03	7.86	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bimbg. Barc. U.S. Corp: High Yield Value Added	-3.30	27.19	30.38	12.18	N/A	N/A	N/A	N/A	N/A	N/A
TPG TAO	17.13	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87
Bimbg. Barc. U.S. Corp: High Yield Value Added	-20.43	31.66	27.93	4.74	N/A	N/A	N/A	N/A	N/A	N/A
Brigade Structured Credit Offshore Fund	10.10	10.13	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bimbg. Barc. U.S. Corp: High Yield Value Added	17.13	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87
Brigade Distressed Value	-7.03	14.60	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1-Month Libor + 5%	34.96	-17.17	3.66	11.12	10.71	N/A	N/A	N/A	N/A	N/A
Value Added	5.52	5.21	5.16	5.20	5.25	5.24	5.29	5.35	7.80	10.51
Brigade Structured Credit Offshore Fund	29.44	-22.38	-1.50	5.92	5.46	N/A	N/A	N/A	N/A	N/A
Barclays Corporate High Yield + 0.25%	26.20	-5.62	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Value Added	17.42	-4.23	2.71	7.71	16.10	5.24	15.41	58.60	-25.97	2.73
Avenue Energy Opportunities Fund	8.78	-1.39	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bimbg. Barc. U.S. Corp: High Yield Value Added	41.63	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Avenue Europe SS III	17.13	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87
Bimbg. Barc. U.S. Corp: High Yield Value Added	24.50	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Blended Benchmark (Barclays US MBS)	5.81	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Galton Onshore Mortgage Recovery Fund III, LP	17.13	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87
Value Added	-11.32	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Real Asset High Yield Composite	4.99	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bimbg. Barc. U.S. Corp: High Yield Value Added	17.13	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87
Mariner/Galton RMBS	-12.14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Blended Benchmark (Barclays US MBS)	3.87	4.38	8.61	8.55	21.64	1.67	N/A	N/A	N/A	N/A
Value Added	1.67	1.51	6.33	7.50	7.50	7.50	N/A	N/A	N/A	N/A
Galton Onshore Mortgage Recovery Fund III, LP	2.20	2.87	2.28	1.05	14.14	-5.83	N/A	N/A	N/A	N/A
Value Added	1.83	-1.33	-4.44	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mariner International Infrastructure	17.13	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87
Bimbg. Barc. U.S. Corp: High Yield Value Added	-15.30	3.14	-6.89	N/A	N/A	N/A	N/A	N/A	N/A	N/A
The Verde Scratch and Dent Fund, LP	8.67	5.82	-5.53	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Value Added	17.13	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87
Value Added	-8.46	10.29	-7.98	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Value Added	6.67	7.48	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A



As of June 30, 2017

Calendar Year Performance

	Performance (%)										
	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	
Bimbg. Barc. U.S. Corp: High Yield Value Added	17.13	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	
The Verde Scratch and Dent Fund I-A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Bimbg. Barc. U.S. Corp: High Yield Value Added	17.13	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	
Latitude Management Real Estate Capital IV	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Bimbg. Barc. U.S. Corp: High Yield Value Added	17.13	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	
Senior Loans High Yield Composite	12.60	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Bimbg. Barc. U.S. Corp: High Yield Value Added	17.13	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	
Cerberus Levered Loan Fund I	6.04	-1.29	3.38	9.09	12.20	N/A	N/A	N/A	N/A	N/A	
Bimbg. Barc. U.S. Corp: High Yield Value Added	17.13	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	
Cerberus Levered Loan Fund II	3.25	8.03	13.92	12.21	N/A	N/A	N/A	N/A	N/A	N/A	
Bimbg. Barc. U.S. Corp: High Yield Value Added	17.13	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	
Cerberus PSERS Levered Loan Opportunities Fund	-13.88	12.50	11.47	4.77	N/A	N/A	N/A	N/A	N/A	N/A	
Bimbg. Barc. U.S. Corp: High Yield Value Added	17.13	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	
LBC Credit Partners II	19.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Bimbg. Barc. U.S. Corp: High Yield Value Added	17.13	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	
LBC Credit Partners III	14.28	12.35	17.02	19.02	29.31	21.09	-15.87	-6.79	N/A	N/A	
Bimbg. Barc. U.S. Corp: High Yield Value Added	17.13	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	
LBC-P/Credit Fund LP	-2.85	16.82	14.57	11.58	13.50	16.11	-30.99	-65.00	N/A	N/A	
Bimbg. Barc. U.S. Corp: High Yield Value Added	17.13	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	
LBC-P/Credit Fund LP	13.28	14.46	11.66	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Bimbg. Barc. U.S. Corp: High Yield Value Added	17.13	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	
Summit Partners Credit Fund II LP	-3.85	18.93	9.21	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Bimbg. Barc. U.S. Corp: High Yield Value Added	17.13	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	
Oaktree Loan Fund 2X, LP	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Bimbg. Barc. U.S. Corp: High Yield Value Added	17.13	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	
Bain Capital Credit Managed Account (PSERS), L.P.	13.37	-0.21	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Bimbg. Barc. U.S. Corp: High Yield Value Added	17.13	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	
Park Square Credit Opportunities	-3.76	4.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Bimbg. Barc. U.S. Corp: High Yield Value Added	17.13	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	
Bimbg. Barc. U.S. Corp: High Yield Value Added	5.35	-23.74	-0.78	6.26	12.69	7.08	12.94	39.95	-18.94	N/A	
Bimbg. Barc. U.S. Corp: High Yield Value Added	17.13	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	
Bimbg. Barc. U.S. Corp: High Yield Value Added	-11.78	-19.27	-3.23	-1.18	-3.12	2.10	-2.18	-18.26	7.22	N/A	
Bimbg. Barc. U.S. Corp: High Yield Value Added	17.80	-8.51	4.28	7.79	10.67	2.10	14.16	N/A	N/A	N/A	
Bimbg. Barc. U.S. Corp: High Yield Value Added	17.13	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	
Bimbg. Barc. U.S. Corp: High Yield Value Added	0.67	-4.04	1.83	0.35	-5.14	-2.88	-0.95	N/A	N/A	N/A	
Bimbg. Barc. U.S. Corp: High Yield Value Added	20.66	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	



## Calendar Year Performance

	Performance (%)									
	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
<i>Bimbg. Barc. U.S. Corp. High Yield</i>	17.13	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87
Value Added	3.53	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<i>Hayfin Special Opportunities Credit LP</i>	5.14	-2.76	-6.95	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<i>Bimbg. Barc. U.S. Corp. High Yield</i>	17.13	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87
Value Added	-11.99	1.71	-9.40	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<i>Hayfin SOF II USD Co-Invest</i>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<i>Bimbg. Barc. U.S. Corp. High Yield</i>	17.13	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87
Value Added	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<i>Hayfin SOF II USD LP</i>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<i>Bimbg. Barc. U.S. Corp. High Yield</i>	17.13	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87
Value Added	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<i>Inflation Protected (levered)</i>	17.80	-2.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<i>Inflation Protected (unlevered)</i>	9.13	2.55	12.49	-10.76	9.15	23.56	18.13	18.74	0.47	11.28
<i>Blended Policy (Barclays World Inflation Linked Bond - Hedged)</i>	10.22	-1.76	3.64	-8.61	6.98	13.56	6.31	11.41	-2.35	11.63
Value Added	-1.09	4.31	8.85	-2.15	2.17	10.00	11.82	7.33	2.82	-0.35
<i>TIPS Composite (levered)</i>	17.80	-2.00	12.06	-11.23	8.59	23.01	17.55	18.42	0.20	11.14
<i>Blended Policy (Barclays World Inflation Linked Bond - Hedged)</i>	10.22	-1.76	3.64	-8.61	6.98	13.56	6.31	11.41	-2.35	11.63
Value Added	7.58	-0.24	8.42	-2.62	1.61	9.45	11.24	7.01	2.55	-0.49
<i>Blended Policy (Net Levered TIPS)</i>	20.11	-3.97	6.76	-17.07	13.75	28.18	12.34	22.50	-8.81	N/A
Value Added	-2.31	1.97	5.30	5.84	-5.16	-5.17	5.21	-4.08	9.01	N/A
<i>TIPS Composite (unlevered)</i>	9.13	2.55	12.49	-10.76	9.15	23.56	18.13	18.74	0.47	11.28
<i>Blended Policy (Barclays World Inflation Linked Bond - Hedged)</i>	10.22	-1.76	3.64	-8.61	6.98	13.56	6.31	11.41	-2.35	11.63
Value Added	-1.09	4.31	8.85	-2.15	2.17	10.00	11.82	7.33	2.82	-0.35
<i>Bridgewater TIPS (unlevered)</i>	11.69	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<i>BGI Custom IL Bond Index (unlevered)</i>	11.34	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Value Added	0.35	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<i>Bridgewater TIPS (levered)</i>	23.93	-2.06	18.34	-11.80	10.04	29.14	27.46	20.64	5.45	10.83
<i>BGI Custom IL Bond Index (levered)</i>	23.14	-3.03	16.75	-12.94	N/A	N/A	N/A	N/A	N/A	N/A
Value Added	0.79	0.97	1.59	1.14	N/A	N/A	N/A	N/A	N/A	N/A
<i>Garda Inflation Opportunity Composite (levered)</i>	18.39	-0.97	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<i>Blended Benchmark (Garda)</i>	19.85	-1.74	2.07	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Value Added	-1.46	0.77	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<i>Garda Inflation Opportunity Composite (unlevered)</i>	4.96	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<i>Bimbg. Barc. Global Inflation-Linked: U.S. TIPS</i>	4.68	-1.44	3.64	-8.61	6.98	13.56	6.31	11.41	-2.35	11.63
Value Added	0.28	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<i>Garda Inflation Opp. Fund ClB (levered)</i>	21.35	-1.47	10.60	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<i>Blended Benchmark (Garda)</i>	19.85	-1.74	2.07	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Value Added	1.50	0.27	8.53	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<i>Garda Inflation Opp. Fund ClB (unlevered)</i>	4.85	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A



## Calendar Year Performance

	Performance (%)									
	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
<b>Blmgb. Barc. Global Inflation-Linked: U.S. TIPS</b>	4.68	-1.44	3.64	-8.61	6.98	13.56	6.31	11.41	-2.35	11.63
Value Added	0.17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Garda Fixed Income Relative Value Opportunity Fund Ltd. (TIPS)</b>	6.82	2.17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>PSERS Total TIPS (levered)</b>	5.98	-1.46	5.03	-7.97	7.10	18.25	11.31	17.12	-2.23	11.50
<b>PSERS Total TIPS (unlevered)</b>	6.20	-1.46	5.03	-7.97	7.03	13.96	7.12	12.95	-2.23	11.50
<b>Blmgb. Barc. Global Inflation-Linked: U.S. TIPS</b>	4.68	-1.44	3.64	-8.61	6.98	13.56	6.31	11.41	-2.35	11.63
Value Added	1.52	-0.02	1.39	0.64	0.05	0.40	0.81	1.54	0.12	-0.13
<b>PSERS TIPS (levered)</b>	5.23	-1.46	5.03	-7.97	7.10	18.25	11.31	17.12	-2.23	11.50
<b>PSERS TIPS (unlevered)</b>	5.23	-1.46	5.03	-7.97	7.03	13.96	7.12	12.95	-2.23	11.50
<b>Blmgb. Barc. Global Inflation-Linked: U.S. TIPS</b>	4.68	-1.44	3.64	-8.61	6.98	13.56	6.31	11.41	-2.35	11.63
Value Added	0.55	-0.02	1.39	0.64	0.05	0.40	0.81	1.54	0.12	-0.13
<b>PIMCO Multi-Sector Strategy</b>	7.11	-3.32	5.22	-1.24	N/A	N/A	N/A	N/A	N/A	N/A
<b>Blended Policy (PIMCO Multi-Sector)</b>	6.36	-2.70	6.32	-0.73	7.46	7.84	6.54	5.93	5.24	6.97
Value Added	0.75	-0.62	-1.10	-0.51	N/A	N/A	N/A	N/A	N/A	N/A
<b>Real Assets (levered/hedged)</b>	17.88	-8.32	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Real Assets (unlevered/hedged)</b>	14.01	-7.87	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Blended Policy (Real Assets) (Hedged)</b>	9.37	-8.79	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Value Added	4.64	0.92	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Real Assets (levered/unhedged)</b>	17.58	-8.32	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Real Assets (unlevered/unhedged)</b>	13.79	-7.87	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Blended Policy (Real Assets) (Unhedged)</b>	9.11	-8.83	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Value Added	4.68	0.96	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Real Assets x Private Real Estate/Infra (levered/hedged)</b>	27.77	-30.79	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Real Assets x Private Real Estate/Infra (unlevered/hedged)</b>	17.17	-29.16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Blended Policy (Real Assets x Private RE) (Hedged)</b>	14.09	-24.87	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Value Added	3.08	-4.29	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Real Assets x Private Real Estate/Infra (levered/unhedged)</b>	27.12	-30.79	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Real Assets x Private Real Estate/Infra (unlevered/unhedged)</b>	16.81	-29.16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Blended Policy (Real Assets x Private RE) (Unhedged)</b>	13.63	-24.92	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Value Added	3.18	-4.24	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Infrastructure Composite (levered/hedged)</b>	24.58	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Infrastructure Composite (unlevered/hedged)</b>	11.66	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>FTSE Dev. Core Infrast. 50/50 100% Hdq Index- Net</b>	11.81	-3.56	21.17	18.21	10.80	7.40	8.22	N/A	N/A	N/A
Value Added	-0.15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Insight Nevada - Infra (notional)</b>	1.84	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Infra Currency Hedge Benchmark</b>	1.98	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Value Added	-0.14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

## Calendar Year Performance

	Performance (%)									
	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Infrastructure Composite (levered/unhedged)	21.40	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Infrastructure Composite (unlevered/unhedged)	10.52	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FTSE Developed Core Infrastr 50/50 Index (Net)	10.63	-7.56	16.02	15.48	11.49	8.00	10.34	N/A	N/A	N/A
Value Added	-0.11	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Private Infrastructure Composite	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PSERS Infrastructure Private	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Publicly-Traded Infrastructure Composite (levered)	21.40	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Publicly-Traded Infrastructure Composite (unlevered)	10.52	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FTSE Developed Core Infrastr 50/50 Index (Net)	10.63	-7.56	16.02	15.48	11.49	8.00	10.34	N/A	N/A	N/A
Value Added	-0.11	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MLP Composite	24.62	-32.63	16.30	37.44	12.77	18.88	39.62	72.22	N/A	N/A
S&P MLP Index	21.95	-35.07	7.66	29.75	4.95	14.47	35.17	78.79	-37.46	9.41
Value Added	2.67	2.44	8.64	7.69	7.82	4.41	4.65	-6.57	N/A	N/A
PSERS MLP	22.29	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MLP Internal Blended Benchmark	21.95	-35.07	7.66	29.75	4.95	14.47	35.17	78.79	-37.46	9.41
Value Added	0.34	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
External MLP Composite	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S&P MLP Index	21.95	-35.07	7.66	29.75	4.95	14.47	35.17	78.79	-37.46	9.41
Value Added	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Atlantic Trust	28.14	-33.34	15.38	38.77	N/A	N/A	N/A	N/A	N/A	N/A
S&P MLP Index	21.95	-35.07	7.66	29.75	4.95	14.47	35.17	78.79	-37.46	9.41
Value Added	6.19	1.73	7.72	9.02	N/A	N/A	N/A	N/A	N/A	N/A
PSERS Harvest Funds MLP	19.96	-30.25	17.87	35.60	12.80	18.88	39.82	72.22	N/A	N/A
S&P MLP Index	21.95	-35.07	7.66	29.75	4.95	14.47	35.17	78.79	-37.46	9.41
Value Added	-1.99	4.82	10.21	5.85	7.85	4.41	4.65	-6.57	N/A	N/A
Salient	29.46	-36.06	15.15	38.62	N/A	N/A	N/A	N/A	N/A	N/A
S&P MLP Index	21.95	-35.07	7.66	29.75	4.95	14.47	35.17	78.79	-37.46	9.41
Value Added	7.51	-0.99	7.49	8.87	N/A	N/A	N/A	N/A	N/A	N/A
Commodities Composite (levered)	35.48	-33.05	-18.05	-14.29	2.41	-10.00	18.13	33.40	-42.37	28.40
Commodities Composite (unlevered)	14.75	-18.59	-10.18	-11.16	2.41	-10.00	18.13	33.40	-42.37	28.40
Blended Policy (Commodities)	10.80	-19.85	-12.05	-10.34	-1.05	-13.32	16.82	18.90	-35.65	16.22
Value Added	3.95	1.26	1.87	-0.82	3.46	3.32	1.31	14.50	-6.72	12.18
PSERS Commodity Beta + PCAF Composite	17.31	-22.60	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bloomberg Commodity Index Total Return	11.74	-24.66	-17.01	-9.52	-1.06	-13.32	16.83	18.91	-35.65	16.23



## Calendar Year Performance

	Performance (%)										
	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	
Value Added	5.57	2.06	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PSERS Commodity Beta (levered)	45.52	-41.67	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PSERS Commodity Beta (unlevered)	14.25	-23.49	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bloomberg Commodity Index Total Return	11.74	-24.66	-17.01	-9.52	-1.06	-13.32	16.83	18.91	-35.65	16.23	N/A
Value Added	2.51	1.17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PIMCO Commodity Alpha Fund	20.81	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Libor (3 month)	0.74	0.32	0.23	0.27	0.42	0.34	0.34	0.69	2.92	5.30	N/A
Value Added	20.07	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Gresham	12.90	-24.91	-16.31	-7.06	0.66	-6.15	20.92	25.47	-37.17	N/A	N/A
Bloomberg Commodity Index Total Return	11.74	-24.66	-17.01	-9.52	-1.06	-13.32	16.83	18.91	-35.65	16.23	N/A
Value Added	1.16	-0.25	0.70	2.46	1.72	7.17	4.09	6.56	-1.52	N/A	N/A
Wellington Management Company	25.32	-24.58	-15.09	-5.05	2.92	-11.05	19.62	50.65	-46.97	31.55	N/A
Blended Benchmark (WMC)	23.33	-24.75	-14.23	-2.79	4.39	-7.71	19.25	33.80	-36.65	28.62	N/A
Value Added	1.99	0.17	-0.86	-2.26	-1.47	-3.34	0.37	16.85	-10.32	2.93	N/A
PSERS Gold Fund (unlevered)	7.38	-10.78	0.40	-28.17	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bloomberg Gold Subindex Total Return	7.73	-10.88	-1.75	-28.66	6.08	9.63	28.72	22.86	3.91	29.92	N/A
Value Added	-0.35	0.10	2.15	0.49	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PTRES Composite (levered/hedged)	11.66	-2.15	20.09	4.10	13.75	4.71	16.82	45.64	-49.52	-8.56	N/A
PTRES Composite (unlevered/hedged)	7.91	-1.89	20.09	4.10	13.75	4.71	16.82	45.64	-49.52	-8.56	N/A
Blended Policy (PTRES) (Hedged)	5.36	-0.32	14.73	2.24	29.85	-8.13	20.03	39.30	-47.73	-6.94	N/A
Value Added	2.55	-1.57	5.36	1.86	-16.10	12.84	-3.21	6.34	-1.79	-1.62	N/A
Insight Sierra - REIT (notional)	2.31	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
REIT Currency Hedge Benchmark	2.46	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Value Added	-0.15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PTRES Composite (levered/unhedged)	9.65	-2.16	20.09	4.10	13.75	4.71	16.82	45.64	-49.52	-8.56	N/A
PTRES Composite (unlevered/unhedged)	6.75	-1.89	20.09	4.10	13.75	4.71	16.82	45.64	-49.52	-8.56	N/A
Blended Policy (PTRES) (Unhedged)	4.06	-0.72	14.73	2.24	29.85	-8.13	20.03	39.30	-47.73	-6.94	N/A
Value Added	2.69	-1.17	5.36	1.86	-16.10	12.84	-3.21	6.34	-1.79	-1.62	N/A
PSERS REIT Index (levered)	7.24	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PSERS REIT Index (unlevered)	4.16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FTSE EPRA/NAREIT Developed Index (Net)	4.06	-0.79	15.02	3.67	27.73	-6.46	19.63	37.13	-48.16	-7.39	N/A
Value Added	0.10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Security Capital Preferred Growth	12.23	2.15	20.09	4.10	13.75	4.71	24.71	64.34	N/A	N/A	N/A
Wifshire US Real Estate Securities Index	7.62	4.81	31.53	2.15	17.55	8.56	29.12	29.20	-39.83	-17.66	N/A
Value Added	4.61	-2.66	-11.44	1.95	-3.80	-3.85	-4.41	35.14	N/A	N/A	N/A
Risk Parity Composite (vol adjusted)	11.14	-6.54	10.17	-4.74	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Blended Policy (Risk Parity)	12.20	-5.66	10.41	-5.28	14.00	16.70	20.34	22.70	-17.74	16.64	N/A
Value Added	-1.06	-0.88	-0.24	0.54	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PSERS Risk Parity (vol adjusted)	14.17	-6.14	10.21	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

As of June 30, 2017

Calendar Year Performance

	Performance (%)										
	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	
Bridgewater All Weather @15% (vol adjusted)	11.60	-8.35	9.49	-4.57	N/A	N/A	N/A	N/A	N/A	N/A	
DE Shaw Orienteer HV (vol adjusted)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
BlackRock Market Advantage II (vol adjusted)	11.69	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Bridgewater Optimal (vol adjusted)	7.72	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
<b>Total Absolute Return</b>	<b>3.98</b>	<b>3.70</b>	<b>3.06</b>	<b>4.77</b>	<b>3.54</b>	<b>7.72</b>	<b>17.25</b>	<b>15.25</b>	<b>-8.71</b>	<b>8.17</b>	
<b>Blended Policy (3-month Libor + 3.5%)</b>	<b>4.27</b>	<b>3.83</b>	<b>5.61</b>	<b>7.50</b>	<b>7.50</b>	<b>7.75</b>	<b>8.00</b>	<b>8.00</b>	<b>8.00</b>	<b>8.00</b>	
Value Added	-0.29	-0.13	-2.55	-2.73	-3.96	-0.03	9.25	7.25	-16.71	0.17	
Apollo Aviation/SASOF III LP	15.22	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Libor (1 month)	0.49	0.20	0.16	0.19	0.24	0.23	0.27	0.33	2.67	5.25	
Value Added	14.73	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Oceanwood Opportunities Fund	-5.12	9.10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Libor (1 month)	0.49	0.20	0.16	0.19	0.24	0.23	0.27	0.33	2.67	5.25	
Value Added	-5.61	8.90	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Perry Partners LP	8.03	-13.32	-4.25	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Libor (1 month)	0.49	0.20	0.16	0.19	0.24	0.23	0.27	0.33	2.67	5.25	
Value Added	7.54	-13.52	-4.41	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Ellis Lake Domestic Fund, LP	-48.93	-9.85	-7.22	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Libor (1 month)	0.49	0.20	0.16	0.19	0.24	0.23	0.27	0.33	2.67	5.25	
Value Added	-49.42	-10.05	-7.38	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Garda Fixed Income Relative Value Opportunity Fund Ltd.	6.83	2.18	6.39	5.06	6.70	N/A	N/A	N/A	N/A	N/A	
Libor (1 month)	0.49	0.20	0.16	0.19	0.24	0.23	0.27	0.33	2.67	5.25	
Value Added	6.34	1.98	6.23	4.87	6.46	N/A	N/A	N/A	N/A	N/A	
Capula Global Relative Value Fund Limited	9.01	8.09	8.62	8.18	0.83	N/A	N/A	N/A	N/A	N/A	
Libor (1 month)	0.49	0.20	0.16	0.19	0.24	0.23	0.27	0.33	2.67	5.25	
Value Added	8.52	7.89	8.46	7.99	0.59	N/A	N/A	N/A	N/A	N/A	
PIMCO PARS/GCOF/MAV Composite	0.54	7.08	4.70	2.16	14.21	5.85	2.03	60.77	N/A	N/A	
Libor (1 month)	0.49	0.20	0.16	0.19	0.24	0.23	0.27	0.33	2.67	5.25	
Value Added	0.05	6.88	4.54	1.97	13.97	5.62	1.76	60.44	N/A	N/A	
PIMCO Absolute Return Strategy V Offshore Fund, Ltd.	-0.14	8.20	14.38	0.90	N/A	N/A	N/A	N/A	N/A	N/A	
PIMCO Global Credit Opportunity Offshore Fund, Ltd.	10.19	10.03	7.34	11.11	N/A	N/A	N/A	N/A	N/A	N/A	
PIMCO Multi-Asset Volatility Onshore Fund, LLC	1.88	10.07	2.97	-4.71	N/A	N/A	N/A	N/A	N/A	N/A	
Capital Structure Investments Offshore Fund, Ltd.	-10.67	12.60	-5.14	7.52	4.07	23.18	0.61	N/A	N/A	N/A	
Libor (1 month)	0.49	0.20	0.16	0.19	0.24	0.23	0.27	0.33	2.67	5.25	
Value Added	-11.16	12.40	-5.30	7.33	3.83	22.95	0.34	N/A	N/A	N/A	
Brigade Leveraged Capital Structures Offshore Fund, Ltd.	22.88	-11.10	0.51	6.12	7.05	2.90	7.84	39.90	-16.69	N/A	
Libor (1 month)	0.49	0.20	0.16	0.19	0.24	0.23	0.27	0.33	2.67	5.25	
Value Added	22.39	-11.30	0.35	5.93	6.81	2.67	7.57	39.57	-19.36	N/A	





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Calendar Year Performance

	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Caspian Select Credit International, Ltd.	8.92	-10.40	3.11	9.82	11.83	N/A	N/A	N/A	N/A	N/A
Libor (1 month)	0.49	0.20	0.16	0.19	0.24	0.23	0.27	0.33	2.67	5.25
Value Added	8.43	-10.60	2.95	9.63	11.59	N/A	N/A	N/A	N/A	N/A
Caspian Keystone Focused Fund, Ltd.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Libor (1 month)	0.49	0.20	0.16	0.19	0.24	0.23	0.27	0.33	2.67	5.25
Value Added	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Venor Capital Offshore, Ltd.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Gitigroup 1 Month T-Bill	0.21	0.02	0.02	0.01	0.04	0.04	0.10	0.10	1.35	4.57
Value Added	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Aeolus Property Catastrophe Keystone PF Fund, LP	10.24	14.72	19.41	22.65	N/A	N/A	N/A	N/A	N/A	N/A
Libor (1 month)	0.49	0.20	0.16	0.19	0.24	0.23	0.27	0.33	2.67	5.25
Value Added	9.75	14.52	19.25	22.46	N/A	N/A	N/A	N/A	N/A	N/A
Nephila / Palmetto Fund Ltd.	2.83	5.37	6.92	6.96	10.04	N/A	N/A	N/A	N/A	N/A
Libor (1 month)	0.49	0.20	0.16	0.19	0.24	0.23	0.27	0.33	2.67	5.25
Value Added	2.34	5.17	6.76	6.77	9.80	N/A	N/A	N/A	N/A	N/A
Independence Reinsurance Partners Composite	9.86	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Libor (1 month)	0.49	0.20	0.16	0.19	0.24	0.23	0.27	0.33	2.67	5.25
Value Added	9.37	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
DaVinci Reinsurance Ltd.	11.94	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RenaissanceRe Medici Fund Ltd.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Upsilon Diversified Fund Ltd.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Two Sigma Risk Premia Enhanced Fund, LP	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Capula Tail Risk Fund Limited	-0.57	3.32	-1.04	-3.41	-14.28	N/A	N/A	N/A	N/A	N/A
Libor (1 month)	0.49	0.20	0.16	0.19	0.24	0.23	0.27	0.33	2.67	5.25
Value Added	-1.06	3.12	-1.20	-3.60	-14.52	N/A	N/A	N/A	N/A	N/A
Bridgewater Pure Alpha Fund II, Ltd.	2.94	7.58	5.93	6.99	1.56	32.86	56.55	2.44	14.31	13.91
Libor (3 month)	0.74	0.32	0.23	0.27	0.42	0.34	0.34	0.69	2.92	5.30
Value Added	2.20	7.26	5.70	6.72	1.14	32.52	56.21	1.75	11.39	8.61
OWS Credit Opportunity Offshore Fund III, Ltd.	10.03	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Libor (3 month)	0.74	0.32	0.23	0.27	0.42	0.34	0.34	0.69	2.92	5.30
Value Added	9.29	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Unallocated Cash & Cash Equivalents	0.40	0.33	0.29	0.28	3.84	3.06	0.47	0.06	-8.91	2.19
BofA Merrill Lynch 3 Month US T-Bill	0.33	0.05	0.04	0.07	0.11	0.10	0.13	0.21	2.06	5.00
Value Added	0.07	0.28	0.25	0.21	3.73	2.96	0.34	-0.15	-10.97	-2.81
PSERS Cash Management	0.40	-0.05	0.30	0.29	0.55	0.77	0.46	0.25	-9.42	2.29
RE Conversions	0.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A



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	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
<b>PSERS Prop Fund</b>	0.56	0.20	0.19	0.24	0.29	0.22	0.31	1.14	N/A	N/A
<i>BofA Merrill Lynch US Treasury Bills 0-3M</i>	0.25	0.02	0.03	0.05	0.08	0.07	0.13	0.14	1.75	4.78
Value Added	0.31	0.18	0.16	0.19	0.21	0.15	0.18	1.00	N/A	N/A
<b>LIBOR Composite</b>	1.90	0.76	0.76	1.39	1.35	0.62	0.97	3.35	N/A	N/A
<b>PSERS LIBOR</b>	1.43	0.46	0.59	0.86	0.76	0.63	1.04	3.42	3.01	5.61
<i>Libor (3 month)</i>	0.74	0.32	0.23	0.27	0.42	0.34	0.34	0.69	2.92	5.30
Value Added	0.69	0.14	0.36	0.59	0.34	0.29	0.70	2.73	0.09	0.31
<b>Capula LIBOR Tail Risk</b>	-0.57	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<i>Libor (3 month)</i>	0.74	0.32	0.23	0.27	0.42	0.34	0.34	0.69	2.92	5.30
Value Added	-1.31	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Radcliffe Ultra Short Duration</b>	4.26	2.19	1.38	3.25	N/A	N/A	N/A	N/A	N/A	N/A
<i>Libor (3 month)</i>	0.74	0.32	0.23	0.27	0.42	0.34	0.34	0.69	2.92	5.30
Value Added	3.52	1.87	1.15	2.98	N/A	N/A	N/A	N/A	N/A	N/A
<b>Penn Mutual Asset Management</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<i>Libor (3 month)</i>	0.74	0.32	0.23	0.27	0.42	0.34	0.34	0.69	2.92	5.30
Value Added	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>PSERS Healthcare &amp; HOP</b>	0.97	0.31	0.19	0.50	0.79	0.83	1.28	2167	3.76	5.69
<b>PSERS Healthcare - Premium Assist</b>	0.33	0.05	0.04	0.07	0.11	0.10	0.13	0.21	2.06	5.00
<i>BofA Merrill Lynch 3 Month US T-Bill</i>	0.64	0.26	0.15	0.43	0.68	0.73	1.15	2.46	1.70	0.69
Value Added	0.53	0.24	0.20	0.24	0.29	0.24	0.47	0.95	2.80	5.39
<b>PSERS Healthcare - HOP</b>	0.33	0.05	0.04	0.07	0.11	0.10	0.13	0.21	2.06	5.00
<i>BofA Merrill Lynch 3 Month US T-Bill</i>	0.20	0.19	0.16	0.17	0.18	0.14	0.34	0.74	0.74	0.39
Value Added	4.09	2.07	-0.74	19.28	8.37	-5.72	16.52	29.46	-34.32	7.40
<b>E/M Total Program Composite</b>	2.63	0.38	5.92	-1.85	5.72	7.63	1.26	-17.81	2.87	6.11
<b>E/M US Core Plus FI Composite</b>	2.63	0.56	6.22	-1.89	5.52	8.02	7.24	8.65	5.43	6.45
<b>Pugh Capital Management</b>	2.65	0.55	5.97	-2.02	4.21	7.84	6.54	5.93	5.24	6.97
<i>Bimbg. Barc. U.S. Aggregate</i>	-0.02	0.01	0.25	0.13	1.31	0.18	0.70	2.72	0.19	-0.52
Value Added	-48.93	-9.85	-7.22	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>E/M Absolute Return Composite</b>	-48.93	-9.85	-7.22	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Ellis Lake</b>	0.49	0.20	0.16	0.19	0.24	0.23	0.27	0.33	2.67	5.25
<i>Libor (1 month)</i>	-49.42	-10.05	-7.38	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Value Added	5.20	2.74	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>E/M Short Duration Cash</b>	4.26	2.19	1.38	3.25	N/A	N/A	N/A	N/A	N/A	N/A
<b>Radcliffe Ultra Short Duration</b>	0.74	0.32	0.23	0.27	0.42	0.34	0.34	0.69	2.92	5.30
<i>Libor (3 month)</i>	3.52	1.87	1.15	2.98	N/A	N/A	N/A	N/A	N/A	N/A
Value Added	5.97	3.22	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Radcliffe Specialty Finance Debt</b>										



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Calendar Year Performance

	Performance (%)										
	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	
3-Month Libor + 0.60%	1.35	0.92	0.84	0.87	1.03	0.94	0.95	1.29	3.54	5.93	
Value Added	4.62	2.30	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	



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Calendar Year Performance

	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
<b>Total Private Market Composites (hedged)</b>	9.85	5.39	12.85	12.52	12.00	11.14	11.59	-23.40	-9.29	35.51
<i>Blended Policy (Private Market)</i>	2.91	5.03	10.06	7.21	7.00	9.10	6.86	-13.63	-0.23	15.87
Value Added	6.94	0.36	2.79	5.31	5.00	2.04	4.73	-9.77	-9.06	19.74
<b>Total Private Market Composites (unhedged)</b>	9.82	5.39	12.85	12.52	12.00	11.14	11.59	-23.40	-9.29	35.61
<i>Blended Policy (Private Market)</i>	2.91	5.03	10.06	7.21	7.00	9.10	6.86	-13.63	-0.23	15.87
Value Added	6.91	0.36	2.79	5.31	5.00	2.04	4.73	-9.77	-9.06	19.74
<b>Total Alternative Investments (hedged)</b>	9.63	2.39	10.03	12.73	13.27	9.96	15.58	-9.62	-3.23	39.96
<i>Burgiss (Lagged) - PE/PD/VC/Int</i>	2.47	3.85	6.86	5.21	5.91	6.17	7.46	-9.11	-4.02	14.77
Value Added	7.16	-1.46	3.17	7.52	7.36	3.79	8.12	-0.51	0.79	25.19
<i>Burgiss (Lagged) - Int</i>	-0.46	1.23	-0.59	-9.54	N/A	N/A	N/A	N/A	N/A	N/A
Value Added	10.09	1.16	10.62	22.27	N/A	N/A	N/A	N/A	N/A	N/A
<i>Burgiss (Lagged) - PE/PD</i>	3.01	4.06	7.31	5.69	6.41	6.53	7.17	-8.74	-4.02	15.35
Value Added	6.62	-1.67	2.72	7.04	6.86	3.43	8.41	-0.88	0.79	24.61
<i>Burgiss (Lagged) - VC</i>	-0.24	2.96	3.21	1.02	0.84	1.95	5.19	-13.29	-3.98	3.08
Value Added	9.87	-0.57	6.82	11.71	12.43	8.01	10.39	3.67	0.75	36.88
<b>Total Alternative Investments (unhedged)</b>	9.59	2.39	10.03	12.73	13.27	9.96	15.58	-9.62	-3.23	39.96
<i>Burgiss (Lagged) - PE/PD/VC/Int</i>	2.47	3.85	6.86	5.21	5.91	6.17	7.46	-9.11	-4.02	14.77
Value Added	7.12	-1.46	3.17	7.52	7.36	3.79	8.12	-0.51	0.79	25.19
<i>Burgiss (Lagged) - Int</i>	-0.46	1.23	-0.59	-9.54	N/A	N/A	N/A	N/A	N/A	N/A
Value Added	10.05	1.16	10.62	22.27	N/A	N/A	N/A	N/A	N/A	N/A
<i>Burgiss (Lagged) - PE/PD</i>	3.01	4.06	7.31	5.69	6.41	6.53	7.17	-8.74	-4.02	15.35
Value Added	6.58	-1.67	2.72	7.04	6.86	3.43	8.41	-0.88	0.79	24.61
<i>Burgiss (Lagged) - VC</i>	-0.24	2.96	3.21	1.02	0.84	1.95	5.19	-13.29	-3.98	3.08
Value Added	9.83	-0.57	6.82	11.71	12.43	8.01	10.39	3.67	0.75	36.88
<b>Priv. Eq/ Venture Cap/ Priv. Debt/Co-Invest</b>	9.59	2.39	10.03	12.72	N/A	N/A	N/A	N/A	N/A	N/A
<i>Insight Wilson - PE (notional)</i>	1.21	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>PE Currency Hedge Custom Benchmark</b>	3.50	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Value Added	-2.29	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Private Equity Co-Investment Composite</b>	27.85	26.47	37.82	39.75	N/A	N/A	N/A	N/A	N/A	N/A
<b>PA Penn Investment Fund - PE Composite</b>	12.12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>PA Penn Investment Fund - PE Internal</b>	8.27	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>PA Penn Investment Fund - PE External</b>	11.06	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Woodstream</b>	27.89	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>ERT</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Lasko</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Evans Network</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Internally Managed PE Composite</b>	28.67	26.48	37.82	39.75	N/A	N/A	N/A	N/A	N/A	N/A
<b>Private Eq/ Venture Cap/ Priv. Debt</b>	8.81	1.76	9.71	12.55	13.23	10.29	15.57	-9.63	-3.22	40.21
<b>Private Debt Composite</b>	1.58	0.50	12.79	12.21	13.49	2.43	19.36	3.32	-9.96	20.65



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Calendar Year Performance

	Performance (%)										
	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	
Private Equity/ Venture Capital Composite	10.08	1.97	9.30	12.53	13.20	12.00	14.24	-13.60	-1.67	44.82	
Burgiss (Lagged) - PE/PD/VC/Int	2.47	3.85	6.86	5.21	5.91	6.17	7.46	-9.11	-4.02	14.77	
Value Added	7.61	-1.88	2.44	7.32	7.29	5.83	6.78	-4.49	2.35	30.05	
Private Equity	10.41	1.29	8.82	13.12	12.89	13.13	15.04	-14.11	-2.74	48.10	
Private Equity x Tobacco Composite	10.41	1.75	8.82	13.12	12.89	13.13	15.04	-14.11	-2.74	48.10	
Venture Capital	8.19	6.92	13.50	7.10	15.97	2.26	7.84	-9.66	6.36	21.76	
Total Real Estate (levered/hedged)	10.20	9.17	17.23	11.70	9.16	13.21	3.52	-35.90	-23.17	19.04	
Total Real Estate (unlevered/hedged)	9.83	9.01	17.23	11.70	9.16	13.21	3.52	-35.90	-23.17	19.04	
Blended Policy (Total Real Estate) (Hedged)	3.58	6.83	14.95	10.56	9.05	15.56	6.74	-14.14	-4.83	11.01	
Value Added	6.25	2.18	2.28	1.14	0.11	-2.35	-3.22	-21.76	-18.34	8.03	
Total Real Estate (levered/unhedged)	10.01	9.17	17.23	11.70	9.16	13.21	3.52	-35.90	-23.17	19.04	
Total Real Estate (unlevered/unhedged)	9.83	9.01	17.23	11.70	9.16	13.21	3.52	-35.90	-23.17	19.04	
Blended Policy (Total Real Estate) (Unhedged)	3.37	6.79	14.95	10.56	9.05	15.56	6.74	-14.14	-4.83	11.01	
Value Added	6.46	2.22	2.28	1.14	0.11	-2.35	-3.22	-21.76	-18.34	8.03	
Private Real Estate Composite	10.10	9.54	17.15	11.92	9.79	13.48	1.04	-44.59	-16.12	31.23	
Blended Policy (Private Real Estate)	3.50	6.46	14.95	10.56	9.05	15.56	6.74	-14.14	-4.83	11.01	
Value Added	6.60	3.08	2.20	1.36	0.74	-2.08	-5.70	-30.45	-11.29	20.22	
Private Real Estate x Internal	9.97	9.46	17.07	11.85	9.79	13.48	1.04	-44.61	-17.15	28.90	
Internally Managed Private Real Estate	18.13	18.51	28.93	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

As of June 30, 2017

Trailing Period Performance - Currency Hedge

	Performance (%)										Allocation Market Value (\$000)
	1 Month	Prior Month	Quarter To Date	FYTD	YTD	1 Year	3 Years	Since Inception	Inception Date		
Currency Hedge Aggregate Portfolio	-0.87	-1.48	-3.04	1.98	-4.91	1.98	N/A	-1.41	12/01/2015	5,889,528	
Currency Hedge Aggregate Benchmark Value Added	-0.87	-1.46	-2.99	2.15	-4.83	2.15	N/A	-1.27			
	0.00	-0.02	-0.05	-0.17	-0.08	-0.17	N/A	-0.14			
Insight Everest - Int'l Eq (notional)	-0.77	-1.40	-2.86	2.42	-4.81	2.42	6.25	1.41	07/01/2006	4,558,337	
Currency Hedge Benchmark Value Added	-0.76	-1.37	-2.80	2.59	-4.73	2.59	6.34	1.50			
	-0.01	-0.03	-0.06	-0.17	-0.08	-0.17	-0.09	-0.09			
Insight Nevada - Infra (notional)	-1.68	-1.33	-2.90	0.23	-4.85	0.23	N/A	-2.17	12/01/2015	508,938	
Infra Currency Hedge Benchmark Value Added	-1.62	-1.33	-2.80	0.50	-4.70	0.50	N/A	-1.98			
	-0.06	0.00	-0.10	-0.27	-0.15	-0.27	N/A	-0.19			
Insight Oxygen - HY (notional)	-1.24	-3.02	-5.83	-1.06	-6.77	-1.06	N/A	0.03	06/01/2015	363,835	
HY Currency Hedge Benchmark Value Added	-1.26	-3.09	-5.89	-1.30	-6.85	-1.30	6.53	-1.07			
	0.02	0.07	0.06	0.24	0.08	0.24	N/A	1.10			
Insight Sierra - REIT (notional)	-0.61	-0.88	-1.74	2.41	-4.03	2.41	N/A	-1.43	12/01/2015	321,710	
REIT Currency Hedge Benchmark Value Added	-0.61	-0.86	-1.70	2.57	-3.93	2.57	N/A	-1.27			
	0.00	-0.02	-0.04	-0.16	-0.10	-0.16	N/A	-0.16			
Insight Wilson - PE (notional) Unlagged	-1.07	-2.20	-5.31	0.10	-6.21	0.10	N/A	0.64	09/01/2015	136,707	
PE Currency Hedge Custom Benchmark Value Added	-1.06	-2.17	-5.21	0.26	-6.12	0.26	N/A	N/A			
	-0.01	-0.03	-0.10	-0.16	-0.09	-0.16	N/A	N/A			

As of June 30, 2017

Supplemental Reporting - Notional Internal Portfolios

	Performance (%)						Allocation		
	1 Month	Prior Month	Quarter To Date	FYTD	Year To Date	1 Year		3 Years	5 Years
PSERS U.S. Long Treasuries (unlevered)	0.37	1.95	3.86	-9.17	4.87	-9.17	4.16	1.70	1,446,941
Bloomberg Barclays Long Treasury Index (Adjusted) <sup>1</sup>	0.32	1.92	3.75	-7.73	5.06	-7.73	N/A	N/A	
Value Added	0.05	0.03	0.11	-1.44	-0.19	-1.44	N/A	N/A	
PSERS Total TIPS (unlevered)	-0.87	-0.13	-0.54	0.75	0.72	0.75	1.37	0.96	1,900,183
Bloomberg Barclays Global Inflation-Linked: U.S. TIPS (Adjusted) <sup>2</sup>	-0.99	-0.08	-0.52	-1.01	0.63	-1.01	0.40	0.09	
Value Added	0.12	-0.05	-0.02	1.76	0.09	1.76	0.97	0.87	
PSERS Infrastructure Index (unlevered)	-0.83	4.05	5.02	9.55	13.13	9.55	N/A	N/A	1,013,079
FTSE Developed Core Infrastructure 50/50 Net Tax Index (Adjusted) <sup>3</sup>	-0.86	4.04	4.94	9.28	12.91	9.28	5.16	10.51	
Value Added	0.03	0.01	0.08	0.27	0.22	0.27	N/A	N/A	
PSERS Commodity Beta (unlevered)	-0.07	-1.58	-2.72	-3.63	-3.62	-3.63	-12.61	N/A	1,631,156
Bloomberg Commodity Index Total Return (Adjusted) <sup>4</sup>	-0.24	-1.38	-3.15	-6.96	-5.53	-6.96	-15.06	-9.46	
Value Added	0.17	-0.20	0.43	3.33	1.91	3.33	2.45	N/A	
PSERS Gold Fund (unlevered)	-2.59	0.28	-0.97	-7.45	7.03	-7.45	-2.88	-5.14	1,700,000
Bloomberg Gold Subindex Total Return (Adjusted) <sup>5</sup>	-2.60	0.28	-1.01	-7.57	6.94	-7.57	-3.03	-5.81	
Value Added	0.01	0.00	0.04	0.12	0.09	0.12	0.15	0.67	
PSERS REIT Index (unlevered)	0.73	0.83	2.65	0.27	4.85	0.27	N/A	N/A	691,972
FTSE EPRA/NAREIT Developed Index (Net) (Adjusted) <sup>6</sup>	0.69	0.81	2.56	-0.28	4.54	-0.28	3.37	7.26	
Value Added	0.04	0.02	0.09	0.55	0.31	0.55	N/A	N/A	

<sup>1</sup>Long Treasury: benchmark adjusted to estimate cost of financing using DTCC GCF O/N Repo Index and target leverage ratio of 8:1

<sup>2</sup>TIPS: benchmark adjusted to estimate cost of financing using 3-month LIBOR and target leverage ratio of 1.65:1

<sup>3</sup>Infrastructure, Commodities & REITS: benchmark adjusted to estimate cost of financing using 3-month LIBOR and target leverage ratio of 2:1

<sup>4</sup>Gold: benchmark adjusted to estimate cost of financing using Citigroup 1 Month T-Bill and target leverage ratio of 10:1

PSERS Total Fund Composite

As of June 30, 2017

Asset Allocation

	(\$)	Total Fund	%
PSERS Total Fund Composite	52,237,228		100.0
Total Public Market Composite	39,063,019		74.8
Total Private Market Composite	13,174,729		25.2
<b>Total Public Equity Composite</b>	<b>10,515,392</b>		<b>20.1</b>
Equity Rebalance Account	11,759		0.0
Total US Equity Composite	3,717,413		7.1
Total US Large Cap Composite	2,767,860		5.3
PSERS-S&P 500 Index Composite	2,767,860		5.3
Radcliffe Specialty Finance Debt	338,612		0.6
Total US Small Cap Composite	948,237		1.8
PSERS-S&P 600 Index Composite	468,467		0.9
PSERS-S&P 400 Index Composite	479,769		0.9
PSERS Misc. Equity	1,316		0.0
<b>Total Non-U.S. Equity Composite (hedged)</b>	<b>6,786,220</b>		<b>13.0</b>
Emerging Markets Equity Composite	300,782		0.6
Wasatch EM Small Cap	300,782		0.6
<b>Total Non-U.S. Equity x Emerging Markets Composite</b>	<b>6,485,438</b>		<b>12.4</b>
Insight Everest - Int'l Eq	-140,542		-0.3
<b>Non-US Large Cap Equity Composite</b>	<b>5,700,223</b>		<b>10.9</b>
PSERS ACWI x US Index Fund	3,041,602		5.8
BlackRock EMAX	413,524		0.8
Baillie Gifford	1,062,918		2.0
Marathon Asset Mgmt	1,041,004		2.0
BlackRock Global Composite	554,700		1.1
<b>Non-US Small Cap Equity Composite</b>	<b>\$25,756</b>		<b>1.8</b>
Acadian Asset Mgmt	238,778		0.5
Wasatch Int'l Small Cap	256,231		0.5
Oberweis Asset Mgmt	185,037		0.4
QS Investors	89,711		0.2
Fidelity Institutional Int'l Small Cap	156,000		0.3
<b>Total Alternative Investments (hedged)</b>	<b>7,964,769</b>		<b>15.2</b>
Private Equity	5,357,785		10.3

Alternative investment and real estate investments are valued on a quarter lag.



**PSERS Total Fund Composite**

As of June 30, 2017

**Asset Allocation**

	Total Fund	%
	(\$)	
Insight Wilson - PE	-521	0.0
Managed Stock Distribution	11,360	0.0
PA Penn Investment Fund - PE Composite	49,212	0.1
PA Penn Investment Fund - PE Internal	4,602	0.0
PA Penn Investment Fund - PE External	44,610	0.1
Woodstream	12,407	0.0
ERT	14,271	0.0
Lasko	7,945	0.0
Evans Network	9,987	0.0
Special Situations	1,085,904	2.1
Venture Capital	980,760	1.9
Internally Managed PE Composite	470,269	0.9
<b>Total Fixed Income Composite</b>	<b>11,691,461</b>	<b>22.4</b>
<b>Investment Grade Composite</b>	<b>2,768,795</b>	<b>5.3</b>
<b>US Core Plus Fixed Income Composite</b>	<b>2,378,258</b>	<b>4.6</b>
Pugh Capital Management	100,825	0.2
PSERS Active Core Plus Fixed Income	1,235,757	2.4
BlackRock Global Alpha	930,126	1.8
SEI Investment Management	111,551	0.2
Non-U.S. Developed Markets Fixed Income Composite	177,409	0.3
Alliance Bernstein Global Fixed	177,409	0.3
U.S. Long Treasuries Composite	213,127	0.4
PSERS U.S. Long Treasuries	213,127	0.4
<b>Credit-Related</b>	<b>4,794,901</b>	<b>9.2</b>
Emerging Markets Fixed Income Composite	336,792	0.6
Franklin Templeton Emerging Fixed Income	336,792	0.6
High Yield Fixed Income Composite (hedged)	4,458,109	8.5
Insight Oxygen - HY	-23,471	0.0
Mezzanine High Yield Composite	551,046	1.1
Internally Managed Private Debt Co-Investment	13,823	0.0
Mezzanine High Yield Composite x Internal	537,222	1.0

Alternative investment and real estate investments are valued on a quarter lag.

## Asset Allocation

	Total Fund	
	(\$)	%
Carlyle Energy Mezz. Opp. Fund	106,035	0.2
Carlyle Energy Mezz. Opp. Fund II	18,419	0.0
ICG Europe Fund V	157,310	0.3
ICG Europe Fund VI	56,513	0.1
Bain Capital Middle Market Credit 2010, L.P.	33,896	0.1
Bain Capital Middle Market Credit 2014, L.P.	165,050	0.3
<b>Opportunistic High Yield Composite</b>	<b>1,856,452</b>	<b>3.6</b>
Apollo European Principal Fund II	180,718	0.3
Bain Capital Credit Opp. Fund IV	61,736	0.1
Bain Capital Distressed and Special Situations 2013	297,822	0.6
Bain Capital Distressed and Special Situations 2016 (A), L.P.	133,299	0.3
TPG Opportunities Partners II, LP	31,267	0.1
TPG Opportunities Partners III, LP	81,447	0.2
TOP NPL (A)	15,861	0.0
TPG TAO	265,204	0.5
Brigade Distressed Value	151,582	0.3
Brigade Structured Credit Offshore Fund	249,457	0.5
Avenue Energy Opportunities Fund	233,562	0.4
Avenue Europe SS III	154,496	0.3
<b>Real Asset High Yield Composite</b>	<b>665,140</b>	<b>1.3</b>
Mariner/Galton RMBS	182,171	0.3
Penn Mutual Asset Management	100,230	0.2
Galton Onshore Mortgage Recovery Fund III, LP	136,231	0.3
Mariner International Infrastructure	146,062	0.3
The Varde Scratch and Dent Fund, LP	148,102	0.3
The Varde Scratch and Dent Fund I-A	45,230	0.1
Latitude Management Real Estate Capital IV	7,343	0.0
<b>Senior Loans High Yield Composite</b>	<b>1,408,942</b>	<b>2.7</b>
Cerberus Levered Loan Fund I	8,470	0.0
Cerberus Levered Loan Fund II	134,540	0.3
Cerberus PSERS Levered Loan Opportunities Fund	185,294	0.4
LBC Credit Partners II	33,010	0.1
LBC Credit Partners III	122,434	0.2

Alternative investment and real estate investments are valued on a quarter lag.

Asset Allocation

	Total Fund (\$)	%
LBC-P Credit Fund LP	111,400	0.2
Summit Partners Credit Fund II LP	105,617	0.2
Oaktree Loan Fund 2X, LP	11,060	0.0
Bain Capital Credit Managed Account (PSERS), L.P.	362,672	0.7
Park Square Credit Opportunities	144,504	0.3
Hayfin Special Opportunities Credit LP	150,924	0.3
Hayfin SOF II USD Co-Invest	6,743	0.0
Hayfin SOF II USD LP	32,275	0.1
<b>Inflation Protected</b>	<b>3,716,956</b>	<b>7.1</b>
TIPS Composite (levered)	3,716,956	7.1
Garda Inflation Opportunity Composite (levered)	440,098	0.8
Garda Inflation Opp. Fund CI B (levered)	295,764	0.6
Garda FIRVO Fund Ltd. (TIPS)	144,334	0.3
Bridgewater TIPS (levered)	2,101,675	4.0
PSERS Total TIPS (levered)	1,175,183	2.2
<b>PIMCO Multi-Sector Strategy</b>	<b>409,723</b>	<b>0.8</b>
PSERS Fixed Liquidation	1,086	0.0
<b>Real Assets (levered/hedged)</b>	<b>10,496,415</b>	<b>20.1</b>
Infrastructure Composite (levered/hedged)	2,931,516	5.6
Insight Nevada - Infra	-13,998	0.0
Private Infrastructure Composite	6,340	0.0
PSERS Infrastructure Private	6,340	0.0
Publicly-Traded Infrastructure Composite (levered)	2,939,174	5.6
PSERS Infrastructure Index (levered)	545,546	1.0
MLP Composite	2,393,628	4.6
PSERS MLP	476,238	0.9
External MLP Composite	1,917,390	3.7
Atlantic Trust	566,890	1.1
Harvest MLP Alpha	752,426	1.4
Sallient	598,074	1.1

Alternative investment and real estate investments are valued on a quarter lag.



## Asset Allocation

	Total Fund	%
	(\$)	
Commodities Composite (levered)	1,825,027	3.5
PSERS Commodities Composite	881,753	1.7
PSERS Commodity Beta (levered)	611,768	1.2
PIMCO Commodity Alpha Fund	269,985	0.5
Gresham	315,287	0.6
Wellington Management Company	413,242	0.8
Gold Composite	214,745	0.4
PSERS Gold Fund (levered)	214,745	0.4
<b>Total Real Estate (levered/hedged)</b>	<b>5,739,872</b>	<b>11.0</b>
PTRES Composite (levered/hedged)	536,772	1.0
Insight Sierra - REIT	-6,574	0.0
PSERS REIT Index (levered)	360,931	0.7
Security Capital Preferred Growth	182,414	0.3
Private Real Estate	5,203,100	10.0
Private Real Estate x Internal	5,081,860	9.7
Internally Managed Private Real Estate	121,240	0.2
<b>Risk Parity Composite</b>	<b>4,495,688</b>	<b>8.6</b>
PSERS Risk Parity	2,189,995	4.2
Bridgewater All Weather @15%	627,444	1.2
DE Shaw Orienteer HV	614,524	1.2
BlackRock Market Advantage II	442,468	0.8
Bridgewater Optimal	621,257	1.2
<b>Total Absolute Return</b>	<b>4,979,029</b>	<b>9.5</b>
Apollo Aviation/SASOF II LP	8,942	0.0
Apollo Aviation/SASOF III LP	102,108	0.2
Oceanwood Opportunities Fund	229,268	0.4
Perry Partners LP	39,567	0.1
Ellis Lake Domestic Fund, LP	2,340	0.0
Garda Fixed Income Relative Value Opportunity Fund Ltd.	395,928	0.8
Capula Global Relative Value Fund Limited	420,434	0.8
PIMCO PARS/GCOF/MAV Composite	780,424	1.5

Alternative investment and real estate investments are valued on a quarter lag.



Asset Allocation

	Total Fund (\$)	%
PIMCO PARS	266,192	0.5
PIMCO GCOF	278,754	0.5
PIMCO MAV	235,479	0.5
Capital Structure Investments Offshore Fund, Ltd.	286,849	0.5
Brigade Leveraged Capital Structures Offshore Fund, Ltd.	293,972	0.6
Caspian Select Credit International, Ltd.	243,302	0.5
Caspian Keystone Focused Fund, Ltd.	15,269	0.0
Venor Capital Offshore, Ltd.	152,367	0.3
Aeolus Property Catastrophe Keystone PF Fund, LP	169,131	0.3
Nephila / Palmetto Fund Ltd.	174,646	0.3
Independence Reinsurance Partners Composite	88,783	0.2
Independence Reinsurance Partners Cash	-29	0.0
DaVinci Reinsurance Ltd.	22,490	0.0
Medici Fund Ltd.	45,670	0.1
Upsilon Diversified Fund	20,651	0.0
Two Sigma Risk Premia Enhanced Fund, LP	147,211	0.3
Capula Tail Risk Fund Limited	326,172	0.6
Bridgewater Pure Alpha Fund II, Ltd.	865,198	1.7
OWS Credit Opportunity Offshore Fund III, Ltd.	237,117	0.5
<b>Unallocated Cash &amp; Cash Equivalents</b>	<b>2,094,086</b>	<b>4.0</b>
PSERS Cash Management	2,080,802	4.0
RE Conversions	13,286	0.0

Alternative investment and real estate investments are valued on a quarter lag.

Schedule of Investable Assets

PSERS Total Fund Composite vs. Blended Policy (Total Plan)

Periods Ending	Beginning Market Value (\$000)	Contributions (\$000)	Withdrawals (\$000)	Net Cash Flow (\$000)	Gain/Loss (\$000)	Ending Market Value (\$000)	%Return
Jun-2013	-	-	-	-	-	49,016,578.10	-
Sep-2013	49,016,578.10	4,636,922.82	6,172,104.01	-1,535,181.19	1,389,685.21	48,871,082.12	2.9
Dec-2013	48,871,082.12	5,867,242.37	6,252,435.21	-385,192.84	1,653,594.99	50,139,484.27	3.4
Mar-2014	50,139,484.27	4,406,958.92	5,416,004.58	-1,009,045.66	1,795,946.40	50,926,385.02	3.6
Jun-2014	50,926,385.02	7,554,255.99	8,049,348.85	-495,092.86	2,129,620.59	52,560,912.74	4.2
Sep-2014	52,560,912.74	5,613,796.98	6,298,432.85	684,635.87	305,731.96	52,182,008.83	0.6
Dec-2014	52,182,008.83	9,486,756.02	10,202,396.23	-715,640.21	73,636.67	51,540,005.29	0.1
Mar-2015	51,540,005.29	10,008,587.78	10,707,898.63	-699,310.86	1,458,105.84	52,298,800.27	2.8
Jun-2015	52,298,800.27	5,787,431.23	6,620,947.13	-833,515.90	-71,189.47	51,394,094.90	-0.5
Sep-2015	51,394,094.90	8,230,771.92	9,673,052.94	-1,442,281.03	-1,975,325.66	47,976,488.21	-3.9
Dec-2015	47,976,488.21	7,625,267.24	8,688,588.51	-1,063,321.26	-34,282.61	46,878,884.34	-0.1
Mar-2016	46,878,884.34	5,942,062.19	6,052,023.77	-109,961.58	686,046.88	47,454,969.63	1.5
Jun-2016	47,454,969.63	5,626,818.39	6,000,209.13	-373,390.75	1,890,250.48	48,971,829.36	4.0
Sep-2016	48,971,829.36	5,501,625.43	6,080,823.79	-579,198.36	1,805,042.28	50,197,673.28	3.7
Dec-2016	50,197,673.28	6,462,818.85	6,783,275.18	-320,456.32	613,829.27	50,491,046.22	1.3
Mar-2017	50,491,046.22	4,304,959.51	4,961,133.73	-656,174.21	1,625,634.07	51,460,506.08	3.3
Jun-2017	51,460,506.08	4,176,271.68	4,219,638.33	-43,366.65	820,088.14	52,237,227.57	1.6
	49,016,578.10	101,232,547.34	112,178,312.88	-10,945,765.55	14,166,415.02	52,237,227.57	7.2