



PA Public School Employees' Retirement System | Third Quarter 2016

Quarterly Investment Review

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Executive Summary

Market Highlights

	Performance(%)							Inception Date
	1 Quarter	FYTD	1 Year	3 Years	5 Years	10 Years	Since Inception	
Equity								
Dow Jones U.S. Total Stock Market Index	4.43	4.43	14.93	10.39	16.30	7.49	10.06	01/01/1987
S&P 500 Index	3.85	3.85	15.43	11.16	16.37	7.24	10.03	01/01/1926
MSCI USA IMI	4.42	4.42	15.18	10.54	16.39	7.58	9.45	06/01/1994
MSCI USA Large Cap Index	3.90	3.90	15.41	11.29	16.32	7.28	9.02	06/01/1994
MSCI USA Small Cap Index	6.82	6.82	15.64	8.13	16.82	8.20	9.38	01/01/2001
MSCI EAFE Index (Net)	6.43	6.43	6.52	0.48	7.39	1.82	8.69	01/01/1970
MSCI EAFE Index (hedged)	5.71	5.71	2.26	2.50	8.17	-0.20	6.96	01/01/1970
MSCI EAFE Index (Price)	5.80	5.80	3.48	-2.18	4.38	-1.02	6.25	01/01/1970
MSCI EAFE Small Cap Index (Net)	8.64	8.64	12.33	5.08	11.07	4.39	8.36	01/01/2001
MSCI AC World ex USA IMI Index (Net)	7.05	7.05	9.81	0.62	6.38	2.47	4.75	06/01/1994
MSCI AC World ex USA Index (Net)	6.91	6.91	9.26	0.18	6.04	2.16	4.21	01/01/2001
MSCI Emerging Markets Index (Net)	9.03	9.03	16.78	-0.56	3.03	3.94	10.27	02/01/1988
Fixed Income								
Blmbg. Barc. U.S. Aggregate	0.46	0.46	5.19	4.03	3.08	4.79	7.68	01/01/1976
Blmbg. Barc. U.S. Treasury: Long	-0.36	-0.36	13.13	11.16	5.48	8.06	8.66	01/01/1973
Barclays Global Agg GDP Weighted Dev x U.S. Index (unhedged)	1.22	1.22	9.57	0.60	1.27	3.97	3.12	01/01/2005
Barclays Global Agg GDP Weighted Dev x U.S. Index (hedged)	0.90	0.90	7.44	5.80	5.21	4.86	4.79	01/01/2005
Blmbg. Barc. U.S. Corp: High Yield	5.55	5.55	12.73	5.28	8.34	7.71	9.05	07/01/1983
Blmbg. Barc. Emerging Market 10% Country Cap Index	2.42	2.42	15.72	-0.84	1.63	N/A	3.07	07/01/2008
Blmbg. Barc. Global Inflation-Linked: U.S. TIPS	0.96	0.96	6.58	2.40	1.93	4.48	5.81	10/01/1997
Barclays World Inflation Linked Bonds (hedged)	3.78	3.78	11.45	6.15	4.54	5.23	6.33	01/01/1997
Barclays Universal Index	0.96	0.96	6.11	4.27	3.62	5.00	6.49	01/01/1990
Libor (3 month)	0.19	0.19	0.61	0.37	0.38	1.26	5.80	01/01/1977
BofA Merrill Lynch 3 Month US T-Bill	0.10	0.10	0.27	0.12	0.10	0.92	5.12	01/01/1978
BofA Merrill Lynch US Treasury Bills 0-3M	0.07	0.07	0.19	0.08	0.07	0.84	2.62	07/01/1992

Market Highlights

	Performance(%)						Since Inception	Inception Date
	1 Quarter	FYTD	1 Year	3 Years	5 Years	10 Years		
MLP								
S&P MLP Index	2.92	2.92	10.12	-4.38	5.51	8.99	10.70	08/01/2001
Infrastructure								
FTSE Dev. Core Infrast 50/50 Index (Net) (Hedged)	0.67	0.67	13.14	11.23	13.59	N/A	10.90	01/01/2010
FTSE Developed Core Infrast 50/50 Index (Net)	0.89	0.89	14.65	8.51	11.79	N/A	9.92	01/01/2010
Risk Parity								
Blended Policy (Risk Parity)	3.73	3.73	15.96	6.55	N/A	N/A	N/A	06/01/2011
Commodities								
Bloomberg Commodity Index Total Return	-3.86	-3.86	-2.59	-12.35	-9.37	-5.33	2.35	02/01/1991
Bloomberg Gold Subindex Total Return	-0.74	-0.74	17.27	-0.73	-4.64	7.32	5.00	02/01/1991
Real Estate								
Burgiss (Lagged) - Opportunistic	0.69	0.69	3.67	8.96	8.79	4.76	8.28	01/01/1989
Burgiss (Lagged) - Value Added	1.20	1.20	6.36	10.54	10.01	2.63	6.32	07/01/1988
NCREIF ODCE NOF 1 Quarter Lag	1.91	1.91	10.80	11.97	11.65	5.19	7.68	04/01/1978
FTSE EPRA/NAREIT Developed Index (Net)	1.25	1.25	14.85	7.71	12.29	3.41	6.40	03/01/2005
FTSE EPRA NAREIT Custom Dev 100% Hedged USD (Net)	1.11	1.11	13.15	9.85	N/A	N/A	13.27	01/01/2012
Wilshire US Real Estate Securities Index	-1.40	-1.40	18.45	14.61	16.02	5.93	12.14	01/01/1978
Private Markets								
Burgiss (Lagged) - PE/PD/MC/Int	0.54	0.54	1.22	4.42	4.39	3.76	3.16	04/01/1998
Burgiss (Lagged) - PE/PD	0.72	0.72	1.71	4.78	4.79	4.07	5.09	01/01/2003
Burgiss (Lagged) - VC	-0.20	-0.20	-1.39	2.07	1.23	-0.17	-0.97	01/01/2003
Burgiss (Lagged) - Int	-0.95	-0.95	-1.25	0.35	N/A	N/A	-12.05	04/01/2012

As of September 30, 2016

Trailing Period Performance

	Performance(%)										Inception Date
	1 Quarter	2 Quarters	3 Quarters	1 Year	3 Years	5 Years	10 Years	Since Inception			
PSERS Total Fund	3.55	7.78	9.39	9.28	6.50	7.56	4.91	6.53			09/01/1997
Blended Policy (Total Plan)	2.74	6.88	9.47	9.49	5.13	6.06	3.79	N/A			
Value Added	0.91	0.90	-0.08	-0.21	1.37	1.50	1.12	N/A			
Total Public Market Composite	3.93	9.00	10.47	10.68	4.96	6.64	4.37	6.52			06/01/2002
Blended Policy (Public Market) (Hedged)	3.47	9.01	12.12	12.02	4.29	5.82	3.47	5.25			
Value Added	0.46	-0.01	-1.65	-1.34	0.67	0.82	0.90	1.27			
Blended Policy (Public Market) (Unhedged)	3.24	8.39	12.27	11.74	3.74	5.48	3.31	5.14			
Value Added	0.69	0.61	-1.80	-1.06	1.22	1.16	1.06	1.38			
Total Private Market Composite	2.83	4.51	6.45	5.54	9.61	9.16	6.87	9.84			12/01/1992
Blended Policy (Private Market)	0.71	1.18	2.47	2.78	6.56	6.34	4.95	N/A			
Value Added	2.12	3.33	3.98	2.76	3.05	2.82	1.92	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 September 30, 2016

Trailing Period Performance

Performance (%)

Since
July 2011

PSERS Total Fund

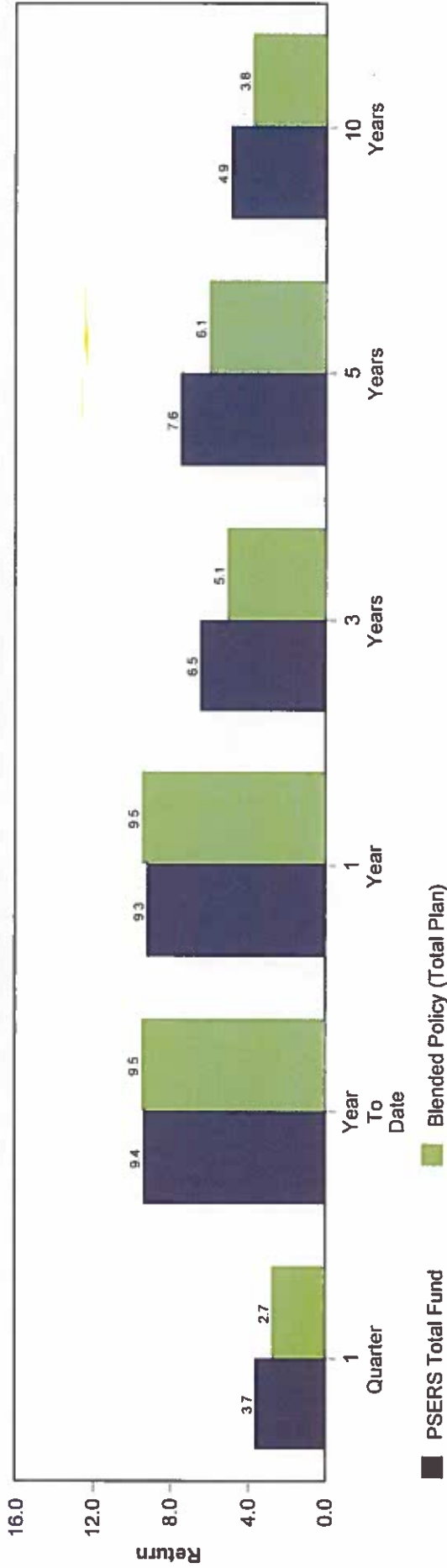
Blended Policy (Total Plan)

6.44

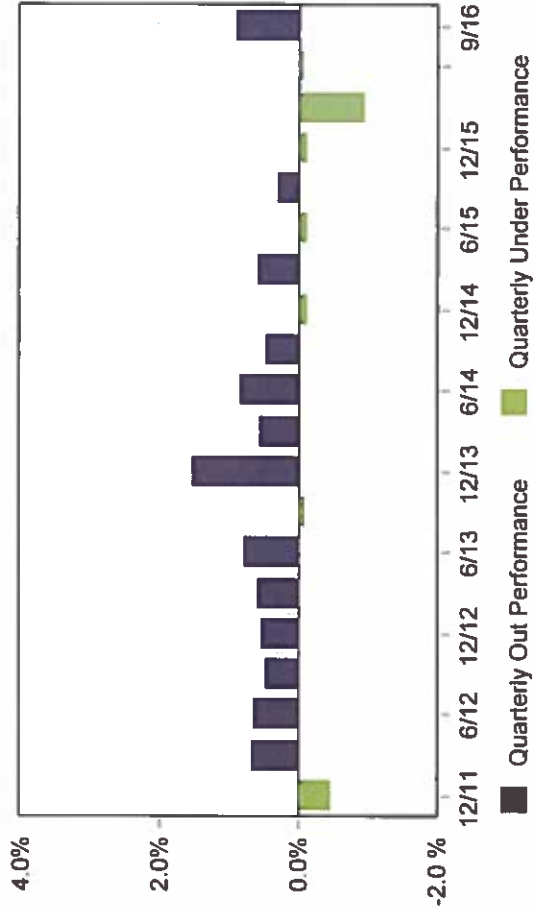
4.84

Performance Summary

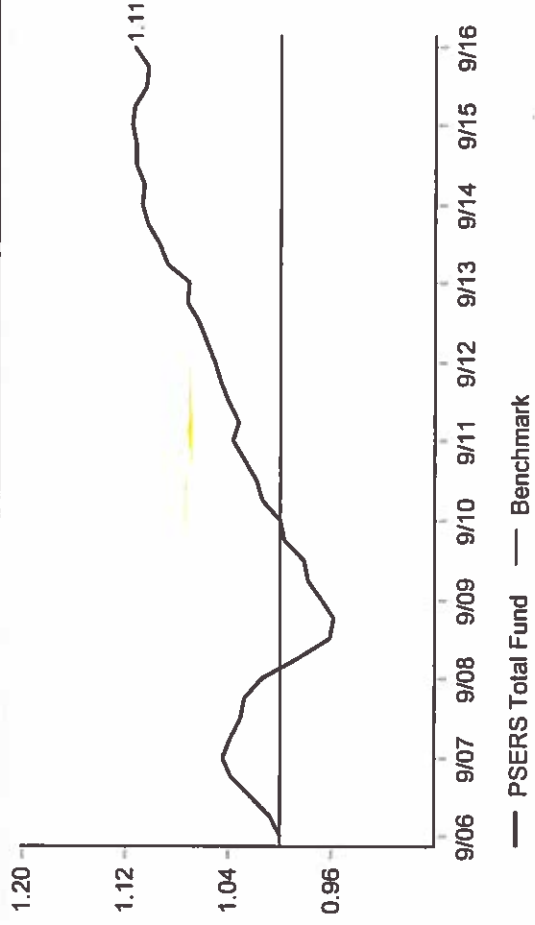
Return Summary



Quarterly Excess Performance

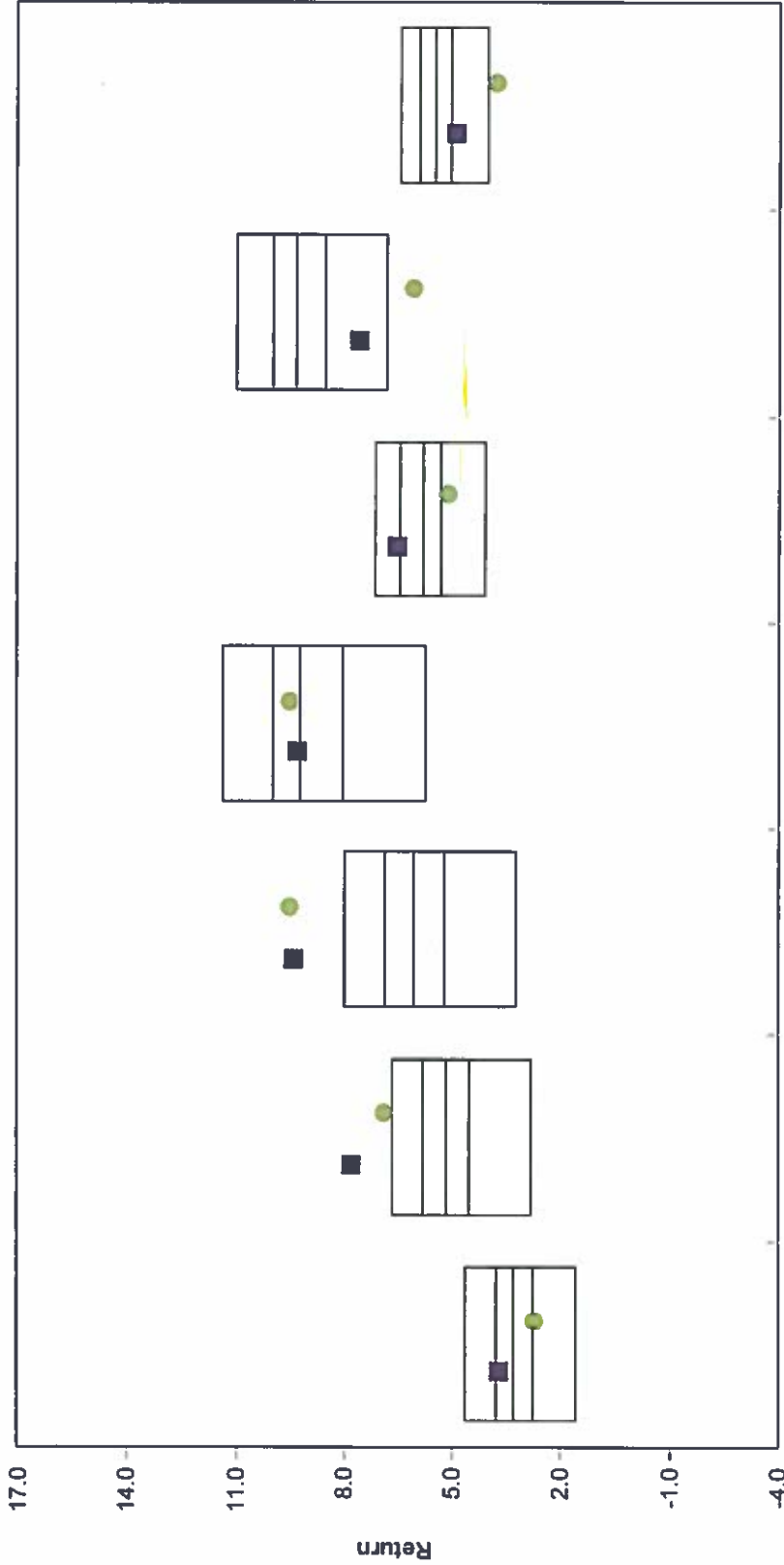


Ratio of Cumulative Wealth - 10 Years



Peer Group Analysis

All Public Plans-Total Fund



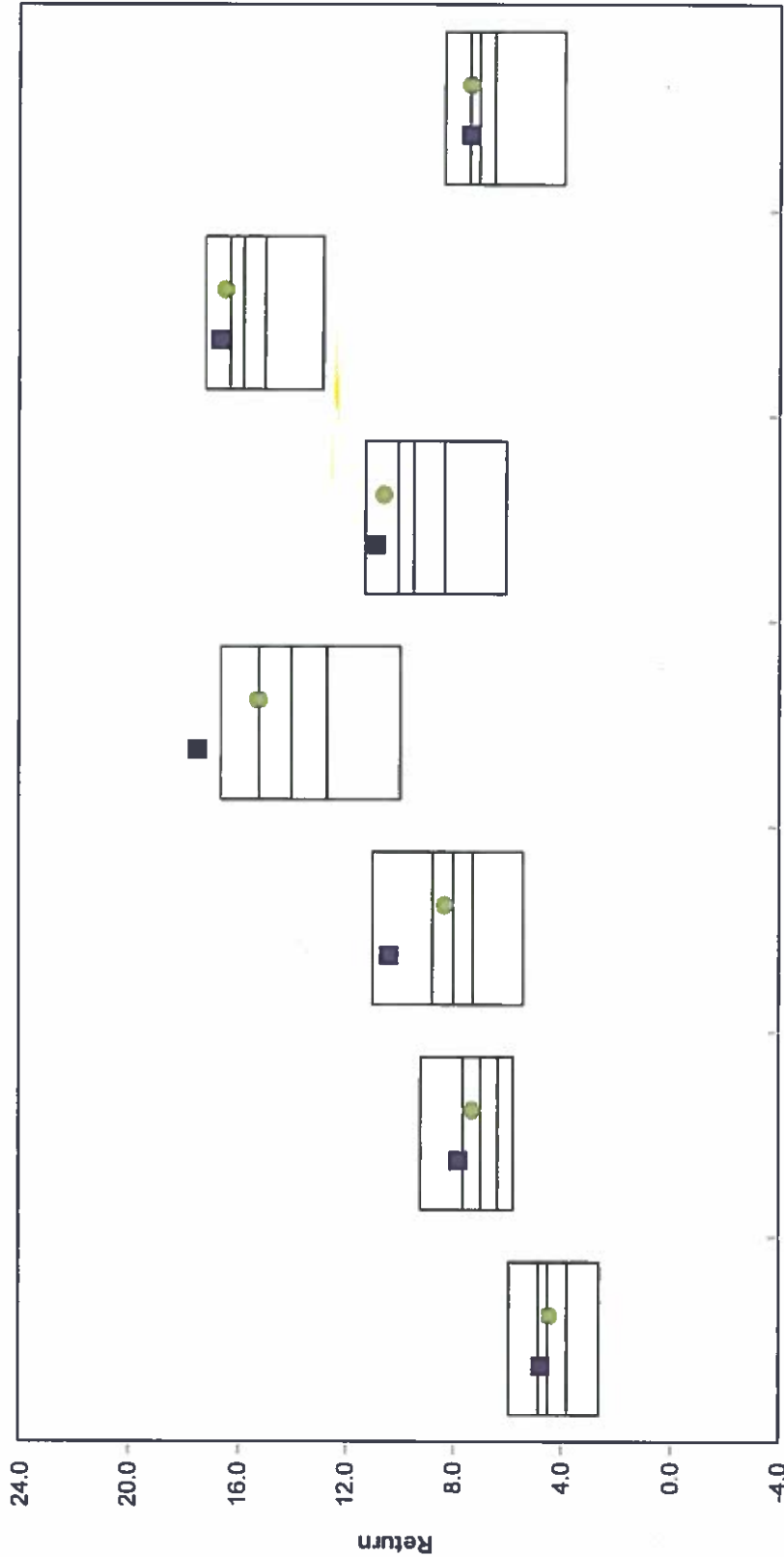
	1 Quarter	2 Quarters	3 Quarters	1 Year	3 Years	5 Years	10 Years
■ PSERS Total Fund	3.65 (32)	7.78 (1)	9.39 (1)	9.28 (49)	6.50 (24)	7.56 (93)	4.91 (82)
● Blended Policy (Total Plan)	2.74 (77)	6.88 (4)	9.47 (1)	9.49 (42)	5.13 (80)	6.06 (98)	3.79 (98)

5th Percentile	4.61	6.68	8.02	11.35	7.12	10.95	6.46
1st Quartile	3.78	5.80	6.88	9.98	6.44	9.99	5.91
Median	3.29	5.17	6.08	9.22	5.82	9.30	5.50
3rd Quartile	2.78	4.52	5.20	8.04	5.32	8.53	5.06
95th Percentile	1.59	2.85	3.27	5.77	4.09	6.80	4.07
Population	381	380	378	377	361	350	228

Parenttheses contain percentile rankings.

Plan Sponsor Peer Group Analysis

All Public Plans-US Equity Segment



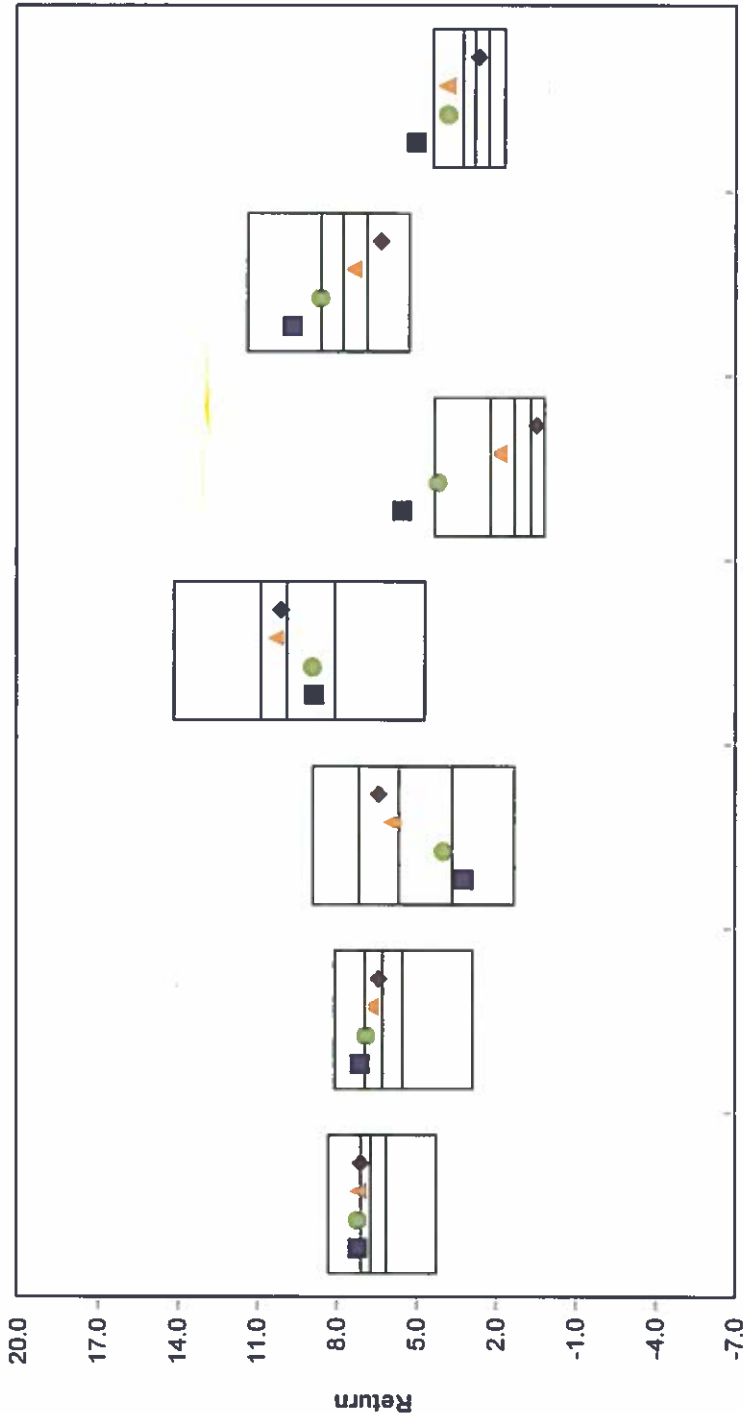
	1 Quarter	2 Quarters	3 Quarters	1 Year	3 Years	5 Years	10 Years
■ Total US Equity Composite	4.72 (36)	7.82 (23)	10.36 (8)	17.47 (4)	10.86 (11)	16.63 (11)	7.34 (32)
● Blended Policy (Tot US Eq)	4.42 (55)	7.32 (39)	8.33 (42)	15.18 (27)	10.54 (18)	16.39 (19)	7.38 (29)

5th Percentile	5.95	9.20	11.02	16.59	11.27	17.19	8.37
1st Quartile	4.88	7.65	8.78	15.20	10.10	16.23	7.46
Median	4.54	7.04	7.98	13.97	9.49	15.72	7.12
3rd Quartile	3.82	6.41	7.29	12.72	8.34	14.98	6.49
95th Percentile	2.63	5.83	5.47	9.99	6.08	12.82	3.97
Population	88	88	86	86	80	67	34

Parenttheses contain percentile rankings.

Plan Sponsor Peer Group Analysis

All Public Plans-Intl. Equity Segment

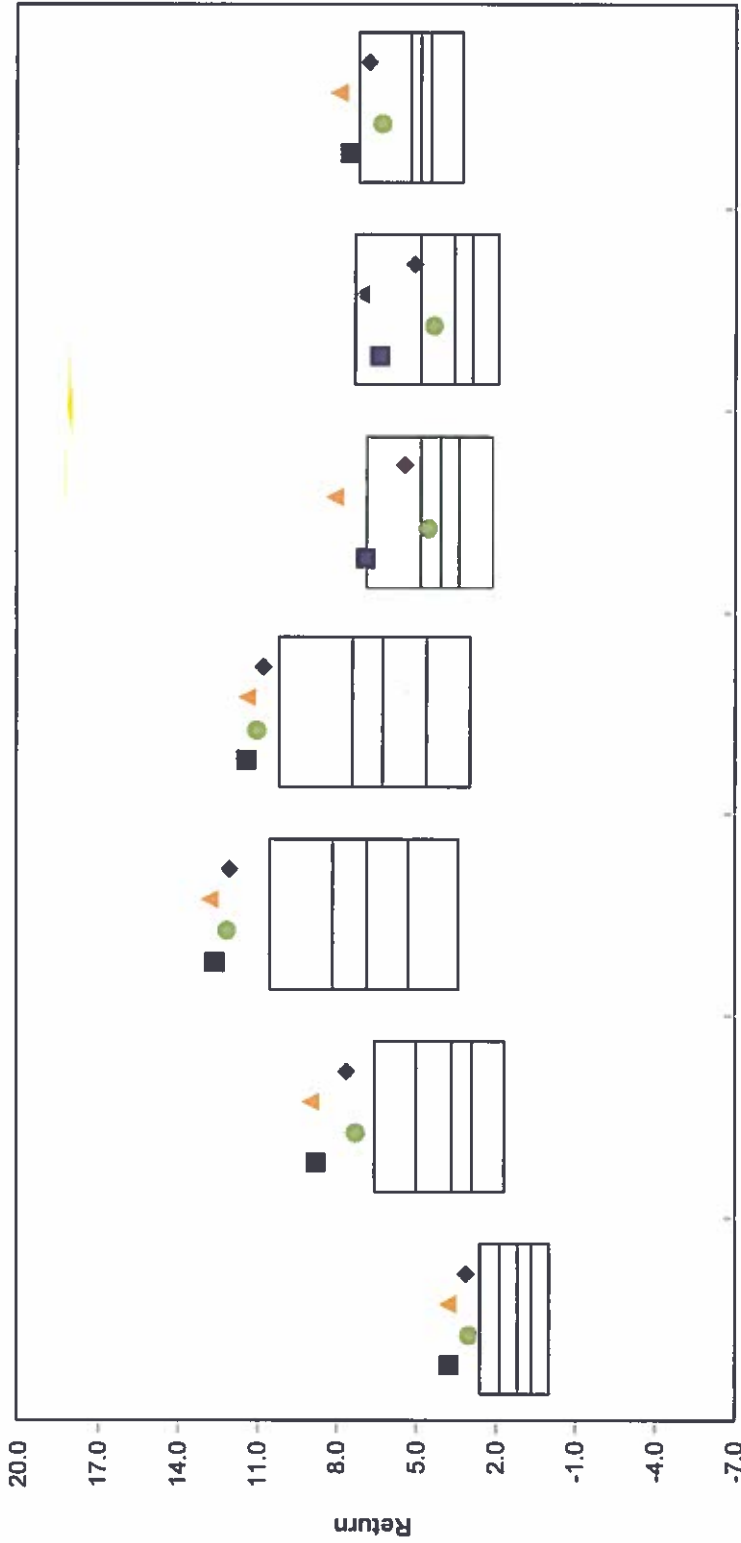


	1 Quarter	2 Quarters	3 Quarters	1 Year	3 Years	5 Years	10 Years
■ Total Non-U.S. Equity Composite (hedged)	7.19 (24)	7.09 (20)	3.21 (84)	8.84 (63)	5.52 (2)	9.64 (7)	4.99 (3)
● Blended Policy (Total Non-US Eq) (Hedged)	7.14 (25)	6.85 (29)	3.95 (75)	8.91 (63)	4.21 (8)	8.63 (26)	3.78 (13)
▲ Total Non-U.S. Equity Composite (unhedged)	7.21 (24)	6.70 (35)	5.88 (46)	10.23 (38)	1.93 (37)	7.39 (62)	3.90 (11)
◆ Blended Policy (Total Non-US Eq) (Unhedged)	7.13 (25)	6.46 (44)	6.46 (36)	10.08 (40)	0.53 (84)	6.32 (88)	2.67 (59)
5th Percentile	8.27	8.08	8.93	14.15	4.32	11.38	4.44
1st Quartile	7.12	6.93	7.21	10.86	2.26	8.64	3.24
Median	6.75	6.26	5.67	9.84	1.33	7.76	2.86
3rd Quartile	6.11	5.49	3.63	8.05	0.69	6.84	2.30
95th Percentile	4.28	2.90	1.35	4.68	0.23	5.34	1.69
Population	83	82	81	80	72	58	31

Parentheses contain percentile rankings.

Plan Sponsor Peer Group Analysis

All Public Plans-US Fixed Income Segment



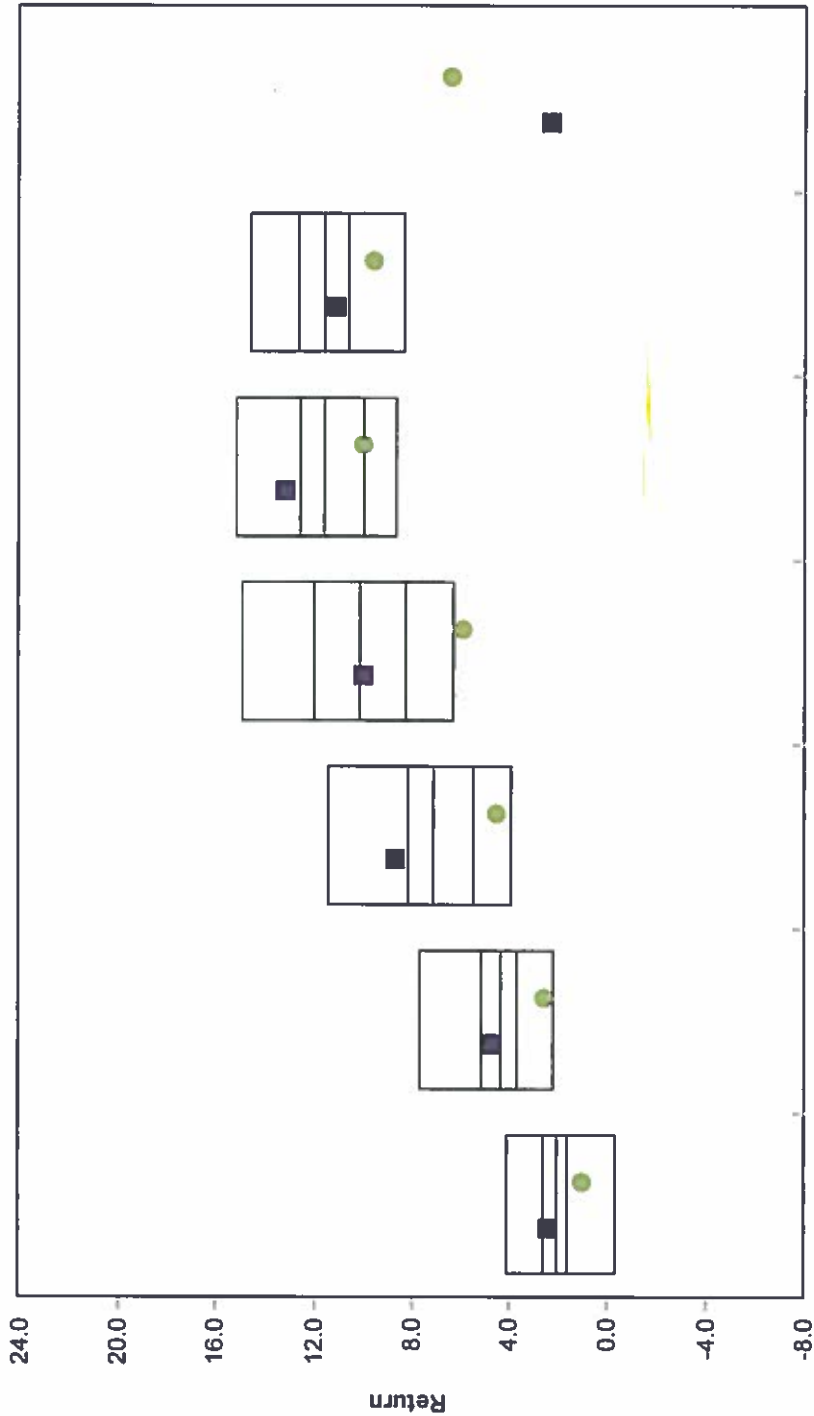
	1 Quarter	2 Quarters	3 Quarters	1 Year	3 Years	5 Years	10 Years
5th Percentile	2.58	6.58	10.54	10.14	6.91	7.35	7.20
1st Quartile	1.85	5.03	8.12	7.42	4.83	4.87	5.26
Median	1.14	3.63	6.90	6.28	4.07	3.54	4.88
3rd Quartile	0.62	2.89	5.29	4.61	3.43	2.87	4.49
95th Percentile	0.00	1.66	3.39	2.98	2.16	1.89	3.29
Population	85	85	85	85	79	69	36

Parenttheses contain percentile rankings.



Plan Sponsor Peer Group Analysis

All Public Plans-Real Estate Segment

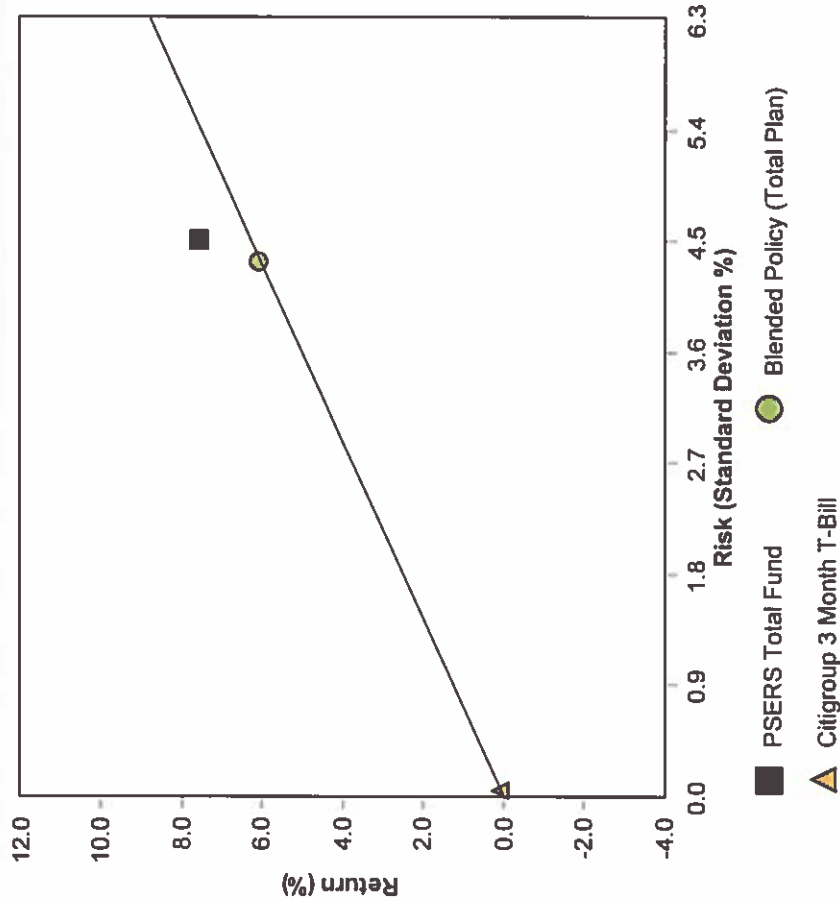


	1 Quarter	2 Quarters	3 Quarters	1 Year	3 Years	5 Years	10 Years
■ Total Real Estate (levered/unhedged)	2.43 (32)	4.68 (34)	8.68 (15)	9.96 (54)	13.15 (13)	11.12 (63)	2.29 (N/A)
● Blended Policy (Total Real Estate) (Unhedged)	1.00 (91)	2.53 (92)	4.47 (94)	5.92 (97)	9.94 (75)	9.56 (87)	6.41 (N/A)
5th Percentile	4.08	7.64	11.43	14.91	15.17	14.57	N/A
1st Quartile	2.67	5.17	8.15	11.98	12.58	12.65	N/A
Median	2.07	4.31	7.13	10.11	11.60	11.58	N/A
3rd Quartile	1.68	3.70	5.52	8.28	9.91	10.63	N/A
95th Percentile	-0.30	2.24	3.95	6.32	8.64	8.28	N/A
Population	41	39	34	32	28	24	8

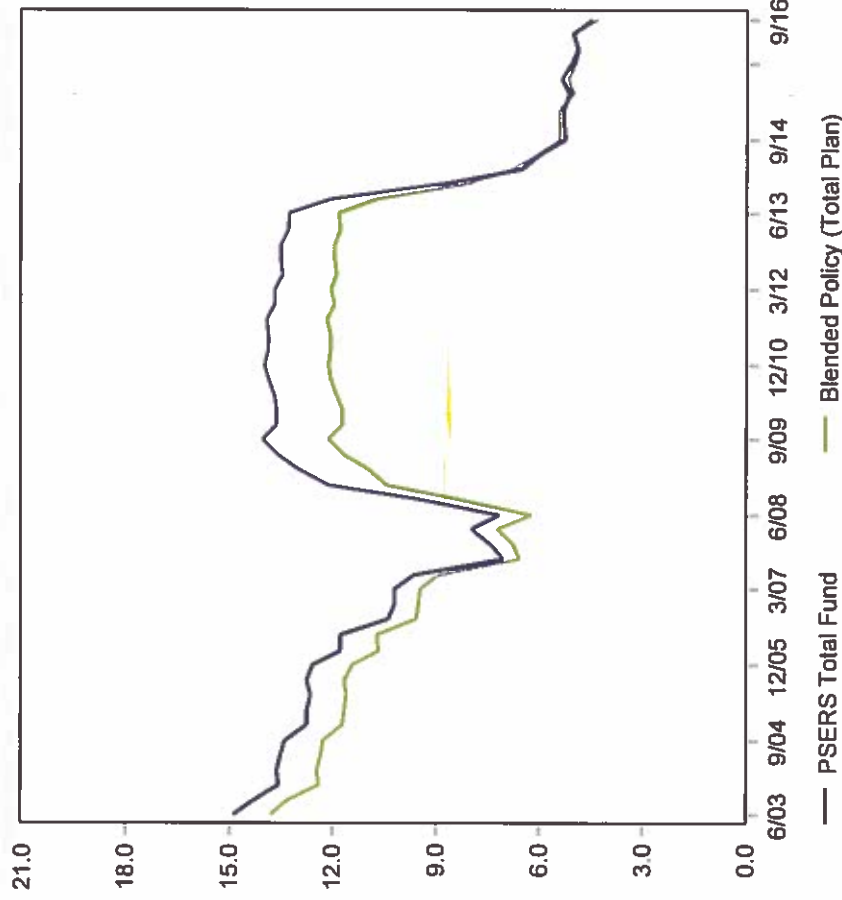
Parenttheses contain percentile rankings.

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	1.44	1.12	1.29	0.94	1.64	1.41	1.01	7.56	4.51	0.97
Blended Policy (Total Plan)	0.00	0.00	N/A	1.00	1.37	0.00	1.00	6.06	4.34	1.00
Citigroup 3 Month T-Bill	-5.94	4.33	-1.37	0.04	N/A	0.06	0.00	0.08	0.04	0.21

As of September 30, 2016

Trailing Period Performance

	Performance(%)						Inception Date
	1	2	3	5	10	Years	Since Inception
	Quarter	2 Quarters	3 Quarters	Year	3 Years	Years	10 Years
Total Public and Private Equity Exposure (hedged)	4.89	6.21	5.71	8.10	N/A	N/A	3.72
Total Public Equity Composite (hedged)	6.27	7.45	5.85	12.00	7.67	12.60	6.30
Blended Policy (Public Equity) (Hedged)	6.07	7.04	5.66	11.34	6.87	12.02	5.34
Value Added	0.20	0.41	0.19	0.66	0.80	0.58	0.96
Total US Equity Composite	4.72	7.82	10.36	17.47	10.86	16.63	7.34
Blended Policy (Tot US Eq)	4.42	7.32	8.33	15.18	10.54	16.39	7.38
Value Added	0.30	0.50	2.03	2.29	0.32	0.24	-0.04
Total Non-U.S. Equity Composite (hedged)	7.19	7.09	3.21	8.84	5.52	9.64	4.99
Blended Policy (Total Non-US Eq) (Hedged)	7.14	6.85	3.95	8.91	4.21	8.63	3.78
Value Added	0.05	0.24	-0.74	-0.07	1.31	1.01	1.21
Emerging Markets Equity Composite	6.50	7.97	8.55	9.60	1.18	4.63	4.38
Blended Policy (MSCI EM net)	9.03	9.75	16.02	16.78	-0.56	3.03	3.99
Value Added	-2.53	-1.78	-7.47	-7.18	1.74	1.60	0.39
Total Alternative Investments (hedged)	3.11	4.63	5.48	3.20	7.26	7.76	9.31
Burgiss (Lagged) - PE/PD/VC/Int	0.54	0.42	1.49	1.22	4.42	4.39	3.76
Burgiss (Lagged) - Int	-0.95	-1.98	-1.02	-1.25	0.35	N/A	N/A
Burgiss (Lagged) - VC	-0.20	-1.56	-0.99	-1.39	2.07	1.23	-0.17
Burgiss (Lagged) - PE/PD	0.72	0.82	1.96	1.71	4.78	4.79	5.09
Total Fixed Income Composite (hedged)	3.70	8.75	12.55	11.40	6.90	6.38	6.90
Blended Policy (Total FI)	3.00	7.25	12.10	11.01	4.54	4.36	6.07
Value Added	0.70	1.50	0.45	0.39	2.36	2.02	1.16
Investment Grade Composite	0.99	5.11	11.54	11.12	N/A	N/A	N/A
Blended Policy (Investment Grade)	0.27	3.80	8.54	7.78	5.82	3.64	5.84
Value Added	0.72	1.31	3.00	3.34	N/A	N/A	N/A
US Core Plus Fixed Income Composite	1.71	2.84	5.73	5.89	4.98	4.65	5.38
Blended Policy (Barclays Aggregate Index)	0.46	2.68	5.60	5.19	4.03	3.08	4.56
Value Added	1.25	0.16	-0.07	0.70	0.95	1.57	0.82
Non-U.S. Developed Markets Fixed Income	1.12	4.25	7.58	8.17	0.17	1.00	4.25
Blended Policy (Barclays Global Agg GDP weighted)	0.90	3.60	7.00	7.44	-0.48	0.62	3.68
Value Added	0.22	0.65	0.58	0.73	0.65	0.38	0.57
U.S. Long Treasuries Composite (unlevered)	-1.13	5.49	14.10	12.57	9.32	N/A	N/A
Bimbg. Barc. U.S. Treasury - Long	-0.36	6.06	14.71	13.13	11.16	5.48	8.06
Value Added	-0.77	-0.57	-0.61	-0.56	-1.84	N/A	N/A
Credit-Related (hedged)	3.66	8.34	7.39	6.57	N/A	N/A	N/A
Blended Policy (Credit-Related)	4.77	9.65	15.09	13.56	N/A	N/A	N/A
Value Added	-1.11	-1.31	-7.70	-6.99	N/A	N/A	N/A
Emerging Markets Fixed Income	5.03	8.75	10.51	12.09	-0.18	2.68	3.20

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

As of September 30, 2016

Trailing Period Performance

	Performance(%)										Inception Date
	1	2	3	1	5	10	Since Inception				
	Quarter	2 Quarters	3 Quarters	Year	Years	Years	Inception				
Blended Policy (Barclays Emerging Mkt 10% Country Cap)	2.42	4.40	14.69	15.72	-0.84	1.63	6.34	2.35			
Value Added	2.61	4.35	-4.18	-3.63	0.66	1.05	N/A	0.85			
High Yield Fixed Income Composite (hedged)	3.56	8.31	7.09	5.87	6.21	8.81	7.48	7.77	10/01/1999		
Blended Policy (Barclays Corporate HY)	5.55	11.38	15.11	12.73	5.28	8.34	7.80	7.66			
Value Added	-1.99	-3.07	-8.02	-6.86	0.93	0.47	-0.32	0.11			
Inflation Protected	6.31	12.92	20.26	17.64	N/A	N/A	N/A	9.72	10/01/2014		
Blended Policy (Barclays World Inflation Linked Bond - Hedged)	3.78	8.08	12.53	11.45	3.94	2.84	4.95	5.13			
Value Added	2.53	4.84	7.73	6.19	N/A	N/A	N/A	4.59			
TIPS Composite (unlevered)	3.18	6.47	10.10	9.07	7.37	5.09	9.04	7.97	04/01/2004		
Blended Policy (Barclays World Inflation Linked Bond - Hedged)	3.78	8.08	12.53	11.45	3.94	2.84	4.95	4.58			
Value Added	-0.60	-1.61	-2.43	-2.38	3.43	2.25	4.09	3.39			
PIMCO Multi-Sector Strategy	1.52	5.26	10.39	10.40	4.14	N/A	N/A	3.89	07/01/2012		
Blended Policy (PIMCO Multi-Sector)	0.54	4.33	10.62	10.76	4.79	4.30	5.41	4.23			
Value Added	0.98	0.93	-0.23	-0.36	-0.65	N/A	N/A	-0.34			
Real Assets (unlevered/hedged)	1.70	9.89	13.70	10.21	N/A	N/A	N/A	1.39	10/01/2014		
Blended Policy (Real Assets) (Hedged)	0.11	7.99	10.32	6.92	N/A	N/A	N/A	-0.45			
Value Added	1.59	1.90	3.38	3.29	N/A	N/A	N/A	1.84			
MLP Composite	4.73	28.81	21.10	14.48	0.94	11.44	N/A	16.57	10/01/2008		
S&P MLP Index	2.92	26.01	18.03	10.12	-4.38	5.51	8.99	11.96			
Value Added	1.81	2.80	3.07	4.36	5.32	5.93	N/A	4.61			
Infrastructure Composite (unlevered/hedged)	0.44	5.80	12.83	N/A	N/A	N/A	N/A	9.47	11/01/2015		
FTSE Dev. Core Infrast 50/50 Index (Net) (Hedged)	0.67	5.76	12.98	13.14	11.23	13.59	N/A	8.56			
Value Added	-0.23	-0.16	-0.15	N/A	N/A	N/A	N/A	0.91			
Commodities Composite (unlevered)	-0.88	9.15	18.06	9.66	-5.55	-4.14	N/A	-1.43	11/01/2006		
Blended Policy (Commodities)	-2.63	7.64	14.54	4.85	-8.10	-6.39	N/A	-4.27			
Value Added	1.75	1.51	3.52	4.81	2.55	2.25	N/A	2.84			
Total Real Estate (unlevered/hedged)	2.33	4.50	8.22	9.35	12.94	11.00	2.24	8.09	04/01/1981		
Blended Policy (Total Real Estate) (Hedged)	0.99	2.50	4.30	5.78	9.89	9.53	6.39	8.57			
Value Added	1.34	2.00	3.92	3.57	3.05	1.47	-1.15	-0.48			
Private Real Estate Composite	2.47	4.35	7.97	9.22	13.06	11.17	2.32	9.22	07/01/1996		
Blended Policy (Private Real Estate)	0.97	2.32	3.94	5.12	9.66	9.39	6.32	9.79			
Value Added	1.50	2.03	4.03	4.10	3.40	1.78	-4.00	-0.57			
PTRES Composite (unlevered/hedged)	1.25	5.86	10.38	13.94	8.92	10.11	3.71	9.47	07/01/1998		
Blended Policy (PTRES) (Hedged)	1.11	4.49	8.16	13.15	6.95	11.88	3.42	8.67			
Value Added	0.14	1.37	2.22	0.79	1.97	-1.77	0.29	0.80			
Risk Parity Composite	4.25	10.86	14.29	14.05	6.54	N/A	N/A	3.26	10/01/2012		
Risk Parity Composite (vol adjusted)	3.68	9.39	12.30	11.79	5.29	N/A	N/A	2.86	10/01/2012		

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

As of September 30, 2016

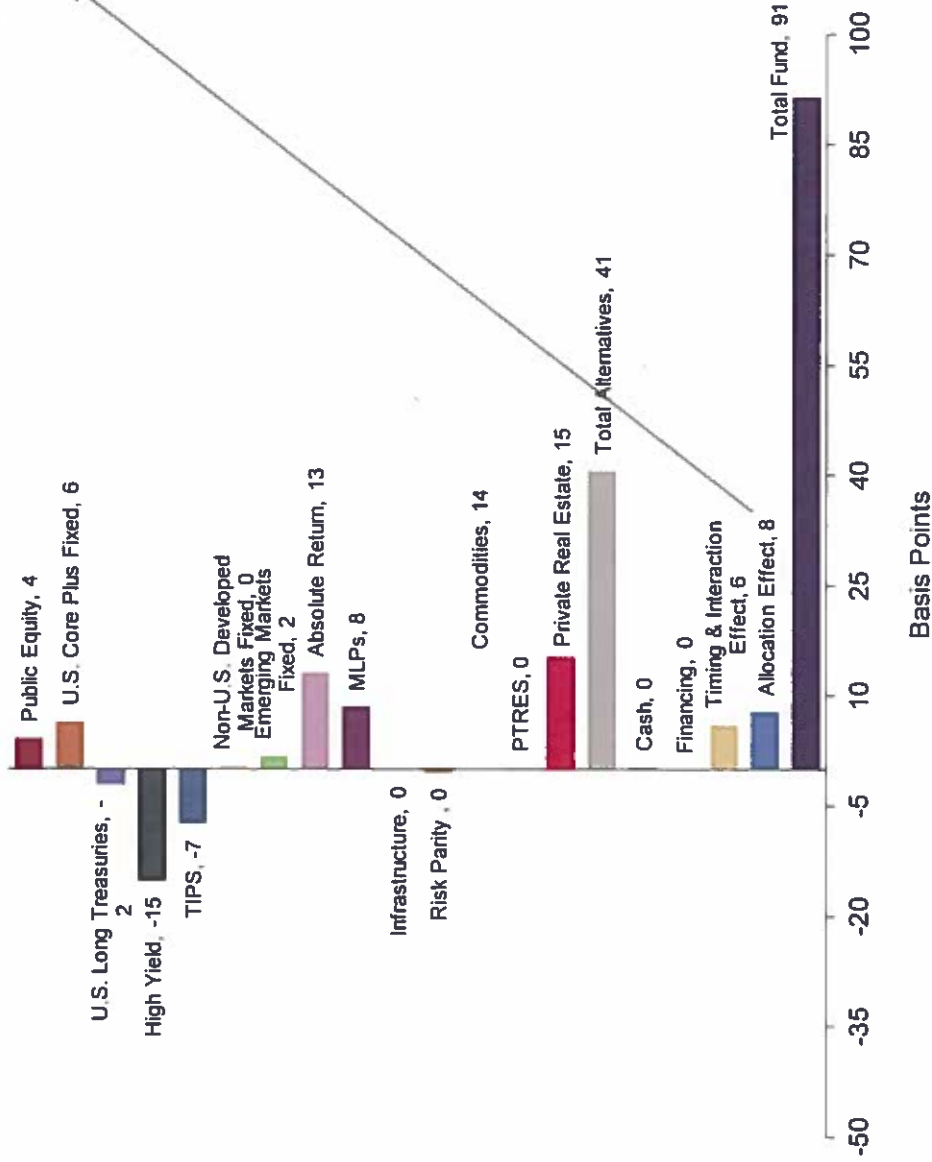
Trailing Period Performance

	Performance(%)							Since Inception	Inception Date
	1 Quarter	2 Quarters	3 Quarters	1 Year	3 Years	5 Years	10 Years		
<i>Blended Policy (Risk Parity)</i>									
Value Added	3.73	10.47	16.78	15.96	6.55	N/A	N/A	4.03	
	-0.05	-1.08	-4.48	-4.17	-1.26	N/A	N/A	-1.17	
Total Absolute Return	2.45	1.54	-0.50	-0.59	2.63	3.05	5.65	5.04	10/01/2005
<i>Blended Policy (3-month Libor + 3.5%)</i>									
Value Added	1.06	2.09	3.14	4.13	4.81	5.88	6.92	7.02	
	1.39	-0.55	-3.64	-4.72	-2.18	-2.83	-1.27	-1.98	
Unallocated Cash & Cash Equivalents	0.13	0.26	0.32	0.34	0.35	1.39	0.17	0.41	07/01/1998
<i>BofA Merrill Lynch 3 Month US T-Bill</i>									
Value Added	0.10	0.17	0.24	0.27	0.12	0.10	0.92	2.07	
	0.03	0.09	0.08	0.07	0.23	1.29	-0.75	-1.66	

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

1 Quarter Ending September 30, 2016

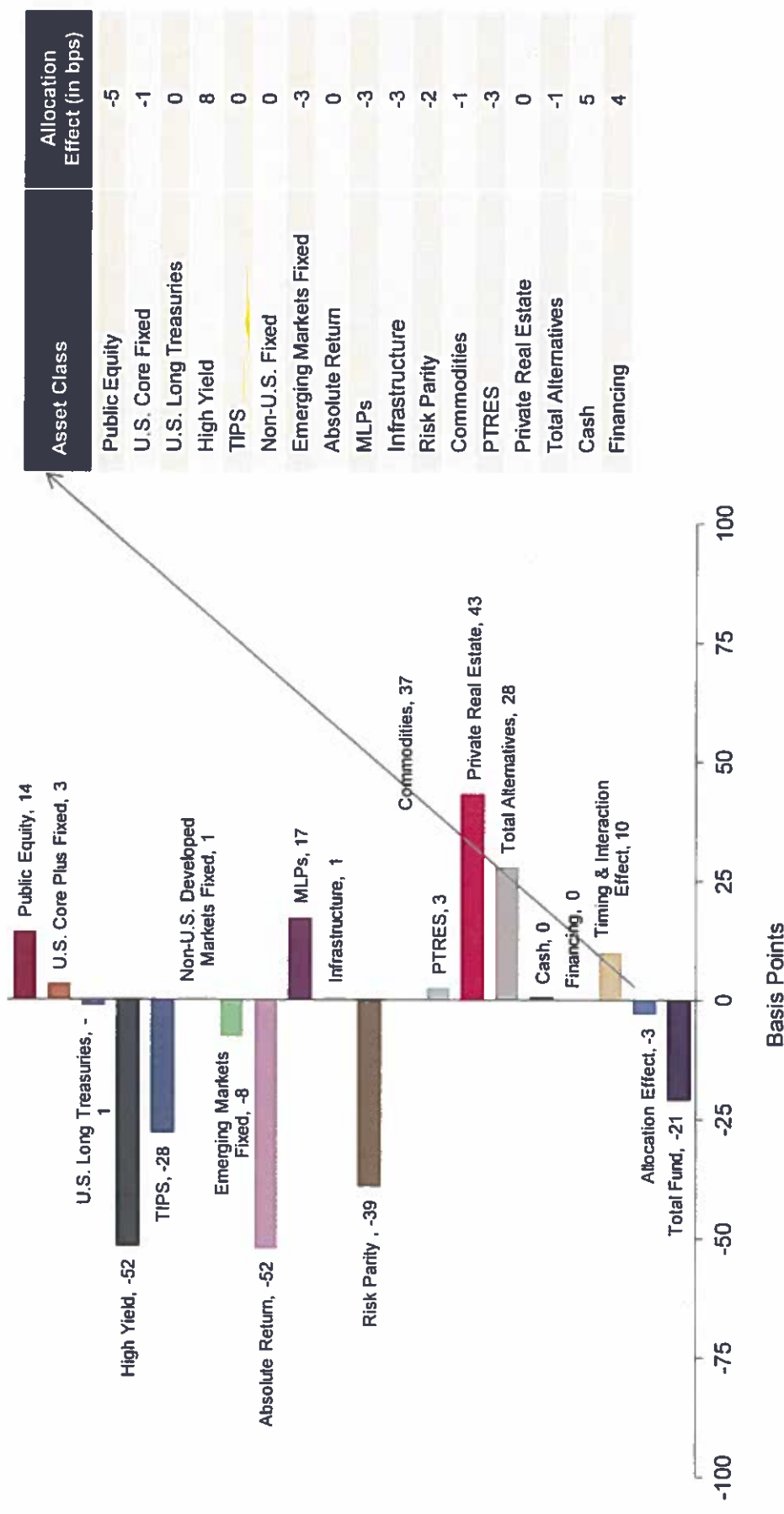
Performance Attribution – Total Fund



- 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.

1 Year Ending September 30, 2016

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

As of September 30, 2016

Trailing Period Performance

	Performance (%)									
	1 Quarter	2 Quarters Ending Sep-2016	3 Quarters Ending Sep-2016	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date	
PSERS Total Fund	3.55	7.78	9.39	9.28	6.50	7.56	4.91	6.13	06/01/1998	
Blended Policy (Total Plan)	2.74	6.88	9.47	9.49	5.13	6.06	3.79	4.88		
Value Added	0.91	0.90	-0.08	-0.21	1.37	1.50	1.12	1.25		
Total Public Markets Composite	3.93	9.00	10.47	10.68	4.96	6.64	4.37	6.52	06/01/2002	
Blended Policy (Public Market) (Hedged)	3.47	9.01	12.12	12.02	4.29	5.82	3.47	5.25		
Value Added	0.46	-0.01	-1.65	-1.34	0.67	0.82	0.90	1.27		
Blended Policy (Public Market) (Unhedged)	3.24	8.39	12.27	11.74	3.74	5.48	3.31	5.14		
Value Added	0.69	0.61	-1.80	-1.06	1.22	1.16	1.06	1.38		
Total Public Equity Composite	6.27	7.45	5.85	12.00	7.67	12.60	5.96	6.30	07/01/1998	
Blended Policy (Public Equity) (Hedged)	6.07	7.04	5.66	11.34	6.87	12.02	5.35	5.34		
Value Added	0.20	0.41	0.19	0.66	0.80	0.58	0.61	0.96		
Blended Policy (Public Equity) (Unhedged)	5.65	6.85	7.27	12.63	5.56	11.20	4.96	5.13		
Value Added	0.62	0.60	-1.42	-0.63	2.11	1.40	1.00	1.17		
Total US Equity Composite	4.72	7.82	10.36	17.47	10.86	16.63	7.34	5.74	01/01/2000	
Blended Policy (Tot US Eq)	4.42	7.32	8.33	15.18	10.54	16.39	7.38	4.76		
Value Added	0.30	0.50	2.03	2.29	0.32	0.24	-0.04	0.98		
PSERS-S&P 500 Index Composite	4.34	7.07	9.22	17.36	11.59	16.80	7.68	5.89	07/01/1998	
S&P 500 Index	3.85	6.40	7.84	15.43	11.16	16.37	7.24	5.58		
Value Added	0.49	0.67	1.38	1.93	0.43	0.43	0.44	0.31		
Total US Small Cap Composite	5.94	10.16	13.94	17.69	7.84	16.02	8.38	9.41	12/01/2001	
MSCI USA Small Cap Index	6.82	11.03	12.01	15.64	8.13	16.82	8.20	9.31		
Value Added	-0.88	-0.87	1.93	2.05	-0.29	-0.80	0.18	0.10		
PSERS Small Cap Index Composite	5.94	10.16	13.94	17.69	7.84	16.02	8.38	9.41	12/01/2001	
PSERS-S&P 400 Index Composite	4.35	8.67	12.87	15.77	9.52	16.80	9.69	10.18	07/01/1998	
S&P MidCap 400	4.14	8.30	12.40	15.33	9.35	16.50	9.11	9.80		
Value Added	0.21	0.37	0.47	0.44	0.17	0.30	0.58	0.38		
PSERS-S&P 600 Index Composite	7.61	11.72	15.05	19.58	9.87	18.94	9.79	9.56	06/01/1998	
S&P SmallCap 600	7.20	10.93	13.88	18.12	9.04	17.86	8.71	8.94		
Value Added	0.41	0.79	1.17	1.46	0.83	1.08	1.08	0.62		
Total Non-U.S. Equity Composite (hedged)	7.19	7.09	3.21	8.84	5.52	9.64	4.99	5.06	01/01/2000	
Blended Policy (Total Non-US Eq) (Hedged)	7.14	6.85	3.95	8.91	4.21	8.63	3.78	4.06		
Value Added	0.05	0.24	-0.74	-0.07	1.31	1.01	1.21	1.00		
Total Non-U.S. Equity Composite (unhedged)	7.21	6.70	5.88	10.23	1.93	7.39	3.90	4.41	01/01/2000	
Blended Policy (Total Non-US Eq) (Unhedged)	7.13	6.46	6.46	10.08	0.53	6.32	2.67	3.39		
Value Added	0.08	0.24	-0.58	0.15	1.40	1.07	1.23	1.02		
Emerging Markets Equity Composite	6.50	7.97	8.55	9.60	1.18	4.63	4.38	8.09	07/01/1998	
Blended Policy (MSCI EM net)	9.03	9.75	16.02	16.78	-0.56	3.03	3.99	8.33		



Trailing Period Performance

	Performance (%)									
	1 Quarter	2 Quarters Ending Sep-2016	3 Quarters Ending Sep-2016	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date	
Value Added	-2.53	-1.78	-7.47	-7.18	1.74	1.60	0.39	-0.24		
MSCI Emerging Markets IMI (Net)	8.83	9.50	15.02	16.19	-0.33	3.24	4.23	7.37		
Value Added	-2.33	-1.53	-6.47	-6.59	1.51	1.39	0.15	0.72		
Wasatch EM Small Cap	6.50	7.97	8.55	9.60	1.01	5.86	N/A	7.68	07/01/2008	
Blended Policy (Wasatch EM)	6.77	7.76	10.23	12.42	0.76	4.42	5.96	3.59		
Value Added	-0.27	0.21	-1.68	-2.82	0.25	1.44	N/A	4.09		
Total Non-U.S. Equity x Emerging Markets Composite (hedged)	7.22	7.06	2.99	8.80	N/A	N/A	N/A	5.01	04/01/2014	
Blended Policy (Non-US Equity x EM) (Hedged)	7.06	6.72	3.47	8.58	4.71	8.95	3.93	3.52		
Value Added	0.16	0.34	-0.48	0.22	N/A	N/A	N/A	1.49		
Pareto Everest - Int'l Eq (notional)	-0.07	0.49	-3.40	-1.75	4.83	2.35	1.18	1.27	07/01/2006	
Currency Hedge Benchmark	-0.01	0.57	-3.26	-1.58	4.91	2.59	1.23	1.36		
Value Added	-0.06	-0.08	-0.14	-0.17	-0.08	-0.24	-0.05	-0.09		
Total Non-U.S. Equity x Emerging Markets Composite (unhedged)	7.24	6.65	5.77	10.26	2.05	8.15	3.56	5.80	07/01/1997	
Blended Policy (Non-US Equity x EM) (Unhedged)	7.05	6.32	6.08	9.81	0.62	6.37	2.70	N/A		
Value Added	0.19	0.33	-0.31	0.45	1.43	1.78	0.86	N/A		
Non-US Large Cap Equity Composite	7.34	6.63	5.78	9.85	1.56	7.40	3.16	5.45	07/01/1998	
Blended Policy (MSCI World AC Word ex USA net)	6.91	6.22	5.82	9.26	0.18	6.04	2.25	4.42		
Value Added	0.43	0.41	-0.04	0.59	1.38	1.36	0.91	1.03		
PSERS ACWI x US Index Fund	6.95	6.70	6.38	9.76	0.69	6.66	2.84	4.55	07/01/1998	
MSCI ACWI/EAFE Index Blend	6.91	6.22	5.82	9.26	0.18	6.04	2.16	4.00		
Value Added	0.04	0.48	0.56	0.50	0.51	0.62	0.68	0.55		
BlackRock EMAX	9.94	12.57	17.99	17.50	N/A	N/A	N/A	-1.57	07/01/2015	
MSCI Emerging Markets Index (Net)	9.03	9.75	16.02	16.78	-0.56	3.03	3.94	-3.31		
Value Added	0.91	2.82	1.97	0.72	N/A	N/A	N/A	1.74		
Active Non-US Large Cap Composite	7.90	6.64	4.93	10.02	2.59	8.53	4.04	5.96	07/01/1998	
MSCI AC World ex USA Index (Net)	6.91	6.22	5.82	9.26	0.18	6.04	2.16	4.35		
Value Added	0.99	0.32	-0.89	0.76	2.41	2.49	1.88	1.60		
Baillie Gifford	10.36	9.40	9.80	16.13	3.59	9.48	5.92	9.16	07/01/2002	
MSCI AC World ex USA Index (Net)	6.91	6.22	5.82	9.26	0.18	6.04	2.16	6.38		
Value Added	3.45	3.18	3.98	6.87	3.41	3.44	3.76	2.78		
Marathon Asset Mgmt	6.82	4.71	2.73	8.17	2.32	9.27	5.49	8.80	07/01/1998	
Blended Benchmark (MSCI ACWI ex USA net)	6.91	6.22	5.82	9.26	0.18	6.04	2.21	4.50		
Value Added	-0.09	-1.51	-3.09	-1.09	2.14	3.23	3.28	4.30		
BlackRock Global Composite	5.48	4.82	0.60	3.17	0.79	6.63	3.63	6.81	10/01/2004	
MSCI AC World ex USA Index (Net)	6.91	6.22	5.82	9.26	0.18	6.04	2.16	5.49		
Value Added	-1.43	-1.40	-5.22	-6.09	0.61	0.59	1.47	1.32		
Non-US Small Cap Equity Composite	6.55	6.78	5.68	13.20	5.92	13.06	6.00	8.59	07/01/2005	

Trailing Period Performance

	Performance (%)									
	1 Quarter	2 Quarters Ending Sep-2016	3 Quarters Ending Sep-2016	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date	
MSCI AC World ex USA Small Cap (Net)	7.91	6.97	7.70	13.38	3.52	8.60	4.59	6.73		
Value Added	-1.36	-0.19	-2.02	-0.18	2.40	4.46	1.41	1.86		
Acadian Asset Mgmt	8.60	8.91	9.51	15.41	6.16	11.95	6.44	9.78	07/01/2005	
Blended Benchmark (MSCI AC World ex USA Small Cap net)	7.91	6.97	7.70	13.38	3.52	8.60	4.54	6.19		
Value Added	0.69	1.94	1.81	2.03	2.64	3.35	1.90	3.59		
Wasatch Int'l Small Cap	5.63	7.17	4.22	13.66	4.74	14.14	8.67	9.42	10/01/2005	
Blended Benchmark (MSCI AC World ex USA Small Cap net)	7.91	6.97	7.70	13.38	3.52	8.60	4.54	5.56		
Value Added	-2.28	0.20	-3.48	0.28	1.22	5.54	4.13	3.86		
Oberweis Asset Mgmt	4.52	4.96	3.10	11.14	9.65	20.55	N/A	8.13	07/01/2008	
MSCI AC World ex USA Small Cap (Net)	7.91	6.97	7.70	13.38	3.52	8.60	4.59	4.35		
Value Added	-3.39	-2.01	-4.60	-2.24	6.13	11.95	N/A	3.78		
QS Investors	8.59	6.64	5.95	10.99	5.64	11.54	N/A	5.56	07/01/2008	
MSCI AC World ex USA Small Cap (Net)	7.91	6.97	7.70	13.38	3.52	8.60	4.59	4.35		
Value Added	0.68	-0.33	-1.75	-2.39	2.12	2.94	N/A	1.21		
Fidelity Institutional Int'l Small Cap	6.63	5.43	5.95	13.08	3.75	9.78	N/A	8.93	10/01/2008	
MSCI AC World ex USA Small Cap (Net)	7.91	6.97	7.70	13.38	3.52	8.60	4.59	8.37		
Value Added	-1.28	-1.54	-1.75	-0.30	0.23	1.18	N/A	0.56		
Total Fixed Income Composite	3.70	8.75	12.55	11.40	6.90	6.38	7.45	6.90	07/01/1998	
Blended Policy (Total FI)	3.00	7.25	12.70	11.01	4.54	4.36	6.29	6.07		
Value Added	0.70	1.50	0.45	0.39	2.36	2.02	1.16	0.83		
Global Fixed Income Composite	2.01	3.60	6.34	6.78	3.07	N/A	N/A	2.90	07/01/2012	
Blended Policy (Global FI)	1.00	3.26	8.20	8.13	2.31	2.50	N/A	1.97		
Value Added	1.01	0.34	-1.86	-1.35	0.76	N/A	N/A	0.93		
Total US Fixed Income Composite	3.82	9.00	12.82	11.35	8.11	7.13	7.91	7.32	10/01/2004	
Blended Policy (Total US FI)	3.13	7.60	12.07	10.75	5.45	5.06	6.79	6.20		
Value Added	0.69	1.40	0.75	0.60	2.66	2.07	1.12	1.12		
Total US Fixed Income ex TIPS Composite	2.58	7.11	9.29	8.34	7.83	8.10	7.49	7.03	07/01/1998	
Investment Grade Composite	0.99	5.11	11.54	11.12	N/A	N/A	N/A	8.29	10/01/2014	
Blended Policy (Investment Grade)	0.27	3.80	8.54	7.78	5.82	3.64	5.84	5.71		
Value Added	0.72	1.31	3.00	3.34	N/A	N/A	N/A	2.58		
US Core Plus Fixed Income Composite	1.71	2.84	5.73	5.89	4.98	4.65	5.63	5.38	10/01/2004	
Blended Policy (Barclays Aggregate Index)	0.46	2.68	5.80	5.19	4.03	3.08	4.73	4.56		
Value Added	1.25	0.16	-0.07	0.70	0.95	1.57	0.90	0.82		
Pugh Capital Management	0.51	2.85	5.95	5.30	4.28	3.38	5.30	5.57	07/01/2006	
Bimbg. Barc. U.S. Aggregate	0.46	2.68	5.80	5.19	4.03	3.08	4.79	5.05		
Value Added	0.05	0.17	0.15	0.11	0.25	0.30	0.51	0.52		
PSERS Active Core Plus Fixed Income	0.93	3.24	6.41	6.35	4.95	3.95	6.11	6.32	07/01/1998	

As of September 30, 2016

Trailing Period Performance

Performance (%)

	1 Quarter	2 Quarters Ending Sep-2016	3 Quarters Ending Sep-2016	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
<i>Blmbg. Barc. U.S. Aggregate</i>	0.46	2.68	5.80	5.19	4.03	3.08	4.79	5.23	
Value Added	0.47	0.56	0.61	1.16	0.92	0.87	1.32	1.09	
<i>BlackRock Global Alpha</i>	2.49	1.63	4.98	5.82	5.60	6.37	N/A	7.61	07/01/2007
<i>Blended Policy (Barclays Aggregate Index)</i>	0.46	2.68	5.80	5.19	4.03	3.08	4.73	4.83	
Value Added	2.03	-1.05	-0.82	0.63	1.57	3.29	N/A	2.78	
<i>SEI Investment Management</i>	5.60	9.04	4.06	1.89	N/A	N/A	N/A	2.34	03/01/2014
<i>BofA Merrill Lynch Corporate 1-3 Year</i>	0.34	1.38	2.61	2.48	1.80	2.33	3.57	1.64	
Value Added	5.26	7.66	1.45	-0.59	N/A	N/A	N/A	0.70	
<i>Non-U.S. Developed Markets Fixed Income Composite</i>	1.12	4.25	7.58	8.17	0.17	1.00	4.25	4.91	07/01/1998
<i>Blended Policy (Barclays GlobalAgg GDP Weighted Dev xUS hedged)</i>	0.90	3.60	7.00	7.44	-0.48	0.62	3.68	N/A	
Value Added	0.22	0.65	0.58	0.73	0.65	0.38	0.57	N/A	
<i>Alliance Bernstein Global Fixed</i>	1.12	4.25	7.58	8.17	-0.13	N/A	N/A	1.02	01/01/2012
<i>Spiced Barclays GlobalAgg GDPWeighted Dev xUS</i>	0.90	3.60	7.00	7.44	-0.48	0.62	3.64	0.79	
Value Added	0.22	0.65	0.58	0.73	0.35	N/A	N/A	0.23	
<i>U.S. Long Treasuries (levered)</i>	-9.35	18.33	80.57	66.08	65.81	N/A	N/A	-1.57	07/01/2012
<i>Blmbg. Barc. U.S. Treasury: Long</i>	-0.36	6.06	14.71	13.13	11.16	5.48	8.06	5.01	
Value Added	-8.99	12.27	65.86	52.95	54.65	N/A	N/A	-6.58	
<i>PSERS U.S. Long Treasuries (unlevered)</i>	-1.13	5.49	14.10	12.57	9.32	N/A	N/A	4.06	07/01/2012
<i>Blmbg. Barc. U.S. Treasury: Long</i>	-0.36	6.06	14.71	13.13	11.16	5.48	8.06	5.01	
Value Added	-0.77	-0.57	-0.61	-0.56	-1.84	N/A	N/A	-0.95	
<i>Credit-Related</i>	3.66	8.34	7.39	6.57	N/A	N/A	N/A	2.48	10/01/2014
<i>Blended Policy (Credit-Related)</i>	4.77	9.65	15.09	13.56	N/A	N/A	N/A	2.86	
Value Added	-1.11	-1.31	-7.70	-6.99	N/A	N/A	N/A	-0.38	
<i>Emerging Markets Fixed Income Composite</i>	5.03	8.75	10.51	12.09	-0.18	2.68	N/A	3.20	04/01/2010
<i>Blended Policy (Barclays Emerging Mkt 10% Country Cap)</i>	2.42	4.40	14.69	15.72	-0.84	1.63	6.34	2.35	
Value Added	2.61	4.35	-4.18	-3.63	0.66	1.05	N/A	0.85	
<i>Franklin Templeton Emerging Fixed Income</i>	5.03	8.81	10.27	12.28	2.65	5.55	N/A	7.51	10/01/2008
<i>Blended Benchmark (Barclays Emerging Mkt 10% Country Cap)</i>	2.42	4.40	14.69	15.72	-0.84	2.94	5.14	4.43	
Value Added	2.61	4.41	-4.42	-3.44	3.49	2.61	N/A	3.08	
<i>High Yield Fixed Income Composite (hedged)</i>	3.56	8.31	7.09	5.87	6.21	8.81	7.48	7.77	10/01/1999
<i>Blended Policy (Barclays Corporate HY)</i>	5.55	11.38	15.11	12.73	5.28	8.34	7.80	7.66	
Value Added	-1.99	-3.07	-8.02	-6.86	0.93	0.47	-0.32	0.11	
<i>Pareto Oxygen - HY (notional)</i>	-0.82	2.00	-2.54	0.36	N/A	N/A	N/A	0.25	07/01/2015
<i>HY Currency Hedge Benchmark</i>	-0.78	2.08	-2.60	0.02	6.25	3.25	0.22	-0.06	
Value Added	-0.04	-0.08	0.06	0.34	N/A	N/A	N/A	0.31	
<i>High Yield Fixed Income Composite (Unhedged)</i>	3.66	8.05	7.45	5.80	6.19	8.79	7.47	7.76	10/01/1999
<i>Blended Policy (Barclays Corporate HY)</i>	5.55	11.38	15.11	12.73	5.28	8.34	7.80	7.66	

As of September 30, 2016

Trailing Period Performance

Performance (%)

	1 Quarter	2 Quarters Ending Sep-2016	3 Quarters Ending Sep-2016	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
Value Added	-1.89	-3.33	-7.66	-6.93	0.91	0.45	-0.33	0.10	
Mezzanine High Yield Composite	-1.22	-0.99	-8.03	-9.78	N/A	N/A	N/A	-8.26	06/01/2015
Bimbg. Barc. U.S. Corp: High Yield	5.55	11.38	15.11	12.73	5.28	8.34	7.71	4.22	
Value Added	-6.77	-12.37	-23.14	-22.51	N/A	N/A	N/A	-12.48	
Carlyle Energy Mezz. Opp. Fund	-13.50	-18.80	-43.51	-44.89	-13.79	N/A	N/A	-6.74	10/01/2012
Bimbg. Barc. U.S. Corp: High Yield	5.55	11.38	15.11	12.73	5.28	8.34	7.71	5.74	
Value Added	-19.05	-30.18	-58.62	-57.62	-19.07	N/A	N/A	-12.48	
Carlyle Energy Mezz. Opp. Fund II	-19.56	-3.26	-7.16	N/A	N/A	N/A	N/A	-17.77	11/01/2015
Bimbg. Barc. U.S. Corp: High Yield	5.55	11.38	15.11	12.73	5.28	8.34	7.71	9.72	
Value Added	-25.11	-14.64	-22.27	N/A	N/A	N/A	N/A	-27.49	
ICG Europe Fund V	2.25	2.45	7.07	6.32	12.48	N/A	N/A	6.27	01/01/2013
Bimbg. Barc. U.S. Corp: High Yield	5.55	11.38	15.11	12.73	5.28	8.34	7.71	5.23	
Value Added	-3.30	-8.93	-8.04	-6.41	7.20	N/A	N/A	1.04	
ICG Europe Fund VI	13.51	21.96	N/A	N/A	N/A	N/A	N/A	95.60	02/01/2016
Bimbg. Barc. U.S. Corp: High Yield	5.55	11.38	15.11	12.73	5.28	8.34	7.71	16.99	
Value Added	7.96	10.58	N/A	N/A	N/A	N/A	N/A	78.61	
Bain Capital Middle Market Credit 2010, L.P.	-0.50	-2.02	-5.58	-5.59	2.48	7.29	N/A	7.15	06/01/2010
Bimbg. Barc. U.S. Corp: High Yield	5.55	11.38	15.11	12.73	5.28	8.34	7.71	8.14	
Value Added	-6.05	-13.40	-20.69	-18.32	-2.80	-1.05	N/A	-0.99	
Bain Capital Middle Market Credit 2014, L.P.	2.26	6.26	4.17	0.22	N/A	N/A	N/A	4.08	11/01/2013
Bimbg. Barc. U.S. Corp: High Yield	5.55	11.38	15.11	12.73	5.28	8.34	7.71	4.55	
Value Added	-3.29	-5.12	-10.94	-12.51	N/A	N/A	N/A	-0.47	
Internally Managed Private Debt Co-Investment	-0.69	-9.34	-32.21	-35.55	-18.77	N/A	N/A	-16.88	08/01/2013
Bimbg. Barc. U.S. Corp: High Yield	5.55	11.38	15.11	12.73	5.28	8.34	7.71	5.12	
Value Added	-6.24	-20.72	-47.32	-48.28	-24.05	N/A	N/A	-22.00	
Opportunistic High Yield Composite	5.07	10.71	11.69	9.43	N/A	N/A	N/A	5.46	06/01/2015
Bimbg. Barc. U.S. Corp: High Yield	5.55	11.38	15.11	12.73	5.28	8.34	7.71	4.22	
Value Added	-0.48	-0.67	-3.42	-3.30	N/A	N/A	N/A	1.24	
Apollo European Principal Fund II	0.91	8.35	9.70	11.32	12.35	N/A	N/A	6.42	10/01/2012
Bimbg. Barc. U.S. Corp: High Yield	5.55	11.38	15.11	12.73	5.28	8.34	7.71	5.74	
Value Added	-4.64	-3.03	-5.41	-1.41	7.07	N/A	N/A	0.68	
Bain Capital Credit Opp. Fund IV	1.13	6.47	3.50	-0.82	-0.30	3.00	N/A	7.10	10/01/2008
Bimbg. Barc. U.S. Corp: High Yield	5.55	11.38	15.11	12.73	5.28	8.34	7.71	10.37	
Value Added	-4.42	-4.91	-11.61	-13.55	-5.58	-5.34	N/A	-3.27	
Bain Capital Distressed and Special Situations 2013	8.24	11.73	4.34	2.21	5.15	N/A	N/A	5.15	10/01/2012
Bimbg. Barc. U.S. Corp: High Yield	5.55	11.38	15.11	12.73	5.28	8.34	7.71	5.74	
Value Added	2.69	0.35	-10.77	-10.52	-0.13	N/A	N/A	-0.59	

As of September 30, 2016

Trailing Period Performance

Performance (%)

	1 Quarter	2 Quarters Ending Sep-2016	3 Quarters Ending Sep-2016	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
Bain Capital Distressed and Special Situations 2016 (A), L.P.	12.98	22.57	24.61	N/A	N/A	N/A	N/A	24.40	11/01/2015
Blmbg. Barc. U.S. Corp. High Yield Value Added	5.55 7.43	11.38 11.19	15.11 9.50	12.73 N/A	5.28 N/A	8.34 N/A	7.71 N/A	9.72 14.68	
Hayfin Special Opp. Credit	3.18	2.69	10.22	8.36	1.34	N/A	N/A	3.63	03/01/2013
Blmbg. Barc. U.S. Corp. High Yield Value Added	5.55 -2.37	11.38 -8.69	15.11 -4.89	12.73 -4.37	5.28 -3.94	8.34 N/A	7.71 N/A	4.94 -1.31	
Hayfin Special Opp. Credit II	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	08/01/2016
Blmbg. Barc. U.S. Corp. High Yield Value Added	5.55 N/A	11.38 N/A	15.11 N/A	12.73 N/A	5.28 N/A	8.34 N/A	7.71 N/A	2.77 N/A	
Hayfin SOF II USD LP	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00	09/01/2016
Blmbg. Barc. U.S. Corp. High Yield Value Added	5.55 N/A	11.38 N/A	15.11 N/A	12.73 N/A	5.28 N/A	8.34 N/A	7.71 N/A	0.67 -0.67	
TPG Opportunities Partners II, LP	1.86	2.19	5.61	11.18	17.98	N/A	N/A	14.09	04/01/2012
Blmbg. Barc. U.S. Corp. High Yield Value Added	5.55 -3.69	11.38 -9.19	15.11 -9.50	12.73 -1.55	5.28 12.70	8.34 N/A	7.71 N/A	6.56 7.53	
TPG Opportunities Partners III, LP	5.67	11.86	15.58	14.87	N/A	N/A	N/A	1.53	02/01/2014
Blmbg. Barc. U.S. Corp. High Yield Value Added	5.55 0.12	11.38 0.48	15.11 0.47	12.73 2.14	5.28 N/A	8.34 N/A	7.71 N/A	4.30 -2.77	
TOP NPL (A)	-5.38	-5.98	-2.69	3.97	17.51	N/A	N/A	16.65	04/01/2012
Blmbg. Barc. U.S. Corp. High Yield Value Added	5.55 -10.93	11.38 -17.36	15.11 -17.80	12.73 -8.76	5.28 12.23	8.34 N/A	7.71 N/A	6.56 10.09	
TPG TAO	2.72	5.34	7.93	8.25	N/A	N/A	N/A	10.38	01/01/2015
Blmbg. Barc. U.S. Corp. High Yield Value Added	5.55 -2.83	11.38 -6.04	15.11 -7.18	12.73 -4.48	5.28 N/A	8.34 N/A	7.71 N/A	5.58 4.80	
Brigade Distressed Value	5.93	19.01	26.83	16.47	4.64	6.45	N/A	6.45	10/01/2011
1-Month Libor + 5%	1.35	2.71	4.08	5.43	5.26	5.25	6.16	5.25	
Value Added	4.58	16.30	24.75	11.04	-0.62	1.20	N/A	1.20	
Brigade Structured Credit Offshore Fund	7.89	13.57	18.96	19.84	N/A	N/A	N/A	6.43	11/01/2014
Barclays Corporate High Yield + 0.25%	5.62	11.52	15.33	13.02	5.55	8.61	7.98	4.15	
Value Added	2.27	2.05	3.63	6.82	N/A	N/A	N/A	2.28	
Avenue Energy Opportunities Fund	11.04	29.98	26.10	6.52	N/A	N/A	N/A	-3.48	02/01/2015
Blmbg. Barc. U.S. Corp. High Yield Value Added	5.55 5.49	11.38 18.60	15.11 10.99	12.73 -6.21	5.28 N/A	8.34 N/A	7.71 N/A	5.45 -8.93	
Avenue Europe SS III	-2.32	2.36	-7.36	N/A	N/A	N/A	N/A	-7.36	01/01/2016
Blmbg. Barc. U.S. Corp. High Yield Value Added	5.55 -7.87	11.38 -9.02	15.11 -22.47	12.73 N/A	5.28 N/A	8.34 N/A	7.71 N/A	15.11 -22.47	
Park Square Credit Opportunities	4.21	12.45	18.71	N/A	N/A	N/A	N/A	21.22	11/01/2015



As of September 30, 2016

Trailing Period Performance

	Performance (%)									
	1 Quarter	2 Quarters Ending Sep-2016	3 Quarters Ending Sep-2016	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date	
Bimbg. Barc. U.S. Corp. High Yield Value Added	5.55	11.38	15.11	12.73	5.28	8.34	7.71	9.72		
Real Asset High Yield Composite	-1.34	1.07	3.60	N/A	N/A	N/A	N/A	11.50		
Bimbg. Barc. U.S. Corp. High Yield Value Added	2.06	3.89	4.61	5.44	N/A	N/A	N/A	4.50	06/01/2015	
Bimbg. Barc. U.S. Corp. High Yield Value Added	5.55	11.38	15.11	12.73	5.28	8.34	7.71	4.22		
Mariner/Gaillon RMBS	-3.47	-7.49	-10.50	-7.29	N/A	N/A	N/A	0.28		
Blended Benchmark (Barclays US MBS)	3.00	5.98	4.24	4.30	6.76	9.47	N/A	8.76	05/01/2010	
Value Added	0.60	1.71	3.72	3.61	4.46	5.67	N/A	6.07		
Value Added	2.40	4.27	0.52	0.69	2.30	3.80	N/A	2.69		
Gaillon Onshore Mortgage Recovery Fund III, LP	1.56	2.15	1.96	2.07	N/A	N/A	N/A	-1.24	11/01/2013	
Bimbg. Barc. U.S. Corp. High Yield Value Added	5.55	11.38	15.11	12.73	5.28	8.34	7.71	4.55		
Mariner International Infrastructure	-3.99	-9.23	-13.15	-10.66	N/A	N/A	N/A	-5.79		
Value Added	1.47	3.36	7.43	9.01	N/A	N/A	N/A	1.62	12/01/2013	
Bimbg. Barc. U.S. Corp. High Yield Value Added	5.55	11.38	15.11	12.73	5.28	8.34	7.71	4.50		
The Varde Scratch and Dent Fund, LP	-4.08	-8.02	-7.68	-3.72	N/A	N/A	N/A	-2.88		
Value Added	2.07	3.75	5.73	7.46	N/A	N/A	N/A	9.35	12/01/2014	
Bimbg. Barc. U.S. Corp. High Yield Value Added	5.55	11.38	15.11	12.73	5.28	8.34	7.71	4.49		
The Varde Scratch and Dent Fund Feed I-A	-3.48	-7.63	-9.38	-5.27	N/A	N/A	N/A	4.86		
Value Added	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	08/01/2016	
Bimbg. Barc. U.S. Corp. High Yield Value Added	5.55	11.38	15.11	12.73	5.28	8.34	7.71	2.77		
Senior Loans High Yield Composite	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	4.38	10.65	10.93	9.05	N/A	N/A	N/A	7.03	06/01/2015	
Bimbg. Barc. U.S. Corp. High Yield Value Added	5.55	11.38	15.11	12.73	5.28	8.34	7.71	4.22		
Cerberus Levered Loan Fund I	-1.17	-0.73	-4.18	-3.68	N/A	N/A	N/A	2.81		
Value Added	1.79	3.63	4.04	2.73	2.37	N/A	N/A	5.67	01/01/2012	
Bimbg. Barc. U.S. Corp. High Yield Value Added	5.55	11.38	15.11	12.73	5.28	8.34	7.71	7.37		
Cerberus Levered Loan Fund II	-3.76	-7.75	-11.07	-10.00	-2.91	N/A	N/A	-1.70		
Value Added	2.06	1.30	2.42	3.38	9.21	N/A	N/A	9.68	01/01/2013	
Bimbg. Barc. U.S. Corp. High Yield Value Added	5.55	11.38	15.11	12.73	5.28	8.34	7.71	5.23		
Cerberus PSERS Levered Loan Opportunities Fund	-3.49	-10.08	-12.69	-9.35	3.93	N/A	N/A	4.45		
Value Added	8.28	17.21	29.16	51.45	N/A	N/A	N/A	61.45	10/01/2015	
Bimbg. Barc. U.S. Corp. High Yield Value Added	5.55	11.38	15.11	12.73	5.28	8.34	7.71	12.73		
LBC Credit Partners II	2.73	5.83	14.05	38.72	N/A	N/A	N/A	38.72		
Value Added	1.25	6.18	7.81	3.78	14.83	18.07	N/A	9.85	01/01/2008	
Bimbg. Barc. U.S. Corp. High Yield Value Added	5.55	11.38	15.11	12.73	5.28	8.34	7.71	13.57		
LBC Credit Partners III	-4.30	-5.20	-7.30	-8.95	9.55	9.73	N/A	-3.72		
Value Added	2.06	5.56	10.58	12.99	13.32	N/A	N/A	15.92	04/01/2013	
Bimbg. Barc. U.S. Corp. High Yield Value Added	5.55	11.38	15.11	12.73	5.28	8.34	7.71	4.75		

As of September 30, 2016

Trailing Period Performance

Performance (%)

	1 Quarter	2 Quarters Ending Sep-2016	3 Quarters Ending Sep-2016	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
Value Added	-3.49	-5.82	-4.53	0.26	8.04	N/A	N/A	11.17	
LBC-P Credit Fund LP	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.96	09/01/2016
Blimb. Barc. U.S. Corp. High Yield	5.55	11.38	15.11	12.73	5.28	8.34	7.71	0.67	
Value Added	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.29	
Summit Partners Credit Fund II LP	4.08	7.74	9.92	11.16	N/A	N/A	N/A	3.46	11/01/2014
Blimb. Barc. U.S. Corp. High Yield	5.55	11.38	15.11	12.73	5.28	8.34	7.71	3.89	
Value Added	-1.47	-3.64	-5.19	-1.57	N/A	N/A	N/A	-0.43	
Oaktree Loan Fund 2X, LP	-4.35	3.13	2.22	-7.15	-6.82	-0.92	N/A	2.78	01/01/2008
Blimb. Barc. U.S. Corp. High Yield	5.55	11.38	15.11	12.73	5.28	8.34	7.71	8.12	
Value Added	-9.90	-8.25	-12.89	-19.88	-12.10	-9.26	N/A	-5.34	
Bain Capital Credit Managed Account (PSERS), L.P.	6.34	19.31	13.57	5.97	3.43	5.83	N/A	7.38	07/01/2009
Blimb. Barc. U.S. Corp. High Yield	5.55	11.38	15.11	12.73	5.28	8.34	7.71	10.45	
Value Added	0.79	7.93	-1.54	-6.76	-1.85	-2.51	N/A	-3.07	
Inflation Protected	6.31	12.92	20.26	17.64	N/A	N/A	N/A	9.72	10/01/2014
Blended Policy (Barclays World Inflation Linked Bond - Hedged)	3.78	8.08	12.53	11.45	3.94	2.84	4.95	5.13	
Value Added	2.53	4.84	7.73	6.19	N/A	N/A	N/A	4.59	
TIPS Composite (levered)	6.31	12.92	20.26	17.64	8.73	5.66	9.17	8.06	04/01/2004
Blended Policy (Barclays World Inflation Linked Bond - Hedged)	3.78	8.08	12.53	11.45	3.94	2.84	4.95	4.58	
Value Added	2.53	4.84	7.73	6.19	4.79	2.82	4.22	3.48	
Blended Policy (Net Levered TIPS)	7.42	16.13	25.63	23.04	7.31	5.05	N/A	N/A	
Value Added	-1.11	-3.21	-5.37	-5.40	1.42	0.61	N/A	N/A	
TIPS Composite (unlevered)	3.18	6.47	10.10	9.07	7.37	5.09	9.04	7.97	04/01/2004
Blended Policy (Barclays World Inflation Linked Bond - Hedged)	3.78	8.08	12.53	11.45	3.94	2.84	4.95	4.58	
Value Added	-0.60	-1.61	-2.43	-2.38	3.43	2.25	4.09	3.39	
Bridgewater TIPS (unlevered)	4.50	9.03	11.87	10.45	N/A	N/A	N/A	3.48	02/01/2015
Bridgewater TIPS (levered)	9.05	18.79	24.68	21.24	12.02	7.80	12.52	11.31	07/01/2004
BGI Custom IL Bond Index	8.68	20.05	28.45	25.38	12.15	N/A	N/A	N/A	
Value Added	0.37	-1.26	-3.77	-4.14	-0.13	N/A	N/A	N/A	
Garda Inflation Opportunity Composite (levered)	5.36	11.18	30.33	25.16	N/A	N/A	N/A	6.45	08/01/2014
Blended Benchmark (Garda)	3.97	11.56	34.72	30.55	6.55	N/A	N/A	3.11	
Value Added	1.39	-0.38	-4.39	-5.39	N/A	N/A	N/A	3.34	
Garda Inflation Opportunity Composite (unlevered)	1.16	2.93	7.57	6.95	N/A	N/A	N/A	N/A	01/01/2015
Blimb. Barc. Global Inflation-Linked: U.S. TIPS	0.96	2.69	7.27	6.58	2.40	1.93	4.48	3.23	
Value Added	0.22	0.24	0.30	0.37	N/A	N/A	N/A	N/A	
Garda Inflation Opp. Fund CI B (levered)	5.86	13.06	37.23	30.28	10.61	N/A	N/A	0.35	03/01/2013
Blended Benchmark (Garda)	3.97	11.56	34.72	30.55	6.55	N/A	N/A	-3.22	
Value Added	1.89	1.50	2.51	-0.27	4.06	N/A	N/A	3.57	

Trailing Period Performance

	Performance (%)									
	1 Quarter	2 Quarters Ending Sep-2016	3 Quarters Ending Sep-2016	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date	
Garda Inflation Opp. Fund Cl B (unlevered)	1.07	2.89	7.99	7.01	N/A	N/A	N/A	2.57	02/01/2015	
<i>Bloomberg, Barc. Global Inflation-Linked: U.S. TIPS</i>	0.96	2.69	7.27	6.58	2.40	1.93	4.48	1.49		
Value Added	0.11	0.20	0.42	0.43	N/A	N/A	N/A	1.08		
Garda Fixed Income Relative Value Opportunity Fund Ltd. (TIPS)	3.22	3.63	5.50	5.89	N/A	N/A	N/A	3.65	08/01/2014	
PSERS Total TIPS (levered)	1.62	3.33	7.88	7.56	3.14	2.56	6.22	5.65	03/01/2004	
<i>PSERS Total TIPS (unlevered)</i>	1.54	3.25	7.80	7.47	3.11	2.46	5.02	4.71	03/01/2004	
<i>Bloomberg, Barc. Global Inflation-Linked: U.S. TIPS</i>	0.96	2.69	7.27	6.58	2.40	1.93	4.48	4.31		
Value Added	0.58	0.56	0.53	0.89	0.71	0.53	0.54	0.40		
PSERS TIPS (levered)	1.51	3.22	7.76	7.44	3.10	2.54	6.20	5.64	03/01/2004	
<i>PSERS TIPS (unlevered)</i>	1.51	3.22	7.76	7.44	3.10	2.45	5.02	4.71	03/01/2004	
<i>Bloomberg, Barc. Global Inflation-Linked: U.S. TIPS</i>	0.96	2.69	7.27	6.58	2.40	1.93	4.48	4.31		
Value Added	0.55	0.53	0.49	0.86	0.70	0.52	0.54	0.40		
PIMCO Multi-Sector Strategy	1.52	5.26	10.39	10.40	4.14	N/A	N/A	3.89	07/01/2012	
<i>Blended Policy (PIMCO Multi-Sector)</i>	0.54	4.33	10.62	10.76	4.79	4.30	5.41	4.23		
Value Added	0.98	0.93	-0.23	-0.36	-0.65	N/A	N/A	-0.34		
Real Assets (levered/hedged)	2.14	12.59	17.49	13.32	N/A	N/A	N/A	2.81	10/01/2014	
<i>Real Assets (unlevered/hedged)</i>	1.70	9.89	13.70	10.21	N/A	N/A	N/A	1.39	10/01/2014	
Blended Policy (Real Assets) (Hedged)	0.11	7.99	10.32	6.92	N/A	N/A	N/A	-0.45		
Value Added	1.59	1.90	3.38	3.29	N/A	N/A	N/A	1.84		
Real Assets (levered/unhedged)	2.16	12.58	17.70	13.52	N/A	N/A	N/A	2.90	10/01/2014	
<i>Real Assets (unlevered/unhedged)</i>	1.72	9.89	13.87	10.37	N/A	N/A	N/A	1.46	10/01/2014	
Blended Policy (Real Assets) (Unhedged)	0.12	7.99	10.50	7.05	N/A	N/A	N/A	-0.39		
Value Added	1.60	1.90	3.37	3.32	N/A	N/A	N/A	1.85		
Real Assets x Private Real Estate (levered/hedged)	1.77	22.90	29.56	17.42	N/A	N/A	N/A	-10.26	10/01/2014	
<i>Real Assets x Private Real Estate (unlevered/hedged)</i>	1.16	14.22	18.18	9.63	N/A	N/A	N/A	-13.28	10/01/2014	
Blended Policy (Real Assets x Private RE) (Hedged)	-0.47	12.45	15.47	8.10	N/A	N/A	N/A	-11.70		
Value Added	1.63	1.77	2.71	1.53	N/A	N/A	N/A	-1.58		
Real Assets x Private Real Estate (levered/unhedged)	1.82	22.85	30.05	17.87	N/A	N/A	N/A	-10.09	10/01/2014	
<i>Real Assets x Private Real Estate (unlevered/unhedged)</i>	1.19	14.20	18.48	9.91	N/A	N/A	N/A	-13.18	10/01/2014	
Blended Policy (Real Assets x Private RE) (Unhedged)	-0.44	12.44	15.77	8.31	N/A	N/A	N/A	-11.61		
Value Added	1.63	1.76	2.71	1.60	N/A	N/A	N/A	-1.57		
MLP Composite	4.73	28.81	21.10	14.48	0.94	11.44	N/A	16.57	10/01/2008	
<i>S&P MLP Index</i>	2.92	26.01	18.03	10.12	-4.38	5.51	8.99	11.96		
Value Added	1.81	2.80	3.07	4.36	5.32	5.93	N/A	4.61		
PSERS S&P MLP Index	2.93	25.98	18.44	12.82	N/A	N/A	N/A	-8.08	08/01/2015	

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Trailing Period Performance

	Performance (%)									
	1 Quarter	2 Quarters Ending Sep-2016	3 Quarters Ending Sep-2016	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date	
S&P MLP Total Return Index										
Value Added	2.92	26.01	18.03	10.12	-4.38	5.51	8.99	-11.02		
Atlantic Trust	0.01	-0.03	0.41	2.70	N/A	N/A	N/A	2.94		
S&P MLP Index	5.20	31.00	24.02	15.68	1.03	N/A	N/A	7.58	09/01/2012	
Value Added	2.92	26.01	18.03	10.12	-4.38	5.51	8.99	1.32		
PSERS Harvest Funds MLP	2.28	4.99	5.99	5.56	5.41	N/A	N/A	6.26		
S&P MLP Index	4.30	25.52	18.02	13.55	1.35	11.64	N/A	16.70	10/01/2008	
Value Added	2.92	26.01	18.03	10.12	-4.38	5.51	8.99	11.96		
Salient	1.38	-0.49	-0.01	3.43	5.73	6.13	N/A	4.74		
S&P MLP Index	6.34	33.52	24.69	16.31	0.35	N/A	N/A	7.16	08/01/2012	
Value Added	2.92	26.01	18.03	10.12	-4.38	5.51	8.99	1.70		
Infrastructure Composite (levered/hedged)	3.42	7.51	6.66	6.19	4.73	N/A	N/A	5.46		
Infrastructure Composite (unlevered/hedged)	0.69	10.91	27.36	N/A	N/A	N/A	N/A	15.11	11/01/2015	
FTSE Dev. Core Infracr 50/50 Index (Net) (Hedged)	0.44	5.60	12.83	N/A	N/A	N/A	N/A	9.47	11/01/2015	
Value Added	0.67	5.76	12.98	13.14	11.23	13.59	N/A	8.56		
Pareto Nevada - Infra (notional)	-0.23	-0.16	-0.15	N/A	N/A	N/A	N/A	0.91		
Infrastructure Composite (levered/unhedged)	-0.62	0.44	-3.93	N/A	N/A	N/A	N/A	-4.23	12/01/2015	
Infrastructure Composite (unlevered/unhedged)	1.25	10.27	32.20	N/A	N/A	N/A	N/A	19.50	11/01/2015	
FTSE Developed Core Infracr 50/50 Index (Net)	0.73	5.32	14.95	N/A	N/A	N/A	N/A	9.59	11/01/2015	
Value Added	0.89	5.44	15.08	14.65	8.51	11.79	N/A	9.70		
Publicly-Traded Infrastructure Composite (levered)	-0.16	-0.12	-0.13	N/A	N/A	N/A	N/A	-0.11		
Publicly-Traded Infrastructure Composite (unlevered)	1.25	10.27	32.20	N/A	N/A	N/A	N/A	19.50	11/01/2015	
FTSE Developed Core Infracr 50/50 Index (Net)	0.73	5.32	14.95	N/A	N/A	N/A	N/A	11.54	11/01/2015	
Value Added	0.89	5.44	15.08	14.65	8.51	11.79	N/A	9.70		
PSERS Infrastructure (levered)	-0.16	-0.12	-0.13	N/A	N/A	N/A	N/A	1.84		
PSERS Infrastructure (unlevered)	1.25	10.27	32.20	N/A	N/A	N/A	N/A	19.50	11/01/2015	
FTSE Developed Core Infracr 50/50 Index (Net)	0.73	5.32	14.95	N/A	N/A	N/A	N/A	9.59	11/01/2015	
Value Added	0.89	5.44	15.08	14.65	8.51	11.79	N/A	9.70		
Commodities Composite (levered)	-0.16	-0.12	-0.13	N/A	N/A	N/A	N/A	-0.11		
Commodities Composite (unlevered)	-1.86	21.03	44.40	21.14	-8.48	-6.44	N/A	-2.63	11/01/2006	
Blended Policy (Commodities)	-0.88	9.15	18.06	9.66	-5.55	-4.14	N/A	-1.43	11/01/2006	
Value Added	-2.63	7.64	14.54	4.85	-8.10	-6.39	N/A	-4.27		
PSERS Commodity Beta + PCAF Composite	1.75	1.51	3.52	4.81	2.55	2.25	N/A	2.84		
Bloomberg Commodity Index Total Return	-1.70	10.78	13.22	3.57	N/A	N/A	N/A	-14.64	05/01/2014	
Value Added	-3.86	8.40	8.85	-2.59	-12.35	-9.37	N/A	-17.89		
PSERS Commodity Beta (levered)	2.16	2.38	4.37	6.16	N/A	N/A	N/A	3.25		
	-6.91	29.04	35.49	1.72	N/A	N/A	N/A	-18.22	05/01/2014	

As of September 30, 2016

Trailing Period Performance

Performance (%)

	1 Quarter	2 Quarters Ending Sep-2016	3 Quarters Ending Sep-2016	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
PSERS Commodity Beta (unlevered)	-2.76	9.40	11.11	0.64	N/A	N/A	N/A	-15.71	05/01/2014
Bloomberg Commodity Index Total Return Value Added	-3.86 1.10	8.40 1.00	8.85 2.26	-2.59 3.23	-12.35 N/A	-9.37 N/A	-5.33 N/A	-17.89 2.18	
PIMCO Commodity Alpha Fund	7.69	9.55	14.88	25.44	N/A	N/A	N/A	13.88	03/01/2015
Libor (3 month) Value Added	0.79 7.50	0.35 9.20	0.51 14.37	0.61 24.83	0.37 N/A	0.38 N/A	1.26 N/A	0.50 13.38	
Gresham	-3.17	8.30	8.36	-3.42	-12.25	-8.14	N/A	-5.57	10/01/2007
Bloomberg Commodity Index Total Return Value Added	-3.86 0.69	8.40 -0.10	8.85 -0.49	-2.59 -0.83	-12.35 0.10	-9.37 1.23	-5.33 N/A	-7.53 1.96	
Wellington Management Company	4.02	15.59	21.71	13.80	-7.20	-4.38	N/A	-1.63	01/01/2007
Blended Benchmark (WMC) Value Added	0.00 4.02	11.82 3.77	17.34 4.37	11.52 2.28	-8.32 1.12	-4.01 -0.37	0.15 N/A	-0.83 -0.80	
PSERS Gold Fund (unlevered)	-0.82	5.80	23.15	16.98	-0.06	N/A	N/A	-3.82	06/01/2012
Bloomberg Gold Subindex Total Return Value Added	-0.74 -0.08	5.94 -0.14	23.40 -0.25	17.27 -0.29	-0.73 0.67	-4.64 N/A	7.32 N/A	-4.40 0.58	
PTRES Composite (levered/hedged)	1.81	8.63	15.61	19.03	10.52	11.07	4.16	9.73	07/01/1998
PTRES Composite (unlevered/hedged)	1.25	5.86	10.38	13.94	8.92	10.11	3.71	9.47	07/01/1998
Blended Policy (PTRES) (Hedged) Value Added	1.11 0.14	4.49 1.37	8.16 2.22	13.15 0.79	6.95 1.97	11.88 -1.77	3.42 0.29	8.67 0.80	
Pareto Sierra - REIT (notional)	-0.34	-0.68	-4.44	N/A	N/A	N/A	N/A	-4.88	12/01/2015
PTRES Composite (levered/unhedged)	1.94	8.87	17.89	21.37	11.24	11.51	4.37	9.85	07/01/1998
PTRES Composite (unlevered/unhedged)	1.33	6.04	11.83	15.44	9.39	10.39	3.84	9.55	07/01/1998
Blended Policy (PTRES) (Unhedged) Value Added	1.25 0.08	4.75 1.29	10.23 1.60	14.85 0.59	7.49 1.90	12.22 -1.83	3.57 0.27	8.75 0.80	
PSERS REIT Index (levered)	2.27	9.07	20.67	N/A	N/A	N/A	N/A	17.25	11/01/2015
PSERS REIT Index (unlevered)	1.21	4.76	10.24	N/A	N/A	N/A	N/A	8.69	11/01/2015
FTSE EPRA/NAREIT Developed Index (Net) Value Added	1.25 -0.04	4.75 0.01	10.23 0.01	14.85 N/A	7.71 N/A	12.29 N/A	3.41 N/A	8.67 0.02	
Security Capital Preferred Growth	1.59	8.66	15.10	23.71	11.95	11.93	N/A	8.96	07/01/2008
Wishare US Real Estate Securities Index Value Added	-1.40 2.99	4.50 4.16	10.04 5.06	18.45 5.26	14.61 -2.66	16.02 -4.09	5.93 N/A	9.12 -0.16	
Risk Parity Composite (vol adjusted)	3.68	9.39	12.30	11.79	5.29	N/A	N/A	2.86	10/01/2012
Blended Policy (Risk Parity) Value Added	3.73 -0.05	10.47 -1.08	16.78 -4.48	15.96 -4.17	6.55 -1.26	N/A N/A	N/A N/A	4.03 -1.17	
PSERS Risk Parity (vol adjusted)	4.01	10.64	16.09	15.44	6.71	N/A	N/A	3.17	02/01/2013
AQR GRP EL 20 Offshore Fund (vol adjusted)	1.42	8.08	12.38	7.69	2.55	N/A	N/A	1.10	11/01/2012



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Trailing Period Performance

Performance (%)

	1 Quarter	2 Quarters Ending Sep-2016	3 Quarters Ending Sep-2016	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
Bridgewater All Weather @15% (vol adjusted)	3.77	11.06	14.06	12.54	4.99	N/A	N/A	2.70	10/01/2012
DE Shaw Orienteer (vol adjusted)	4.00	8.71	10.67	13.10	N/A	N/A	N/A	7.41	02/01/2014
DE Shaw Orienteer HV (vol adjusted)	4.03	8.75	N/A	N/A	N/A	N/A	N/A	12.00	02/01/2016
BlackRock Market Advantage II (vol adjusted)	3.71	9.00	12.42	11.98	N/A	N/A	N/A	1.50	04/01/2015
Bridgewater Optimal (vol adjusted)	4.25	4.80	-0.05	N/A	N/A	N/A	N/A	-1.53	11/01/2015
Total Absolute Return	2.45	1.54	-0.50	-0.59	2.63	3.05	5.65	5.04	10/01/2005
Blended Policy (3-month Libor + 3.5%)	1.06	2.09	3.14	4.13	4.81	5.88	6.92	7.02	
Value Added	1.39	-0.55	-3.64	-4.72	-2.18	-2.83	-1.27	-1.98	
Apollo/SASOF III	-3.80	-2.18	-4.58	-9.77	N/A	N/A	N/A	-23.10	02/01/2015
Libor (1 month)	0.13	0.24	0.34	0.41	0.25	0.24	1.11	0.32	
Value Added	-3.93	-2.42	-4.92	-10.18	N/A	N/A	N/A	-23.42	
Oceanwood Opportunities Fund	5.55	-0.56	-9.16	-5.19	N/A	N/A	N/A	-0.55	09/01/2014
Libor (1 month)	0.13	0.24	0.34	0.41	0.25	0.24	1.11	0.29	
Value Added	5.42	-0.80	-9.50	-5.60	N/A	N/A	N/A	-0.84	
Perry Partners L.P.	-0.01	-0.23	-2.83	-7.98	N/A	N/A	N/A	-6.79	12/01/2013
Libor (1 month)	0.13	0.24	0.34	0.41	0.25	0.24	1.11	0.25	
Value Added	-0.14	-0.47	-3.17	-8.39	N/A	N/A	N/A	-7.04	
Ellis Lake	0.65	-4.45	-7.58	-12.68	-6.63	N/A	N/A	-5.47	04/01/2013
Libor (1 month)	0.13	0.24	0.34	0.41	0.25	0.24	1.11	0.24	
Value Added	0.52	-4.69	-7.92	-13.09	-6.88	N/A	N/A	-5.71	
Garda Fixed Income Relative Value Opportunity Fund Ltd.	3.22	3.63	5.50	5.89	4.99	N/A	N/A	5.43	01/01/2012
Libor (1 month)	0.13	0.24	0.34	0.41	0.25	0.24	1.11	0.24	
Value Added	3.09	3.39	5.16	5.48	4.74	N/A	N/A	5.19	
Capula Global Relative Value Fund Limited - Class F	2.06	3.51	5.48	6.82	7.69	6.45	N/A	6.70	04/01/2011
Libor (1 month)	0.13	0.24	0.34	0.41	0.25	0.24	1.11	0.24	
Value Added	1.93	3.27	5.14	6.41	7.44	6.21	N/A	6.46	
PIMCO PARS/GCOF/MAV Fund	0.01	1.29	-0.85	-0.87	3.80	5.63	N/A	6.94	03/01/2008
Libor (1 month)	0.13	0.24	0.34	0.41	0.25	0.24	1.11	0.47	
Value Added	-0.12	1.05	-1.19	-1.28	3.55	5.39	N/A	6.47	
PIMCO PARS	2.62	5.29	2.55	3.81	8.57	N/A	N/A	7.21	10/01/2012
PIMCO GCOF	1.82	3.19	3.85	1.77	6.92	N/A	N/A	8.67	10/01/2012
PIMCO MAV	-0.86	-0.30	-1.73	0.55	4.24	N/A	N/A	1.67	10/01/2012
BlackRock Capital Structure Investments Fund	3.62	-9.29	-11.71	-3.74	-0.60	2.12	N/A	0.50	03/01/2009
Libor (1 month)	0.13	0.24	0.34	0.41	0.25	0.24	1.11	0.25	
Value Added	3.49	-9.53	-12.05	-4.15	-0.85	1.88	N/A	0.25	



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Trailing Period Performance

Performance (%)

	1 Quarter	2 Quarters Ending Sep-2016	3 Quarters Ending Sep-2016	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
Brigade Leveraged Capital Structures Offshore Fund	5.80	15.01	19.86	12.07	3.14	3.93	N/A	5.33	10/01/2007
Libor (1 month)	0.13	0.24	0.34	0.41	0.25	0.24	1.11	0.65	
Value Added	5.67	14.77	19.52	11.66	2.89	3.69	N/A	4.68	
Caspian Select Credit International - Class A	4.27	7.09	4.42	-1.49	-0.18	3.60	N/A	2.20	04/01/2011
Libor (1 month)	0.13	0.24	0.34	0.41	0.25	0.24	1.11	0.24	
Value Added	4.14	6.85	4.08	-1.90	-0.43	3.36	N/A	1.96	
Caspian Keystone Focused Fund, L.P.	4.47	N/A	N/A	N/A	N/A	N/A	N/A	8.95	05/01/2016
Libor (1 month)	0.13	0.24	0.34	0.41	0.25	0.24	1.11	0.20	
Value Added	4.34	N/A	N/A	N/A	N/A	N/A	N/A	8.75	
Venor Capital Offshore	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.45	09/01/2016
Citigroup 1 Month T-Bill	0.05	0.10	0.15	0.16	0.06	0.05	0.76	0.02	
Value Added	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.43	
Aeolus Property Catastrophe Fund I LP	7.41	7.42	8.67	12.07	15.88	N/A	N/A	17.85	06/01/2012
Libor (1 month)	0.13	0.24	0.34	0.41	0.25	0.24	1.11	0.24	
Value Added	7.28	7.18	8.33	11.66	15.63	N/A	N/A	17.61	
Nephelia / Palmetto Fund Ltd. - Class G	2.11	3.18	3.01	3.90	5.72	6.51	N/A	6.80	07/01/2011
Libor (1 month)	0.13	0.24	0.34	0.41	0.25	0.24	1.11	0.24	
Value Added	1.98	2.94	2.67	3.49	5.47	6.27	N/A	6.56	
Independence Reinsurance Partners Composite	2.87	5.06	8.94	N/A	N/A	N/A	N/A	8.94	01/01/2016
Libor (1 month)	0.13	0.24	0.34	0.41	0.25	0.24	1.11	0.34	
Value Added	2.74	4.82	8.60	N/A	N/A	N/A	N/A	8.60	
Davinci Reinsurance Ltd.	3.07	6.00	10.78	N/A	N/A	N/A	N/A	10.78	01/01/2016
Medical Fund Ltd.	2.71	4.20	N/A	N/A	N/A	N/A	N/A	5.27	02/01/2016
Capula Tail Risk Fund Limited - Class C	0.30	0.09	-1.14	-3.31	-0.98	-3.55	N/A	-0.91	07/01/2011
Libor (1 month)	0.13	0.24	0.34	0.41	0.25	0.24	1.11	0.24	
Value Added	0.17	-0.15	-1.48	-3.72	-1.23	-3.79	N/A	-1.15	
Bridgewater Pure Alpha Fund II, Ltd.	1.89	-3.28	-9.94	-9.17	1.37	2.26	12.09	11.53	01/01/2006
Libor (3 month)	0.19	0.35	0.51	0.61	0.37	0.38	1.26	1.52	
Value Added	1.70	-3.63	-10.45	-9.78	1.00	1.88	10.83	10.01	
Brevan Howard Fund Limited - Class E	-2.13	-2.21	-3.00	-5.01	-1.06	0.57	N/A	2.24	07/01/2010
Libor (3 month)	0.19	0.35	0.51	0.61	0.37	0.38	1.26	0.36	
Value Added	-2.32	-2.56	-3.51	-5.62	-1.43	0.19	N/A	1.88	
OWS Credit Opportunity Offshore Fund III	7.30	8.57	7.11	N/A	N/A	N/A	N/A	6.39	12/01/2015
Libor (3 month)	0.19	0.35	0.51	0.61	0.37	0.38	1.26	0.55	
Value Added	7.11	8.22	6.60	N/A	N/A	N/A	N/A	5.84	

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Trailing Period Performance

Performance (%)

	1 Quarter	2 Quarters Ending Sep-2016	3 Quarters Ending Sep-2016	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
Unallocated Cash & Cash Equivalents	0.13	0.26	0.32	0.34	0.35	1.39	0.17	0.41	07/01/1998
BofA Merrill Lynch 3 Month US T-Bill	0.10	0.17	0.24	0.27	0.12	0.10	0.92	2.07	
Value Added	0.03	0.09	0.08	0.07	0.23	1.29	-0.75	-1.65	
PSERS Cash Management	0.13	0.26	0.32	0.33	0.22	0.32	-0.54	2.49	07/01/1985
PSERS Cash Management Sub	0.06	0.16	0.25	0.28	0.14	0.13	N/A	0.21	12/01/2008
RE Conversions	0.00	0.00	0.00	0.00	N/A	N/A	N/A	0.00	09/01/2015
PSERS I/Prop Fund	0.15	0.28	0.41	0.47	0.29	0.29	N/A	0.39	01/01/2009
BofA Merrill Lynch US Treasury Bills 0-3M	0.07	0.12	0.18	0.19	0.08	0.07	0.84	0.09	
Value Added	0.08	0.16	0.23	0.28	0.21	0.22	N/A	0.30	
LIBOR Composite	0.52	1.02	1.50	1.77	1.11	1.19	N/A	1.47	04/01/2008
PSERS LIBOR	0.38	0.76	1.11	1.27	0.79	0.79	N/A	1.78	01/01/2007
Libor (3 month)	0.19	0.35	0.51	0.61	0.37	0.38	1.26	1.15	
Value Added	0.19	0.41	0.60	0.66	0.42	0.41	N/A	0.63	
Capula LIBOR Tail Risk	0.29	0.08	-1.13	-1.02	N/A	N/A	N/A	-1.02	10/01/2015
Libor (3 month)	0.19	0.35	0.51	0.61	0.37	0.38	1.26	0.61	
Value Added	0.10	-0.27	-1.64	-1.63	N/A	N/A	N/A	-1.63	
Radcliffe Ultra Short Duration	1.17	2.31	3.62	4.43	2.62	N/A	N/A	2.76	06/01/2012
Libor (3 month)	0.19	0.35	0.51	0.61	0.37	0.38	1.26	0.36	
Value Added	0.98	1.96	3.11	3.82	2.25	N/A	N/A	2.40	
PSERS Healthcare & HOP	0.25	0.51	0.78	0.85	0.48	0.54	1.82	2.99	01/01/1998
PSERS Healthcare - Premium Assist	0.10	0.17	0.24	0.27	0.12	0.10	0.92	2.16	
BofA Merrill Lynch 3 Month US T-Bill	0.15	0.34	0.54	0.58	0.36	0.44	0.90	0.83	
Value Added	0.14	0.27	0.38	0.45	0.29	0.28	1.24	1.67	02/01/2002
PSERS Healthcare - HOP	0.10	0.17	0.24	0.27	0.12	0.10	0.92	1.35	
BofA Merrill Lynch 3 Month US T-Bill	0.04	0.10	0.14	0.18	0.17	0.18	0.32	0.32	
Value Added	1.44	3.27	4.42	4.28	3.74	8.27	3.87	3.32	01/01/2000
E/M Total Program Composite	0.51	2.85	5.95	5.29	4.13	3.40	1.47	1.72	11/01/2004
E/M US Core Plus FI Composite	0.51	2.85	5.95	5.30	4.28	3.38	5.30	5.57	07/01/2006
Pugh Capital Management	0.46	2.68	5.80	5.19	4.03	3.08	4.79	5.05	
Bimbg. Barc. U.S. Aggregate	0.05	0.17	0.15	0.11	0.25	0.30	0.51	0.52	
Value Added	0.65	-4.45	-7.58	-12.68	-6.63	N/A	N/A	-6.14	07/01/2013
E/M Absolute Return Composite	0.65	-4.45	-7.58	-12.68	-6.63	N/A	N/A	-5.47	04/01/2013
Ellis Lake	0.13	0.24	0.34	0.41	0.25	0.24	1.11	0.24	
Libor (1 month)	0.52	-4.69	-7.92	-13.09	-6.88	N/A	N/A	-5.71	
Value Added									

As of September 30, 2016

Trailing Period Performance

	Performance (%)							Inception Date	
	1 Quarter	2 Quarters Ending Sep-2016	3 Quarters Ending Sep-2016	1 Year	3 Years	5 Years	10 Years		Since Inception
E/M Short Duration Cash	1.61	3.66	4.59	5.01	N/A	N/A	N/A	4.03	10/01/2014
Radcliffe Ultra Short Duration	1.17	2.31	3.62	4.43	2.62	N/A	N/A	2.76	06/01/2012
Libor (3 month)	0.19	0.35	0.51	0.61	0.37	0.38	1.26	0.36	
Value Added	0.98	1.96	3.11	3.82	2.25	N/A	N/A	2.40	
Radcliffe Specialty Finance Debt	1.97	4.77	5.56	5.48	N/A	N/A	N/A	4.50	10/01/2014
3-Month Libor + 0.60%	0.34	0.65	0.96	1.22	0.98	0.98	1.86	1.05	
Value Added	1.63	4.12	4.60	4.26	N/A	N/A	N/A	3.45	

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Trailing Period Performance

	Performance (%)									
	1 Quarter	2 Quarters Ending Sep-2016	3 Quarters Ending Sep-2016	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date	
Total Private Market Composites (hedged)	2.86	4.52	6.48	5.57	9.62	9.16	6.87	9.84	10/01/1992	
Blended Policy (Private Market)	0.71	1.18	2.47	2.78	6.56	6.34	4.95	N/A		
Value Added	2.15	3.34	4.01	2.79	3.06	2.82	1.92	N/A		
Total Private Market Composites (unhedged)	2.83	4.51	6.45	5.54	9.61	9.15	6.87	9.84	10/01/1992	
Blended Policy (Private Market)	0.71	1.18	2.47	2.78	6.56	6.34	4.95	N/A		
Value Added	2.12	3.33	3.98	2.76	3.05	2.82	1.92	N/A		
Total Alternative Investments (hedged)	3.11	4.63	5.48	3.20	7.26	7.76	9.31	9.81	07/01/1998	
Burgiss (Lagged) - PE/PD/VC/Int	0.54	0.42	1.49	1.22	4.42	4.39	3.76	3.15		
Value Added	2.57	4.21	3.99	1.98	2.84	3.37	5.55	6.66		
Burgiss (Lagged) - Int	-0.95	-1.98	-1.02	-1.25	0.35	N/A	N/A	N/A		
Value Added	4.06	6.61	6.50	4.45	6.91	N/A	N/A	N/A		
Burgiss (Lagged) - PE/PD	0.72	0.82	1.96	1.71	4.78	4.79	4.07	N/A		
Value Added	2.39	3.81	3.52	1.49	2.48	2.97	5.24	N/A		
Burgiss (Lagged) - VC	-0.20	-1.56	-0.99	-1.39	2.07	1.23	-0.17	N/A		
Value Added	3.31	6.19	6.47	4.59	5.19	6.53	9.48	N/A		
Total Alternative Investments (unhedged)	3.07	4.61	5.44	3.16	7.24	7.75	9.31	9.81	07/01/1998	
Burgiss (Lagged) - PE/PD/VC/Int	0.54	0.42	1.49	1.22	4.42	4.39	3.76	3.15		
Value Added	2.53	4.19	3.95	1.94	2.82	3.36	5.55	6.66		
Burgiss (Lagged) - Int	-0.95	-1.98	-1.02	-1.25	0.35	N/A	N/A	N/A		
Value Added	4.02	6.59	6.46	4.41	6.89	N/A	N/A	N/A		
Burgiss (Lagged) - PE/PD	0.72	0.82	1.96	1.71	4.78	4.79	4.07	N/A		
Value Added	2.35	3.79	3.48	1.45	2.46	2.96	5.24	N/A		
Burgiss (Lagged) - VC	-0.20	-1.56	-0.99	-1.39	2.07	1.23	-0.17	N/A		
Value Added	3.27	6.17	6.43	4.55	5.17	6.52	9.48	N/A		
Priv. Eq/ Venture Cap/ Priv. Debt/Co-Invest	3.07	4.61	5.44	3.16	7.24	N/A	N/A	8.76	04/01/2012	
Pareto Wilson - PE (notional)	3.65	0.22	2.97	3.91	N/A	N/A	N/A	3.91	10/01/2015	
PE Currency Hedge Custom Benchmark	3.84	0.62	3.32	4.23	N/A	N/A	N/A	4.23		
Value Added	-0.19	-0.40	-0.35	-0.32	N/A	N/A	N/A	-0.32		
Private Equity Co-Investment Composite	5.80	11.11	18.78	23.53	30.38	N/A	N/A	34.42	04/01/2012	
PA Penn Investment Fund - PE Composite	3.63	3.48	5.78	N/A	N/A	N/A	N/A	5.49	12/01/2015	
PA Penn Investment Fund - PE	11.06	10.81	9.90	N/A	N/A	N/A	N/A	9.74	12/01/2015	
PA Penn Investment Fund - PE Internal	0.00	0.00	8.27	N/A	N/A	N/A	N/A	8.27	12/01/2015	
Internally Managed PE Composite	5.94	11.48	19.43	24.22	30.62	N/A	N/A	34.58	04/01/2012	
Private Eq/ Venture Cap/ Private Debt	2.93	4.31	4.89	2.40	6.72	7.40	9.18	9.73	07/01/1998	
Private Debt Composite	2.13	2.60	-1.25	-3.31	4.30	6.07	7.22	7.39	04/01/2001	
Private Equity/ Venture Capital Composite	3.06	4.57	5.96	3.40	7.15	7.65	9.36	9.59	07/01/1998	



As of September 30, 2016

Trailing Period Performance

Performance (%)

	1 Quarter	2 Quarters Ending Sep-2016	3 Quarters Ending Sep-2016	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
<i>Burgiss (Lagged) - PE/PD/VC/Int</i>									
Value Added	0.54	0.42	1.49	1.22	4.42	4.39	3.76	3.15	
	2.52	4.15	4.47	2.18	2.73	3.26	5.60	6.44	
Private Equity	2.88	5.04	6.30	3.88	6.92	7.52	9.60	10.43	04/01/2001
Private Equity x Tobacco Composite	2.88	5.04	6.30	4.07	7.08	7.61	9.65	10.47	04/01/2001
Venture Capital	4.13	1.85	4.02	0.62	9.11	8.71	7.33	3.26	04/01/2001
Total Real Estate (levered/hedged)	2.41	4.66	8.52	9.81	13.10	11.09	2.28	8.10	04/01/1981
Total Real Estate (unlevered/hedged)	2.33	4.50	8.22	9.35	12.94	11.00	2.24	8.09	04/01/1981
Blended Policy (Total Real Estate) (Hedged)	0.99	2.50	4.30	5.78	9.89	9.53	6.39	8.57	
Value Added	1.34	2.00	3.92	3.57	3.05	1.47	-1.15	-0.48	
Total Real Estate (levered/unhedged)	2.43	4.68	8.68	9.96	13.15	11.12	2.29	8.10	04/01/1981
Total Real Estate (unlevered/unhedged)	2.33	4.50	8.22	9.35	12.94	11.00	2.24	8.09	04/01/1981
Blended Policy (Total Real Estate) (Unhedged)	1.00	2.53	4.47	5.92	9.94	9.56	6.41	8.57	
Value Added	1.33	1.97	3.75	3.43	3.00	1.44	-1.17	-0.48	
Private Real Estate Composite	2.47	4.35	7.97	9.22	13.06	11.17	2.32	9.22	07/01/1996
Blended Policy (Private Real Estate)	0.97	2.32	3.94	5.12	9.66	9.39	6.32	9.79	
Value Added	1.50	2.03	4.03	4.10	3.40	1.78	-1.00	-0.57	
Private Real Estate x Internal	2.46	4.33	7.87	9.15	12.97	11.11	1.99	8.74	07/01/1996
Internally Managed Private Real Estate	3.06	5.02	14.67	13.28	21.78	N/A	N/A	27.23	07/01/2013

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Calendar Year Performance

	Performance (%)									
	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
PSERS Total Fund	-1.80	8.75	8.66	11.35	4.31	14.22	12.06	-29.70	13.83	18.04
Blended Policy (Total Plan)	-2.48	6.87	5.65	8.78	2.39	10.32	12.94	-25.96	10.43	15.46
Value Added	0.68	1.88	3.01	2.57	1.92	3.90	-0.88	-3.74	3.40	2.58
Total Public Markets Composite	-4.70	6.58	6.64	10.98	1.01	15.33	28.30	-34.67	10.15	16.82
Blended Policy (Public Market) (Hedged)	-5.66	5.19	4.76	9.81	-0.36	11.76	24.17	-32.01	9.44	15.88
Value Added	0.96	1.39	1.88	1.17	1.37	3.57	4.13	-2.66	0.71	0.94
Blended Policy (Public Market) (Unhedged)	-6.28	4.16	4.69	9.81	-0.36	11.76	24.17	-32.01	9.44	15.88
Value Added	1.58	2.42	1.95	1.17	1.37	3.57	4.13	-2.66	0.71	0.94
Total Public Equity Composite	0.92	8.15	24.43	17.07	-6.96	16.95	41.00	-42.75	10.55	19.93
Blended Policy (Public Equity) (Hedged)	-0.51	7.93	24.18	16.73	-7.83	14.34	37.59	-41.03	10.10	19.86
Value Added	1.43	0.22	0.25	0.34	0.87	2.61	3.41	-1.72	0.46	0.07
Blended Policy (Public Equity) (Unhedged)	-1.88	4.14	23.89	16.73	-7.83	14.34	37.59	-41.03	10.10	19.86
Value Added	2.80	4.01	0.54	0.34	0.87	2.61	3.41	-1.72	0.46	0.07
Total US Equity Composite	0.40	11.71	34.04	15.65	1.65	18.37	33.94	-41.49	4.68	14.71
Blended Policy (Tot US Eq)	0.64	12.51	33.39	16.42	0.80	16.52	28.22	-37.23	5.62	15.77
Value Added	-0.24	-0.80	0.65	-0.77	0.85	1.85	5.72	-4.26	-0.94	-1.06
PSERS-S&P 500 Index Composite	1.43	13.66	32.85	16.09	2.03	16.03	28.52	-37.07	5.60	15.88
S&P 500 Index	1.38	13.69	32.39	16.00	2.11	15.06	26.46	-37.00	5.49	15.79
Value Added	0.05	-0.03	0.46	0.09	-0.08	0.97	2.06	-0.07	0.11	0.09
Total US Small Cap Composite	-2.31	3.57	37.99	15.08	-1.14	26.20	38.03	-35.83	2.82	12.22
MSCI USA Small Cap Index	-3.65	7.55	38.26	18.22	-3.03	27.96	39.74	-35.88	-3.00	14.68
Value Added	1.34	-3.98	-0.27	-3.14	1.89	-1.76	-1.71	0.05	5.82	-2.46
PSERS Small Cap Index Composite	-1.79	8.00	38.32	18.36	-0.14	27.43	35.33	-33.93	4.01	12.73
PSERS-S&P 400 Index Composite	-2.20	9.87	33.45	18.78	-1.60	27.42	41.12	-35.91	8.08	10.52
S&P MidCap 400	-2.18	9.77	33.50	17.88	-1.73	26.64	37.38	-36.23	7.98	10.32
Value Added	-0.02	0.10	-0.05	0.90	0.13	0.78	3.74	0.32	0.10	0.20
PSERS-S&P 600 Index Composite	-1.47	6.23	43.13	17.70	1.64	27.47	29.62	-30.67	-0.14	15.30
S&P SmallCap 600	-1.97	5.76	41.31	16.33	1.02	26.31	25.57	-31.07	-0.30	15.12
Value Added	0.50	0.47	1.82	1.37	0.62	1.16	4.05	0.40	0.16	0.18
Total Non-U.S. Equity Composite (hedged)	2.68	5.09	15.95	18.39	-13.34	16.00	45.88	-43.80	16.34	27.67
Blended Policy (Total Non-US Eq) (Hedged)	-0.50	3.97	16.36	17.03	-14.30	12.73	45.38	-44.31	14.66	26.55
Value Added	3.18	1.12	-0.41	1.36	0.96	3.27	0.50	0.51	1.68	1.12
Total Non-U.S. Equity Composite (unhedged)	-1.98	-3.27	15.95	18.39	-13.34	16.00	45.88	-43.80	16.34	27.67
Blended Policy (Total Non-US Eq) (Unhedged)	-5.11	-3.99	15.82	17.03	-14.30	12.73	45.38	-44.31	14.66	26.55
Value Added	3.13	0.72	0.13	1.36	0.96	3.27	0.50	0.51	1.68	1.12
Emerging Markets Equity Composite	-8.21	1.48	-0.24	21.03	-17.81	17.04	71.83	-52.69	37.99	32.19
Blended Policy (MSCI EM net)	-14.92	-2.19	-2.60	18.23	-18.42	18.87	78.48	-53.27	39.79	32.59
Value Added	6.71	3.67	2.36	2.80	0.61	-1.83	-6.65	0.58	-1.80	-0.40
MSCI Emerging Markets IMI (Net)	-13.86	-1.79	-2.20	18.69	-19.49	19.90	82.36	-53.78	39.77	31.79

As of September 30, 2016

Calendar Year Performance

	Performance (%)										
	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	
Value Added	5.65	3.27	1.96	2.34	1.68	-2.86	-10.53	1.09	-1.78	0.40	
Wasatch EM Small Cap	-10.36	2.13	1.87	28.06	-12.98	42.87	119.09	N/A	N/A	N/A	
Blended Policy (Wasatch EM)	-9.81	1.49	1.01	22.60	-26.96	27.47	114.32	-58.10	42.57	32.59	
Value Added	-0.55	0.64	0.86	5.46	13.98	15.40	4.77	N/A	N/A	N/A	
Total Non-U.S. Equity x Emerging Markets Composite (hedged)	3.70	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Blended Policy (Non-US Equity x EM) (Hedged)	0.66	4.75	16.36	17.03	-14.30	12.73	45.38	-44.31	14.66	26.55	
Value Added	3.04	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Pareto Everest - Int'l Eq (notional)	7.13	10.98	-0.37	-1.46	0.00	1.39	1.84	3.15	-4.46	N/A	
Currency Hedge Benchmark	7.24	11.06	-1.39	0.00	0.00	0.00	3.39	3.81	-5.01	N/A	
Value Added	-0.11	-0.08	1.02	-1.46	0.00	1.39	-1.55	-0.66	0.55	N/A	
Total Non-U.S. Equity x Emerging Markets Composite (unhedged)	-1.46	-3.43	19.23	18.82	-12.39	14.77	42.06	-45.82	15.61	27.90	
Blended Policy (Non-US Equity x EM) (Unhedged)	-4.60	-3.89	15.82	17.03	-14.30	12.73	45.38	-44.31	14.66	26.55	
Value Added	3.14	0.46	3.41	1.79	1.91	2.04	-3.32	-1.51	0.95	1.35	
Non-US Large Cap Equity Composite	-2.75	-3.41	17.33	17.78	-11.95	12.69	40.38	-44.76	16.43	27.39	
Blended Policy (MSCI World AC World ex USA net)	-5.66	-3.87	15.29	16.83	-13.71	11.15	41.45	-45.33	17.12	27.16	
Value Added	2.90	0.46	2.04	0.95	1.75	1.54	-1.07	0.57	-0.69	0.23	
PSEERS ACWI x US Index Fund	-5.24	-3.41	16.07	17.57	-13.06	11.85	42.86	-44.91	17.01	27.12	
MSCI ACWI/EAFE Index Blend	-5.66	-3.87	15.29	16.83	-13.71	11.15	41.45	-45.53	16.65	26.65	
Value Added	0.42	0.46	0.78	0.74	0.65	0.70	1.41	0.62	0.36	0.47	
BlackRock EMEA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
MSCI Emerging Markets Index (Net)	-14.92	-2.19	-2.60	18.23	-18.42	18.88	78.51	-53.33	39.38	32.18	
Value Added	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Active Non-US Large Cap Composite	0.72	-3.88	19.34	18.60	-8.26	15.23	37.57	-44.69	15.83	26.73	
MSCI AC World ex USA Index (Net)	-5.66	-3.87	15.29	16.83	-13.71	11.15	41.45	-45.53	16.65	26.65	
Value Added	6.38	-0.01	4.05	1.77	5.45	4.08	-3.88	0.93	-0.82	0.08	
Baillie Gifford	-1.91	-2.19	17.46	21.25	-11.41	15.75	49.51	-46.12	28.43	27.58	
MSCI AC World ex USA Index (Net)	-5.66	-3.87	15.29	16.83	-13.71	11.15	41.45	-45.53	16.65	26.65	
Value Added	3.75	1.68	2.17	4.42	2.30	4.60	8.06	-0.59	11.78	0.93	
Marathon Asset Mgmt	3.63	-5.35	25.79	18.82	-9.23	17.59	35.96	-40.50	17.53	29.25	
Blended Benchmark (MSCI ACWI ex USA net)	-5.66	-3.87	15.29	16.83	-13.71	11.15	41.45	-45.53	17.12	27.16	
Value Added	9.19	-1.48	10.50	1.99	4.48	6.44	-5.49	5.03	0.41	2.09	
BlackRock Global Composite	-0.93	-3.52	13.89	18.71	-4.14	21.12	35.38	-45.67	14.99	28.93	
MSCI AC World ex USA Index (Net)	-5.66	-3.87	15.29	16.83	-13.71	11.15	41.45	-45.53	16.65	26.65	
Value Added	4.73	0.35	-1.40	1.88	9.57	9.97	-6.07	-0.14	-1.66	2.28	
Non-US Small Cap Equity Composite	9.41	-3.47	30.37	25.17	-15.55	29.62	52.97	-52.32	8.09	31.87	
MSCI AC World ex USA Small Cap (Net)	2.60	-4.03	19.73	18.52	-18.50	25.21	62.91	-50.23	10.76	26.86	
Value Added	6.81	0.56	10.64	6.65	2.95	4.41	-9.94	-2.09	-2.67	5.01	
Acadian Asset Mgmt	3.08	-0.19	24.86	25.11	-16.94	26.02	59.84	-55.59	23.01	43.11	
Blended Benchmark (MSCI AC World ex USA Small Cap net)	2.60	-4.03	19.73	18.52	-18.50	25.21	62.91	-50.23	10.76	26.86	

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Calendar Year Performance

	Performance (%)										
	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	
Value Added	0.48	3.84	5.13	6.59	1.56	0.81	-3.07	-7.21	14.38	19.69	
Wasatch Int'l Small Cap	14.73	-7.31	28.25	33.41	-13.75	34.70	69.89	-52.34	14.56	22.29	
Blended Benchmark (MSCI AC World ex USA Small Cap net)	2.60	-4.03	19.73	18.52	-18.50	25.21	62.91	-48.38	8.63	23.42	
Value Added	12.13	-3.28	8.52	14.89	4.75	9.49	6.98	-3.96	5.93	-1.13	
Oberweis Asset Mgmt	16.17	-2.82	59.12	31.95	-14.60	31.03	62.42	N/A	N/A	N/A	
MSCI AC World ex USA Small Cap (Net)	2.60	-4.03	19.73	18.52	-18.50	25.21	62.91	-50.23	10.76	26.86	
Value Added	13.57	1.21	39.39	13.43	3.90	5.82	-0.49	N/A	N/A	N/A	
QS Investors	4.60	-0.18	26.34	21.71	-12.22	26.52	41.36	N/A	N/A	N/A	
MSCI AC World ex USA Small Cap (Net)	2.60	-4.03	19.73	18.52	-18.50	25.21	62.91	-50.23	10.76	26.86	
Value Added	2.00	3.85	6.61	3.19	6.28	1.31	-21.55	N/A	N/A	N/A	
Fidelity Institutional Int'l Small Cap	5.14	-4.16	19.81	22.81	-18.54	24.04	60.57	N/A	N/A	N/A	
MSCI AC World ex USA Small Cap (Net)	2.60	-4.03	19.73	18.52	-18.50	25.21	62.91	-50.23	10.76	26.86	
Value Added	2.54	-0.13	0.08	4.29	-0.04	-1.17	-2.34	N/A	N/A	N/A	
Total Fixed Income Composite	-1.40	10.29	-2.52	11.76	9.54	14.11	22.34	-7.24	7.35	4.63	
Blended Policy (Total FI)	-2.62	5.19	-4.69	9.86	7.27	10.27	24.60	-4.55	7.99	3.77	
Value Added	1.22	5.10	2.17	1.90	2.27	3.84	-2.46	-2.69	-0.64	0.86	
Global Fixed Income Composite	-0.92	3.69	-1.89	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Blended Policy (Global FI)	-3.35	2.65	-2.76	7.49	5.36	8.07	9.49	N/A	N/A	N/A	
Value Added	2.43	1.04	0.87	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Total US Fixed Income Composite	-0.54	12.94	-2.35	11.42	10.83	14.58	22.49	-7.78	7.28	4.20	
Blended Policy (Total US FI)	-1.72	5.60	-2.92	9.48	8.46	10.45	27.91	-6.09	7.79	3.28	
Value Added	1.18	7.34	0.57	1.94	2.37	4.13	-5.42	-1.69	-0.51	0.92	
Total US Fixed Income ex TIPS Composite	-0.14	13.46	3.53	13.15	4.98	13.50	24.35	-10.83	5.66	5.66	
Investment Grade Composite	-0.22	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Blended Policy (Investment Grade)	-0.58	11.06	-5.59	4.39	14.57	7.30	-0.22	11.04	8.38	3.95	
Value Added	0.36	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
US Core Plus Fixed Income Composite	1.70	7.12	-0.86	8.06	9.31	10.25	14.34	-5.70	5.86	5.04	
Blended Policy (Barclays Aggregate Index)	0.55	5.97	-2.02	4.21	7.06	7.16	8.60	2.38	6.50	4.97	
Value Added	1.15	1.15	1.16	3.85	2.25	3.09	6.24	-8.08	-0.64	0.07	
Pugh Capital Management	0.56	6.22	-1.89	5.52	8.02	7.24	8.65	5.43	6.45	N/A	
Bimbg. Barc. U.S. Aggregate	0.55	5.97	-2.02	4.21	7.84	6.54	5.93	5.24	6.97	4.34	
Value Added	0.01	0.25	0.13	1.31	0.18	0.70	2.72	0.19	-0.52	N/A	
PSEERS Active Core Plus Fixed Income	1.59	7.27	-2.01	5.78	9.34	8.54	15.38	1.57	6.95	4.59	
Bimbg. Barc. U.S. Aggregate	0.55	5.97	-2.02	4.21	7.84	6.54	5.93	5.24	6.97	4.34	
Value Added	1.04	1.30	0.01	1.57	1.50	2.00	9.45	-3.67	-0.02	0.25	
BlackRock Global Alpha	2.25	7.79	1.52	12.05	11.18	13.67	19.95	-5.12	N/A	N/A	
Blended Policy (Barclays Aggregate Index)	0.55	5.97	-2.02	4.21	7.06	7.16	8.60	2.38	6.50	4.97	
Value Added	1.70	1.82	3.54	7.84	4.12	6.51	11.35	-7.50	N/A	N/A	
SEI Investment Management	0.04	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	



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Calendar Year Performance

	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
BoFA Merrill Lynch Corporate 1-3 Year Value Added	1.01	1.19	1.78	4.49	1.76	4.86	14.69	-2.68	5.67	4.71
Non-U.S. Developed Markets Fixed Income Composite	-0.97	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Blended Policy (Barclays GlobalAgg GDP Weighted Dev xUS hedged) Value Added	-5.57	-1.09	-2.49	7.16	3.79	8.63	19.43	-3.08	8.28	6.46
Alliance Bernstein Global Fixed	-5.56	-2.28	-1.49	6.70	4.48	5.84	8.04	3.76	9.23	6.92
Spiced Barclays GlobalAgg GDPWeighted Dev xUS Value Added	-0.01	1.19	-1.00	0.46	-0.69	2.79	11.39	-6.84	-0.95	-0.46
U.S. Long Treasuries (levered)	-5.71	-1.80	-1.82	7.30	N/A	N/A	N/A	N/A	N/A	N/A
Blimbg. Barc. U.S. Treasury: Long Value Added	-5.56	-2.28	-1.49	6.70	3.95	3.47	9.49	2.77	11.03	8.11
Emerging Markets Fixed Income Composite	-0.15	0.48	-0.33	0.60	N/A	N/A	N/A	N/A	N/A	N/A
Blended Policy (Barclays Emerging Mkt 10% Country Cap) Value Added	-9.37	427.01	-88.18	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PSERS U.S. Long Treasuries (unlevered)	-1.21	25.07	-12.66	3.56	29.93	9.38	-12.92	24.03	9.81	1.85
Blended Policy (Barclays Emerging Mkt 10% Country Cap) Value Added	-8.16	401.94	-75.52	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Franklin Templeton Emerging Fixed Income	-1.84	19.66	-12.10	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Blended Benchmark (Barclays Emerging Mkt 10% Country Cap) Value Added	-1.21	25.07	-12.66	3.56	29.93	9.38	-12.92	24.03	9.81	1.85
Credit-Related	-0.63	-5.41	0.56	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Blended Policy (Credit-Related) Value Added	-1.46	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Emerging Markets Fixed Income Composite	-6.30	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Blended Policy (Barclays Emerging Mkt 10% Country Cap) Value Added	4.84	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
High Yield Fixed Income Composite (hedged)	-6.50	-3.52	-4.08	16.81	0.82	N/A	N/A	N/A	N/A	N/A
Blended Policy (Barclays Corporate HY) Value Added	-11.72	-3.14	-5.39	16.00	-1.49	15.68	21.98	-5.22	18.11	15.22
Franklin Templeton Emerging Fixed Income	5.22	-0.38	1.31	0.81	2.31	N/A	N/A	N/A	N/A	N/A
Blended Benchmark (Barclays Emerging Mkt 10% Country Cap) Value Added	-1.75	-1.66	0.87	18.99	1.96	14.19	56.43	N/A	N/A	N/A
High Yield Fixed Income Composite (Unhedged)	-11.72	-3.14	-5.39	19.47	4.47	10.95	8.00	8.00	8.00	8.00
Blended Policy (Barclays Corporate HY) Value Added	9.97	1.48	6.26	-0.48	-2.51	3.24	48.43	N/A	N/A	N/A
Pareto Oxygen - HY (notional)	-0.29	8.54	10.17	17.31	1.64	15.95	34.90	-20.97	3.59	12.72
HY Currency Hedge Benchmark Value Added	-4.47	2.45	7.44	15.81	4.98	15.12	57.95	-26.17	2.65	11.91
High Yield Fixed Income Composite (Unhedged)	4.18	6.09	2.73	1.50	-3.34	0.83	-23.05	5.20	0.94	0.81
Blended Policy (Barclays Corporate HY) Value Added	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mezzanine High Yield Composite	10.55	13.41	-4.63	-2.06	1.12	4.49	-4.83	1.53	-8.96	-8.98
Blimbg. Barc. U.S. Corp. High Yield 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	-0.69	8.54	10.17	17.31	1.64	15.95	34.90	-20.97	3.59	12.72
Blended Policy (Barclays Corporate HY) Value Added	-4.47	2.45	7.44	15.81	4.98	15.12	57.95	-26.17	2.65	11.91
Mezzanine High Yield Composite	3.78	6.09	2.73	1.50	-3.34	0.83	-23.05	5.20	0.94	0.81
Blimbg. Barc. U.S. Corp. High Yield 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 li	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	11.86
Blended Policy (Barclays Corporate HY) 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	-9.01	19.08	20.66	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Blimbg. Barc. U.S. Corp. High Yield Value Added	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	11.86
Carlyle Energy Mezz. Opp. Fund li	-4.54	16.63	13.22	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Blended Policy (Barclays Corporate HY) Value Added	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Calendar Year Performance

	Performance (%)										
	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	
Bimbg. Barc. U.S. Corp. High Yield Value Added	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	11.86	
ICG Europe Fund V	-2.00	4.03	15.07	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Bimbg. Barc. U.S. Corp. High Yield Value Added	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	11.86	
ICG Europe Fund VI	2.47	1.58	7.63	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Bimbg. Barc. U.S. Corp. High Yield Value Added	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	11.86	
Bain Capital Middle Market Credit 2010, L.P.	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	4.81	6.37	11.04	19.37	8.64	N/A	N/A	N/A	N/A	N/A	
Bain Capital Middle Market Credit 2014, L.P.	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	11.86	
Bimbg. Barc. U.S. Corp. High Yield Value Added	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	11.86	
Bain Capital Middle Market Credit 2014, L.P.	9.28	3.92	3.60	3.56	3.66	N/A	N/A	N/A	N/A	N/A	
Bimbg. Barc. U.S. Corp. High Yield Value Added	0.81	7.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Internally Managed Private Debt Co-Investment	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	11.86	
Bimbg. Barc. U.S. Corp. High Yield Value Added	-33.14	15.79	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Opportunistic High Yield Composite	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	11.86	
Bimbg. Barc. U.S. Corp. High Yield Value Added	-28.67	13.34	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Apollo European Principal Fund II	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	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	11.86	
Bain Capital Credit Opp. Fund IV	10.78	6.35	-8.27	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Bimbg. Barc. U.S. Corp. High Yield Value Added	-7.15	1.69	9.20	6.47	0.81	13.76	39.72	-26.16	1.87	11.86	
Bain Capital Distressed and Special Situations 2013	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	11.86	
Bimbg. Barc. U.S. Corp. High Yield Value Added	-2.68	-0.76	1.76	-9.34	-4.17	-1.36	-18.49	N/A	N/A	N/A	
Bain Capital Distressed and Special Situations 2016 (A), L.P.	-3.02	10.46	10.06	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Bimbg. Barc. U.S. Corp. High Yield Value Added	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	11.86	
Bain Capital Distressed and Special Situations 2016 (A), L.P.	1.45	8.01	2.62	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Bimbg. Barc. U.S. Corp. High Yield Value Added	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	11.86	
Hayfin Special Opp. Credit	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	-2.76	-6.95	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Hayfin Special Opp. Credit II	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	11.86	
Bimbg. Barc. U.S. Corp. High Yield Value Added	1.71	-9.40	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Hayfin Special Opp. Credit II	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	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	11.86	
Hayfin SOF II USD LP	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

Calendar Year Performance

	Performance (%)									
	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
<i>Bimbg. Barc. U.S. Corp. High Yield Value Added</i>	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	11.86
<i>TPG Opportunities Partners II, LP</i>	21.82	25.75	13.76	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<i>Bimbg. Barc. U.S. Corp. High Yield Value Added</i>	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	11.86
<i>TPG Opportunities Partners III, LP</i>	3.39	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 Value Added</i>	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	11.86
<i>TOP NPL (A)</i>	27.19	30.38	12.18	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<i>Bimbg. Barc. U.S. Corp. High Yield Value Added</i>	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	11.86
<i>TPG TAO</i>	10.13	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 Value Added</i>	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	11.86
<i>Brigade Distressed Value</i>	-17.17	3.86	11.12	10.71	N/A	N/A	N/A	N/A	N/A	N/A
<i>1-Month Libor + 5%</i>	5.21	5.16	5.20	5.25	5.24	5.29	5.35	7.80	10.51	10.35
<i>Value Added</i>	-22.38	-1.50	5.92	5.46	N/A	N/A	N/A	N/A	N/A	N/A
<i>Brigade Structured Credit Offshore Fund</i>	-5.62	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<i>Barclays Corporate High Yield + 0.25%</i>	-4.23	2.71	7.71	16.10	5.24	15.41	58.60	-25.97	2.13	12.14
<i>Value Added</i>	-1.39	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<i>Avenue Energy Opportunities Fund</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 Value Added</i>	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	11.86
<i>Avenue Europe SS III</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 Value Added</i>	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	11.86
<i>Park Square Credit Opportunities</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 Value Added</i>	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	11.86
<i>Real Asset High Yield Composite</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 Value Added</i>	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	11.86
<i>Mariner/Galton RMBS</i>	4.38	8.61	8.55	21.64	1.67	N/A	N/A	N/A	N/A	N/A
<i>Blended Benchmark (Barclays US MBS)</i>	1.51	6.33	7.50	7.50	7.50	N/A	N/A	N/A	N/A	N/A
<i>Value Added</i>	2.87	2.28	1.05	14.14	-5.83	N/A	N/A	N/A	N/A	N/A
<i>Galton Onshore Mortgage Recovery Fund III, LP</i>	-1.33	-4.44	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<i>Bimbg. Barc. U.S. Corp. High Yield Value Added</i>	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	11.86
<i>Mariner International Infrastructure</i>	3.14	-6.89	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<i>Value Added</i>	5.82	-5.53	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Calendar Year Performance

	Performance (%)										
	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	
<i>Bimbg. Barc. U.S. Corp. High Yield Value Added</i>	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	11.86	
<i>The Varde Scratch and Dent Fund, LP</i>	10.29	-7.98	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
<i>Bimbg. Barc. U.S. Corp. High Yield Value Added</i>	7.48	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
<i>The Varde Scratch and Dent Fund Feed I-A</i>	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	11.86	
<i>Bimbg. Barc. U.S. Corp. High Yield Value Added</i>	11.95	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
<i>Senior Loans High Yield Composite</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 Value Added</i>	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	11.86	
<i>Cerberus Levered Loan Fund I</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 Value Added</i>	-1.29	3.38	9.09	12.20	N/A	N/A	N/A	N/A	N/A	N/A	
<i>Cerberus Levered Loan Fund II</i>	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	11.86	
<i>Bimbg. Barc. U.S. Corp. High Yield Value Added</i>	3.18	0.93	1.65	-3.61	N/A	N/A	N/A	N/A	N/A	N/A	
<i>Cerberus PSERS Levered Loan Opportunities Fund</i>	8.03	13.92	12.21	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
<i>Bimbg. Barc. U.S. Corp. High Yield Value Added</i>	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	11.86	
<i>LBC Credit Partners II</i>	12.50	11.47	4.77	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
<i>Bimbg. Barc. U.S. Corp. High Yield Value Added</i>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
<i>LBC Credit Partners III</i>	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	11.86	
<i>Bimbg. Barc. U.S. Corp. High Yield Value Added</i>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
<i>LBC-P Credit Fund LP</i>	12.35	17.02	19.02	29.31	21.09	-15.87	-6.79	N/A	N/A	N/A	
<i>Bimbg. Barc. U.S. Corp. High Yield Value Added</i>	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	11.86	
<i>Summit Partners Credit Fund II LP</i>	16.82	14.57	11.58	13.50	16.11	-30.99	-65.00	N/A	N/A	N/A	
<i>Bimbg. Barc. U.S. Corp. High Yield Value Added</i>	14.46	11.66	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
<i>Oaktree Loan Fund 2X, LP</i>	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	11.86	
<i>Bimbg. Barc. U.S. Corp. High Yield Value Added</i>	18.93	9.21	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
<i>Bain Capital Credit Managed Account (PSERS), L.P.</i>	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	11.86	
<i>Bimbg. Barc. U.S. Corp. High Yield Value Added</i>	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	11.86	
<i>Inflation Protected</i>	4.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	-23.74	-0.78	6.26	12.69	7.08	12.94	39.95	-18.94	N/A	N/A	
	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	11.86	
	-19.27	-3.23	-1.18	-3.12	2.10	-2.18	-18.26	7.22	N/A	N/A	
	-8.51	4.28	7.79	10.67	2.10	14.16	N/A	N/A	N/A	N/A	
	-4.47	2.45	7.44	15.81	4.98	15.12	58.21	-26.16	1.87	11.86	
	-4.04	1.83	0.35	-5.14	-2.88	-0.96	N/A	N/A	N/A	N/A	
	-2.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

Calendar Year Performance

	Performance (%)									
	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
<i>Blended Policy (Barclays World Inflation Linked Bond - Hedged)</i>										
Value Added	-1.76	3.64	-8.61	6.98	13.56	6.31	11.41	-2.35	11.63	0.49
	-0.24	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TIPS Composite (levered)	-2.00	12.06	-11.23	8.59	23.01	17.55	18.42	0.20	11.14	0.84
<i>Blended Policy (Barclays World Inflation Linked Bond - Hedged)</i>										
Value Added	-1.76	3.64	-8.61	6.98	13.56	6.31	11.41	-2.35	11.63	0.49
	-0.24	8.42	-2.62	1.61	9.45	11.24	7.01	2.55	-0.49	0.35
<i>Blended Policy (Net Levered TIPS)</i>										
Value Added	-3.97	6.76	-17.07	13.75	28.18	12.34	22.50	-8.81	N/A	N/A
	1.97	5.30	5.84	-5.16	-5.17	5.21	-4.08	9.01	N/A	N/A
TIPS Composite (unlevered)	2.55	12.49	-10.76	9.15	23.56	18.13	18.74	0.47	11.28	0.94
<i>Blended Policy (Barclays World Inflation Linked Bond - Hedged)</i>										
Value Added	-1.76	3.64	-8.61	6.98	13.56	6.31	11.41	-2.35	11.63	0.49
	4.31	8.85	-2.15	2.17	10.00	11.82	7.33	2.82	-0.35	0.45
<i>Bridgewater TIPS (unlevered)</i>										
Value Added	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<i>Bridgewater TIPS (levered)</i>										
Value Added	-2.06	18.34	-11.80	10.04	29.14	27.46	20.64	5.45	10.83	1.90
<i>BGI Custom IL Bond Index</i>										
Value Added	-3.03	16.75	-12.94	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	0.97	1.59	1.14	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Garda Inflation Opportunity Composite (levered)	-0.97	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<i>Blended Benchmark (Garda)</i>										
Value Added	-1.74	2.07	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	0.77	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Garda Inflation Opportunity Composite (unlevered)	N/A	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>										
Value Added	-1.44	3.64	-8.61	6.98	13.56	6.31	11.41	-2.35	11.63	0.49
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<i>Garda Inflation Opp. Fund CI B (levered)</i>										
Value Added	-1.47	10.60	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	-1.74	2.07	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<i>Blended Benchmark (Garda)</i>										
Value Added	0.27	8.53	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<i>Garda Inflation Opp. Fund CI B (unlevered)</i>										
Value Added	-1.44	3.64	-8.61	6.98	13.56	6.31	11.41	-2.35	11.63	0.49
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<i>Garda Fixed Income Relative Value Opportunity Fund Ltd. (TIPS)</i>										
Value Added	2.17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PSERS Total TIPS (levered)	-1.46	5.03	-7.97	7.10	18.25	11.31	17.12	-2.23	11.50	0.76
<i>PSERS Total TIPS (unlevered)</i>										
Value Added	-1.46	5.03	-7.97	7.03	13.96	7.12	12.95	-2.23	11.50	0.76
	-1.44	3.64	-8.61	6.98	13.56	6.31	11.41	-2.35	11.63	0.49
	-0.02	1.39	0.64	0.05	0.40	0.81	1.54	0.12	-0.13	0.27
PSERS TIPS (levered)	-1.46	5.03	-7.97	7.10	18.25	11.31	17.12	-2.23	11.50	0.76
<i>PSERS TIPS (unlevered)</i>										
Value Added	-1.46	5.03	-7.97	7.03	13.96	7.12	12.95	-2.23	11.50	0.76
	-1.44	3.64	-8.61	6.98	13.56	6.31	11.41	-2.35	11.63	0.49
	-0.02	1.39	0.64	0.05	0.40	0.81	1.54	0.12	-0.13	0.27
PIMCO Multi-Sector Strategy	-3.32	5.22	-1.24	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<i>Blended Policy (PIMCO Multi-Sector)</i>										
Value Added	-2.70	6.32	-0.73	7.46	7.84	6.54	5.93	5.24	6.97	4.34

As of September 30, 2016

Calendar Year Performance

	Performance (%)									
	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
Value Added	-0.62	-1.10	-0.51	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Real Assets (levered/hedged)	-8.32	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Real Assets (unlevered/hedged)	-7.87	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Blended Policy (Real Assets) (Hedged)	-8.12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Value Added	0.25	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Real Assets (levered/unhedged)	-8.32	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Real Assets (unlevered/unhedged)	-7.87	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Blended Policy (Real Assets) (Unhedged)	-8.16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Value Added	0.29	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Real Assets x Private Real Estate (levered/hedged)	-30.79	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Real Assets x Private Real Estate (unlevered/hedged)	-29.16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Blended Policy (Real Assets x Private RE) (Hedged)	-24.87	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Value Added	-4.29	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Real Assets x Private Real Estate (levered/unhedged)	-30.79	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Real Assets x Private Real Estate (unlevered/unhedged)	-29.16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Blended Policy (Real Assets x Private RE) (Unhedged)	-24.92	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Value Added	-4.24	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MLP Composite	-32.63	16.30	37.44	12.77	18.88	39.82	72.22	N/A	N/A	N/A
S&P MLP Index	-35.07	7.66	29.75	4.95	14.47	35.17	78.79	-37.46	9.41	25.91
Value Added	2.44	8.64	7.69	7.82	4.41	4.65	-6.57	N/A	N/A	N/A
PSERS S&P MLP Index	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S&P MLP Total Return Index	-35.07	7.66	29.75	4.95	14.47	35.17	78.79	-37.46	9.41	25.91
Value Added	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Atlantic Trust	-33.34	15.38	38.77	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S&P MLP Index	-35.07	7.66	29.75	4.95	14.47	35.17	78.79	-37.46	9.41	25.91
Value Added	1.73	7.72	9.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PSERS Harvest Funds MLP	-30.25	17.87	35.60	12.80	18.88	39.82	72.22	N/A	N/A	N/A
S&P MLP Index	-35.07	7.66	29.75	4.95	14.47	35.17	78.79	-37.46	9.41	25.91
Value Added	4.82	10.21	5.85	7.85	4.41	4.65	-6.57	N/A	N/A	N/A
Salient	-36.06	15.15	38.62	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S&P MLP Index	-35.07	7.66	29.75	4.95	14.47	35.17	78.79	-37.46	9.41	25.91
Value Added	-0.99	7.49	8.87	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Infrastructure Composite (levered/hedged)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Infrastructure Composite (unlevered/hedged)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FTSE Dev. Core Infrastr 50/50 Index (Net) (Hedged)	-3.56	21.17	18.21	10.80	7.40	8.22	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
Pareto Nevada - Infra (notional)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Infrastructure Composite (levered/unhedged)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Calendar Year Performance

	Performance (%)									
	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
Infrastructure Composite (unlevered/unhedged)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FTSE Developed Core Infrast 50/50 Index (Net)	-7.56	16.02	15.48	11.49	8.00	10.34	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
Publicly-Traded Infrastructure Composite (levered)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Publicly-Traded Infrastructure Composite (unlevered)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FTSE Developed Core Infrast 50/50 Index (Net)	-7.56	16.02	15.48	11.49	8.00	10.34	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
PSERS Infrastructure (levered)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PSERS Infrastructure (unlevered)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FTSE Developed Core Infrast 50/50 Index (Net)	-7.56	16.02	15.48	11.49	8.00	10.34	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
Commodities Composite (levered)	-33.05	-18.05	-14.29	2.41	-10.00	18.13	33.40	-42.37	28.40	N/A
Commodities Composite (unlevered)	-18.59	-10.18	-11.16	2.41	-10.00	18.13	33.40	-42.37	28.40	N/A
Blended Policy (Commodities)	-19.85	-12.05	-10.34	-1.05	-13.32	16.82	18.90	-35.65	16.22	N/A
Value Added	1.26	1.87	-0.82	3.46	3.32	1.31	14.50	-6.72	12.18	N/A
PSERS Commodity Beta + PCAF Composite	-22.60	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bloomberg Commodity Index Total Return	-24.66	-17.01	-9.52	-1.06	-13.32	16.83	18.91	-35.65	16.23	2.07
Value Added	2.06	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PSERS Commodity Beta (levered)	-41.67	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PSERS Commodity Beta (unlevered)	-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	-24.66	-17.01	-9.52	-1.06	-13.32	16.83	18.91	-35.65	16.23	2.07
Value Added	1.17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PIMCO Commodity Alpha Fund	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Libor (3 month)	0.32	0.23	0.27	0.42	0.34	0.34	0.69	2.92	5.30	5.20
Value Added	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Gresham	-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	-24.66	-17.01	-9.52	-1.06	-13.32	16.83	18.91	-35.65	16.23	2.07
Value Added	-0.25	0.70	2.46	1.72	7.17	4.09	6.56	-1.52	N/A	N/A
Wellington Management Company	-24.58	-15.09	-5.05	2.92	-11.05	19.62	50.65	-46.97	31.55	N/A
Blended Benchmark (WMC)	-24.75	-14.23	-2.79	4.39	-7.71	19.25	33.80	-36.65	28.62	N/A
Value Added	0.17	-0.86	-2.26	-1.47	-3.34	0.37	16.85	-10.32	2.93	N/A
PSERS Gold Fund (unlevered)	-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	-10.88	-1.75	-28.66	6.08	9.63	28.72	22.86	3.91	29.92	21.67
Value Added	0.10	2.15	0.49	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PTRES Composite (levered/hedged)	-2.15	20.09	4.10	13.75	4.71	16.82	45.64	-49.52	-8.56	44.46
PTRES Composite (unlevered/hedged)	-1.89	20.09	4.10	13.75	4.71	16.82	45.64	-49.52	-8.56	44.46
Blended Policy (PTRES) (Hedged)	-0.32	14.73	2.24	29.85	-8.13	20.03	39.30	-47.73	-6.94	42.04
Value Added	-1.57	5.36	1.86	-16.10	12.84	-3.21	6.34	-1.79	-1.62	2.42
Pareto Sierra - REIT (notional)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A



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Calendar Year Performance

	Performance (%)										
	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	
PTRES Composite (levered/unhedged)	-2.16	20.09	4.10	13.75	4.71	16.82	45.64	-49.52	-8.56	44.46	
PTRES Composite (unlevered/unhedged)	-1.89	20.09	4.10	13.75	4.71	16.82	45.64	-49.52	-8.56	44.46	
Blended Policy (PTRES) (Unhedged)	-0.72	14.73	2.24	29.85	-8.13	20.03	39.30	-47.73	-6.94	42.04	
Value Added	-1.17	5.36	1.86	-16.10	12.84	-3.21	6.34	-1.79	-1.62	2.42	
PSERS REIT Index (levered)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
PSERS REIT Index (unlevered)	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)	-0.79	15.02	3.67	27.73	-6.46	19.63	37.13	-48.16	-7.39	41.81	
Value Added	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Security Capital Preferred Growth	2.15	20.09	4.10	13.75	4.71	24.71	64.34	N/A	N/A	N/A	
Wilshire US Real Estate Securities Index	4.81	31.53	2.15	17.55	8.56	29.12	29.20	-39.83	-17.66	35.68	
Value Added	-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)	-6.54	10.17	-4.74	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Blended Policy (Risk Parity)	-5.66	10.41	-5.28	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Value Added	-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)	-6.14	10.21	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
AQR GRP EL 20 Offshore Fund (vol adjusted)	-11.68	8.10	-4.78	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Bridgewater All Weather @15% (vol adjusted)	-8.35	9.49	-4.57	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
DE Shaw Orienteur (vol adjusted)	-1.44	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
DE Shaw Orienteur 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)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Bridgewater Optimal (vol adjusted)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Total Absolute Return	3.70	3.06	4.77	3.54	7.72	17.25	15.25	-8.71	8.17	3.73	
Blended Policy (3-month Libor + 3.5%)	3.83	5.61	7.50	7.50	7.75	8.00	8.00	8.00	8.00	8.00	
Value Added	-0.13	-2.55	-2.73	-3.96	-0.03	9.25	7.25	-16.71	0.17	-4.27	
Apollo/SASOF III	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Libor (1 month)	0.20	0.16	0.19	0.24	0.23	0.27	0.33	2.67	5.25	5.10	
Value Added	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Oceanwood Opportunities Fund	9.10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Libor (1 month)	0.20	0.16	0.19	0.24	0.23	0.27	0.33	2.67	5.25	5.10	
Value Added	8.90	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Perry Partners L.P.	-13.32	-4.25	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Libor (1 month)	0.20	0.16	0.19	0.24	0.23	0.27	0.33	2.67	5.25	5.10	
Value Added	-13.52	-4.41	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Ellis Lake	-9.85	-7.22	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Libor (1 month)	0.20	0.16	0.19	0.24	0.23	0.27	0.33	2.67	5.25	5.10	
Value Added	-10.05	-7.38	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Garda Fixed Income Relative Value Opportunity Fund Ltd.	2.18	6.39	5.06	6.70	N/A	N/A	N/A	N/A	N/A	N/A	



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Calendar Year Performance

	Performance (%)									
	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
<i>Libor (1 month)</i>	0.20	0.16	0.19	0.24	0.23	0.27	0.33	2.67	5.25	5.10
Value Added	1.98	6.23	4.87	6.46	N/A	N/A	N/A	N/A	N/A	N/A
Capula Global Relative Value Fund Limited - Class F	8.09	8.62	8.18	0.83	N/A	N/A	N/A	N/A	N/A	N/A
<i>Libor (1 month)</i>	0.20	0.16	0.19	0.24	0.23	0.27	0.33	2.67	5.25	5.10
Value Added	7.89	8.46	7.99	0.59	N/A	N/A	N/A	N/A	N/A	N/A
PIMCO PARS/GCOF/MAV Fund	7.08	4.70	2.16	14.21	5.85	2.03	60.77	N/A	N/A	N/A
<i>Libor (1 month)</i>	0.20	0.16	0.19	0.24	0.23	0.27	0.33	2.67	5.25	5.10
Value Added	6.88	4.54	1.97	13.97	5.62	1.76	60.44	N/A	N/A	N/A
PIMCO PARS	8.20	14.38	0.90	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PIMCO GCOF	10.03	7.34	11.11	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PIMCO MAV	10.07	2.97	-4.71	N/A	N/A	N/A	N/A	N/A	N/A	N/A
BlackRock Capital Structure Investments Fund	12.60	-5.14	7.52	4.07	23.18	0.61	N/A	N/A	N/A	N/A
<i>Libor (1 month)</i>	0.20	0.16	0.19	0.24	0.23	0.27	0.33	2.67	5.25	5.10
Value Added	12.40	-5.30	7.33	3.83	22.95	0.34	N/A	N/A	N/A	N/A
Brigade Leveraged Capital Structures Offshore Fund	-11.10	0.51	6.12	7.05	2.90	7.84	39.90	-16.69	N/A	N/A
<i>Libor (1 month)</i>	0.20	0.16	0.19	0.24	0.23	0.27	0.33	2.67	5.25	5.10
Value Added	-11.30	0.35	5.93	6.81	2.67	7.57	39.57	-19.36	N/A	N/A
Caspian Select Credit International - Class A	-10.40	3.11	9.82	11.83	N/A	N/A	N/A	N/A	N/A	N/A
<i>Libor (1 month)</i>	0.20	0.16	0.19	0.24	0.23	0.27	0.33	2.67	5.25	5.10
Value Added	-10.60	2.95	9.63	11.59	N/A	N/A	N/A	N/A	N/A	N/A
Caspian Keystone Focused Fund, L.P.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<i>Libor (1 month)</i>	0.20	0.16	0.19	0.24	0.23	0.27	0.33	2.67	5.25	5.10
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	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<i>Citigroup 1 Month T-Bill</i>	0.02	0.02	0.01	0.04	0.04	0.10	0.10	1.35	4.57	4.77
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 Fund I LP	14.72	19.41	22.65	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<i>Libor (1 month)</i>	0.20	0.16	0.19	0.24	0.23	0.27	0.33	2.67	5.25	5.10
Value Added	14.52	19.25	22.46	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nephila / Palmetto Fund Ltd. - Class G	5.37	6.92	6.96	10.04	N/A	N/A	N/A	N/A	N/A	N/A
<i>Libor (1 month)</i>	0.20	0.16	0.19	0.24	0.23	0.27	0.33	2.67	5.25	5.10
Value Added	5.17	6.76	6.77	9.80	N/A	N/A	N/A	N/A	N/A	N/A
Independence Reinsurance Partners Composite	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<i>Libor (1 month)</i>	0.20	0.16	0.19	0.24	0.23	0.27	0.33	2.67	5.25	5.10
Value Added	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
DaVinci Reinsurance Ltd	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Medici Fund Ltd.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Calendar Year Performance

	Performance (%)										
	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	
Capula Tail Risk Fund Limited - Class C	3.32	-1.04	-3.41	-14.28	N/A	N/A	N/A	N/A	N/A	N/A	
Libor (1 month)	0.20	0.16	0.19	0.24	0.23	0.27	0.33	2.67	5.25	5.10	
Value Added	3.12	-1.20	-3.60	-14.52	N/A	N/A	N/A	N/A	N/A	N/A	
Bridgewater Pure Alpha Fund II, Ltd.	7.58	5.93	6.99	1.56	32.86	56.55	2.44	14.31	13.91	4.47	
Libor (3 month)	0.32	0.23	0.27	0.42	0.34	0.34	0.69	2.92	5.30	5.20	
Value Added	7.26	5.70	6.72	1.14	32.52	56.21	1.75	11.39	8.61	-0.73	
Brevan Howard Fund Limited - Class E	-1.46	-0.29	2.83	4.35	12.70	N/A	N/A	N/A	N/A	N/A	
Libor (3 month)	0.32	0.23	0.27	0.42	0.34	0.34	0.69	2.92	5.30	5.20	
Value Added	-1.78	-0.52	2.56	3.93	12.36	N/A	N/A	N/A	N/A	N/A	
OWS Credit Opportunity Offshore Fund III	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Libor (3 month)	0.32	0.23	0.27	0.42	0.34	0.34	0.69	2.92	5.30	5.20	
Value Added	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Unallocated Cash & Cash Equivalents	0.33	0.29	0.28	3.84	3.06	0.47	0.06	-8.91	2.19	3.76	
BofA Merrill Lynch 3 Month US T-Bill	0.05	0.04	0.07	0.11	0.10	0.13	0.21	2.06	5.00	4.85	
Value Added	0.28	0.25	0.21	3.73	2.96	0.34	-0.15	-10.97	-2.81	-1.09	
PSERS Cash Management	-0.05	0.30	0.29	0.55	0.77	0.46	0.25	-9.42	2.29	2.88	
PSERS Cash Management Sub	0.09	0.06	0.07	0.15	0.12	0.17	0.57	N/A	N/A	N/A	
RE Conversions	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
PSERS Prop Fund	0.20	0.19	0.24	0.29	0.22	0.31	1.14	N/A	N/A	N/A	
BofA Merrill Lynch US Treasury Bills 0-3M	0.02	0.03	0.05	0.08	0.07	0.13	0.14	1.75	4.78	4.81	
Value Added	0.18	0.16	0.19	0.21	0.15	0.18	1.00	N/A	N/A	N/A	

Calendar Year Performance

	Performance (%)									
	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
LIBOR Composite	0.76	0.76	1.39	1.35	0.62	0.97	3.35	N/A	N/A	N/A
PSERS LIBOR	0.46	0.59	0.86	0.76	0.63	1.04	3.42	3.01	5.61	N/A
Liber (3 month)	0.32	0.23	0.27	0.42	0.34	0.34	0.69	2.92	5.30	5.20
Value Added	0.14	0.36	0.59	0.34	0.29	0.70	2.73	0.09	0.31	N/A
Capula LIBOR Tail Risk	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Liber (3 month)	0.32	0.23	0.27	0.42	0.34	0.34	0.69	2.92	5.30	5.20
Value Added	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Radcliffe Ultra Short Duration	2.19	1.38	3.25	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Liber (3 month)	0.32	0.23	0.27	0.42	0.34	0.34	0.69	2.92	5.30	5.20
Value Added	1.87	1.15	2.98	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PSERS Healthcare & HOP										
PSERS Healthcare - Premium Assist	0.31	0.19	0.50	0.79	0.83	1.28	2.67	3.76	5.69	5.47
BofA Merrill Lynch 3 Month US T-Bill	0.05	0.04	0.07	0.11	0.10	0.13	0.21	2.06	5.00	4.85
Value Added	0.26	0.15	0.43	0.68	0.73	1.15	2.46	1.70	0.69	0.62
PSERS Healthcare - HOP	0.24	0.20	0.24	0.29	0.24	0.47	0.95	2.80	5.39	5.13
BofA Merrill Lynch 3 Month US T-Bill	0.05	0.04	0.07	0.11	0.10	0.13	0.21	2.06	5.00	4.85
Value Added	0.19	0.16	0.17	0.18	0.14	0.34	0.74	0.74	0.39	0.28
E/M Total Program Composite	2.07	-0.74	19.28	8.37	-5.72	16.52	29.46	-34.32	7.40	12.69
E/M US Core Plus FI Composite	0.38	5.92	-1.85	5.72	7.63	1.26	-17.81	2.87	6.11	4.90
Pugh Capital Management	0.56	6.22	-1.89	5.52	8.02	7.24	8.65	5.43	6.45	N/A
Bimbg. Barc. U.S. Aggregate	0.55	5.97	-2.02	4.21	7.84	6.54	5.93	5.24	6.97	4.34
Value Added	0.01	0.25	0.13	1.31	0.18	0.70	2.72	0.19	-0.52	N/A
E/M Absolute Return Composite	-9.85	-7.22	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ellis Lake	-9.85	-7.22	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Liber (1 month)	0.20	0.16	0.19	0.24	0.23	0.27	0.33	2.67	5.25	5.10
Value Added	-10.05	-7.38	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
E/M Short Duration Cash	2.74	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Radcliffe Ultra Short Duration	2.19	1.38	3.25	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Liber (3 month)	0.32	0.23	0.27	0.42	0.34	0.34	0.69	2.92	5.30	5.20
Value Added	1.87	1.15	2.98	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Radcliffe Specialty Finance Debt	3.22	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
3-Month Liber + 0.60%	0.92	0.84	0.87	1.03	0.94	0.95	1.29	3.54	5.93	5.83
Value Added	2.30	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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Calendar Year Performance

	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
Total Private Market Composites (hedged)	5.39	12.85	12.52	12.00	11.14	11.59	-23.40	-9.29	35.61	25.37
Blended Policy (Private Market)	5.50	10.07	7.33	6.79	9.10	6.86	-13.63	-0.23	15.87	13.08
Value Added	-0.11	2.78	5.19	5.21	2.04	4.73	-9.77	-9.06	19.74	12.29
Total Private Market Composites (unhedged)	5.39	12.85	12.52	12.00	11.14	11.59	-23.40	-9.29	35.61	25.37
Blended Policy (Private Market)	5.50	10.07	7.33	6.79	9.10	6.86	-13.63	-0.23	15.87	13.08
Value Added	-0.11	2.78	5.19	5.21	2.04	4.73	-9.77	-9.06	19.74	12.29
Total Alternative Investments (hedged)	2.39	10.03	12.73	13.27	9.96	15.58	-9.62	-3.23	39.95	21.96
Burgiss (Lagged) - PE/PD/VC/Int	3.60	6.86	5.38	5.53	6.17	7.46	-9.11	-4.02	14.77	10.89
Value Added	-1.21	3.17	7.35	7.74	3.79	8.12	-0.51	0.79	25.19	11.07
Burgiss (Lagged) - Int	2.70	1.21	-8.31	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Value Added	-0.31	8.82	21.04	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Burgiss (Lagged) - PE/PD	3.75	7.26	5.88	5.98	6.53	7.17	-8.74	-4.02	15.35	11.34
Value Added	-1.36	2.77	6.85	7.29	3.43	8.41	-0.88	0.79	24.61	10.62
Burgiss (Lagged) - VC	2.76	3.48	0.84	1.24	1.95	5.19	-13.29	-3.98	3.08	1.62
Value Added	-0.37	6.55	11.89	12.03	8.01	10.39	3.67	0.75	36.88	20.34
Total Alternative Investments (unhedged)	2.39	10.03	12.73	13.27	9.96	15.58	-9.62	-3.23	39.95	21.96
Burgiss (Lagged) - PE/PD/VC/Int	3.60	6.86	5.38	5.53	6.17	7.46	-9.11	-4.02	14.77	10.89
Value Added	-1.21	3.17	7.35	7.74	3.79	8.12	-0.51	0.79	25.19	11.07
Burgiss (Lagged) - Int	2.70	1.21	-8.31	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Value Added	-0.31	8.82	21.04	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Burgiss (Lagged) - PE/PD	3.75	7.26	5.88	5.98	6.53	7.17	-8.74	-4.02	15.35	11.34
Value Added	-1.36	2.77	6.85	7.29	3.43	8.41	-0.88	0.79	24.61	10.62
Burgiss (Lagged) - VC	2.76	3.48	0.84	1.24	1.95	5.19	-13.29	-3.98	3.08	1.62
Value Added	-0.37	6.55	11.89	12.03	8.01	10.39	3.67	0.75	36.88	20.34
Priv. Eq/ Venture Cap/ Priv. Debt/Co-Invest	2.39	10.03	12.72	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pareto Wilson - PE (notional)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
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
Value Added	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	26.47	37.82	39.75	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PA Penn Investment Fund - PE Composite	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PA Penn Investment Fund - PE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PA Penn Investment Fund - PE Internal	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Internally Managed PE Composite	26.48	37.82	39.75	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Private Eq/ Venture Cap/ Private Debt	1.76	9.71	12.55	13.23	10.29	15.57	-9.63	-3.22	40.21	22.00
Private Debt Composite	0.50	12.79	12.21	13.49	2.43	19.36	3.32	-9.96	20.65	13.37
Private Equity/ Venture Capital Composite	1.97	9.30	12.53	13.20	12.00	14.24	-13.60	-1.67	44.82	23.92
Burgiss (Lagged) - PE/PD/VC/Int	3.60	6.86	5.38	5.53	6.17	7.46	-9.11	-4.02	14.77	10.89
Value Added	-1.63	2.44	7.15	7.67	5.83	6.78	-4.49	2.35	30.05	13.03

As of September 30, 2016

Calendar Year Performance

	Performance (%)									
	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
Private Equity	1.29	8.82	13.12	12.89	13.13	15.04	-14.11	-2.74	48.10	25.85
Private Equity x Tobacco Composite	1.75	8.82	13.12	12.89	13.13	15.04	-14.11	-2.74	48.10	25.85
Venture Capital	6.92	13.50	7.10	15.97	2.26	7.84	-9.66	6.36	21.76	10.70
Total Real Estate (levered/hedged)	9.17	17.23	11.70	9.16	13.21	3.52	-35.90	-23.17	19.04	34.94
Total Real Estate (unlevered/hedged)	9.01	17.23	11.70	9.16	13.21	3.52	-35.90	-23.17	19.04	34.94
Blended Policy (Total Real Estate) (Hedged)	8.24	14.95	10.56	9.05	15.56	6.74	-14.14	-4.83	11.01	22.97
Value Added	0.77	2.28	1.14	0.11	-2.35	-3.22	-21.76	-18.34	8.03	11.97
Total Real Estate (levered/unhedged)	9.17	17.23	11.70	9.16	13.21	3.52	-35.90	-23.17	19.04	34.94
Total Real Estate (unlevered/unhedged)	9.01	17.23	11.70	9.16	13.21	3.52	-35.90	-23.17	19.04	34.94
Blended Policy (Total Real Estate) (Unhedged)	8.21	14.95	10.56	9.05	15.56	6.74	-14.14	-4.83	11.01	22.97
Value Added	0.80	2.28	1.14	0.11	-2.35	-3.22	-21.76	-18.34	8.03	11.97
Private Real Estate Composite	9.54	17.15	11.92	9.79	13.48	1.04	-44.59	-16.12	31.23	35.56
Blended Policy (Private Real Estate)	7.94	14.95	10.56	9.05	15.56	6.74	-14.14	-4.83	11.01	22.97
Value Added	1.60	2.20	1.36	0.74	-2.08	-5.70	-30.45	-11.29	20.22	12.59
Private Real Estate x Internal	9.46	17.07	11.85	9.79	13.48	1.04	-44.61	-17.15	28.90	31.57
Internally Managed Private Real Estate	18.51	28.93	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

PSERS Total Fund Composite

As of September 30, 2016

Asset Allocation

	Total Fund	
	(\$)	%
PSERS Total Fund Composite	50,177,096	100.0
Total Public Market Composite	37,057,526	73.9
Total Private Market Composite	13,117,123	26.1
Total Public Equity Composite	9,595,118	19.1
Equity Rebalance Account	50,743	0.1
Total US Equity Composite	3,347,311	6.7
Total US Large Cap Composite	2,429,674	4.8
PSERS-S&P 500 Index Composite	2,429,674	4.8
Radcliffe Specialty Finance Debt	326,587	0.7
PE Conversions	307,300	0.6
Total US Small Cap Composite	916,414	1.8
PSERS-S&P 600 Index Composite	495,796	1.0
PSERS-S&P 400 Index Composite	420,618	0.8
PSERS Misc. Equity	1,223	0.0
Total Non-U.S. Equity Composite (hedged)	6,197,064	12.4
Emerging Markets Equity Composite	283,005	0.6
Total Non-U.S. Equity x Emerging Markets Composite	5,914,059	11.8
Wasatch EM Small Cap	283,005	0.6
Pareto Everest	49,365	0.1
Non-US Large Cap Equity Composite	5,031,578	10.0
PSERS ACWI x US Index Fund	2,685,633	5.4
BlackRock EMAX	358,703	0.7
Baillie Gifford	925,757	1.8
Marathon Asset Mgmt	921,612	1.8
BlackRock Global Composite	498,577	1.0
Non-US Small Cap Equity Composite	833,116	1.7
Acadian Asset Mgmt	200,875	0.4
Wasatch Int'l Small Cap	243,614	0.5
Oberweis Asset Mgmt	166,799	0.3
QS Investors	79,671	0.2
Fidelity Institutional Int'l Small Cap	142,156	0.3
Total Alternative Investments (hedged)	7,948,152	15.8

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

PSERS Total Fund Composite

As of September 30, 2016

Asset Allocation

	Total Fund	%
	(\$)	
Private Equity	5,437,734	10.8
Pareto Wilson - PE	2,448	0.0
PA Penn Investment Fund - PE Composite	24,458	0.0
Private Debt	1,119,348	2.2
Venture Capital	975,517	1.9
Internally Managed PE Composite	388,648	0.8
Total Fixed Income Composite	10,832,231	21.6
Investment Grade Composite	2,657,411	5.3
U.S. Core Plus Fixed Income Composite	2,339,566	4.7
Pugh Capital Management	101,613	0.2
PSERS Active Core Plus Fixed Income	1,236,194	2.5
BlackRock Global Alpha	898,526	1.8
SEI Investment Management	103,233	0.2
Non-U.S. Developed Markets Fixed Income Composite	176,757	0.4
Alliance Bernstein Global Fixed	176,757	0.4
U.S. Long Treasuries Composite	141,088	0.3
PSERS U.S. Long Treasuries	141,088	0.3
Credit-Related	4,391,451	8.8
Emerging Markets Fixed Income Composite	311,977	0.6
Franklin Templeton Emerging Fixed Income	311,977	0.6
High Yield Fixed Income Composite (hedged)	4,079,474	8.1
Pareto Oxygen - HY	4,861	0.0
Mezzanine High Yield Composite	495,508	1.0
Carlyle Energy Mezz. Opp. Fund	75,781	0.2
Carlyle Energy Mezz. Opp. Fund II	15,853	0.0
ICG Europe Fund V	202,958	0.4
ICG Europe Fund VI	23,149	0.0
Bain Capital Middle Market Credit 2010, L.P.	33,460	0.1
Bain Capital Middle Market Credit 2014, L.P.	129,405	0.3
Internally Managed Private Debt Co-Investment	14,901	0.0
Opportunistic High Yield Composite	2,047,940	4.1

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

Asset Allocation

	Total Fund (\$)	%
Apollo European Principal Fund II	164,858	0.3
Bain Capital Credit Opp. Fund IV	74,625	0.1
Bain Capital Distressed and Special Situations 2013	337,601	0.7
Bain Capital Distressed and Special Situations 2016 (A), L.P.	73,587	0.1
Hayfin Special Opp. Credit	198,378	0.4
Hayfin Special Opp. Credit II	3,442	0.0
Hayfin SOF II USD LP	14,879	0.0
TPG Opportunities Partners II, LP	41,969	0.1
TPG Opportunities Partners III, LP	66,551	0.1
TOP NPL (A)	21,875	0.0
TPG TAO	267,177	0.5
Brigade Distressed Value	136,658	0.3
Brigade Structured Credit Offshore Fund	225,357	0.4
Avenue Energy Opportunities Fund	206,332	0.4
Avenue Europe SS III	98,811	0.2
Park Square Credit Opportunities	115,840	0.2
Real Asset High Yield Composite	599,066	1.2
Mariner/Galton RMBS	174,864	0.3
Galton Onshore Mortgage Recovery Fund III, LP	152,608	0.3
Mariner International Infrastructure	105,843	0.2
The Varde Scratch and Dent Fund, LP	154,513	0.3
The Varde Scratch and Dent Fund Feed I-A	11,238	0.0
Senior Loans High Yield Composite	932,099	1.9
Cerberus Levered Loan Fund I	20,547	0.0
Cerberus Levered Loan Fund II	140,909	0.3
Cerberus PSERS Levered Loan Opportunities Fund	101,594	0.2
LBC Credit Partners I	27,438	0.1
LBC Credit Partners III	148,672	0.3
LBC-P Credit Fund LP	18,018	0.0
Summit Partners Credit Fund II LP	131,857	0.3
Oaktree Loan Fund 2X, LP	10,876	0.0
Bain Capital Credit Managed Account (PSERS), L.P.	332,189	0.7

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

PSERS Total Fund Composite

As of September 30, 2016

Asset Allocation

	Total Fund	%
	(\$)	
Inflation Protected	3,358,199	6.7
TIPS Composite (levered)	3,358,199	6.7
Garda Inflation Opportunity Composite (levered)	471,818	0.9
Garda Inflation Opp. Fund Cl B (levered)	383,011	0.8
Garda FIRVO Fund Ltd. (TIPS)	88,808	0.2
Bridgewater TIPS (levered)	1,927,511	3.8
PSERS Total TIPS (levered)	958,870	1.9
PIMCO Multi-Sector Strategy	423,741	0.8
PSERS Fixed Liquidation	1,429	0.0
Real Assets (levered/hedged)	10,060,940	20.1
MLP Composite	2,408,089	4.8
PSERS S&P MLP Index	474,009	0.9
Atlantic Trust	573,484	1.1
Harvest Enhanced Index	6,913	0.0
Harvest MLP Alpha	757,186	1.5
Salient	596,497	1.2
Infrastructure Composite (levered/hedged)	282,658	0.6
Pareto Nevada - Infra	2,512	0.0
Publicly-Traded Infrastructure Composite (levered)	280,146	0.6
PSERS Infrastructure (levered)	280,146	0.6
Commodities Composite (levered)	1,748,293	3.5
PSERS Commodities Composite	870,191	1.7
PSERS Commodity Beta (levered)	626,632	1.2
PIMCO Commodity Alpha Fund	243,559	0.5
Gresham	315,507	0.6
Wellington Management Company	425,336	0.8
Gold Composite	137,258	0.3
PSERS Gold Fund (levered)	137,258	0.3
Total Real Estate (levered/hedged)	5,621,900	11.2
PTRES Composite (levered/hedged)	450,481	0.9
Pareto Sierra - REIT	1,936	0.0

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

Asset Allocation

	Total Fund (\$)	%
PSERS REIT Index (levered)	231,796	0.5
Security Capital Preferred Growth	216,749	0.4
Private Real Estate	5,171,419	10.3
Private Real Estate x Internal	5,046,472	10.1
Internally Managed Private Real Estate	124,947	0.2
Risk Parity Composite	4,483,777	8.9
PSERS Risk Parity	1,796,667	3.6
AQR GRP EL 20 Offshore Fund	331,050	0.7
Bridgewater All Weather @15%	611,044	1.2
DE Shaw Orienteer	392,054	0.8
DE Shaw Orienteer HV	345,301	0.7
BlackRock Market Advantage II	414,869	0.8
Bridgewater Optimal	592,792	1.2
Total Absolute Return	4,773,835	9.5
Apollo/SASOF III	35,344	0.1
Oceanwood Opportunities Fund	197,695	0.4
Perry Partners L.P.	163,852	0.3
Ellis Lake	4,308	0.0
Garda Fixed Income Relative Value Opportunity Fund Ltd.	376,057	0.7
Capula Global Relative Value Fund Limited - Class F	396,596	0.8
PIMCO PARS/GCOF/MAV Fund	764,044	1.5
PIMCO PARS	272,303	0.5
PIMCO GCOF	270,198	0.5
PIMCO MAV	232,316	0.5
BlackRock Capital Structure Investments Fund	263,358	0.5
Brigade Leveraged Capital Structures Offshore Fund	274,171	0.5
Caspian Select Credit International - Class A	225,309	0.4
Caspian Keystone Focused Fund, L.P.	13,327	0.0
Venor Capital Offshore	150,668	0.3
Aeolus Property Catastrophe Fund I LP	175,635	0.4
Nephila / Palmetto Fund Ltd. - Class G	248,161	0.5

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

PSERS Total Fund Composite

As of September 30, 2016

Asset Allocation

	Total Fund	
	(\$)	%
Independence Reinsurance Partners Composite	43,174	0.1
Independence Reinsurance Partners Cash	-36	0.0
DaVinci Reinsurance Ltd.	22,156	0.0
Medici Fund Ltd.	21,054	0.0
Capula Tail Risk Fund Limited - Class C	344,600	0.7
Bridgewater Pure Alpha Fund II, Ltd.	774,116	1.5
Brevan Howard Fund Limited - Class E	110,646	0.2
OWS Credit Opportunity Offshore Fund III	212,774	0.4
Unallocated Cash & Cash Equivalents	2,482,268	4.9
PSERS Cash Management	2,420,399	4.8
PSERS Cash Management Sub	1	0.0
RE Conversions	61,869	0.1

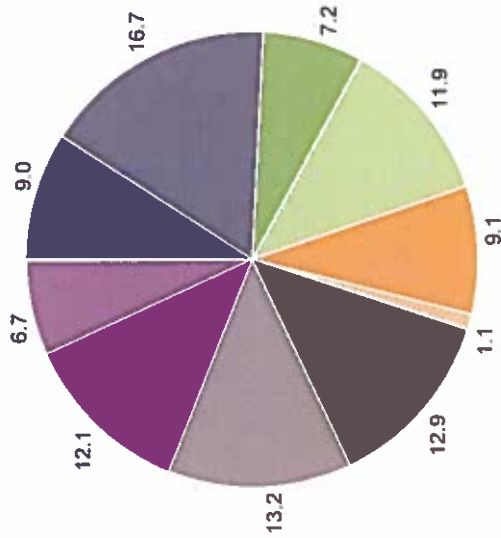
Alternative investment and real estate investments are valued on a quarter lag.



Total Public Markets

Asset Allocation by Asset Class

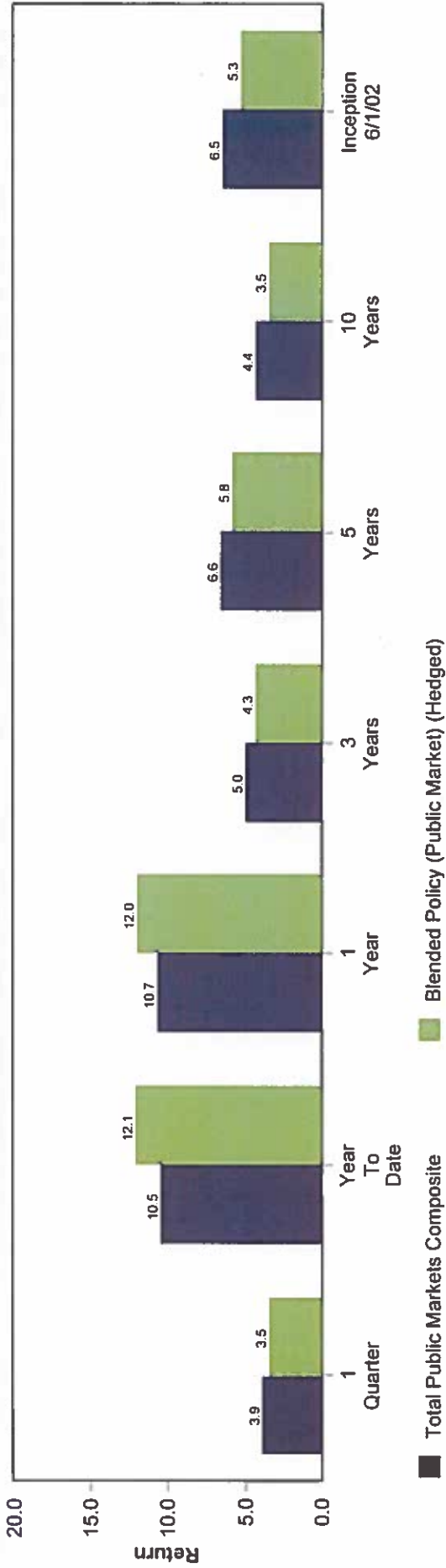
September 30, 2016 : \$37,057,526



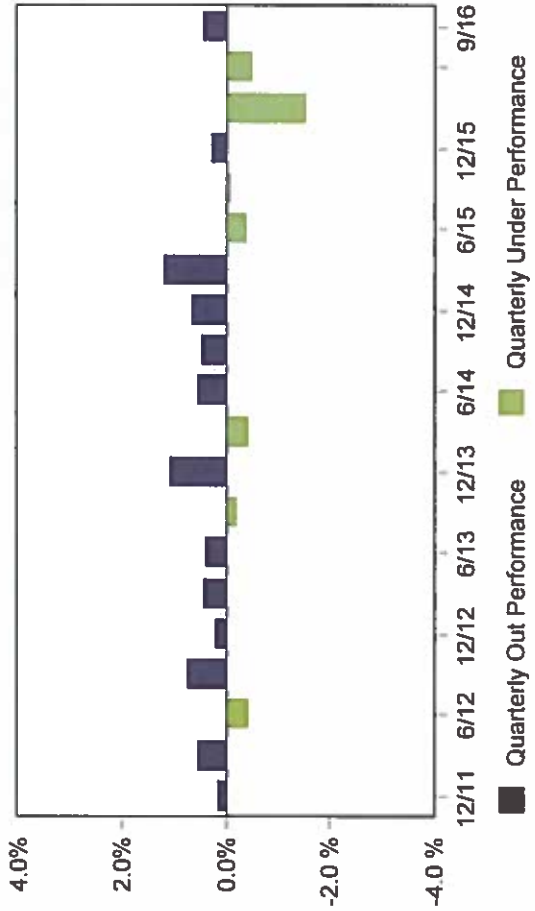
Asset Class	Market Value (\$000)	Allocation (%)
US Equity	3,347,311.3	9.0
Non-US Equity	6,197,064.0	16.7
Investment Grade	2,657,411.5	7.2
Credit-Related	4,391,451.2	11.9
Inflation Protected	3,358,198.9	9.1
PIMCO Multi-Sector Strategy	423,741.4	1.1
Absolute Return	4,773,835.0	12.9
Real Assets x Private Real Estate	4,889,521.0	13.2
Risk Parity	4,483,776.6	12.1
Unallocated Cash & Cash Equivalents	2,482,268.3	6.7
Equity Rebalance Account	50,742.9	0.1
PSERS Fixed Liquidation	1,428.6	0.0
Global Tax Reclaim	330.1	0.0
Income Receivable-Term Managers	31.4	0.0
PSERS - Misc. Collections	413.6	0.0

Performance Summary

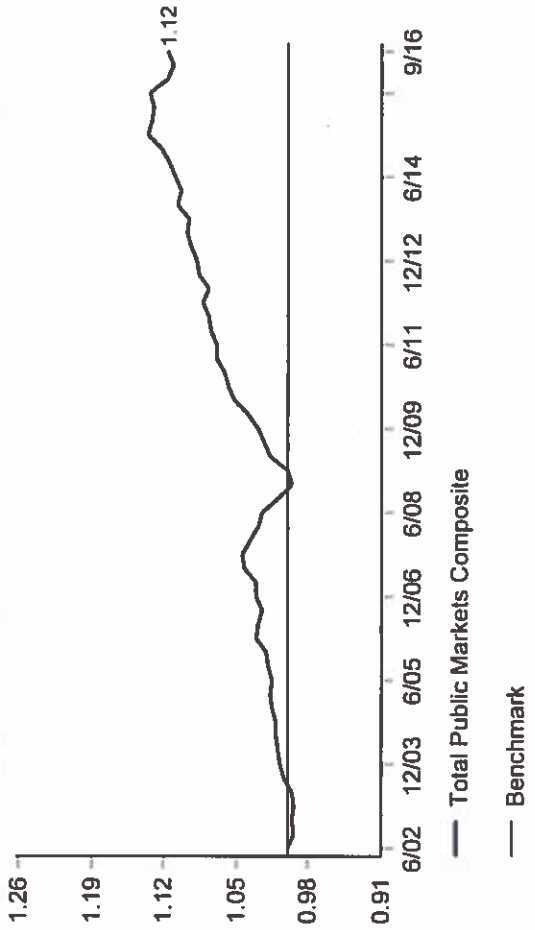
Return Summary



Quarterly Excess Performance

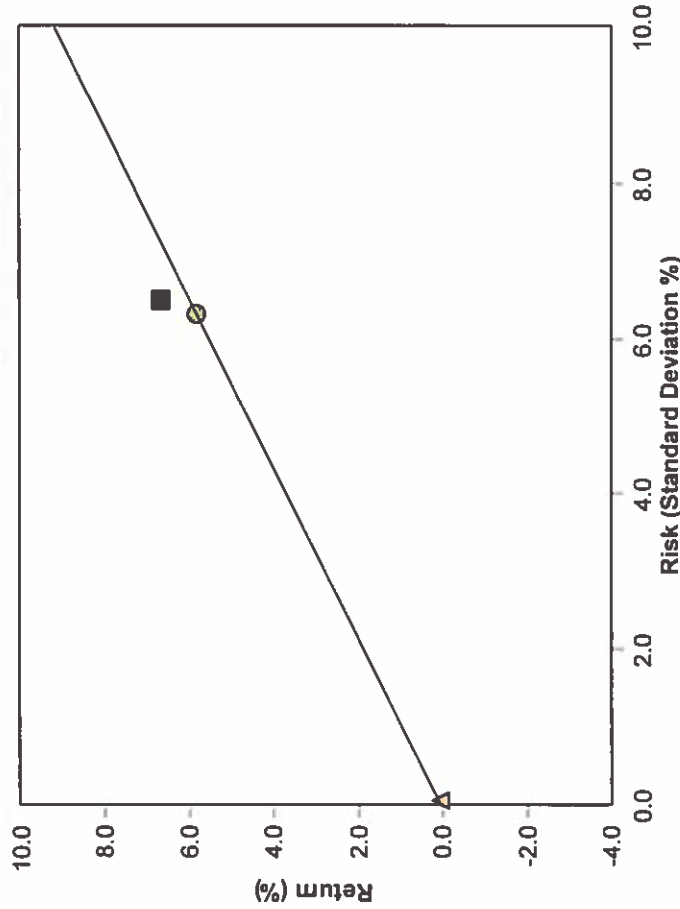


Ratio of Cumulative Wealth - Since Inception

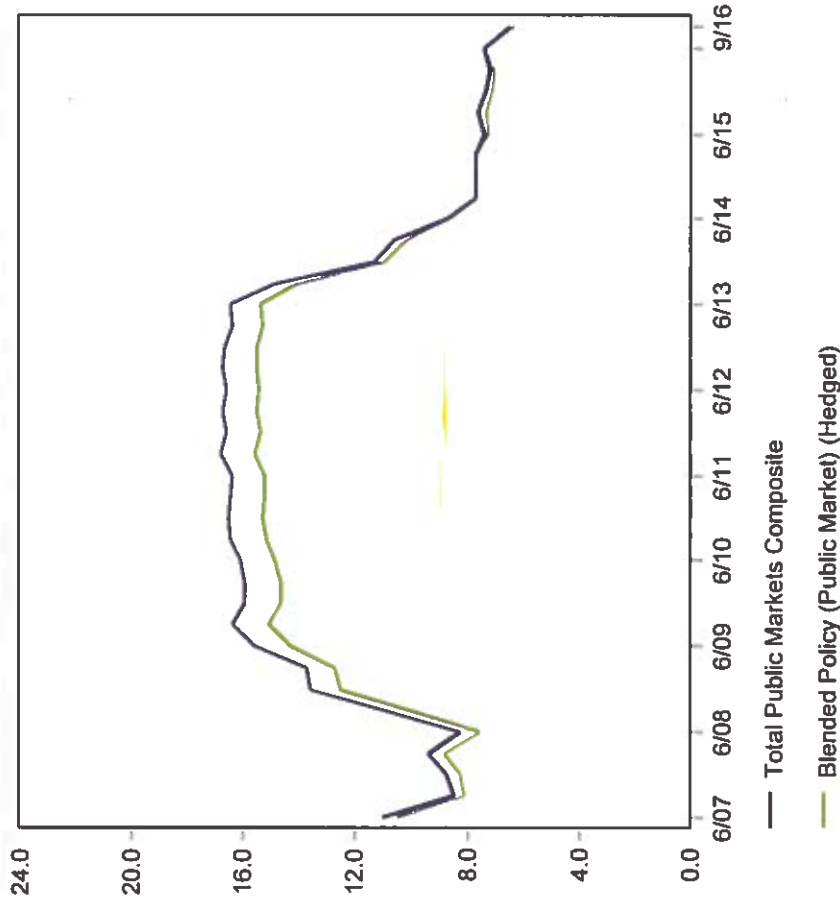


Risk Profile

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
Total Public Markets Composite	0.80	1.27	0.63	0.96	1.02	0.75	1.01	6.64	6.49	0.98
Blended Policy (Public Market) (Hedged)	0.00	0.00	N/A	1.00	0.92	0.00	1.00	5.82	6.31	1.00
Citigroup 3 Month T-Bill	-5.81	6.30	-0.92	0.05	N/A	0.07	0.00	0.08	0.04	0.23