



Pittsburgh Comprehensive Municipal Pension

Pittsburgh Comprehensive Municipal

Executive Summary

December 31, 2016

Manager Status

Market Value: \$696.8 Million and 100.0% of Fund

Investment Manager	Asset Class	Status	Reason
Federated Investors	Core Fixed Income	In Compliance	
BlackRock Total Return Fund	Core Fixed Income	In Compliance	
SSgA S&P 500 Index Fund	Large-Cap Core	In Compliance	
Frontier Capital Management	Smid-Cap Core	In Compliance	
Guyasuta Investment Advisors	Small-Cap Core	In Compliance	
MFS International Equity Fund	Non-U.S. Large-Cap Core	In Compliance	222
SSgA Active Emerging Markets Fund	Emerging Markets	In Compliance	
ABS Emerging Markets (Hedged)	Emerging Markets	In Compliance	===
ABS Offshore SPC Global	Hedged Equity Hedge FoF	In Compliance	<u> </u>
Entrust Diversified Select Equity Fund	Hedged Equity Hedge FoF	Alert	Organizational Issues
Entrust Special Opportunities Fund III	Multi-Strat. Hedge Fund	Alert	Organizational Issues
Rreef America II	Core Real Estate	In Compliance	
Cornerstone Patriot Fund	Core Real Estate	In Compliance	
Birchmere Ventures III, LP	Venture Private Equity	In Compliance	
Draper Triangle Ventures II, LP	Venture Private Equity	In Compliance	
Draper Triangle Ventures III, LP	Venture Private Equity	In Compliance	
Novitas Capital Partners III, LP	Venture Private Equity	In Compliance	07.
Hirtle Callaghan Private Equity Fund III, LP	Global Divers. Private Equity FoF	In Compliance	
Hirtle Callaghan Private Equity Fund IV, LP	Global Divers. Private Equity FoF	In Compliance	
Hirtle Callaghan Private Equity Fund V, LP	Global Divers. Private Equity FoF	In Compliance	
Crescent Mezzanine Partners VIB, LP	Mezz. Private Equity	In Compliance	
Dedicated Funding for CMPTF	Fixed Income Annuity	In Compliance	

Investment Manager Evaluation Terminology

The following terminology has been developed by Marquette Associates to facilitate efficient communication among the Investment Manager, Investment Consultant, and the Plan Sponsor. Each term signifies a particular status with the Fund and any conditions that may require improvement. In each case, communication is made only after consultation with the Trustees and/or the Investment Committee of the Plan.

In Compliance – The investment manager states it is acting in accordance with the Investment Policy Guidelines.

Alert – The investment manager is notified of a problem in performance (usually related to a benchmark or volatility measure), a change in investment characteristics, an alteration in management style or key investment professionals, and/or any other irregularities.

On Notice – The investment manager is notified of continued concern with one or more Alert issues. Failure to improve upon stated issues within a specific time frame justifies termination.

Termination – The Trustees have decided to terminate the investment manager. The investment manager is notified and transition plans are in place.

Market Value: \$696.8 Million and 100.0% of Fund

Ending December 31, 2016

	Asset Class	Market Value	3 Mo Net Cash Flows	% of Portfolio	Policy %	Policy Difference
Total Fund Composite		\$696,804,402	-\$7,693,912	100.0%	100.0%	\$0
Dedicated Funding for CMPTF	Fixed Income Annuity	\$293,607,504	-\$3,344,000	42.1%	40.0%	\$14,885,743
Total Invested Portfolio		\$403,196,898	-\$4,349,912	57.9%	60.0%	-\$14,885,743
Fixed Income Composite		\$71,526,301	-\$32,812	10.3%	13.0%	-\$19,058,271
Federated Investors	Core Fixed Income	\$52,334,131	-\$32,812	7.5%		
BlackRock Total Return Fund	Core Fixed Income	\$19,192,171	\$0	2.8%		
U.S. Equity Composite		\$155,251,440	-\$3,076,187	22.3%	22.0%	\$1,954,471
SSgA S&P 500 Index Fund	Large-Cap Core	\$93,391,660	-\$3,000,000	13.4%		
Twin Capital	Large-Cap Core	\$2,098,989	\$0	0.3%		
Frontier Capital Management	Smid-Cap Core	\$29,271,268	-\$45,918	4.2%		
Guyasuta Investment Advisors	Small-Cap Core	\$28,284,540	-\$30,270	4.1%		
CIM Investment Management	Small-Cap Core	\$2,204,982	\$0	0.3%		
Non-U.S. Equity Composite		\$69,161,152	\$0	9.9%	12.0%	-\$14,455,376
MFS International Equity Fund	Non-U.S. Large-Cap Core	\$54,111,991	\$0	7.8%		
SSgA Active Emerging Markets Fund	Emerging Markets	\$6,953,621	\$0	1.0%		
ABS Emerging Markets (Hedged)	Emerging Markets	\$8,095,540	\$0	1.2%		
Hedge Fund Composite		\$40,007,117	\$367,116	5.7%	5.0%	\$5,166,897
ABS Offshore SPC Global	Hedged Equity Hedge FoF	\$17,327,242	\$0	2.5%		
Entrust Diversified Select Equity Fund	Hedged Equity Hedge FoF	\$16,799,635	\$0	2.4%		
Entrust Special Opportunities Fund III	Multi-Strat. Hedge Fund	\$5,880,240	\$367,116	0.8%		
Real Estate Composite		\$40,124,636	-\$99,661	5.8%	5.0%	\$5,284,416
Rreef America II	Core Real Estate	\$20,855,473	-\$48,690	3.0%	2.5%	\$3,435,363
Cornerstone Patriot Fund	Core Real Estate	\$19,269,163	-\$50,971	2.8%	2.5%	\$1,849,053
Private Equity Composite		\$11,514,942	-\$416,818	1.7%	3.0%	-\$9,389,191
Cash Composite		\$15,611,311	-\$1,091,550	2.2%	0.0%	\$15,611,311

- Private Equity Composite may not include current performance, due to reporting cycle limitations.



Total Invested Portfolio

Market Value: \$403.2 Million and 57.9% of Fund

Ending December 31, 2016

	Asset Class	Market Value	3 Mo Net Cash Flows	% of Portfolio
Total Invested Portfolio		\$403,196,898	-\$4,349,912	100.0%
Fixed Income Composite		\$71,526,301	-\$32,812	17.7%
Federated Investors	Core Fixed Income	\$52,334,131	-\$32,812	13.0%
BlackRock Total Return Fund	Core Fixed Income	\$19,192,171	\$0	4.8%
U.S. Equity Composite		\$155,251,440	-\$3,076,187	38.5%
SSgA S&P 500 Index Fund	Large-Cap Core	\$93,391,660	-\$3,000,000	23.2%
Twin Capital	Large-Cap Core	\$2,098,989	\$0	0.5%
Frontier Capital Management	Smid-Cap Core	\$29,271,268	-\$45,918	7.3%
Guyasuta Investment Advisors	Small-Cap Core	\$28,284,540	-\$30,270	7.0%
CIM Investment Management	Small-Cap Core	\$2,204,982	\$0	0.5%
Non-U.S. Equity Composite		\$69,161,152	\$0	17.2%
MFS International Equity Fund	Non-U.S. Large-Cap Core	\$54,111,991	\$0	13.4%
SSgA Active Emerging Markets Fund	Emerging Markets	\$6,953,621	\$0	1.7%
ABS Emerging Markets (Hedged)	Emerging Markets	\$8,095,540	\$0	2.0%
Hedge Fund Composite		\$40,007,117	\$367,116	9.9%
ABS Offshore SPC Global	Hedged Equity Hedge FoF	\$17,327,242	\$0	4.3%
Entrust Diversified Select Equity Fund	Hedged Equity Hedge FoF	\$16,799,635	\$0	4.2%
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Private Equity Composite		\$11,514,942	-\$416,818	2.9%
Cash Composite		\$15,611,311	-\$1,091,550	3.9%

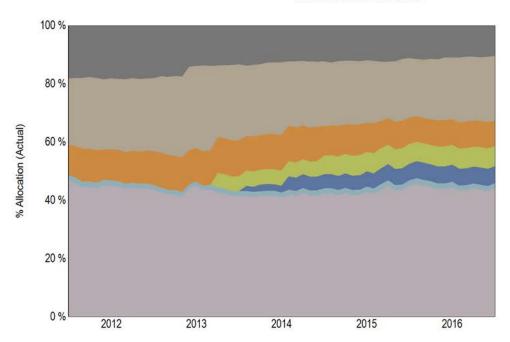
- Private Equity Composite may not include current performance, due to reporting cycle limitations.



Asset Allocation

Market Value: \$696.8 Million and 100.0% of Fund

Historic Asset Allocation



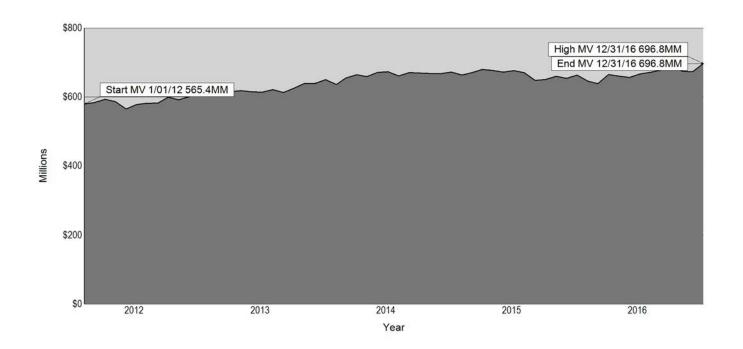


Asset Allocation vs. Target As Of December 31, 2016

	Current	Policy	Difference	%
U.S. Equity	\$155,251,440	\$153,296,968	\$1,954,471	0.3%
Non-U.S. Equity	\$61,065,612	\$83,616,528	-\$22,550,916	-3.2%
Hedge Funds	\$48,102,657	\$34,840,220	\$13,262,437	1.9%
Real Assets	\$40,124,636	\$34,840,220	\$5,284,416	0.8%
Private Equity	\$11,514,942	\$20,904,132	-\$9,389,191	-1.3%
Other	\$309,218,815	\$278,721,761	\$30,497,054	4.4%
Total	\$696,804,402	\$696,804,402		

Market Value History

Market Value: \$696.8 Million and 100.0% of Fund



Summary of Cash Flows

	Fourth Quarter	Year-To-Date	One Year	Three Years
Beginning Market Value	\$401,703,150.69	\$377,508,931.24	\$377,508,931.24	\$391,536,202.65
Net Cash Flow	-\$4,133,988.20	-\$5,320,204.22	-\$5,320,204.22	-\$46,004,924.51
Net Investment Change	\$5,627,735.57	\$31,008,171.04	\$31,008,171.04	\$57,665,619.92
Ending Market Value	\$403,196,898.06	\$403,196,898.06	\$403,196,898.06	\$403,196,898.06

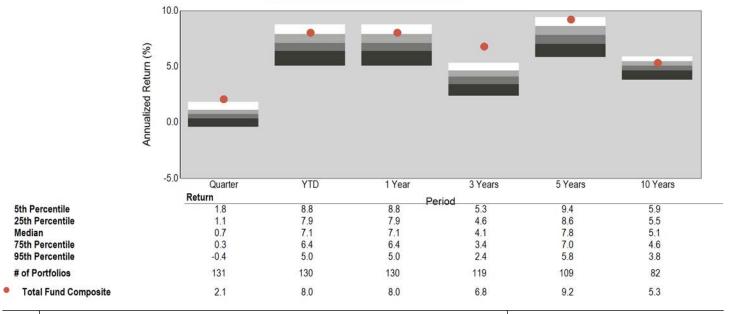
Annualized Performance (Net of Fees)

Market Value: \$696.8 Million and 100.0% of Fund

Ending December 31, 2016

	1 Mo	3 Mo	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs
Total Fund Composite	2.1%	2.1%	8.0%	5.6%	6.8%	8.5%	9.2%	7.6%	5.3%
Total Fund Composite Benchmark	1.1%	1.6%	7.6%	5.6%	6.1%	8.1%	8.5%	8.0%	5.4%
InvestorForce Public DB Net Rank	1	4	21	1	1	6	9	39	37
Total Invested Portfolio	1.6%	1.5%	8.4%	4.1%	5.0%	8.0%	9.2%	6.9%	4.8%
Total Invested Portfolio Benchmark	1.4%	1.1%	7.7%	3.9%	4.9%	8.0%	8.8%	8.1%	5.4%
InvestorForce Public DB Net Rank	10	13	13	19	10	17	10	67	66
Fixed Income Composite	0.4%	-2.1%	4.5%	2.2%	3.5%	2.5%	3.7%	4.5%	
BBgBarc US Aggregate TR	0.1%	-3.0%	2.6%	1.6%	3.0%	1.7%	2.2%	3.6%	4.3%
InvestorForce Public DB US Fix Inc Net Rank	29	53	30	28	19	19	14	24	
U.S. Equity Composite	2.1%	4.8%	16.7%	6.8%	8.6%	14.5%	15.2%	12.0%	
Dow Jones U.S. Total Stock Market	1.9%	4.1%	12.6%	6.4%	8.4%	14.2%	14.6%	13.0%	7.2%
InvestorForce Public DB US Eq Net Rank	13	37	3	29	12	8	6	69	
Non-U.S. Equity Composite	2.0%	-2.3%	1.9%	0.1%	-1.3%	2.1%	5.7%		
MSCI ACWI ex USA	2.6%	-1.3%	4.5%	-0.7%	-1.8%	2.2%	5.0%	2.9%	1.0%
InvestorForce Public DB ex-US Eq Net Rank	36	44	90	44	51	65	52		
Hedge Fund Composite	1.1%	1.7%	-0.1%	0.0%	1.6%	-			
HFRI Fund of Funds Composite Index	1.1%	1.1%	0.7%	0.2%	1.3%	3.1%	3.5%	2.4%	1.3%
HFRX Equity Hedge Index	0.2%	0.8%	0.1%	-1.1%	-0.3%	2.4%	2.9%	0.3%	-1.2%
InvestorForce Public DB Hedge Funds Net Rank	31	53	77	73	76	-			
Real Estate Composite	2.2%	2.2%	8.4%	11.3%	11.2%	-			-
NFI	0.6%	1.8%	7.8%	10.8%	11.0%	11.5%	11.1%	12.3%	4.8%

InvestorForce Public DB Net Accounts



Calendar Performance (Net of Fees)

Market Value: \$696.8 Million and 100.0% of Fund

Calendar Year

	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
Total Fund Composite	8.0%	3.2%	9.2%	13.6%	12.3%	1.8%	5.6%	23.4%	-27.0%	11.6%	12.1%
Total Fund Composite Benchmark	7.6%	3.5%	7.2%	14.1%	10.5%	1.3%	12.6%	23.0%	-26.1%	8.5%	14.0%
InvestorForce Public DB Net Rank	21	1	1	66	41	22	98	19	70	2	51
Total Invested Portfolio	8.4%	0.0%	6.6%	17.6%	14.1%	-2.5%	5.6%	23.3%	-27.0%	11.6%	12.1%
Total Invested Portfolio Benchmark	7.7%	0.3%	6.9%	17.6%	12.2%	0.3%	12.4%	22.9%	-26.2%	8.2%	13.9%
InvestorForce Public DB Net Rank	13	33	22	22	7	92	98	20	70	2	52
Fixed Income Composite	4.5%	0.0%	6.1%	-0.4%	8.4%	5.4%	7.8%	13.8%	-9.3%	-	
BBgBarc US Aggregate TR	2.6%	0.6%	6.0%	-2.0%	4.2%	7.8%	6.5%	5.9%	5.2%	7.0%	4.3%
InvestorForce Public DB US Fix Inc Net Rank	30	56	15	32	35	87	41	42	91	-	
U.S. Equity Composite	16.7%	-2.3%	12.5%	34.2%	17.8%	0.6%	8.6%	25.8%	-36.1%		
Dow Jones U.S. Total Stock Market	12.6%	0.4%	12.5%	33.5%	16.4%	1.1%	17.5%	28.6%	-37.2%	5.6%	15.8%
InvestorForce Public DB US Eq Net Rank	3	84	14	50	4	48	99	86	29	-	
Non-U.S. Equity Composite	1.9%	-1.7%	-4.1%	13.1%	21.5%						
MSCI ACWI ex USA	4.5%	-5.7%	-3.9%	15.3%	16.8%	-13.7%	11.2%	41.4%	-45.5%	16.7%	26.6%
InvestorForce Public DB ex-US Eq Net Rank	90	21	59	82	7						
Hedge Fund Composite	-0.1%	0.0%	4.9%								
HFRI Fund of Funds Composite Index	0.7%	-0.3%	3.4%	9.0%	4.8%	-5.7%	5.7%	11.5%	-21.4%	10.3%	10.4%
HFRX Equity Hedge Index	0.1%	-2.3%	1.4%	11.1%	4.8%	-19.1%	8.9%	13.1%	-25.5%	3.2%	9.2%
InvestorForce Public DB Hedge Funds Net Rank	77	45	35	-					-	-	
Real Estate Composite	8.4%	14.4%	11.0%	-						-	
NFI	7.8%	13.9%	11.5%	12.9%	9.8%	15.0%	15.3%	-30.4%	-10.7%	14.8%	15.3%

Annualized Performance (Net of Fees)

Market Value: \$696.8 Million and 100.0% of Fund

Ending December 31, 2016

	1 Mo	3 Mo	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs
Total Fund Composite	2.1%	2.1%	8.0%	5.6%	6.8%	8.5%	9.2%	7.6%	5.3%
Total Fund Composite Benchmark	1.1%	1.6%	7.6%	5.6%	6.1%	8.1%	8.5%	8.0%	5.4%
InvestorForce Public DB Net Rank	1	4	21	1	1	6	9	39	37
Dedicated Funding for CMPTF	2.9%	2.9%	7.6%	7.6%	9.4%	9.1%	9.2%		
Annual Return	0.6%	1.8%	7.5%	7.5%	7.5%	7.6%	7.7%		
Total Invested Portfolio	1.6%	1.5%	8.4%	4.1%	5.0%	8.0%	9.2%	6.9%	4.8%
Total Invested Portfolio Benchmark	1.4%	1.1%	7.7%	3.9%	4.9%	8.0%	8.8%	8.1%	5.4%
InvestorForce Public DB Net Rank	10	13	13	19	10	17	10	67	66
Fixed Income Composite	0.4%	-2.1%	4.5%	2.2%	3.5%	2.5%	3.7%	4.5%	
BBgBarc US Aggregate TR	0.1%	-3.0%	2.6%	1.6%	3.0%	1.7%	2.2%	3.6%	4.3%
InvestorForce Public DB US Fix Inc Net Rank	29	53	30	28	19	19	14	24	
Federated Investors	0.4%	-2.0%	4.8%	2.3%	3.2%	2.2%	3.1%	4.3%	4.5%
BBgBarc US Aggregate TR	0.1%	-3.0%	2.6%	1.6%	3.0%	1.7%	2.2%	3.6%	4.3%
eA US Core Fixed Inc Net Rank	8	12	7	19	42	31	25	28	61
BlackRock Total Return Fund	0.3%	-2.4%	3.5%	1.9%	4.0%	3.0%	4.4%	5.2%	4.5%
BBgBarc US Aggregate TR	0.1%	-3.0%	2.6%	1.6%	3.0%	1.7%	2.2%	3.6%	4.3%
eA US Core Fixed Inc Net Rank	12	20	32	40	9	4	4	6	63
U.S. Equity Composite	2.1%	4.8%	16.7%	6.8%	8.6%	14.5%	15.2%	12.0%	-
Dow Jones U.S. Total Stock Market	1.9%	4.1%	12.6%	6.4%	8.4%	14.2%	14.6%	13.0%	7.2%
InvestorForce Public DB US Eq Net Rank	13	37	3	29	12	8	6	69	
SSgA S&P 500 Index Fund	2.0%	3.9%	12.0%	6.6%	9.0%				
S&P 500	2.0%	3.8%	12.0%	6.5%	8.9%	14.3%	14.7%	12.8%	6.9%
eA US Large Cap Core Equity Net Rank	27	43	21	19	14				
Twin Capital	2.4%	4.9%							
S&P 500	2.0%	3.8%	12.0%	6.5%	8.9%	14.3%	14.7%	12.8%	6.9%
eA US Large Cap Core Equity Net Rank	13	20							
Frontier Capital Management	1.4%	4.1%	20.1%	6.0%	8.0%	15.0%	15.6%	13.9%	9.5%
Russell 2500	1.9%	6.1%	17.6%	6.9%	6.9%	13.7%	14.5%	13.6%	7.7%
eA US Small-Mid Cap Core Equity Net Rank	57	74	5	45	28	28	22	40	20
Guyasuta Investment Advisors	3.1%	8.1%	29.4%	8.0%	8.1%	14.6%	16.7%	15.2%	9.8%
Russell 2000	2.8%	8.8%	21.3%	7.7%	6.7%	14.0%	14.5%	13.2%	7.1%
eA US Small Cap Core Equity Net Rank	47	66	3	51	27	43	13	17	6
CIM Investment Management	2.7%	9.9%							
Russell 2000	2.8%	8.8%	21.3%	7.7%	6.7%	14.0%	14.5%	13.2%	7.1%
eA US Small Cap Core Equity Net Rank	55	34							



Annualized Performance (Net of Fees)

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Ending December 31, 2016

	1 Mo	3 Mo	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs
Non-U.S. Equity Composite	2.0%	-2.3%	1.9%	0.1%	-1.3%	2.1%	5.7%		
MSCI ACWI ex USA	2.6%	-1.3%	4.5%	-0.7%	-1.8%	2.2%	5.0%	2.9%	1.0%
InvestorForce Public DB ex-US Eq Net Rank	36	44	90	44	51	65	52		
MFS International Equity Fund	2.5%	-2.0%	0.3%	0.2%	-1.3%	3.3%	6.9%		
MSCI EAFE	3.4%	-0.7%	1.0%	0.1%	-1.6%	4.0%	6.5%	3.8%	0.7%
Foreign Large Blend MStar MF Rank	44	50	64	42	39	56	30		
SSgA Active Emerging Markets Fund	0.5%	-3.1%	12.5%	-1.1%	-1.6%	-2.4%	1.4%		
MSCI Emerging Markets	0.2%	-4.2%	11.2%	-2.7%	-2.6%	-2.6%	1.3%	0.5%	1.8%
eA Emg Mkts Equity Net Rank	31	22	27	29	39	72	75		
ABS Emerging Markets (Hedged)	0.0%	-3.2%	4.8%	0.6%					
HFRI Emerging Markets (Total) Index	0.0%	-1.1%	6.8%	1.6%	0.2%	1.5%	3.2%	1.7%	2.1%
Hedge Fund Composite	1.1%	1.7%	-0.1%	0.0%	1.6%				
HFRI Fund of Funds Composite Index	1.1%	1.1%	0.7%	0.2%	1.3%	3.1%	3.5%	2.4%	1.3%
HFRX Equity Hedge Index	0.2%	0.8%	0.1%	-1.1%	-0.3%	2.4%	2.9%	0.3%	-1.2%
InvestorForce Public DB Hedge Funds Net Rank	31	53	77	73	76				
ABS Offshore SPC Global	1.1%	0.2%	-4.2%	-0.2%	1.4%				
HFRX Equity Hedge Index	0.2%	0.8%	0.1%	-1.1%	-0.3%	2.4%	2.9%	0.3%	-1.2%
Entrust Diversified Select Equity Fund	1.6%	3.9%	2.5%	-1.3%	0.8%				
HFRX Equity Hedge Index	0.2%	0.8%	0.1%	-1.1%	-0.3%	2.4%	2.9%	0.3%	-1.2%
Entrust Special Opportunities Fund III	0.0%	0.0%	10.2%						
HFRI Fund of Funds Composite Index	1.1%	1.1%	0.7%	0.2%	1.3%	3.1%	3.5%	2.4%	1.3%
Real Estate Composite	2.2%	2.2%	8.4%	11.3%	11.2%	-	-	-	
NFI	0.6%	1.8%	7.8%	10.8%	11.0%	11.5%	11.1%	12.3%	4.8%
Rreef America II	2.4%	2.4%	8.1%	11.8%	11.9%				
NFI	0.6%	1.8%	7.8%	10.8%	11.0%	11.5%	11.1%	12.3%	4.8%
Cornerstone Patriot Fund	2.0%	2.0%	8.6%	10.8%					
NFI	0.6%	1.8%	7.8%	10.8%	11.0%	11.5%	11.1%	12.3%	4.8%

Calendar Performance (Net of Fees)

Market Value: \$696.8 Million and 100.0% of Fund

Calendar Year

	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
Total Fund Composite	8.0%	3.2%	9.2%	13.6%	12.3%	1.8%	5.6%	23.4%	-27.0%	11.6%	12.1%
Total Fund Composite Benchmark	7.6%	3.5%	7.2%	14.1%	10.5%	1.3%	12.6%	23.0%	-26.1%	8.5%	14.0%
InvestorForce Public DB Net Rank	21	1	1	66	41	22	98	19	70	2	51
Dedicated Funding for CMPTF	7.6%	7.5%	13.2%	8.1%	9.8%	7.2%					
Annual Return	7.5%	7.5%	7.5%	8.0%	8.0%	8.0%					
Total Invested Portfolio	8.4%	0.0%	6.6%	17.6%	14.1%	-2.5%	5.6%	23.3%	-27.0%	11.6%	12.1%
Total Invested Portfolio Benchmark	7.7%	0.3%	6.9%	17.6%	12.2%	0.3%	12.4%	22.9%	-26.2%	8.2%	13.9%
InvestorForce Public DB Net Rank	13	33	22	22	7	92	98	20	70	2	52
Fixed Income Composite	4.5%	0.0%	6.1%	-0.4%	8.4%	5.4%	7.8%	13.8%	-9.3%	-	
BBgBarc US Aggregate TR	2.6%	0.6%	6.0%	-2.0%	4.2%	7.8%	6.5%	5.9%	5.2%	7.0%	4.3%
InvestorForce Public DB US Fix Inc Net Rank	30	56	15	32	35	87	41	42	91		
Federated Investors	4.8%	-0.2%	5.0%	-0.8%	7.1%	6.5%	8.2%	11.2%	-2.7%	7.1%	4.3%
BBgBarc US Aggregate TR	2.6%	0.6%	6.0%	-2.0%	4.2%	7.8%	6.5%	5.9%	5.2%	7.0%	4.3%
eA US Core Fixed Inc Net Rank	7	89	80	19	23	81	12	33	76	25	48
BlackRock Total Return Fund	3.5%	0.4%	8.2%	-0.1%	10.3%	4.7%	10.1%	16.3%	-11.1%	5.3%	4.3%
BBgBarc US Aggregate TR	2.6%	0.6%	6.0%	-2.0%	4.2%	7.8%	6.5%	5.9%	5.2%	7.0%	4.3%
eA US Core Fixed Inc Net Rank	32	64	4	8	2	96	2	14	95	87	49
U.S. Equity Composite	16.7%	-2.3%	12.5%	34.2%	17.8%	0.6%	8.6%	25.8%	-36.1%	-	
Dow Jones U.S. Total Stock Market	12.6%	0.4%	12.5%	33.5%	16.4%	1.1%	17.5%	28.6%	-37.2%	5.6%	15.8%
InvestorForce Public DB US Eq Net Rank	3	84	14	50	4	48	99	86	29		
SSgA S&P 500 Index Fund	12.0%	1.5%	13.8%	-							
S&P 500	12.0%	1.4%	13.7%	32.4%	16.0%	2.1%	15.1%	26.5%	-37.0%	5.5%	15.8%
eA US Large Cap Core Equity Net Rank	21	36	33								
Twin Capital		-	-	-	-	-				-	
S&P 500	12.0%	1.4%	13.7%	32.4%	16.0%	2.1%	15.1%	26.5%	-37.0%	5.5%	15.8%
eA US Large Cap Core Equity Net Rank			-								
Frontier Capital Management	20.1%	-6.5%	12.1%	39.0%	18.0%	-6.5%	28.9%	46.5%	-39.5%	12.8%	18.2%
Russell 2500	17.6%	-2.9%	7.1%	36.8%	17.9%	-2.5%	26.7%	34.4%	-36.8%	1.4%	16.2%
eA US Small-Mid Cap Core Equity Net Rank	5	88	1	26	29	86	25	5	75	15	16



Calendar Performance (Net of Fees)

Market Value: \$696.8 Million and 100.0% of Fund

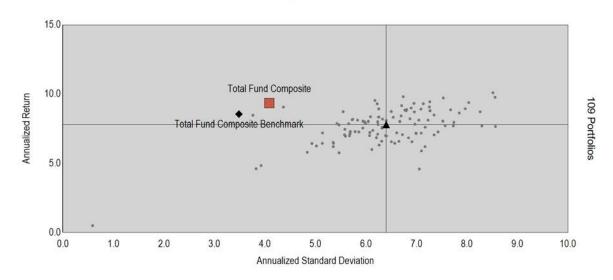
Cal	lend	ar	Year
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						Odiciida	i i cui				
	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
Guyasuta Investment Advisors	29.4%	-9.9%	8.4%	36.2%	25.7%	4.1%	19.3%	40.8%	-30.6%	-2.8%	13.5%
Russell 2000	21.3%	-4.4%	4.9%	38.8%	16.3%	-4.2%	26.9%	27.2%	-33.8%	-1.6%	18.4%
eA US Small Cap Core Equity Net Rank	3	88	15	73	1	17	97	9	18	80	77
CIM Investment Management											
Russell 2000	21.3%	-4.4%	4.9%	38.8%	16.3%	-4.2%	26.9%	27.2%	-33.8%	-1.6%	18.4%
eA US Small Cap Core Equity Net Rank											
Non-U.S. Equity Composite	1.9%	-1.7%	-4.1%	13.1%	21.5%						
MSCI ACWI ex USA	4.5%	-5.7%	-3.9%	15.3%	16.8%	-13.7%	11.2%	41.4%	-45.5%	16.7%	26.6%
InvestorForce Public DB ex-US Eq Net Rank	90	21	59	82	7						
MFS International Equity Fund	0.3%	0.0%	-4.2%	18.6%	22.5%						
MSCI EAFE	1.0%	-0.8%	-4.9%	22.8%	17.3%	-12.1%	7.8%	31.8%	-43.4%	11.2%	26.3%
Foreign Large Blend MStar MF Rank	64	37	36	64	12						
SSgA Active Emerging Markets Fund	12.5%	-13.1%	-2.6%	-4.8%	18.1%						
MSCI Emerging Markets	11.2%	-14.9%	-2.2%	-2.6%	18.2%	-18.4%	18.9%	78.5%	-53.3%	39.4%	32.2%
eA Emg Mkts Equity Net Rank	27	53	67	87	66						
ABS Emerging Markets (Hedged)	4.8%	-3.4%								-	
HFRI Emerging Markets (Total) Index	6.8%	-3.3%	-2.6%	5.5%	10.4%	-14.0%	11.4%	40.3%	-37.3%	24.9%	24.3%
edge Fund Composite	-0.1%	0.0%	4.9%	-	-	-				-	
HFRI Fund of Funds Composite Index	0.7%	-0.3%	3.4%	9.0%	4.8%	-5.7%	5.7%	11.5%	-21.4%	10.3%	10.4%
HFRX Equity Hedge Index	0.1%	-2.3%	1.4%	11.1%	4.8%	-19.1%	8.9%	13.1%	-25.5%	3.2%	9.2%
InvestorForce Public DB Hedge Funds Net Rank	77	45	35								
ABS Offshore SPC Global	-4.2%	4.0%	4.8%					-		-	-
HFRX Equity Hedge Index	0.1%	-2.3%	1.4%	11.1%	4.8%	-19.1%	8.9%	13.1%	-25.5%	3.2%	9.2%
Entrust Diversified Select Equity Fund	2.5%	-4.9%	4.9%							-	-
HFRX Equity Hedge Index	0.1%	-2.3%	1.4%	11.1%	4.8%	-19.1%	8.9%	13.1%	-25.5%	3.2%	9.2%
Entrust Special Opportunities Fund III	10.2%									-	
HFRI Fund of Funds Composite Index	0.7%	-0.3%	3.4%	9.0%	4.8%	-5.7%	5.7%	11.5%	-21.4%	10.3%	10.4%
Real Estate Composite	8.4%	14.4%	11.0%			-				-	
NFI	7.8%	13.9%	11.5%	12.9%	9.8%	15.0%	15.3%	-30.4%	-10.7%	14.8%	15.3%
Rreef America II	8.1%	15.6%	12.0%							-	
NFI	7.8%	13.9%	11.5%	12.9%	9.8%	15.0%	15.3%	-30.4%	-10.7%	14.8%	15.3%
Cornerstone Patriot Fund	8.6%	13.0%	_					-	-	-	
NFI	7.8%	13.9%	11.5%	12.9%	9.8%	15.0%	15.3%	-30.4%	-10.7%	14.8%	15.3%

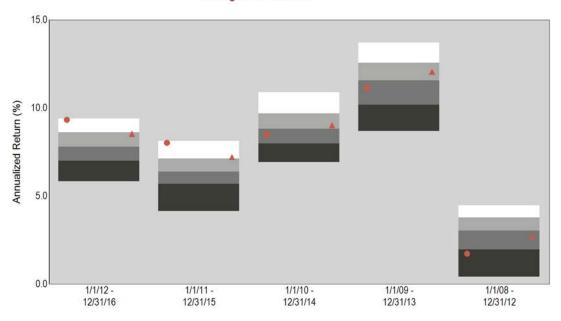
Total Fund vs. Peer Universe

Market Value: \$696.8 Million and 100.0% of Fund

Annualized Return vs. Annualized Standard Deviation 5 Years Ending December 31, 2016



Rolling 5 Year Returns



		Return (Rank)										
	5th Percentile	9.4		8.1		10.9		13.7		4.5		
2	25th Percentile	8.6		7.1		9.7		12.6		3.8		
1	Median	7.8		6.4		8.8		11.6		3.1		
7	75th Percentile	7.0		5.7		8.0		10.2		2.0		
9	95th Percentile	5.8		4.2		6.9		8.7		0.4		
#	of Portfolios	109		210		168		148		130		
•	Total Fund Composite Total Fund Composite Benchmark	9.3 8.5	(7) (26)	8.0 7.2	(6) (24)	8.5 9.0	(61) (45)	11.2 12.1	(59) (42)	1.7 2.7	(81) (56)	

Private Equity Composite

Annualized Performance

Asset Class	Fund Company	Vintage Yr.	Perf. as of:	Net IRR
Venture	Birchmere Ventures III	2005	9/30/2016	-8.7%
Venture	Draper Triangle Venture II	2004	9/30/2016	3.5%
Venture	Draper Triangle Venture III	2013	9/30/2016	
Venture	Novitas Capital Partners III	2003	9/30/2016	-25.8%
Global Diversified FoFs	Hirtle Callaghan PEP III	2003	9/30/2016	17.2%
Global Diversified FoFs	Hirtle Callaghan PEP IV	2004	9/30/2016	9.6%
Global Diversified FoFs	Hirtle Callaghan PEP V	2006	9/30/2016	2.5%
Mezzanine	Crescent Mezz Partners VI	2013	9/30/2016	8.2%
Mezzanine	Crescent Mezz Partners VII	2016	12/31/2016	
Total Private Equity				

Since Inception Cash Flows

Asset Class	Fund Company	Commitment	Capital Calls	Distributions	Remaining Callable Amt.	Ending Value	¹ Cash Multiple
Venture	Direkwana Vanturaa III	61 000 000	64 000 000	6002 070	60	620.047	0.0
Venture	Birchmere Ventures III	\$1,000,000	\$1,000,000	\$893,272	\$0	\$39,017	0.9
Venture	Draper Triangle Venture II	\$1,000,000	\$1,000,000	\$1,059,426	\$0	\$518,924	1.6
Venture	Draper Triangle Venture III	\$2,000,000	\$940,362	\$9,817	\$1,059,638	\$768,084	0.8
Venture	Novitas Capital Partners III	\$1,000,000	\$989,904	\$423,452	\$0	\$40,314	0.5
Global Diversified FoFs	Hirtle Callaghan PEP III	\$8,000,000	\$7,600,835	\$11,707,286	\$0	\$838,094	1.7
Global Diversified FoFs	Hirtle Callaghan PEP IV	\$8,000,000	\$7,418,650	\$9,933,981	\$0	\$1,149,151	1.5
Global Diversified FoFs	Hirtle Callaghan PEP V	\$3,000,000	\$2,481,360	\$1,858,376	\$0	\$1,017,071	1.2
Mezzanine	Crescent Mezz Partners VI	\$10,000,000	\$9,550,643	\$3,492,409	\$1,851,528	\$7,561,105	1.2
Mezzanine	Crescent Mezz Partners VII	\$10,000,000	\$825,207	\$0	\$9,174,793	\$825,207	
Total Private Equity		\$44,000,000	\$31,806,961	\$29,378,019	\$12,085,959	\$12,756,967	1.3

¹ Calculated as the sum of the distributions and ending value divided by the amount of all capital calls.

Investment Manager Statistics

Market Value: \$696.8 Million and 100.0% of Fund

3 Years Ending December 31, 2016

	Sharpe Ratio	Tracking Error	Alpha	Beta	R-Squared	Information Ratio	Standard Deviation	Up Mkt Capture Ratio Anlzd	Down Mkt Capture Ratio Anlzd
Federated Investors	1.1	1.3%	0.2%	0.8	0.9	0.3	1.6%	96.5%	68.0%
BBgBarc US Aggregate TR	0.8	-		-	-		1.8%		
BlackRock Total Return Fund	1.1	1.0%	0.2%	1.0	0.9	1.0	1.8%	116.4%	90.6%
BBgBarc US Aggregate TR	0.8						1.8%		
Frontier Capital Management	0.6	6.1%	0.0%	1.3	0.9	0.3	7.3%	133.8%	131.9%
Russell 2500	0.7						5.1%		
Guyasuta Investment Advisors	0.6	5.6%	0.6%	0.9	0.8	0.3	6.7%	97.8%	74.3%
Russell 2000	0.5						6.5%		
MFS International Equity Fund	-0.2	2.2%	0.0%	0.9	1.0	0.1	4.6%	89.6%	89.5%
MSCI EAFE	-0.2						4.9%		
SSgA Active Emerging Markets Fund	-0.1	2.1%	0.2%	1.0	1.0	0.5	6.8%	106.5%	96.0%
MSCI Emerging Markets	-0.2			-	-		7.0%		

5 Years Ending December 31, 2016

	Sharpe Ratio	Tracking Error	Alpha	Beta	R-Squared	Information Ratio	Standard Deviation	Up Mkt Capture Ratio Anlzd	Down Mkt Capture Ratio Anlzd
Federated Investors	1.1	1.3%	0.4%	0.9	0.8	0.9	1.5%	116.8%	67.6%
BBgBarc US Aggregate TR	0.7	-			-		1.6%		
BlackRock Total Return Fund	1.2	1.5%	0.5%	1.0	0.8	1.5	1.7%	144.5%	71.9%
BBgBarc US Aggregate TR	0.7						1.6%		
Frontier Capital Management	1.2	5.0%	0.0%	1.1	0.9	0.4	6.9%	117.9%	123.5%
Russell 2500	1.3						5.7%		
Guyasuta Investment Advisors	1.2	5.4%	0.6%	1.0	0.9	0.5	7.1%	109.4%	84.9%
Russell 2000	1.1	-					6.4%		
MFS International Equity Fund	0.6	2.7%	0.1%	1.0	0.9	0.1	6.0%	98.7%	93.2%
MSCI EAFE	0.5						5.9%		
SSgA Active Emerging Markets Fund	0.1	2.4%	0.0%	1.0	1.0	0.0	7.1%	99.8%	98.9%
MSCI Emerging Markets	0.1	-		-	-		7.3%	-	

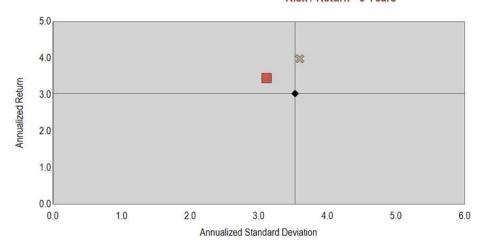
Fixed Income Composite

Characteristics

As of December 31, 2016

Market Value: \$71.5 Million and 10.3% of Fund

Risk / Return - 3 Years



- Federated Investors
- BlackRock Total Return Fund
- BBgBarc US Aggregate TR

	Characteristics	
	Portfolio	Index
	Q4-16	Q4-16
Yield to Maturity	2.7%	2.6%
Avg. Eff. Maturity	7.8 yrs.	8.2 yrs.
Avg. Duration	5.7 yrs.	5.9 yrs.
Avg. Quality	А	

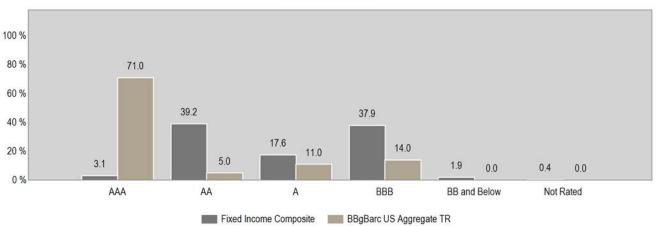
Region	Number Of Assets
United States	1,485
Europe Ex U.K.	4
United Kingdom	1
Pacific Basin Ex Japan	0
Emerging Markets	3
Other	12

Sector						
	Portfolio	Index				
	Q4-16	Q4-16				
UST/Agency	24.8%	44.0%				
Corporate	47.5%	26.0%				
MBS	25.1%	30.0%				
ABS	3.2%					
Foreign	2.0%	-				
Muni	1.1%					
Other	-3.7%					

	Q4-16
<1 Year	9.6%
1-3 Years	25.9%
3-5 Years	15.5%
5-7 Years	11.2%
7-10 Years	22.6%
10-15 Years	1.3%
15-20 Years	0.5%
>20 Years	13.4%
Not Rated/Cash	0.0%

Maturity

Quality Distribution

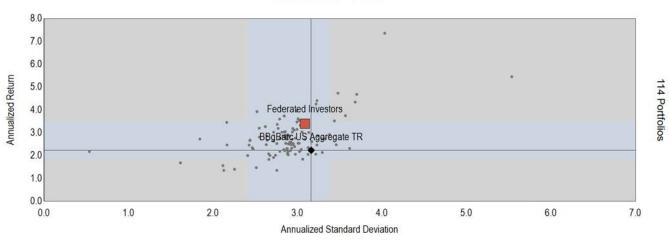


Federated Investors

Characteristics

As of December 31, 2016 Market Value: \$52.3 Million and 7.5% of Fund



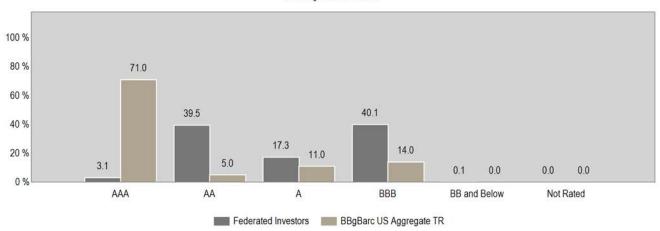


	Characteristics			Sector			Maturity
	Portfolio	Index		Portfolio	Index		Q4-16
	Q4-16	Q4-16		Q4-16	Q4-16	<1 Year	9.8%
Yield to Maturity	2.7%	2.6%	UST/Agency	19.7%	44.0%	1-3 Years	26.7%
Avg. Eff. Maturity	7.5 yrs.	8.2 yrs.	Corporate	49.0%	26.0%	3-5 Years	12.6%
Avg. Duration	5.5 yrs.	5.9 yrs.	MBS	27.3%	30.0%	5-7 Years	11.3%
Avg. Quality	А		ABS	2.9%		7-10 Years	25.4%
			Foreign	1.1%		10-15 Years	1.5%
		Ni mahan Of	Muni			15-20 Years	0.3%
Region		Number Of Assets	Other			>20 Years	12.3%
United States		254				Not Rated/Cash	0.0%

Quality Distribution

0

254



Pacific Basin Ex Japan

Other

Total

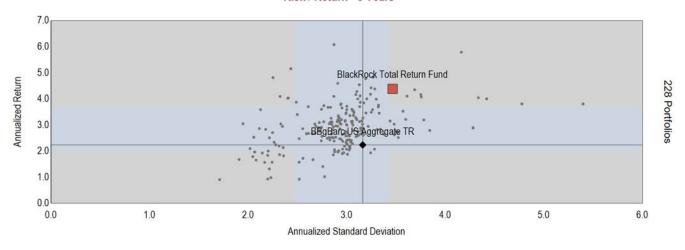
BlackRock Total Return Fund

Characteristics

As of December 31, 2016

Market Value: \$19.2 Million and 2.8% of Fund

Risk / Return - 5 Years



Characteristics						
	Portfolio	Index				
	Q4-16	Q4-16				
Yield to Maturity	2.8%	2.6%				
Avg. Eff. Maturity	8.9 yrs.	8.2 yrs.				
Avg. Duration	6.3 yrs.	5.9 yrs.				
Avg. Quality	A					

Region	Number Of Assets
United States	1,248
Europe Ex U.K.	4
United Kingdom	1
Pacific Basin Ex Japan	0
Emerging Markets	3
Other	12

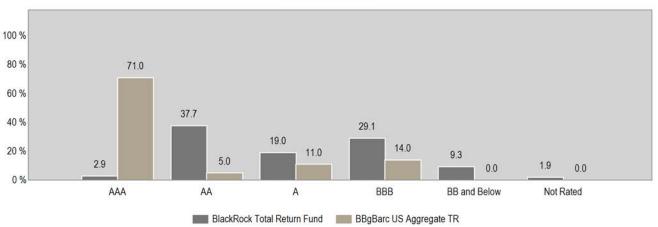
	Portfolio	Index
	Q4-16	Q4-16
UST/Agency	43.7%	44.0%
Corporate	41.9%	26.0%
MBS	17.2%	30.0%
ABS	4.4%	
Foreign	5.1%	
Muni	5.0%	
Other	-17.3%	

Sector

	Q4-16
<1 Year	8.9%
1-3 Years	22.7%
3-5 Years	26.1%
5-7 Years	10.9%
7-10 Years	12.3%
10-15 Years	0.6%
15-20 Years	1.2%
>20 Years	17.3%
Not Rated/Cash	0.0%

Maturity

Quality Distribution



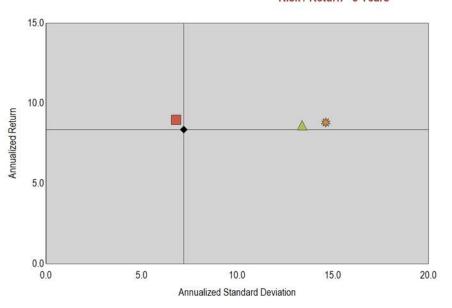
U.S. Equity Composite

As of December 31, 2016

Characteristics

Market Value: \$155.3 Million and 22.3% of Fund

Risk / Return - 3 Years



- SSgA S&P 500 Index Fund
- Frontier Capital Management
- Guyasuta Investment Advisors
- Dow Jones U.S. Total Stock Market

Characteristics

	Portfolio	Dow Jones U.S. Total Stock Market
Number of Holdings	795	3,834
Weighted Avg. Market Cap. (\$B)	88.0	114.0
Median Market Cap. (\$B)	12.4	0.8
Price To Earnings	24.3	23.6
Price To Book	4.3	3.6
Price To Sales	3.1	3.2
Return on Equity (%)	17.9	16.3
Yield (%)	1.8	1.9
Beta	1.2	1.0
R-Squared	1.0	1.0

Characteristics

	Portfolio	Dow Jones U.S. Total Stock Market
INDUSTRY SECTOR DISTRIBUTION (% Equity)		
Energy	4.9	7.0
Materials	9.3	3.3
Industrials	16.6	10.8
Consumer Discretionary	8.8	12.5
Consumer Staples	6.5	8.3
Health Care	12.9	13.0
Financials	11.1	15.4
Information Technology	20.0	20.0
Telecommunication Services	1.9	2.4
Utilities	2.0	3.2
Real Estate	4.3	4.0
Unclassified	0.1	0.0

Largest Holdings

	Ena weight	Return
APPLE	2.0	3.0
MICROSOFT	1.5	8.6
EXXON MOBIL	1.2	4.3
UNITED CONTINENTAL HDG.	1.0	38.9
JOHNSON & JOHNSON	1.0	-1.8

Top Contributors

	Beg Wgt	Return	Contribution
UNITED CONTINENTAL HDG.	0.8	38.9	0.3
JP MORGAN CHASE & CO.	0.8	30.5	0.2
APPLIED INDL.TECHS.	0.8	27.7	0.2
BANK OF AMERICA	0.5	41.7	0.2
CLARCOR	0.7	27.4	0.2

Bottom Contributors

	Beg Wgt	Return	Contribution
AMAZON.COM	1.1	-10.4	-0.1
FACEBOOK CLASS A	1.0	-10.3	-0.1
DEXCOM	0.3	-31.9	-0.1
ILLUMINA	0.3	-29.5	-0.1
BRIGHTCOVE	0.2	-38.3	-0.1

	Small Cap	Small/ Mid	Mid Cap	Mid/ Large	Large Cap
U.S. Equity Composite	17.9%	16.4%	14.4%	20.7%	30.5%
Dow Jones U.S. Total Stock Market	6.4%	9.8%	16.6%	27.2%	40.0%
Weight Over/Under	11.5%	6.6%	-2.1%	-6.5%	-9.5%

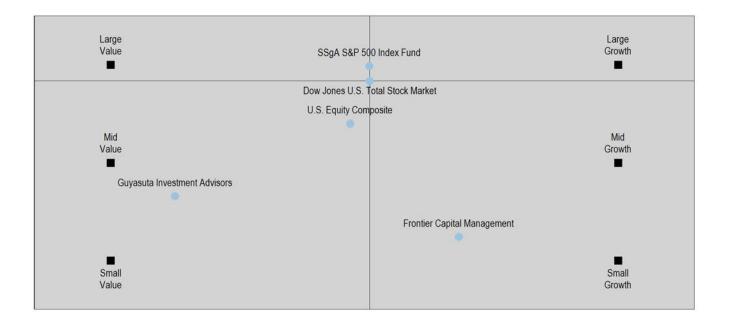


Style

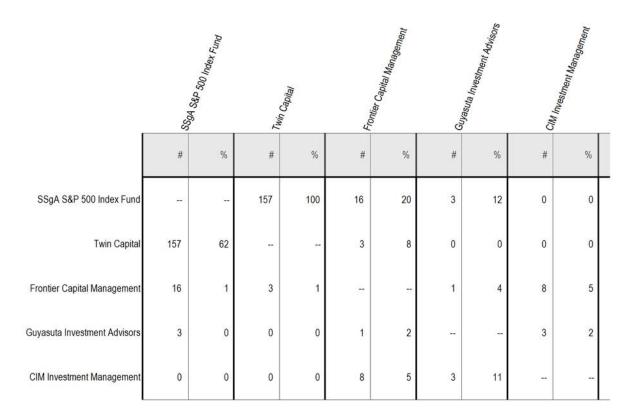
Market Value: \$155.3 Million and 22.3% of Fund

As of December 31, 2016

U.S. Equity Style Map 3 Years Ending December 31, 2016

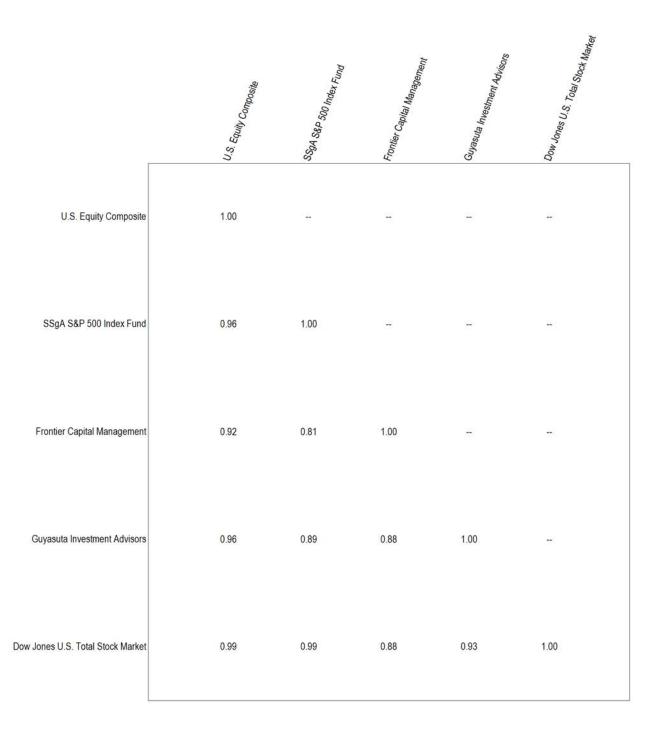


Common Holdings Matrix



As of December 31, 2016

Correlation Matrix 3 Years

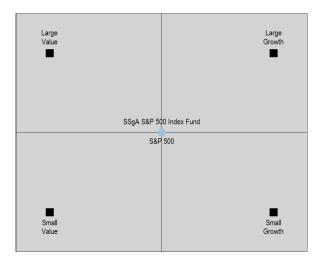


SSgA S&P 500 Index Fund

Characteristics

As of December 31, 2016 Market Value: \$93.4 Million and 13.4% of Fund

Style Drift - 1 Year



Characteristics

	Portfolio	S&P 500
Number of Holdings	507	505
Weighted Avg. Market Cap. (\$B)	138.5	138.5
Median Market Cap. (\$B)	18.7	18.8
Price To Earnings	23.1	22.3
Price To Book	4.7	4.4
Price To Sales	3.5	3.3
Return on Equity (%)	20.8	18.5
Yield (%)	2.1	2.1
Beta	1.0	1.0
R-Squared	1.0	1.0

	End Weight	Return
APPLE	3.1	3.0
MICROSOFT	2.4	8.6
EXXON MOBIL	1.9	4.3
JOHNSON & JOHNSON	1.6	-1.8
BERKSHIRE HATHAWAY 'B'	1.6	12.8

Largest Holdings

Гор	Contributors
	Dan Wat

	Beg Wgt	Return	Contribution
JP MORGAN CHASE & CO.	1.2	30.5	0.4
BANK OF AMERICA	0.8	41.7	0.3
WELLS FARGO & CO	1.0	25.5	0.3
MICROSOFT	2.3	8.6	0.2
CITIGROUP	0.7	26.2	0.2

Bottom Contributors

Beg Wgt	Return	Contribution
1.7	-10.4	-0.2
1.5	-10.3	-0.2
0.6	-17.1	-0.1
0.6	-11.8	-0.1
1.2	-5.6	-0.1
	1.7 1.5 0.6 0.6	1.7 -10.4 1.5 -10.3 0.6 -17.1 0.6 -11.8

Market Capitalization

	Small Cap	Small/ Mid	Mid Cap	Mid/ Large	Large Cap
SSgA S&P 500 Index Fund	0.0%	1.7%	16.6%	32.7%	49.0%
S&P 500	0.0%	1.5%	16.7%	32.8%	49.0%
Weight Over/Under	0.0%	0.1%	-0.1%	-0.1%	0.0%

Characteristics

	Portfolio	S&P 500			
INDUSTRY SECTOR DISTRIBUTION (% Equity)					
Energy	7.4	7.6			
Materials	2.8	2.9			
Industrials	10.0	10.2			
Consumer Discretionary	11.7	12.0			
Consumer Staples	9.1	9.4			
Health Care	13.3	13.6			
Financials	14.4	14.8			
Information Technology	20.2	20.8			
Telecommunication Services	2.6	2.7			
Utilities	3.1	3.2			
Real Estate	2.8	2.9			
Unclassified	0.2	0.0			

Attribution

As of December 31, 2016 Market Value: \$93.4 Million and 13.4% of Fund

Sector Attribution vs S&P 500

GICS Sector	Portfolio Weight	Index Weight	Excess Weight	Portfolio USD Return	Index USD Return	Excess Return	Allocation Effect (Local)	Selection Effect (Local)	Active Contrib.	Passive Contrib.	Total Contrib.
Energy	7.3%	7.3%	0.0%	7.2%	7.3%	0.0%	0.0%	0.0%	0.0%	0.2%	0.2%
Materials	2.9%	2.8%	0.1%	4.3%	4.8%	-0.6%	0.0%	0.0%	0.0%	0.0%	0.0%
Industrials	10.0%	10.3%	-0.3%	7.2%	6.8%	0.4%	0.0%	0.0%	0.0%	0.3%	0.3%
Consumer Discretionary	12.3%	12.3%	0.0%	2.3%	2.3%	0.0%	0.0%	0.0%	0.0%	-0.2%	-0.2%
Consumer Staples	9.9%	9.9%	0.0%	-1.9%	-1.9%	0.0%	0.0%	0.0%	0.0%	-0.6%	-0.6%
Health Care	14.7%	14.4%	0.3%	-4.0%	-4.0%	0.1%	0.0%	0.0%	0.0%	-1.1%	-1.1%
Financials	12.8%	15.8%	-3.1%	21.1%	16.2%	4.9%	-0.4%	0.6%	0.3%	2.0%	2.2%
Information Technology	21.2%	21.2%	0.0%	1.2%	1.2%	0.0%	0.0%	0.0%	0.0%	-0.6%	-0.6%
Telecommunication Services	2.6%	2.6%	0.0%	4.8%	4.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Utilities	3.3%	3.3%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.1%
Real Estate	3.1%	0.0%	3.1%	-4.5%	-4.5%	0.0%	-0.3%	0.0%	-0.3%	0.0%	-0.3%
Total				3.8%	3.8%	0.0%	-0.7%	0.7%	0.0%	0.0%	0.0%

SSgA S&P 500 Index Fund Performance Attribution vs. S&P 500

	Total	Selection	Allocation	Interaction
	Effects	Effect	Effect	Effects
Energy	0.0%	0.0%	0.0%	0.0%
Materials	0.0%	0.0%	0.0%	0.0%
Industrials	0.0%	0.0%	0.0%	0.0%
Consumer Discretionary	0.0%	0.0%	0.0%	0.0%
Consumer Staples	0.0%	0.0%	0.0%	0.0%
Health Care	0.0%	0.0%	0.0%	0.0%
Financials	0.0%	0.8%	-0.6%	-0.2%
Information Technology	0.0%	0.0%	0.0%	0.0%
Telecommunication Services	0.0%	0.0%	0.0%	0.0%
Utilities	0.0%	0.0%	0.0%	0.0%
Real Estate	-0.1%	0.0%	-0.1%	0.0%
Cash	0.0%	0.0%	0.0%	0.0%
Portfolio	-0.1%	= 0.8%	+ -0.8%	+ -0.2%

Market Cap Attribution vs. S&P 500

	Portfolio Weight	Index Weight	Excess Weight	Portfolio USD Return	Index USD Return	Excess USD Return	Allocation Effect (Local)	Selection Effect (Local)	Active Contrib.	Passive Contrib.	Total Contrib.
Market Cap. Quintile (\$Bil)											
1) Above 239.58	19.2%	19.2%	0.0%	2.6%	2.6%	0.0%	0.0%	0.0%	0.0%	-0.2%	-0.2%
2) 124.83 - 239.58	20.5%	20.5%	0.0%	5.6%	5.6%	0.0%	0.0%	0.0%	0.0%	0.4%	0.4%
3) 55.14 - 124.83	20.2%	20.2%	0.0%	2.9%	2.9%	0.0%	0.0%	0.0%	0.0%	-0.2%	-0.2%
4) 24.86 - 55.14	20.2%	20.2%	0.0%	3.9%	3.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
5) 0.00 - 24.86	20.0%	20.0%	0.0%	4.1%	4.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%
Total				3.8%	3.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Twin Capital

Characteristics

As of December 31, 2016 Market Value: \$2.1 Million and 0.3% of Fund

Characteristics

	Portfolio	S&P 500
Number of Holdings	157	505
Weighted Avg. Market Cap. (\$B)	140.2	138.5
Median Market Cap. (\$B)	42.4	18.8
Price To Earnings	21.1	22.3
Price To Book	4.5	4.4
Price To Sales	3.4	3.3
Return on Equity (%)	21.5	18.5
Yield (%)	2.1	2.1
Beta		1.0
R-Squared		1.0

Characteristics

	Portfolio	S&P 500
INDUSTRY SECTOR DISTRIBUTION (% E		
Energy	7.9	7.6
Materials	2.9	2.9
Industrials	9.9	10.2
Consumer Discretionary	12.0	12.0
Consumer Staples	9.1	9.4
Health Care	14.0	13.6
Financials	15.6	14.8
Information Technology	20.7	20.8
Telecommunication Services	2.7	2.7
Utilities	2.9	3.2
Real Estate	2.3	2.9
Unclassified	0.0	0.0

Largest Holdings

	End Weight	Return
APPLE	3.2	3.0
MICROSOFT	2.6	8.6
JOHNSON & JOHNSON	2.0	-1.8
JP MORGAN CHASE & CO.	1.9	30.5
ALPHABET 'A'	1.9	-1.4

Top Contributors

	End Weight	Return	Contribution
BANK OF AMERICA	1.4	41.7	0.6
JP MORGAN CHASE & CO.	1.9	30.5	0.6
LINCOLN NATIONAL	0.9	41.8	0.4
KEYCORP	0.7	50.9	0.3
ZIONS BANCORP.	0.9	39.0	0.3

Bottom Contributors

	End Weight	Return	Contribution
AMAZON.COM	1.8	-10.4	-0.2
EDWARDS LIFESCIENCES	0.7	-22.3	-0.2
FACEBOOK CLASS A	1.3	-10.3	-0.1
SIMON PROPERTY GROUP	0.7	-13.4	-0.1
AMGEN	0.8	-11.8	-0.1

	Small Cap	Small/ Mid	Mid Cap	Mid/ Large	Large Cap
Twin Capital	0.0%	1.9%	18.9%	30.5%	48.8%
S&P 500	0.0%	1.5%	16.7%	32.8%	49.0%
Weight Over/Under	0.0%	0.4%	2.2%	-2.3%	-0.2%

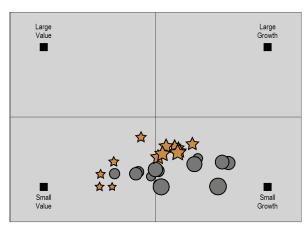
Frontier Capital Management

Characteristics

Market Value: \$29.3 Million and 4.2% of Fund

As of December 31, 2016

Style Drift - 5 Years



Frontier Capital Management

Russell 2500

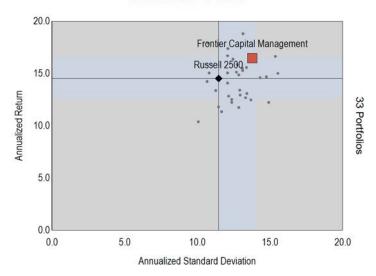
Characteristics

	Portfolio	Russell 2500
Number of Holdings	132	2,476
Weighted Avg. Market Cap. (\$B)	5.5	4.2
Median Market Cap. (\$B)	2.4	1.1
Price To Earnings	23.5	24.8
Price To Book	3.6	3.2
Price To Sales	2.6	2.3
Return on Equity (%)	14.5	12.1
Yield (%)	0.7	1.4
Beta	1.3	1.0
R-Squared	0.9	1.0

Characteristics

	Portfolio	Russell 2500
INDUSTRY SECTOR DISTRIBUTION (% E	quity)	
Energy	1.5	5.0
Materials	15.6	6.0
Industrials	23.2	15.7
Consumer Discretionary	6.8	12.7
Consumer Staples	0.3	3.4
Health Care	9.3	10.7
Financials	9.7	17.8
Information Technology	31.8	14.6
Telecommunication Services	1.8	0.6
Utilities	0.0	3.7
Real Estate	0.0	9.8
Unclassified	0.0	0.0

Risk / Return - 5 Years



Largest Holdings

	End Weight	Return
UNITED CONTINENTAL HDG.	5.4	38.9
ROVI	3.0	7.3
MASTEC	2.2	28.6
BERRY PLASTICS GROUP	2.0	11.1
COGENT COMMS.HOLDINGS	1.8	13.5

Top Contributors

Beg Wgt	Return	Contribution
4.0	38.9	1.6
1.7	28.6	0.5
0.9	48.5	0.5
1.2	28.2	0.3
1.2	27.8	0.3
	4.0 1.7 0.9 1.2	4.0 38.9 1.7 28.6 0.9 48.5 1.2 28.2

Bottom Contributors

	Beg Wgt	Return	Contribution
DEXCOM	1.5	-31.9	-0.5
BRIGHTCOVE	1.2	-38.3	-0.5
ILLUMINA	1.1	-29.5	-0.3
COEUR MINING	1.3	-23.2	-0.3
KRATON PERF.POLYMERS	1.5	-18.7	-0.3

	Small Cap	Small/ Mid	Mid Cap	Mid/ Large	Large Cap
Frontier Capital Management	48.6%	30.1%	19.1%	2.1%	0.0%
Russell 2500	35.1%	51.6%	13.3%	0.0%	0.0%
Weight Over/Under	13.5%	-21.4%	5.9%	2.1%	0.0%



Frontier Capital Management

Attribution

As of December 31, 2016 Market Value: \$29.3 Million and 4.2% of Fund

Sector Attribution vs Russell 2500

GICS Sector	Portfolio Weight	Index Weight	Excess Weight	Portfolio USD Return	Index USD Return	Excess Return	Allocation Effect (Local)	Selection Effect (Local)	Active Contrib.	Passive Contrib.	Total Contrib.
Energy	1.7%	4.7%	-3.0%	-5.1%	9.0%	-14.2%	-0.1%	-0.2%	-0.3%	0.1%	-0.2%
Materials	16.5%	6.0%	10.5%	1.7%	5.6%	-3.9%	-0.1%	-0.6%	-0.7%	0.0%	-0.7%
Industrials	20.6%	15.1%	5.5%	15.4%	11.2%	4.2%	0.3%	0.9%	1.2%	0.8%	1.9%
Consumer Discretionary	6.2%	12.8%	-6.7%	13.2%	5.3%	7.8%	0.1%	0.5%	0.5%	-0.1%	0.4%
Consumer Staples	0.5%	3.4%	-3.0%	-25.2%	0.8%	-26.1%	0.2%	-0.1%	0.0%	-0.2%	-0.1%
Health Care	10.9%	11.8%	-0.9%	-16.3%	-6.0%	-10.3%	0.1%	-1.1%	-1.0%	-1.4%	-2.4%
Financials	8.5%	16.0%	-7.5%	19.2%	19.5%	-0.4%	-1.0%	0.0%	-1.0%	2.1%	1.1%
Information Technology	33.4%	15.1%	18.3%	1.1%	3.4%	-2.3%	-0.5%	-0.8%	-1.3%	-0.4%	-1.7%
Telecommunication Services	1.7%	0.7%	1.0%	13.5%	4.6%	8.9%	0.0%	0.2%	0.1%	0.0%	0.1%
Utilities	0.0%	3.8%	-3.8%		3.9%		0.1%	0.0%	0.1%	-0.1%	0.0%
Real Estate	0.0%	10.5%	-10.5%		-0.8%		0.7%	0.0%	0.7%	-0.7%	0.0%
Total				4.5%	6.2%	-1.7%	-0.3%	-1.4%	-1.7%	0.0%	-1.7%

Performance Attribution vs. Russell 2500

	Total	Selection	Allocation	Interaction
	Effects	Effect	Effect	Effects
Energy	-0.5%	-0.7%	-0.3%	0.4%
Materials	-0.1%	-0.2%	0.6%	-0.4%
Industrials	1.5%	0.6%	0.6%	0.2%
Consumer Discretionary	0.1%	1.0%	-0.4%	-0.5%
Consumer Staples	-0.1%	-0.9%	0.0%	0.8%
Health Care	-1.1%	-1.2%	0.1%	0.1%
Financials	-1.5%	-0.1%	-1.5%	0.0%
Information Technology	-0.1%	-0.3%	0.6%	-0.4%
Telecommunication Services	0.2%	0.1%	0.0%	0.1%
Utilities	-0.1%		-0.1%	
Real Estate	0.1%	-	0.1%	
Cash	0.0%			
Portfolio	-1.7%	= -1.7%	+ -0.3%	+ 0.3%

Market Cap Attribution vs. Russell 2500

	Portfolio Weight	Index Weight	Excess Weight	Portfolio USD Return	Index USD Return	Excess USD Return	Allocation Effect (Local)	Selection Effect (Local)	Active Contrib.	Passive Contrib.	Total Contrib.
Market Cap. Quintile (\$Bil)											
1) Above 6.40	26.3%	20.0%	6.3%	4.5%	2.5%	2.0%	-0.2%	0.5%	0.3%	-0.7%	-0.4%
2) 4.40 - 6.40	8.1%	19.9%	-11.9%	12.8%	5.8%	7.0%	0.0%	0.6%	0.6%	-0.1%	0.5%
3) 2.87 - 4.40	12.7%	20.0%	-7.3%	8.1%	5.1%	2.9%	0.1%	0.4%	0.4%	-0.2%	0.2%
4) 1.57 - 2.87	29.0%	19.9%	9.1%	3.2%	7.3%	-4.1%	0.1%	-1.2%	-1.1%	0.2%	-0.9%
5) 0.00 - 1.57	23.9%	20.1%	3.8%	1.4%	10.1%	-8.7%	0.1%	-2.1%	-1.9%	0.8%	-1.1%
Total				4.5%	6.2%	-1.7%	0.1%	-1.8%	-1.7%	0.0%	-1.7%

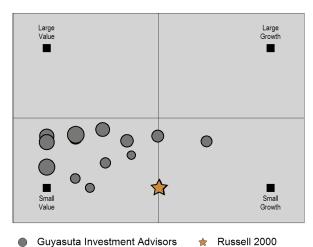
Guyasuta Investment Advisors

Characteristics

Market Value: \$28.3 Million and 4.1% of Fund

As of December 31, 2016

Style Drift - 5 Years



Russell 2000

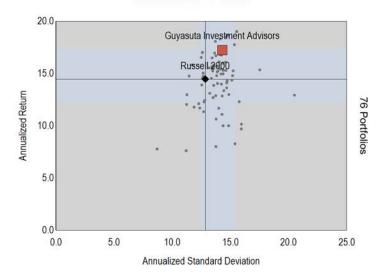
Characteristics

	Portfolio	Russell 2000
Number of Holdings	27	1,978
Weighted Avg. Market Cap. (\$B)	3.6	2.1
Median Market Cap. (\$B)	4.0	0.8
Price To Earnings	29.2	25.1
Price To Book	4.4	3.0
Price To Sales	2.1	2.1
Return on Equity (%)	11.7	10.1
Yield (%)	1.7	1.1
Beta	0.9	1.0
R-Squared	0.8	1.0

Characteristics

	Portfolio	Russell 2000
INDUSTRY SECTOR DISTRIBUTION (% E	quity)	
Energy	0.0	3.8
Materials	26.2	4.9
Industrials	33.4	14.6
Consumer Discretionary	0.0	12.5
Consumer Staples	3.9	3.0
Health Care	15.3	12.1
Financials	0.0	20.2
Information Technology	8.1	17.0
Telecommunication Services	0.0	0.7
Utilities	0.0	3.5
Real Estate	13.2	7.6
Unclassified	0.0	0.1

Risk / Return - 5 Years



Largest Holdings

	End Weight	Return
CLARCOR	4.8	27.4
NN	4.6	4.8
EQUITY ONE	4.5	1.0
FIRST POTOMAC REAL.TST.	4.4	21.3
APPLIED INDL.TECHS.	4.3	27.7

Top Contributors

Beg Wgt	Return	Contribution
4.8	27.7	1.3
4.4	27.4	1.2
4.9	24.3	1.2
3.6	26.8	1.0
3.7	23.8	0.9
	4.8 4.4 4.9 3.6	4.8 27.7 4.4 27.4 4.9 24.3 3.6 26.8

Bottom Contributors

	Beg Wgt	Return	Contribution
PATTERSON COMPANIES	4.4	-10.2	-0.4
PERKINELMER	4.5	-6.9	-0.3
APTARGROUP	3.2	-4.7	-0.2
TELEFLEX	3.3	-3.9	-0.1
IDEX	3.5	-3.4	-0.1

	Small Cap	Small/ Mid	Mid Cap	Mid/ Large	Large Cap
Guyasuta Investment Advisors	44.9%	51.6%	3.5%	0.0%	0.0%
Russell 2000	71.8%	27.6%	0.7%	0.0%	0.0%
Weight Over/Under	-26.9%	24.0%	2.9%	0.0%	0.0%



Guyasuta Investment Advisors

Attribution

As of December 31, 2016 Market Value: \$28.3 Million and 4.1% of Fund

Sector Attribution vs Russell 2000

GICS Sector	Portfolio Weight	Index Weight	Excess Weight	Portfolio USD Return	Index USD Return	Excess Return	Allocation Effect (Local)	Selection Effect (Local)	Active Contrib.	Passive Contrib.	Total Contrib.
Energy	0.0%	3.2%	-3.2%		17.7%		-0.3%	0.0%	-0.3%	0.3%	0.0%
Materials	26.1%	4.7%	21.4%	7.3%	11.4%	-4.1%	0.6%	-1.1%	-0.5%	0.1%	-0.4%
Industrials	36.7%	14.2%	22.5%	14.3%	12.5%	1.8%	0.8%	0.7%	1.5%	0.5%	2.0%
Consumer Discretionary	0.0%	12.7%	-12.7%		7.9%		0.1%	0.0%	0.1%	-0.1%	0.0%
Consumer Staples	0.0%	3.0%	-3.0%		6.4%		0.1%	0.0%	0.1%	-0.1%	0.0%
Health Care	16.0%	14.0%	2.0%	-5.6%	-6.3%	0.7%	-0.3%	0.1%	-0.2%	-2.1%	-2.3%
Financials	0.0%	18.0%	-18.0%		22.9%		-2.5%	0.0%	-2.5%	2.5%	0.0%
Information Technology	8.1%	17.7%	-9.6%	15.5%	4.7%	10.9%	0.4%	0.9%	1.3%	-0.7%	0.6%
Telecommunication Services	0.0%	0.8%	-0.8%		9.1%		0.0%	0.0%	0.0%	0.0%	0.0%
Utilities	0.0%	3.8%	-3.8%		5.3%		0.1%	0.0%	0.1%	-0.1%	0.0%
Real Estate	13.1%	7.9%	5.2%	6.6%	4.1%	2.5%	-0.2%	0.3%	0.1%	-0.4%	-0.3%
Total				8.4%	8.7%	-0.4%	-1.3%	0.9%	-0.4%	0.0%	-0.4%

Performance Attribution vs. Russell 2000

	Total	Selection	Allocation	Interaction
	Effects	Effect	Effect	Effects
Energy	-0.6%		-0.6%	-
Materials	1.4%	-0.2%	2.4%	-0.9%
Industrials	3.5%	0.3%	2.8%	0.4%
Consumer Discretionary	-1.0%		-1.0%	
Consumer Staples	-0.2%		-0.2%	-
Health Care	0.0%	0.1%	-0.1%	0.0%
Financials	-4.1%		-4.1%	
Information Technology	0.4%	1.9%	-0.4%	-1.0%
Telecommunication Services	-0.1%		-0.1%	
Utilities	-0.2%		-0.2%	
Real Estate	0.5%	0.2%	0.2%	0.1%
Cash	0.0%			-
Portfolio	-0.4%	= 2.3% +	-1.3% +	-1.4%

Market Cap Attribution vs. Russell 2000

	Portfolio Weight	Index Weight	Excess Weight	Portfolio USD Return	Index USD Return	Excess USD Return	Allocation Effect (Local)	Selection Effect (Local)	Active Contrib.	Passive Contrib.	Total Contrib.
Market Cap. Quintile (\$Bil)											
1) Above 2.81	51.8%	20.0%	31.8%	0.9%	7.9%	-7.0%	-0.3%	-3.6%	-3.9%	-0.2%	-4.1%
2) 2.04 - 2.81	4.1%	20.0%	-15.9%	4.3%	7.6%	-3.3%	0.2%	-0.1%	0.0%	-0.2%	-0.2%
3) 1.42 - 2.04	15.4%	20.0%	-4.6%	18.5%	8.2%	10.3%	0.0%	1.6%	1.6%	-0.1%	1.5%
4) 0.84 - 1.42	8.1%	20.0%	-12.0%	13.0%	8.7%	4.3%	0.0%	0.3%	0.4%	0.0%	0.3%
5) 0.00 - 0.84	20.7%	20.0%	0.7%	18.5%	11.3%	7.2%	0.0%	1.5%	1.5%	0.5%	2.0%
Total				8.4%	8.7%	-0.4%	0.0%	-0.3%	-0.4%	0.0%	-0.4%

CIM Investment Management

Characteristics

Market Value: \$2.2 Million and 0.3% of Fund

As of December 31, 2016

Characteristics

	Portfolio	Russell 2000
Number of Holdings	159	1,978
Weighted Avg. Market Cap. (\$B)	2.4	2.1
Median Market Cap. (\$B)	2.1	0.8
Price To Earnings	25.8	25.1
Price To Book	3.1	3.0
Price To Sales	2.6	2.1
Return on Equity (%)	12.5	10.1
Yield (%)	1.1	1.1
Beta		1.0
R-Squared		1.0

Characteristics

	Portfolio	Russell 2000
INDUSTRY SECTOR DISTRIBUTION (% E	quity)	
Energy	2.8	3.8
Materials	4.2	4.9
Industrials	13.6	14.6
Consumer Discretionary	16.5	12.5
Consumer Staples	3.2	3.0
Health Care	12.8	12.1
Financials	19.8	20.2
Information Technology	17.1	17.0
Telecommunication Services	0.0	0.7
Utilities	2.8	3.5
Real Estate	7.3	7.6
Unclassified	0.0	0.1

Largest Holdings

	End Weight	Return
MGIC INVESTMENT	1.4	27.4
WEBMD HEALTH	1.3	-0.3
AMC ENTERTAINMENT HDG. CL.A	1.3	8.9
AVISTA	1.2	-3.5
COLUMBIA BKG.SYS.	1.2	38.2

Top Contributors

	End Weight	Return	Contribution
COLUMBIA BKG.SYS.	1.2	38.2	0.5
TEXAS CAPITAL BANCSHARES	1.0	42.8	0.4
MGIC INVESTMENT	1.4	27.4	0.4
WEBSTER FINANCIAL	0.8	43.7	0.3
BOFI HOLDING	1.1	27.5	0.3

Bottom Contributors

	End Weight	Return	Contribution
SMITH & WESSON HLDG.	0.8	-20.7	-0.2
DEPOMED	0.5	-27.8	-0.1
SURGERY PARTNERS	0.6	-21.7	-0.1
VASCO DATA SCTY.INTL.	0.5	-22.5	-0.1
FINISH LINE 'A'	0.6	-18.2	-0.1

	Small Cap	Small/ Mid	Mid Cap	Mid/ Large	Large Cap
CIM Investment Management	64.1%	35.9%	0.0%	0.0%	0.0%
Russell 2000	71.8%	27.6%	0.7%	0.0%	0.0%
Weight Over/Under	-7.7%	8.4%	-0.7%	0.0%	0.0%

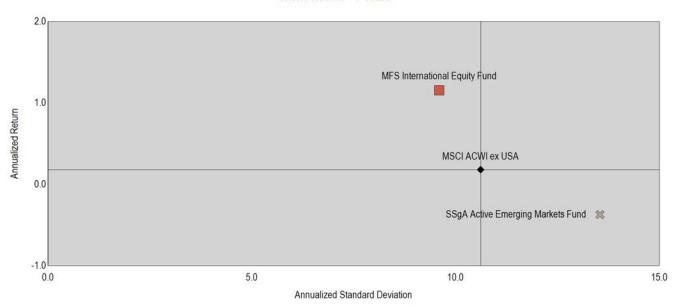
Non-U.S. Equity Composite

Characteristics

As of September 30, 2016

Market Value: \$70.8 Million and 10.3% of Fund

Risk / Return - 3 Years



Characteristics

	Portfolio	MSCI ACWI ex USA
Number of Holdings	129	1,853
Weighted Avg. Market Cap. (\$B)	62.0	51.2
Median Market Cap. (\$B)	20.6	6.8
Price To Earnings	22.3	19.9
Price To Book	3.9	2.6
Price To Sales	2.7	2.2
Return on Equity (%)	17.6	13.5
Yield (%)	2.6	3.0
Beta	0.9	1.0
R-Squared	1.0	1.0

Total	100.0%	100.0%
Other	0.0%	0.7%
Emerging Markets	8.0%	23.0%
Japan	12.8%	16.8%
Pacific Basin Ex Japan	5.8%	8.6%
United Kingdom	15.3%	13.2%
Europe Ex U.K.	50.4%	30.9%
United States	3.3%	0.0%
North America ex U.S.	4.3%	6.7%
Region	% of Total	% of Bench

Characteristics

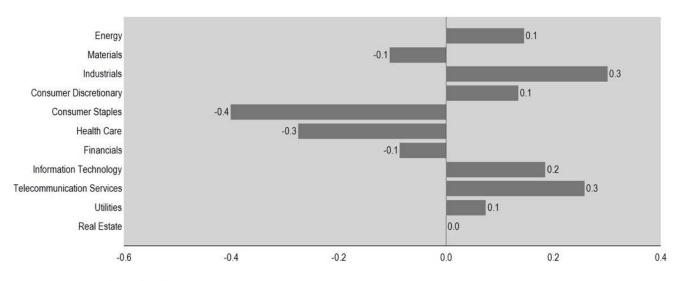
	Portfolio	MSCI ACWI ex USA
INDUSTRY SECTOR DISTRIBUTION (% Equity)		
Energy	2.1	6.6
Materials	7.1	7.5
Industrials	12.4	11.7
Consumer Discretionary	16.8	11.4
Consumer Staples	19.2	11.1
Health Care	14.1	8.6
Financials	13.4	21.7
Information Technology	12.1	9.6
Telecommunication Services	0.5	5.0
Utilities	1.2	3.4
Real Estate	0.0	3.5
Unclassified	0.0	0.0

	Small Cap	Mid Cap	Large Cap
Non-U.S. Equity Composite	2.0%	8.5%	89.5%
MSCI EAFE	5.0%	20.5%	74.5%

Market Value: \$70.8 Million and 10.3% of Fund

As of September 30, 2016

Active Contribution vs. MSCI ACWI ex USA



Non-U.S. Equity Composite

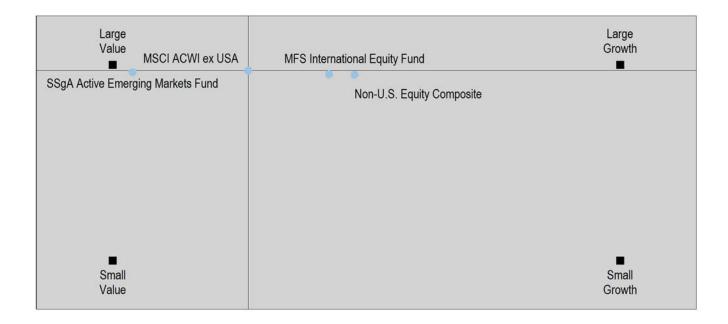
Market Cap Attribution vs. MSCI ACWI ex USA

	Portfolio Weight	Index Weight	Excess Weight	Portfolio USD Return	Index USD Return	Excess USD Return	Allocation Effect (Local)	Selection Effect (Local)	Active Contrib.	Passive Contrib.	Total Contrib.
Market Cap. Quintile (\$Bil)											
1) Above 79.39	21.5%	20.0%	1.5%	5.7%	4.2%	1.5%	0.0%	0.3%	0.3%	-0.5%	-0.3%
2) 36.20 - 79.39	24.5%	20.0%	4.5%	5.4%	7.0%	-1.6%	0.0%	-0.4%	-0.4%	0.0%	-0.3%
3) 18.68 - 36.20	29.0%	20.0%	8.9%	9.3%	9.2%	0.1%	0.2%	0.1%	0.3%	0.5%	0.8%
4) 8.58 - 18.68	17.5%	20.0%	-2.6%	4.7%	6.5%	-1.8%	0.0%	-0.3%	-0.3%	-0.1%	-0.4%
5) 0.00 - 8.58	7.5%	19.9%	-12.4%	11.4%	7.6%	3.8%	0.0%	0.2%	0.1%	0.1%	0.3%
Total				6.9%	6.9%	0.0%	0.2%	-0.1%	0.0%	0.0%	0.0%

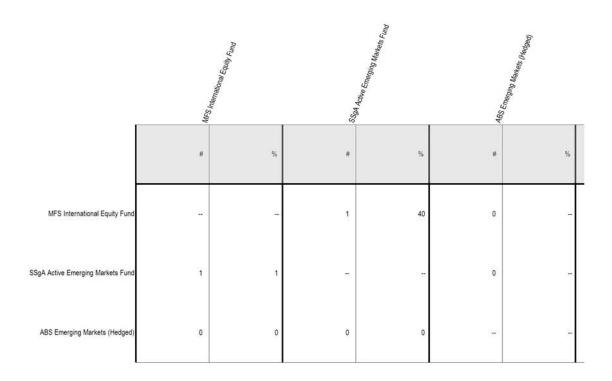
Market Value: \$70.8 Million and 10.3% of Fund

As of September 30, 2016

Equity Style Map 3 Years Ending September 30, 2016



Common Holdings Matrix



MFS International Equity Fund

Characteristics

As of September 30, 2016

Market Value: \$55.2 Million and 8.0% of Fund

Characteristics

	Portfolio	MSCI EAFE
Number of Holdings	77	927
Weighted Avg. Market Cap. (\$B)	61.5	52.2
Median Market Cap. (\$B)	31.5	8.9
Price To Earnings	22.2	20.5
Price To Book	3.6	2.4
Price To Sales	2.7	2.1
Return on Equity (%)	17.5	12.2
Yield (%)	2.7	3.2
Beta	0.9	1.0
R-Squared	1.0	1.0

Region	% of Total	% of Bench
North America ex U.S.	4.3%	0.0%
United States	3.4%	0.0%
Europe Ex U.K.	50.9%	44.1%
United Kingdom	15.5%	18.8%
Pacific Basin Ex Japan	5.9%	12.3%
Japan	12.9%	24.0%
Emerging Markets	7.1%	0.0%
Other	0.0%	0.7%
Total	100.0%	100.0%

Characteristics

	Portfolio	MSCI EAFE
INDUSTRY SECTOR DISTRIBUTION (%	Equity)	
Energy	2.1	4.8
Materials	7.1	7.5
Industrials	12.5	14.0
Consumer Discretionary	16.7	12.2
Consumer Staples	19.4	12.8
Health Care	14.2	11.4
Financials	13.5	19.2
Information Technology	11.6	5.5
Telecommunication Services	0.5	4.8
Utilities	1.2	3.7
Real Estate	0.0	4.0
Unclassified	0.0	0.0

	Small Cap	Mid Cap	Large Cap
MFS International Equity Fund	1.9%	8.5%	89.5%
MSCI EAFE	5.0%	20.5%	74.5%



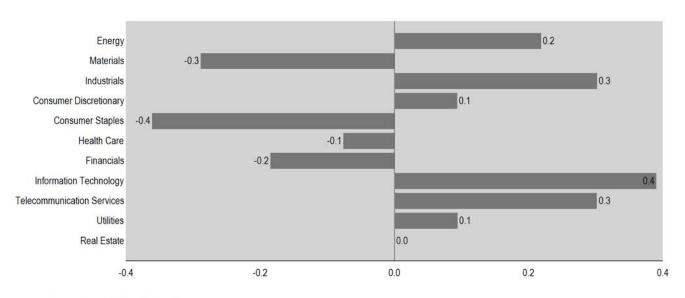
MFS International Equity Fund

Attribution

Market Value: \$55.2 Million and 8.0% of Fund

As of September 30, 2016

Active Contribution



MFS International Equity Fund

Performance By Characteristic

	Portfolio Weight	Index Weight	Excess Weight	Portfolio USD Return	Index USD Return	Excess USD Return	Allocation Effect (Local)	Selection Effect (Local)	Active Contrib.	Passive Contrib.	Total Contrib.
Market Cap. Quintile (\$Bil)											
1) Above 86.70	17.2%	19.6%	-2.5%	5.8%	1.3%	4.6%	0.1%	0.8%	0.9%	-1.0%	-0.1%
2) 42.15 - 86.70	26.9%	20.5%	6.4%	3.7%	5.6%	-1.9%	0.0%	-0.5%	-0.5%	-0.2%	-0.7%
3) 22.12 - 42.15	30.1%	20.0%	10.1%	9.2%	9.8%	-0.6%	0.3%	-0.1%	0.2%	0.7%	0.9%
4) 10.28 - 22.12	19.0%	19.9%	-0.9%	5.9%	7.2%	-1.3%	0.0%	-0.3%	-0.3%	0.2%	-0.1%
5) 0.00 - 10.28	6.9%	20.0%	-13.1%	11.1%	8.0%	3.1%	-0.2%	0.1%	0.0%	0.3%	0.3%

SSgA Active Emerging Markets Index Fund

Characteristics

As of December 31, 2016

Market Value: \$7.0 Million and 1.0% of Fund

Characteristics

	Portfolio	MSCI Emerging Markets
Number of Holdings	59	832
Weighted Avg. Market Cap. (\$B)	93.2	48.4
Median Market Cap. (\$B)	4.3	4.6
Price To Earnings	30.2	18.3
Price To Book	5.4	2.6
Price To Sales	8.1	5.2
Return on Equity (%)	21.8	16.3
Yield (%)	0.5	2.6
Beta	1.0	1.0
R-Squared	1.0	1.0

Region	% of Total	% of Bench
EM Asia	84.1%	70.0%
EM Latin America	6.7%	13.4%
EM Europe & Middle East	1.5%	7.2%
EM Africa	0.8%	7.3%
Other	6.9%	2.1%
Total	100.0%	100.0%

Characteristics

	Portfolio	MSCI Emerging Markets			
INDUSTRY SECTOR DISTRIBUTION (% Equity)					
Energy	1.1	7.9			
Materials	2.3	7.4			
Industrials	1.1	5.8			
Consumer Discretionary	22.4	10.3			
Consumer Staples	0.3	7.2			
Health Care	1.0	2.5			
Financials	4.8	24.4			
Information Technology	59.2	23.2			
Telecommunication Services	1.2	5.9			
Utilities	2.4	2.9			
Real Estate	0.0	2.6			
Unclassified	0.0	0.0			

	Small Cap	Mid Cap	Large Cap
SSgA Active Emerging Markets Fund	6.7%	4.0%	89.3%
FTSE Emerging Markets	11.8%	7.2%	81.0%

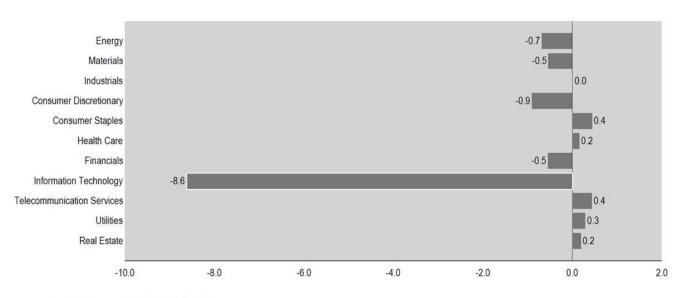


SSgA Active Emerging Markets Index Fund

Attribution

As of December 31, 2016 Market Value: \$7.0 Million and 1.0% of Fund

Active Contribution



SSgA Active Emerging Markets Fund

Performance By Characteristic

	Portfolio Weight	Index Weight	Excess Weight	Portfolio USD Return	Index USD Return	Excess USD Return	Allocation Effect (Local)	Selection Effect (Local)	Active Contrib.	Passive Contrib.	Total Contrib.
Market Cap. Quintile (\$Bil)											
1) Above 75.70	40.5%	19.7%	20.8%	-17.0%	-7.5%	-9.5%	-0.8%	-4.3%	-5.1%	-0.6%	-5.8%
2) 24.64 - 75.70	29.5%	20.2%	9.3%	-8.3%	-1.5%	-6.8%	0.1%	-2.2%	-2.0%	0.5%	-1.5%
3) 12.02 - 24.64	11.4%	20.1%	-8.7%	-3.8%	-2.8%	-1.0%	-0.2%	0.2%	0.0%	0.3%	0.3%
4) 5.50 - 12.02	8.1%	20.0%	-11.9%	-8.1%	-4.4%	-3.7%	-0.1%	0.1%	0.1%	0.0%	0.0%
5) 0.00 - 5.50	10.5%	20.0%	-9.5%	-9.3%	-4.9%	-4.3%	0.0%	-0.2%	-0.1%	-0.1%	-0.3%

ABS Emerging Markets (Hedged)

Characteristics

As of September 30, 2016

Market Value: \$8.4 Million and 1.2% of Fund

Characteristics

Strategy	Breakdown
----------	-----------

	ABS Investment Management
Product Assets	\$261,378,035
# Underlying Managers	19
% of Portfolio in Top 3 Funds	27.2%
Aggregate Portfolio Leverage	111.0%
Best Performing Manager Return	17.3%
Worst Performing Manager Return	-3.2%
# Managers Hired Over Quarter	5
# Managers Fired Over Quarter	2
Total Outflows from the Fund	\$22,538
Pending Outflows	\$583,000
Total Inflows to the Fund	\$22,000
% of Fund Liquid in 6 Months	98.8%
% of Fund Liquid in 12 Months	99.2%
% of Fund Liquid in 24 Months	100.0%
Client Percent of Fund	0.0%

	Weight (%)	Attribution (%)
Credit	0.0%	0.0%
Event Driven	0.0%	0.0%
Global Macro/CTA	0.0%	0.0%
Multi-Strategy	0.0%	0.0%
Hedged Equity	33.2%	1.2%
Relative Value	0.0%	0.0%
Short Selling	0.0%	0.0%
Other*	65.2%	2.3%
Cash	1.6%	0.0%
Total	100.0%	3.5%

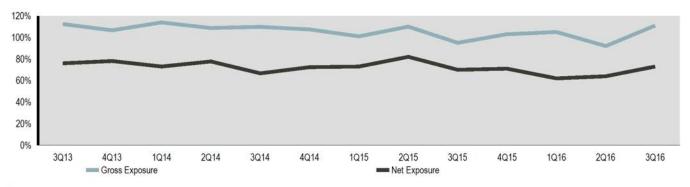
Security Geographic Exposure	Weight (%)
U.S. Exposure	1.8%
International Exposure	96.9%
Cash	1 3%

Top Ten Holdings Investment Detail

Fund	Туре	Cost (\$M)	Fair Market Value (\$M)	Weight (%)	Quarter Return
Sagil Latin American Opportunities	Hedged Equity	\$20.3	\$24.9	981.0%	553.0%
Cheetah Korea Value Fund	Other	\$21.8	\$19.9	887.0%	585.0%
WF Asian Smaller Companies Fund Limited	Other	\$15.2	\$19.9	822.0%	726.0%
Green Fund LLC	Hedged Equity	\$19.7	\$18.5	815.0%	130.0%
One North Capital Asia Value Fund	Other	\$18.5	\$19.8	771.0%	779.0%
36One Hedge Portfolio (1.33x)	Hedged Equity	\$19.2	\$17.8	768.0%	-29.0%
Constellation Fund SPC	Other	\$18.5	\$17.8	678.0%	615.0%
Indus Select Fund Ltd.	Other	\$12.3	\$14.6	605.0%	1373.0%
The Russian Prosperity Fund	Other	\$9.2	\$12.1	497.0%	1305.0%
ENAM India Growth Fund (Cayman) Ltd	Other	\$9.3	\$11.8	477.0%	1790.0%

Fund	Size of Fund (\$M)	Fund Inception	Investment Inception	SEC Registered
Sagil Latin American Opportunities	\$0.0	July-09	August-14	Yes
Cheetah Korea Value Fund	\$0.0	June-04	December-13	Yes
WF Asian Smaller Companies Fund Limited	\$0.0	July-12	July-12	Yes
Green Fund LLC	\$0.0	February-01	January-15	Yes
One North Capital Asia Value Fund	\$0.0	March-09	October-12	Yes
36One Hedge Portfolio (1.33x)	\$0.0	May-13	June-16	Yes
Constellation Fund SPC	\$0.0	December-05	October-12	Yes
Indus Select Fund Ltd.	\$0.0	January-09	July-12	Yes
The Russian Prosperity Fund	\$0.0	September-96	January-15	Yes
ENAM India Growth Fund (Cayman) Ltd	\$0.0	August-11	January-15	Yes

Gross/Net Positioning



Marquette Associates

ABS Offshore SPC Global

Characteristics

As of September 30, 2016

Characteristics

Market Value: \$17.3 Million and 2.5% of Fund Strategy Breakdown

	ABS investment Management
Product Assets	\$1,301,697,808
# Underlying Managers	24
% of Portfolio in Top 3 Funds	20.0%
Aggregate Portfolio Leverage	155.0%
Best Performing Manager Return	12.2%
Worst Performing Manager Return	-9.6%
# Managers Hired Over Quarter	0
# Managers Fired Over Quarter	0
Total Outflows from the Fund	\$35,699,758
Pending Outflows	\$16,861,502
Total Inflows to the Fund	\$23,820,000
% of Fund Liquid in 6 Months	88.7%
% of Fund Liquid in 12 Months	99.7%
% of Fund Liquid in 24 Months	100.0%
Client Percent of Fund	1.3%

	Weight (%)	Attribution (%)
Credit	0.0%	0.0%
Event Driven	0.0%	0.0%
Global Macro/CTA	0.0%	0.0%
Multi-Strategy	0.0%	0.0%
Hedged Equity	96.9%	4.2%
Relative Value	0.0%	0.0%
Short Selling	0.0%	0.0%
Other*	0.0%	0.0%
Cash	3.2%	0.0%
Total	100.0%	4.2%

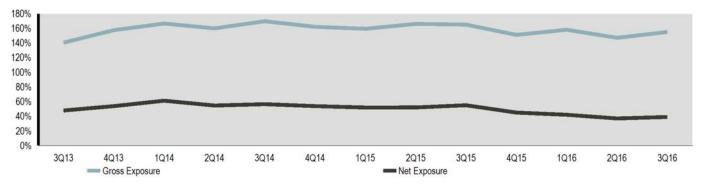
Security Geographic Exposure	Weight (%)
U.S. Exposure	61.0%
International Exposure	35.3%
Cash	3.7%

Top Ten Holdings Investment Detail

Fund	Туре	Cost (\$M)	Fair Market Value (\$M)	Weight (%)	Quarter Return
Camber Capital Offshore Fund, Ltd.	Hedged Equity	\$41.3	\$90.0	7.0%	9.1%
Lansdowne Developed Markets Fund Limited	Hedged Equity	\$66.2	\$83.7	6.4%	-1.7%
Seligman Tech Spectrum Fund	Hedged Equity	\$69.4	\$80.6	6.0%	10.5%
Suvretta Offshore Fund, Ltd.	Hedged Equity	\$48.1	\$75.1	5.6%	5.1%
Long Pond Offshore Ltd	Hedged Equity	\$42.5	\$71.7	5.4%	4.3%
Marianas Fund Ltd.	Hedged Equity	\$62.0	\$64.3	5.3%	-3.9%
Soroban Cayman Fund Ltd	Hedged Equity	\$32.0	\$67.5	5.3%	9.3%
Pelham Long/Short Fund Ltd.	Hedged Equity	\$42.8	\$68.1	5.2%	11.3%
TPG Public Equity Partners B, Ltd	Hedged Equity	\$64.5	\$67.2	5.1%	6.4%
Lakewood	Hedged Equity	\$39.7	\$56.4	4.2%	4.2%

Fund	Size of Fund (\$M)	Fund Inception	Investment Inception	SEC Registered
Camber Capital Offshore Fund, Ltd.	\$1,601.0	April-06	February-10	Yes
Lansdowne Developed Markets Fund Limited	\$10,020.0	August-01	October-05	Yes
Seligman Tech Spectrum Fund	\$613.0	July-01	October-09	Yes
Suvretta Offshore Fund, Ltd.	\$2,588.0	January-12	January-13	Yes
Long Pond Offshore Ltd	\$2,129.0	October-10	November-12	Yes
Marianas Fund Ltd.	\$616.0	March-12	March-14	Yes
Soroban Cayman Fund Ltd	\$6,047.0	October-10	November-10	Yes
Pelham Long/Short Fund Ltd.	\$4,113.0	November-07	April-12	Yes
TPG Public Equity Partners B, Ltd	\$1,515.0	September-13	June-15	Yes
Lakewood	\$3,898.0	July-07	June-11	Yes

Gross/Net Positioning



Entrust Diversified Select Equity Fund

Characteristics

As of September 30, 2016

Characteristics

Market Value: \$16.2 Million and 2.3% of Fund Strategy Breakdown

	EnTrustPermal
Product Assets	\$67,175,188
# Underlying Managers	14
% of Portfolio in Top 3 Funds	33.6%
Aggregate Portfolio Leverage	141.3%
Best Performing Manager Return	0.9%
Worst Performing Manager Return	-0.1%
# Managers Hired Over Quarter	1
# Managers Fired Over Quarter	0
Total Outflows from the Fund	\$0
Pending Outflows	\$17,061,138
Total Inflows to the Fund	\$0
% of Fund Liquid in 6 Months	58.0%
% of Fund Liquid in 12 Months	62.1%
% of Fund Liquid in 24 Months	60.3%
Client Percent of Fund	24.1%

	Weight (%)	Attribution (%)
Credit	5.4%	0.0%
Event Driven	0.9%	-0.1%
Global Macro/CTA	0.0%	0.0%
Multi-Strategy	20.0%	0.0%
Hedged Equity	6.3%	2.1%
Relative Value	0.0%	0.0%
Short Selling	0.0%	0.0%
Other*	67.4%	1.8%
Cash	0.0%	0.0%
Total	100.0%	3.8%

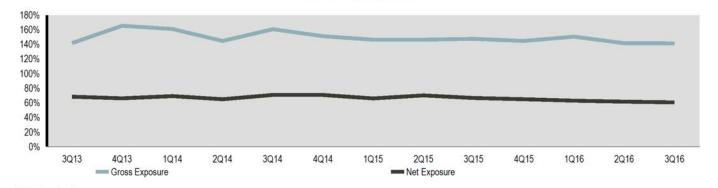
Security Geographic Exposure	Weight (%)
U.S. Exposure	84.8%
International Exposure	15.2%
Cash	0.0%

Top Ten Holdings Investment Detail

Fund	Туре	Cost (\$M)	Fair Market Value (\$M)	Weight (%)	Quarter Return
Trian Partners Ltd	Other	\$4.4	\$7.8	11.9%	-0.1%
Long Pond Offshore, Ltd.	Hedged Equity	\$5.6	\$7.6	11.6%	0.4%
Corvex Offshore II Ltd.	Hedged Equity	\$6.4	\$6.5	10.0%	0.4%
Blue Harbour Funds	Other	\$3.1	\$6.5	9.9%	0.7%
Tosca (Plan Assets)	Hedged Equity	\$5.1	\$6.4	9.9%	0.9%
Third Point Offshore Fund Ltd	Multi-Strategy	\$7.3	\$6.2	9.6%	0.4%
Pershing Square International Ltd	Other	\$4.2	\$6.0	9.2%	0.2%
JANA Offshore Partners, Ltd	Other	\$5.0	\$5.2	8.1%	0.4%
ValueAct Capital International II, L.P.	Other	\$2.8	\$4.6	7.1%	0.4%
Empyrean Capital Overseas Fund Ltd	Multi-Strategy	\$2.9	\$4.2	6.5%	0.3%

Fund	Size of Fund (\$M)	Fund Inception	Investment Inception	SEC Registered
Trian Partners Ltd	\$0.0	November-05	August-08	Yes
Long Pond Offshore, Ltd.	\$0.0	October-10	September-13	Yes
Corvex Offshore II Ltd.	\$0.0	March-11	January-12	Yes
Blue Harbour Funds	\$0.0	January-04	March-12	Yes
Tosca (Plan Assets)	\$0.0	October-00	August-08	Yes
Third Point Offshore Fund Ltd	\$0.0	June-95	September-08	Yes
Pershing Square International Ltd	\$0.0	January-04	August-08	Yes
JANA Offshore Partners, Ltd	\$0.0	April-01	September-13	Yes
ValueAct Capital International II, L.P.	\$0.0	December-00	September-11	Yes
Empyrean Capital Overseas Fund Ltd	\$0.0	February-04	May-11	Yes

Gross/Net Positioning



*Other:(freeform)

Marquette Associates, Inc.

Rreef America II Characteristics

As of September 30, 2016

Market Value: \$20.4 Million and 2.9% of Fund

Strategy Breakdown

Characteristics

	Rreef America I
Number of Properties	105
Total Square Feet	44,581,141
% in Top Ten	29.3%
% Leased (By Square Feet)	92.0%
% Leverage	22.2%
% Equity	84.8%
% Joint Ventures	15.2%
1-Year Dividend Yield	3.6%
1-Year Net Income Return	3.6%
1-Year Gross Appreciation Return	5.5%
1-Year Gross Total Return	10.3%
% of Portfolio Owned by Client	0.2%

	% of Portfolio	Top Five
Pre-Dvp/Fwd Comm.	0.0%	San Fran
Development	1.8%	New Yor
Re-Development	0.0%	Los Ange
Initial Leasing	0.0%	Seattle
Operating	98.2%	Boston
Cash, Debt & Other	0.0%	

Top Five Metro Areas	% of NAV
San Francisco	11.0%
New York	10.3%
Los Angeles	9.1%
Seattle	8.2%
Boston	7.8%

		Queue %
Fund GAV	\$11,686,970,063	2.4%
Fund NAV	\$9,493,456,621	3.0%
Queue	+\$280,925,000	
Queue Length	within 6 months	

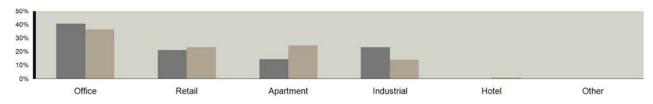
Top Ten Holdings Investment Detail

			Total Cost		
Property	Type	Location	(\$M) Fair M	arket Value (\$M)	% of Fund
Riverfront Office Park	Office	Cambridge, MA	\$238.5	\$634.0	6.0%
222 Broadway	Office	New York, NY	\$502.4	\$441.0	4.2%
222 South Riverside	Office	Chicago, IL	\$341.3	\$390.0	3.7%
West 8th	Office	Seattle, WA	\$369.0	\$252.5	2.4%
Manhattan Village	Retail	Manhattan Beach, CA	\$169.4	\$304.0	2.9%
Villa Marina Marketplace	Retail	Marina Del Rey, CA	\$231.7	\$259.0	2.5%
Sharon Green Apartments	Apartment	Menlo Park, CA	\$249.3	\$128.8	1.2%
Las Olas Centre	Office	Ft. Lauderdale, FL	\$212.9	\$188.0	1.8%
St. Johns Town Center JV	Retail	Jacksonville, FL	\$209.4	\$243.7	2.3%
San Francisco Design Center	Retail	San Francisco, CA	\$133.1	\$242.2	2.3%
Total			\$2,657.0	\$3,083.1	29.3%

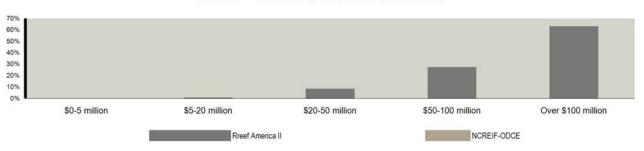
Regional Breakdown by NAV (Excluding Cash & Debt)



Property Type Breakdown by NAV (Excluding Cash & Debt)



Property Size Breakdown by NAV (Excluding Cash & Debt)



Cornerstone Patriot Fund Characteristics

As of September 30, 2016

Characteristics

Strategy Breakdown

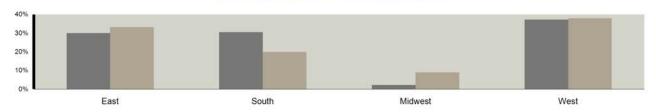
Number of Properties	58
Total Square Feet	9,168,833
% in Top Ten	36.5%
% Leased (By Square Feet)	92.1%
% Leverage	23.6%
% Equity	76.4%
% Joint Ventures	7.8%
1-Year Dividend Yield	4.5%
1-Year Net Income Return	3.9%
1-Year Gross Appreciation Return	5.9%
1-Year Gross Total Return	10.9%
% of Portfolio Owned by Client	0.6%

	% of Portfolio	Top Five Metro Areas	% of NAV
Pre-Dvp/Fwd Comm.	0.8%	Los Angeles, CA	14.2%
Development	1.5%	New York - Northern NJ	13.0%
Re-Development	0.0%	West Palm Beach, FL	8.2%
Initial Leasing	0.0%	Dallas-Ft Worth, TX	7.7%
Operating	97.8%	Philadelphia, PA	6.0%
Cash, Debt & Other	0.0%		
Fund GAV	\$4,190,748,996		
Fund NAV	\$3,120,865,153		

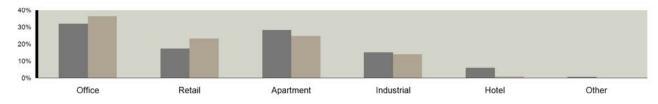
Top Ten Holdings Investment Detail

			Total Cost		
Property	Туре	Location	(\$M) Fair M	arket Value (\$M)	% of Fund
100 Wall Street	Office	New York, NY	\$271.4	\$149.7	4.9%
Boca Office	Office	Boca Raton, FL	\$125.3	\$140.6	4.6%
33 New Montgomery	Office	San Francisco, CA	\$154.6	\$114.9	3.8%
801 South Figueroa	Office	Los Angeles, CA	\$201.2	\$113.4	3.7%
Atrium	Office	Irvine, CA	\$92.7	\$110.7	3.6%
Hamilton Crowne Plaza	Hotel	Washington, DC	\$75.9	\$109.5	3.6%
San Fernando Business Center	Industrial	San Fernando, CA	\$72.7	\$96.1	3.2%
551 Madison Avenue	Office	New York, NY	\$131.7	\$94.1	3.1%
Alamo Crossing	Industrial	Houston, TX	\$87.0	\$92.5	3.0%
Promenade at Town Center	Retail	Valencia, CA	\$68.4	\$86.3	2.8%
Total			\$1,281.0	\$1,107.8	36.5%

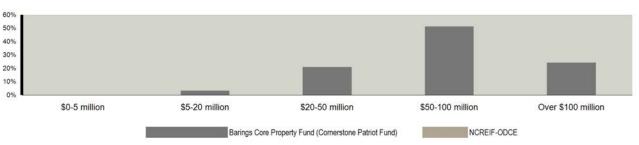
Regional Breakdown by NAV (Excluding Cash & Debt)



Property Type Breakdown by NAV (Excluding Cash & Debt)



Property Size Breakdown by NAV (Excluding Cash & Debt)



*Other:Other = Land



Draper Triangle Ventures II, LP

Characteristics

As of December 31, 2015

Market Value: \$0.5 Million and 0.1% of Fund

Characteristics

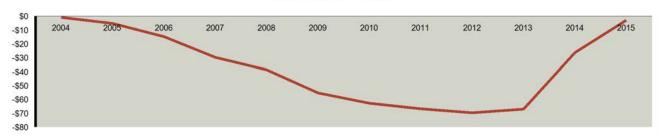
	Draper Triangle Ventures
Fund Vintage Year	2004
Total Size of Fund (\$M)	\$72.6
% of Capital Called	109.97%
Capital Distributed (\$M)	\$76.4
Current Fund NAV (\$M)	\$47.5
Client Commitment (\$M)	\$1.0
Client % Ownership of Fund	1.16%
Net IRR	6.2%
Net Multiple	1.6

	# of Companies Reali	% of Portfolio	
Total Companies in Portfolio	15	\$123.0	
Companies Written Off	2	\$0.0	
Companies Realized	9	\$84.9	
Active Companies in Portfolio	7	\$13.5	
Companies Written Down	5	\$3.5	
Companies Written Up	2	\$9.9	

Top Ten Holdings Detail

		Initial Investment		Total Investment Fair M	Market Value Total	Distribution
Holding	Туре	Date	% of Portfolio	(\$M)	(\$M)	(\$M)
Ayalogic	Information Technology	October-04	1.81%	\$5.94	\$0.24	\$0.00
Co-eXprise	Information Technology	December-09	27.61%	\$3.61	\$3.72	\$0.00
ThinkVine	Information Technology	January-08	17.70%	\$2.38	\$2.38	\$0.00
OnShift	Health Care	November-10	46.04%	\$1.75	\$6.20	\$0.00
Commuter Advertising	Information Technology	March-11	6.84%	\$1.00	\$0.92	\$0.00
Unitask	Information Technology	April-05	0.00%	\$2.98	\$0.00	\$0.00

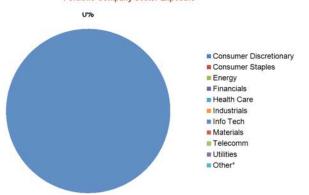
Annual Cash Flow Summary (\$M)



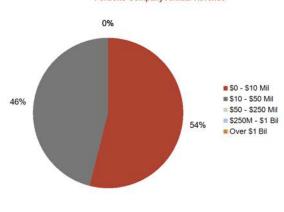
Cumulative

	2008	2009	2010	2011	2012	2013	2014	2015
Paid In Capital w/o Fees	-\$7.5	-\$15.2	-\$6.1	-\$7.1	-\$2.1	-\$0.4	-\$1.7	-\$2.4
Fees Paid	-\$1.5	-\$1.5	-\$1.4	-\$1.1	-\$1.0	-\$0.7	-\$0.5	-\$0.4
Distribution	\$0.0	\$0.0	\$0.0	\$4.2	\$0.2	\$3.7	\$42.9	\$26.1
Cumulative	-\$38.7	-\$55.4	-\$62.8	-\$66.8	-\$69.7	-\$67.1	-\$26.4	-\$3.0

Portfolio Company Sector Exposure



Portfolio Company Annual Revenue



Draper Triangle Ventures III, LP

Characteristics

Market Value: \$0.5 Million and 0.1% of Fund

As of December 31, 2015

Characteristics

Draper Triangle Ventures
2013
\$78.8
22 100/

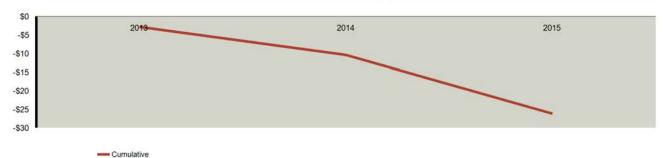
Fund Vintage Year	2013
Total Size of Fund (\$M)	\$78.8
% of Capital Called	33.19%
Capital Distributed (\$M)	\$0.0
Current Fund NAV (\$M)	\$21.0
Client Commitment (\$M)	\$2.0
Client % Ownership of Fund	2.54%
Net IRR	-19.6%
Not Multiple	

	Curr # of Companies Realized MV	% of Portfolio	
Total Companies in Portfolio	9 \$	\$21.0	100.0%
Companies Written Off	0	\$0.0	0.0%
Companies Realized	0	\$0.0	0.0%
Active Companies in Portfolio	9 5	\$21.0	100.0%
Companies Written Down	1	\$2.9	13.7%
Companies Written Up	2	\$0.7	3.3%

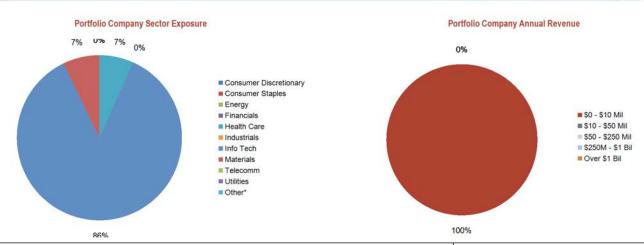
Top Ten Holdings Detail

		Initial Investment		Total Investment Fair N	Market Value Total	Distribution
Holding	Туре	Date	% of Portfolio	(\$M)	(\$M)	(\$M)
Bjond	Information Technology	December-13	10.07%	\$2.05	\$2.05	\$0.00
Amplifinity	Information Technology	February-14	14.71%	\$3.00	\$2.88	\$0.00
Rhiza	Information Technology	June-14	23.49%	\$4.79	\$5.20	\$0.00
re2	Information Technology	July-14	9.81%	\$2.00	\$2.28	\$0.00
Pixel Velocity	Information Technology	February-15	9.81%	\$2.00	\$2.00	\$0.00
Thread International	Materials	June-15	7.36%	\$1.50	\$1.50	\$0.00
Acrobatiq	Information Technology	July-15	14.71%	\$3.00	\$3.00	\$0.00
Ninespot	Information Technology	October-15	3.16%	\$0.64	\$0.64	\$0.00
Stimdia	Health Care	December-15	6.87%	\$1.40	\$1.40	\$0.00

Annual Cash Flow Summary (\$M)



	2013	2014	2015
Paid In Capital w/o Fees	-\$1.7	-\$6.0	-\$13.0
Fees Paid	-\$1.2	-\$1.5	-\$2.8
Distribution	\$0.0	\$0.0	\$0.0
Cumulative	-\$2.9	-\$10.4	-\$26.2



Hirtle Callaghan Private Equity Fund III, LP

Characteristics

As of September 30, 2016 Market Value: \$0.8 Million and 0.1% of Fund

 Total Size of Fund:
 \$28.0

 # of Funds Committed to:
 7

 Total Commitments
 \$26.0

 Client Commitment:
 \$8.0 Mil.

Breakdown of Funds by Commitment

Fund	Vintage Year	Type	Total Commitment	% of Portfolio
1 Whitehall Global 2001	2001	Global Real Estate	\$5.0	19%
2 Coller International IV	2001	Secondaries	\$4.0	15%
3 Globespan Capital IV	2002	US Venture	\$4.0	15%
4 OCM Principal Opps II	2000	US Distressed	\$4.0	15%
5 Trivest III	2000	US Buyout	\$4.0	15%
6 Industri Kapital 2004	2002	European Buyout	\$3.0	12%
7 Lubert Adler III	2000	US Real Estate	\$2.0	8%

Hirtle Callaghan Private Equity Fund IV, LP

Characteristics

Market Value: \$1.1 Million and 0.2% of Fund

As of September 30, 2016

\$44.0 11

\$42.0

\$8.0 Mil.

Total Size of Fund:
of Funds Committed to:
Total Commitments
Client Commitment:

Breakdown of Funds by Commitment

Fund	Vintage Year	Туре	Total Commitment	% of Portfolio
1 NIAM Nordic III	2004	Nordic Real Estate	\$5.0	12%
2 Somera Realty Fund	2003	US Real Estate	\$5.0	12%
3 Close Brothers VII	2003	UK Buyout	\$4.0	10%
4 Harbert Private Equity II	2004	US Buyout	\$4.0	10%
5 OCM Principal Opps III	2003	US Distressed	\$4.0	10%
6 Onex Partners	2003	US/Canada Buyout	\$4.0	10%
7 Resource Capital Fund III	2003	Global Venture	\$4.0	10%
8 Court Square Venture II	2004	US Venture	\$3.4	8%
9 Cerberus RE Partners	2007	US Real Estate	\$3.0	7%
10 Freeman Spogli Partners V	2002	US Buyout	\$3.0	7%
11 Boston Millennia III	2009	US Venture	\$2.7	6%

Hirtle Callaghan Private Equity Fund V, LP

Characteristics

As of September 30, 2016 Market Value: \$1.0 Million and 0.1% of Fund

 Total Size of Fund:
 \$111.0

 # of Funds Committed to:
 14

 Total Commitments
 \$106.0

 Client Commitment:
 \$3.0 Mil.

Breakdown of Funds by Commitment

Fund	Vintage Year	Туре	Total Commitment	% of Portfolio
1 CapMan Buyout VIII	2005	Nordic Buyout	\$10.0	9%
2 Gresham Fund Four	2006	UK Buyout	\$10.0	9%
3 Harbert Mezzanine II	2005	US Mezzanine	\$10.0	9%
4 J.F. Lehman Equity II	2005	US Buyout	\$10.0	9%
5 MHR Institutional III	2006	US Distressed	\$10.0	9%
6 New Venture Partners IV	2005	US/European Venture	\$10.0	9%
7 Coller International V	2006	Secondaries	\$8.0	8%
8 JLL Partners V	2004	US Buyout	\$7.2	7%
9 Edison Partners VI	2005	US Venture	\$6.0	6%
10 Legacy Realty Partners II	2006	Real Estate	\$5.0	5%
11 Liquid Realty III	2006	UK Real Estate FoFs	\$5.6	5%
12 Perennial Real Estate	2006	Global Real Estate FoFs	\$5.0	5%
13 US Power Fund II	2004	US Buyout	\$5.5	5%
14 Artiman Ventures II	2007	US Venture	\$4.1	4%

Crescent Mezzanine Partners VIB, LP

Characteristics

As of September 30, 2016

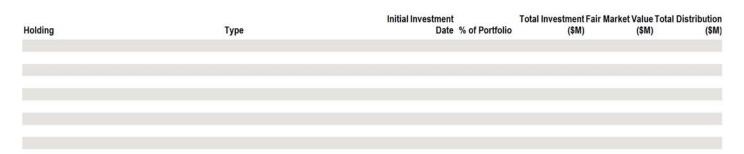
Characteristics

Market Value: \$7.6 Million and 1.1% of Fund

	Crescent Capital Group
Fund Vintage Year	2012
Total Size of Fund (\$M)	\$667.6
% of Capital Called	89.96%
Capital Distributed (\$M)	\$138.5
Current Fund NAV (\$M)	\$553.3
Client Commitment (\$M)	\$10.0
Client % Ownership of Fund	1.50%
Net IRR	8.3%
Net Multiple	0.2

	Current +		
	# of Companies Realized MV (\$M)	% of Portfolio	
Total Companies in Portfolio			
Companies Written Off			
Companies Realized			
Active Companies in Portfolio			
Companies Written Down			
Companies Written Up			

Top Ten Holdings Detail



Annual Cash Flow Summary (\$M)



Portfolio Company Sector Exposure

Portfolio Company Annual Revenue





Pittsburgh Comprehensive Municipal Pension

Report Items

- On January 20, 2017, \$634,327 was transferred from cash to Crescent Mezzanine Fund VII.
- On December 16, 2016, \$4,541 was transferred from cash to Birchmere Ventures III.
- On December 8, 2016, \$825,207 was transferred from cash to Crescent Mezzanine Fund VII.
- On December 2, 2016, \$136,789 was transferred from cash to Draper Triangle Ventures III.
- On November 21, 2016, \$3,000,000 was transferred from the SSgA S&P 500 Flagship Fund to the operating account.
- On October 26, 2016, \$10,000,000 was committed to Crescent Mezzanine Fund VII.
- On October 7, 2016, \$367,116 was transferred from cash to EnTrust Special Opportunities III.
- On September 15, 2016, redemption requests were submitted for \$5,000,000 from ABS Alpha Fund and \$5,000,000 from EnTrust Select Equity, to be paid out, effective December 31, 2016.
- On August 18, 2016, \$4,000,000 was redeemed from Guyasuta Small Cap Equity, and \$2,000,000 was transferred to the new CIM Small Cap Equity account, and \$2,000,000 was transferred to the new Twin Capital Large Cap Equity account.
- On July 1, 2016, \$843,984 was transferred from cash to EnTrust Special Opportunities III.
- On May 25, 2016, \$5,000,000 was transferred from the Federated Fixed Income account to the operating cash account.
- On April 27, 2016, \$53,619 was transferred from cash to Crescent Mezzanine Fund VI.
- On March 17, 2016, \$785,558 was transferred from cash to EnTrust Special Opportunities III.
- On February 5, 2016, \$401,333 was transferred from cash to EnTrust Special Opportunities III.
- On January 26, 2016, \$109,041 was transferred from cash to Draper Triangle Ventures III.
- On January 15, 2016, \$174,969 was transferred from cash to Crescent Mezzanine Fund VI.
- On December 17, 2015, \$302,269 was transferred from cash to EnTrust Special Opportunities III.
- On December 8, 2015, \$229,544 was transferred from cash to Crescent Mezzanine Fund VI.
- On December 1, 2015, the Israel Bonds matured, and the proceeds were transferred to the operating cash account.
- On November 24, 2015, \$58,368 was transferred from cash to Draper Triangle Ventures III.
- On November 20, 2015, \$5,500,000 was transferred from BlackRock Total Return Fund to the operating cash account.
- On November 3, 2015, \$510,399 was transferred from BlackRock Total Return Fund to EnTrust Special Opportunities III.
- On October 2, 2015, \$101,810 was transferred from cash to Crescent Mezzanine Fund VI.
- On August 26, 2015, \$4,000,000 from the SSgA S&P 500 Flagship Fund and \$3,000,000 from the MFS International Equity Fund, was transferred to the operating account.
- On August 17, 2015, \$17,222 was transferred from cash to Draper Triangle Ventures III.
- On August 14, 2015, \$529,876 was called by Crescent Mezzanine VI, and funded with a transfer from excess cash.
- On August 4, 2015, \$20,000 was transferred from cash to Novitas Capital III.
- On August 3, 2015, \$598,079 was transferred from cash to EnTrust Special Opportunities III.
- On July 30, 2015, \$509,592 was called by Crescent Mezzanine VI, and funded with a transfer from excess cash.
- On July 1, 2015, \$409,524 was transferred from BlackRock Total Return Fund to EnTrust Special Opportunities III.
- On June 26, 2015, \$99,321 was transferred from cash to Draper Triangle Ventures III.
- On June 25, 2015, \$282,673 was transferred from cash to Crescent Mezzanine Fund VI.
- On May 26, 2015, \$2,000,000 from MFS International Equity Fund, and \$3,000,000 from the SSgA S&P 500 Flagship Fund, were transferred to the operating account.
- On April 10, 2015, \$199,988 was transferred from cash to EnTrust Special Opportunities III.

Action Items

None.



Fee Schedule

Market Value: \$696.8 Million and 100.0% of Fund

Industry

Expense Ratio &

Asset Class	Investment Manager	Fee Schedule	Expense Ratio & Estimated Annual Fee ¹	Industry Average ²
Core Fixed Income	Federated Investors	0.25% on the Balance	0.25%	0.26%
Core Fixed Income	BlackRock Total Return Fund	0.40% on the Balance	\$129,489 0.40% \$76,503	0.50%
Large-Cap Core	SSgA S&P 500 Index Fund	0.04% on the Balance	0.04% \$36,630	0.05%
Large-Cap Core	Twin Capital	0.35% on the first \$50 million 0.20% on the Balance	0.35% \$7,160	0.60%
Smid-Cap Core	Frontier Capital Management	0.75% on the Balance	0.75% \$216,337	0.84%
Small-Cap Core	Guyasuta Investment Advisors	0.45% on the Balance	0.45% \$123,333	0.88%
Small-Cap Core	CIM Investment Management	0.75% on the first \$1 million 0.65% on the next \$3 million 0.60% on the Balance	0.70% \$14,945	0.88%
Non-U.S. Large-Cap Core	MFS International Equity Fund	0.75% on the Balance	0.75% \$395,949	0.97%
Emerging Markets	SSgA Active Emerging Markets Fund	0.75% on the Balance	0.75% \$51,871	0.95%
Emerging Markets	ABS Emerging Markets (Hedged)	0.80% on the Balance	0.80% \$66,937	1.00%
Hedged Equity Hedge FoF	ABS Offshore SPC Global	1.00% on the Balance	1.00% \$171,621	1.00%
Hedged Equity Hedge FoF	Entrust Diversified Select Equity Fund	1.30% on the Balance	1.30% \$209,320	1.00%
Multi-Strat. Hedge Fund	Entrust Special Opportunities Fund III	1.25% on the Balance Plus 10% incentive fee after 7.5% preferred return	1.25% \$73,503	1.00%
Core Real Estate	Rreef America II	0.95% on the Balance	0.95% \$193,424	1.01%
Core Real Estate	Cornerstone Patriot Fund	1.10% on the first \$15 million 1.00% on the next \$10 million 0.80% on the Balance	1.08% \$203,882	1.01%
Venture Private Equity	Birchmere Ventures III, LP	2.50% on total commitments plus 20% carried interest after 8% preferred return	\$25,000	
Venture Private Equity	Draper Triangle Ventures II, LP	1.00% on total commitments plus 20% carried interest	1.93% \$10,000	3.85%
Venture Private Equity	Novitas Capital Partners III, LP	2.00% on total commitments plus 20% carried interest after 8% preferred return	\$20,000	-
Global Divers. Private Equity FoF	Hirtle Callaghan Private Equity Fund III, LP	0.00% on the Balance	0.00% \$0	1.25%
Global Divers. Private Equity FoF	Hirtle Callaghan Private Equity Fund IV, LP	0.00% on the Balance	0.00% \$0	1.25%
Global Divers. Private Equity FoF	Hirtle Callaghan Private Equity Fund V, LP	0.00% on the Balance	0.00% \$0	0.00%
Mezz. Private Equity	Crescent Mezzanine Partners VIB, LP	1.50% on total commitments plus 20% carried interest after 8% preferred return	2.18% \$150,000	2.55%
Fixed Income Annuity	Dedicated Funding for CMPTF	0.00% on the Balance	0.00% \$0	0.00%
Total Investment Management Fed	es		0.32% \$2,175,903	0.33%
Custodian	PNC Bank	0.03% on the all assets, excluding Dedicated Funding for CMPTF	0.02% \$129,561	
Total Fund			0.34%	
			\$2,305,464	

¹ Expense Ratio & Estimated Annual Fee are Based on Market Value at Month End.



² Source: 2016 Marquette Associates Investment Management Fee Study.