



Pittsburgh Comprehensive Municipal Pension

Pittsburgh Comprehensive Municipal

Executive Summary

December 31, 2022

Manager Status

Market Value: \$966.3 Million and 100.0% of Fund

Investment Manager	Asset Class	Status	Reason
Vanguard Ultra Short Duration	Short-Term Fixed Income	In Compliance	
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	
Twin Capital	Large-Cap Core	In Compliance	
Frontier Capital Management	Smid-Cap Core	In Compliance	
Vanguard Russell 2000	Small-Cap Core	In Compliance	
CIM Investment Management	Small-Cap Core	In Compliance	
Federated Hermes Global Equity	Global Core Equity	In Compliance	
MFS International Equity Fund	Non-U.S. Large-Cap Core	In Compliance	
SSgA Active Emerging Markets Fund	Emerging Markets	In Compliance	
ABS Emerging Markets	Emerging Markets	In Compliance	
ABS Offshore SPC Global	Hedged Equity Hedge FoF	In Compliance	
Entrust Three Rivers Partners	Multi-Strat. Hedge Fund	In Compliance	
Parametric Defensive Equity	Defensive Equity	In Compliance	
Rreef America II	Core Real Estate	In Compliance	
Barings Core Property Fund	Core Real Estate	In Compliance	
Birchmere Ventures III, LP	Venture Private Equity	In Compliance	
Draper Triangle Ventures III, LP	Venture Private Equity	In Compliance	
Crescent Mezzanine Partners VIB, LP	Mezz. Private Equity	In Compliance	
Crescent Mezzanine Partners VIIB, L.P.	Mezzanine Debt	In Compliance	
Dedicated Funding for CMPTF	Fixed Income Annuity	In Compliance	
Siguler Guff Small Buyout Opportunities Fund IV	LBO Private Equity FoF	In Compliance	
Siguler Guff Small Buyout Opportunities Fund V	LBO Private Equity FoF	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.

Plan Capital Movement

- On December 8, 2022, Columbus Macro ceased investing for CMPTF and the account was liquidated due to chronic underperformance.
- On September 15, 2022, proceeds from the liquidation of Guyasuta Small Cap Core were used to purchase shares of Vanguard Russell 2000 Index fund until a new small cap equity manager is selected from the RFP candidates.
- On August 5, 2022, \$360,000 in cash was wired to Siguler Guff Small Buyout V from the Operating Account for the initial capital call for the fund.
- On June 30, 2022, \$750,000 in cash was wired to Rreef America II fund from the Operating Account as the last part of an additional \$5,000,000 commitment to the fund.
- On March 31, 2022, \$500,000 in cash was wired to Rreef America II fund from the Operating Account as part of an additional \$5,000,000 commitment to the fund.
- On December 31, 2021, \$2,500,000 in cash was wired to Rreef America II fund from the Operating Account as part of an additional \$5,000,000 commitment to the fund.
- •In 2022, \$2,577,012 has been wired from the Crescent account at PNC to Crescent Credit Solutions VIII, to cover capital calls.
- •In 2022, \$2,927,801 has been wired from the Siguler Guff account at PNC to Siguler Guff Small Buyout IV, to cover capital calls.
- •In 2022, \$1,717,500 has been wired from the Siguler Guff account at PNC to Siguler Guff Small Buyout V, to cover capital calls.

Recent Action Items

None

Market Value: \$966.3 Million and 100.0% of Fund

	Asset Class	Market Value	3 Mo Net	% of Portfolio	Policy %	Policy Difference
		(\$)	(+)		,	(\$)
Total Fund Composite		966,324,000	-4,679,526	100.0	100.0	0
Dedicated Funding for CMPTF	Fixed Income Annuity	336,836,112	-6,688,000	34.9	40.0	-49,693,488
Total Invested Portfolio		629,487,889	2,008,474	65.1	60.0	49,693,488
Fixed Income Composite		114,421,850	19,963,720	11.8	13.0	-11,200,270
Vanguard Ultra Short Duration	Short-Term Fixed Income	35,575,537	20,000,000	3.7		
Federated Investors	Core Fixed Income	58,547,997	-36,280	6.1		
BlackRock Total Return Fund	Core Fixed Income	20,298,315	0	2.1		
U.S. Equity Composite		243,910,665	-96,805	25.2	22.0	31,319,385
SSgA S&P 500 Index Fund	Large-Cap Core	162,257,641	-16,584	16.8		
Frontier Capital Management	Smid-Cap Core	41,890,660	-80,222	4.3		
Vanguard Russell 2000	Small-Cap Core	39,762,365	0	4.1		
Emerging Manager Composite		6,444,702	-2,527,297	0.7	-	6,444,702
Twin Capital	Large-Cap Core	3,800,111	-3,417	0.4		
CIM Investment Management	Small-Cap Core	2,644,590	-4,675	0.3		
Non-U.S. Equity Composite		104,172,126	-16,017	10.8	12.0	-11,786,754
MFS International Equity Fund	Non-U.S. Large-Cap Core	83,567,697	0	8.6		
SSgA Active Emerging Markets Fund	Emerging Markets	8,779,016	-16,017	0.9		
ABS Emerging Markets	Emerging Markets	11,825,413	0	1.2		
Global Equity Composite		7,815,262	0	0.8	-	7,815,262
Federated Hermes Global Equity	Global Core Equity	7,815,262	0	0.8		
Hedge Fund Composite		56,336,879	0	5.8	5.0	8,020,679
ABS Offshore SPC Global	Hedged Equity Hedge FoF	16,139,349	0	1.7		
Entrust Three Rivers Partners	Multi-Strat. Hedge Fund	26,023,788	0	2.7		
Parametric Defensive Equity	Defensive Equity	14,173,742	0	1.5		
Real Estate Composite		51,956,827	-303,292	5.4	5.0	3,640,627
Rreef America II	Core Real Estate	26,622,166	-241,633	2.8	2.5	2,464,066
Barings Core Property Fund	Core Real Estate	25,334,661	-61,659	2.6	2.5	1,176,561
Private Equity Composite		29,606,225	1,993,431	3.1	3.0	616,505
Cash Composite		14,823,353	-17,005,266	1.5	0.0	14,823,353

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



Total Invested Portfolio

Market Value: \$629.5 Million and 65.1% of Fund

	Asset Class	Market Value (\$)	3 Mo Net Cash Flows (\$)	% of Portfolio
Total Invested Portfolio		629,487,889	2,008,474	100.0
Fixed Income Composite		114,421,850	19,963,720	18.2
Vanguard Ultra Short Duration	Short-Term Fixed Income	35,575,537	20,000,000	5.7
Federated Investors	Core Fixed Income	58,547,997	-36,280	9.3
BlackRock Total Return Fund	Core Fixed Income	20,298,315	0	3.2
U.S. Equity Composite		243,910,665	-96,805	38.7
SSgA S&P 500 Index Fund	Large-Cap Core	162,257,641	-16,584	25.8
Frontier Capital Management	Smid-Cap Core	41,890,660	-80,222	6.7
Vanguard Russell 2000	Small-Cap Core	39,762,365	0	6.3
Emerging Manager Composite		6,444,702	-2,527,297	1.0
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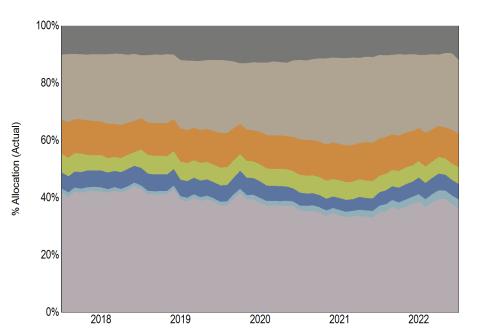
⁻ Private Equity Composite may not include current performance, due to reporting cycle limitations.



Asset Allocation

Market Value: \$966.3 Million and 100.0% of Fund

Historic Asset Allocation



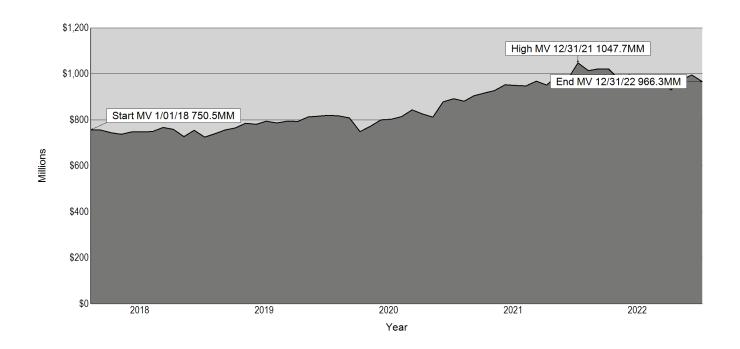


Asset Allocation vs. Target As Of December 31, 2022

	Current	Policy	Difference*	Difference**
Fixed Income	\$114,421,850	\$125,622,120	-\$11,200,270	-1.2%
U.S. Equity	\$250,355,367	\$212,591,280	\$37,764,087	3.9%
Non-U.S. Equity	\$111,987,388	\$115,958,880	-\$3,971,492	-0.4%
Hedge Funds	\$56,336,879	\$48,316,200	\$8,020,679	0.8%
Real Assets	\$51,956,827	\$48,316,200	\$3,640,627	0.4%
Private Equity	\$29,606,225	\$28,989,720	\$616,505	0.1%
Other	\$351,659,465	\$386,529,600	-\$34,870,135	-3.6%
Total	\$966,324,000	\$966,324,000		

Market Value History

Market Value: \$966.3 Million and 100.0% of Fund



Summary of Cash Flows: Invested Portfolio

	Fourth Quarter	One Year	Three Years	Five Years
Beginning Market Value	\$592,580,057.62	\$707,265,840.26	\$522,400,244.22	\$448,620,579.80
Net Cash Flow	\$2,296,612.54	\$9,085,008.99	\$33,020,879.03	\$42,442,663.94
Net Investment Change	\$34,611,218.57	-\$86,862,960.52	\$74,066,765.48	\$138,424,644.99
Ending Market Value	\$629,487,888.73	\$629,487,888.73	\$629,487,888.73	\$629,487,888.73

Annualized Performance (Net of Fees)

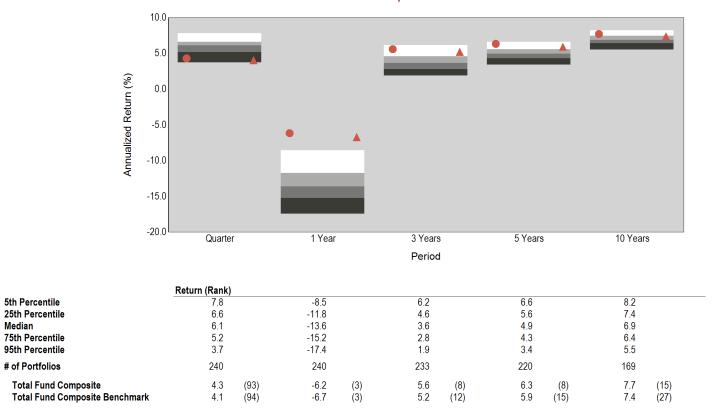
Market Value: \$966.3 Million and 100.0% of Fund

	1 Mo (%)	3 Mo (%)	1 Yr (%)	2 Yrs (%)	3 Yrs (%)	4 Yrs (%)	5 Yrs (%)	7 Yrs (%)	10 Yrs (%)
Total Fund Composite	-2.2	4.3	-6.2	3.2	5.6	8.0	6.3	7.3	7.7
Total Fund Composite Benchmark	-1.7	4.1	-6.7	2.5	5.2	7.4	5.9	7.0	7.4
InvMetrics Public DB Net Rank	13	93	3	3	8	31	8	21	15
Total Invested Portfolio	-3.2	5.7	-12.4	0.7	4.4	8.0	5.3	7.0	7.3
Total Invested Portfolio Benchmark	-2.6	5.7	-12.8	0.0	4.3	7.9	5.2	7.0	7.4
InvMetrics Public DB Net Rank	60	59	32	22	29	31	37	34	30
Fixed Income Composite	-0.1	1.9	-10.8	-5.7	-1.0	1.5	1.0	2.0	2.0
Bloomberg US Aggregate TR	-0.5	1.9	-13.0	-7.5	-2.7	0.0	0.0	0.9	1.1
InvMetrics Public DB US Fix Inc Net Rank	22	48	54	51	17	7	13	7	4
U.S. Equity Composite	-6.0	7.9	-18.0	1.6	6.7	12.4	8.1	10.9	11.7
Dow Jones U.S. Total Stock Market	-5.9	7.2	-19.5	0.6	6.9	12.4	8.7	10.9	12.0
InvMetrics Public DB US Eq Net Rank	91	75	62	68	58	51	62	38	36
Emerging Manager Composite	-6.5	6.5	-19.7	-3.7	1.3	7.0	3.4		
Emerging Manager Benchmark	-5.5	7.7	-19.3	-1.4	5.0	10.4	6.3		
Non-U.S. Equity Composite	-2.3	13.9	-15.0	-1.8	2.6	7.9	3.7	6.7	5.3
MSCI ACWI ex USA	-0.7	14.3	-16.0	-4.8	0.1	5.0	0.9	4.8	3.8
InvMetrics Public DB ex-US Eq Net Rank	76	61	14	7	8	7	7	6	6
Global Equity Composite	-5.5	9.6	-23.3	-					
MSCI ACWI	-3.9	9.8	-18.4	-1.6	4.0	9.2	5.2	8.1	8.0
InvMetrics Public DB Glbl Eq Net Rank	99	99	97						
Hedge Fund Composite	-0.5	4.6	-6.2	1.2	3.4	4.9	3.3	3.7	
HFRI Fund of Funds Composite Index	0.3	1.8	-5.2	0.3	3.7	4.9	3.0	3.3	3.5
HFRI Equity Hedge (Total) Index	-0.8	4.2	-10.2	0.1	5.7	7.7	4.5	5.9	5.6
InvMetrics Public DB Hedge Funds Net Rank	50	51	43	74	85	85	63	51	
Real Estate Composite	-3.4	-3.4	5.0	12.8	8.5	7.9	7.7	7.6	
NFI-ODCE	-5.1	-5.1	6.6	13.6	9.0	7.8	7.7	7.6	9.1
InvMetrics Public DB Real Estate Priv Net Rank	49	35	83	86	83	72	80	67	
Private Equity Composite	0.0	0.0	6.1	16.4	14.8	12.8	10.0	7.6	6.3
Russell 3000 + 2%	-5.7	7.7	-17.6	2.8	9.2	14.8	11.0	13.2	14.4
InvMetrics Public DB Private Eq Net Rank									

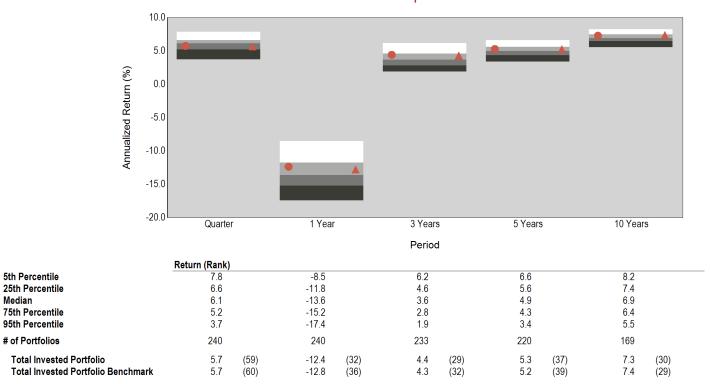
Annualized Performance (Net of Fees)

Market Value: \$966.3 Million and 100.0% of Fund

Total Fund DB Return Comparison



Invested Portfolio DB Return Comparison



Calendar Performance (Net of Fees)

Market Value: \$966.3 Million and 100.0% of Fund

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	2022 (%)	2021 (%)	2020 (%)	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)
Total Fund Composite	-6.2	13.5	10.6	15.6	-0.1	11.7	8.1	3.2	9.2	13.6	12.3
Total Fund Composite Benchmark	-6.7	12.6	10.8	14.4	0.1	12.2	7.7	3.5	7.2	14.1	10.5
InvMetrics Public DB Net Rank	3	54	81	93	2	95	26	1	1	66	41
Total Invested Portfolio	-12.4	15.8	12.1	19.5	-5.0	14.7	8.5	0.0	6.6	17.6	14.1
Total Invested Portfolio Benchmark	-12.8	14.7	13.3	19.5	-4.8	16.0	7.4	0.7	6.8	17.6	12.2
InvMetrics Public DB Net Rank	32	19	61	49	69	49	16	34	22	22	7
Fixed Income Composite	-10.8	-0.3	9.0	9.6	-0.9	4.3	4.5	0.0	6.1	-0.4	8.4
Bloomberg US Aggregate TR	-13.0	-1.5	7.5	8.7	0.0	3.5	2.6	0.6	6.0	-2.0	4.2
InvMetrics Public DB US Fix Inc Net Rank	54	16	21	13	91	39	47	56	15	32	35
U.S. Equity Composite	-18.0	25.9	17.8	31.1	-7.2	19.5	16.6	-2.3	12.5	34.2	17.8
Dow Jones U.S. Total Stock Market	-19.5	25.7	20.8	30.9	-5.3	21.2	12.6	0.4	12.5	33.5	16.4
InvMetrics Public DB US Eq Net Rank	62	47	49	15	73	70	2	84	14	50	4
Emerging Manager Composite	-19.7	15.3	12.3	25.9	-9.8	16.9					
Emerging Manager Benchmark	-19.3	20.5	19.2	28.0	-8.4	18.9					
Non-U.S. Equity Composite	-15.0	13.5	11.9	25.5	-11.4	28.5	1.9	-1.7	-4.2	12.9	21.3
MSCI ACWI ex USA	-16.0	7.8	10.7	21.5	-14.2	27.2	4.5	-5.7	-3.9	15.3	16.8
InvMetrics Public DB ex-US Eq Net Rank	14	1	59	12	6	48	83	23	62	82	8
Global Equity Composite	-23.3										
MSCIACWI	-18.4	18.5	16.3	26.6	-9.4	24.0	7.9	-2.4	4.2	22.8	16.1
InvMetrics Public DB Glbl Eq Net Rank	97							-	-	-	
Hedge Fund Composite	-6.2	9.2	8.1	9.3	-2.9	9.0	0.7	0.0	4.9		
HFRI Fund of Funds Composite Index	-5.2	6.2	10.9	8.4	-4.0	7.8	0.5	-0.3	3.4	9.0	4.8
HFRI Equity Hedge (Total) Index	-10.2	11.7	17.9	13.7	-7.1	13.3	5.5	-1.0	1.8	14.3	7.4
InvMetrics Public DB Hedge Funds Net Rank	43	41	49	38	68	23	74	45	35		
Real Estate Composite	5.0	21.2	0.3	6.1	6.9	6.5	8.4	14.4	11.0		
NFI-ODCE	6.6	21.1	0.3	4.4	7.4	6.7	7.8	14.0	11.5	12.9	9.8
InvMetrics Public DB Real Estate Priv Net Rank	83	69	69	34	80	63	43	7	67		

Annualized Performance (Net of Fees)

Market Value: \$966.3 Million and 100.0% of Fund

	1 Mo (%)	3 Mo (%)	1 Yr (%)	2 Yrs (%)	3 Yrs (%)	4 Yrs (%)	5 Yrs (%)	7 Yrs (%)	10 Yrs (%)
Total Fund Composite	-2.2	4.3	-6.2	3.2	5.6	8.0	6.3	7.3	7.7
Total Fund Composite Benchmark	-1.7	4.1	-6.7	2.5	5.2	7.4	5.9	7.0	7.4
InvMetrics Public DB Net Rank	13	93	3	3	8	31	8	21	15
Dedicated Funding for CMPTF	-0.3	1.7	7.0	7.7	7.6	8.1	8.0	7.8	8.4
Annual Return	0.6	1.8	7.2	7.2	7.2	7.2	7.3	7.4	7.4
Total Invested Portfolio	-3.2	5.7	-12.4	0.7	4.4	8.0	5.3	7.0	7.3
Total Invested Portfolio Benchmark	-2.6	5.7	-12.8	0.0	4.3	7.9	5.2	7.0	7.4
InvMetrics Public DB Net Rank	60	59	32	22	29	31	37	34	30
Fixed Income Composite	-0.1	1.9	-10.8	-5.7	-1.0	1.5	1.0	2.0	2.0
Bloomberg US Aggregate TR	-0.5	1.9	-13.0	-7.5	-2.7	0.0	0.0	0.9	1.1
InvMetrics Public DB US Fix Inc Net Rank	22	48	54	51	17	7	13	7	4
Vanguard Ultra Short Duration	0.4	0.9	-0.4	-0.1	0.6				-
BofA Merrill Lynch 1 Year Treasury	0.4	0.7	-0.2	-0.1	0.5	1.1	1.3	1.1	0.9
Ultrashort Bond MStar MF Rank	57	45	53	57	44				
Federated Investors	-0.5	1.7	-12.4	-6.5	-1.1	1.6	1.1	2.1	1.8
Bloomberg US Aggregate TR	-0.5	1.9	-13.0	-7.5	-2.7	0.0	0.0	0.9	1.1
eV US Core Fixed Inc Net Rank	64	61	18	11	2	2	2	1	4
BlackRock Total Return Fund	-0.5	2.0	-14.1	-7.7	-2.4	0.5	0.3	1.3	1.7
Bloomberg US Aggregate TR	-0.5	1.9	-13.0	-7.5	-2.7	0.0	0.0	0.9	1.1
Intermediate Core Bond MStar MF Rank	49	21	82	59	35	23	28	18	6
U.S. Equity Composite	-6.0	7.9	-18.0	1.6	6.7	12.4	8.1	10.9	11.7
Dow Jones U.S. Total Stock Market	-5.9	7.2	-19.5	0.6	6.9	12.4	8.7	10.9	12.0
InvMetrics Public DB US Eq Net Rank	91	75	62	68	58	51	62	38	36
SSgA S&P 500 Index Fund	-5.8	7.6	-18.1	2.6	7.6	13.1	9.4	11.4	
S&P 500	-5.8	7.6	-18.1	2.7	7.7	13.2	9.4	11.5	12.6
eV US Large Cap Core Equity Net Rank	72	69	67	56	41	37	37	28	
Frontier Capital Management	-6.4	11.0	-17.9	-1.5	4.6	10.2	5.0	8.9	10.2
Russell 2500	-5.9	7.4	-18.4	-1.8	5.0	10.3	5.9	9.0	10.0
eV US Small-Mid Cap Core Equity Net Rank	96	24	57	73	71	68	79	59	57
Vanguard Russell 2000	-6.5	6.3						-	
Russell 2000	-6.5	6.2	-20.4	-4.4	3.1	8.3	4.1	7.9	9.0
Small Cap MStar MF Rank	76	67							

Annualized Performance (Net of Fees)

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	1 Mo (%)	3 Mo (%)	1 Yr (%)	2 Yrs (%)	3 Yrs (%)	4 Yrs (%)	5 Yrs (%)	7 Yrs (%)	10 Yrs (%)
Emerging Manager Composite	-6.5	6.5	-19.7	-3.7	1.3	7.0	3.4	-	
Emerging Manager Benchmark	-5.5	7.7	-19.3	-1.4	5.0	10.4	6.3		
Twin Capital	-6.4	6.2	-18.2	2.4	6.5	12.0	8.0		
S&P 500	-5.8	7.6	-18.1	2.7	7.7	13.2	9.4	11.5	12.6
Russell 1000	-5.8	7.2	-19.1	1.1	7.3	12.9	9.1	11.3	12.4
eV US Large Cap Core Equity Net Rank	91	88	67	59	63	60	63		
CIM Investment Management	-6.2	6.3	-21.2	-8.2	-2.0	4.8	0.7		
Russell 2000	-6.5	6.2	-20.4	-4.4	3.1	8.3	4.1	7.9	9.0
eV US Small Cap Core Equity Net Rank	68	84	77	96	99	98	99		-
Non-U.S. Equity Composite	-2.3	13.9	-15.0	-1.8	2.6	7.9	3.7	6.7	5.3
MSCI ACWI ex USA	-0.7	14.3	-16.0	-4.8	0.1	5.0	0.9	4.8	3.8
InvMetrics Public DB ex-US Eq Net Rank	76	61	14	7	8	7	7	6	6
MFS International Equity Fund	-2.4	16.2	-14.8	-1.0	2.9	8.8	4.6	7.0	6.2
MSCI EAFE	0.1	17.3	-14.5	-2.4	0.9	5.8	1.5	4.5	4.7
Foreign Large Blend MStar MF Rank	77	59	35	12	12	7	5	3	7
SSgA Active Emerging Markets Fund	-2.4	9.8	-17.6	-6.2	-2.1	1.3	-2.1	4.4	0.6
MSCI Emerging Markets	-1.4	9.7	-20.1	-11.8	-2.7	2.2	-1.4	5.2	1.4
eV Emg Mkts Equity Net Rank	79	61	39	30	58	86	76	78	93
ABS Emerging Markets	-1.1	2.8	-14.4	-3.9	4.0	7.4	2.9	6.3	
HFRI Emerging Markets (Total) Index	1.5	5.1	-12.7	-3.4	1.7	4.2	0.9	4.3	2.9
MSCI Emerging Markets	-1.4	9.7	-20.1	-11.8	-2.7	2.2	-1.4	5.2	1.4
eV Emg Mkts Equity Net Rank	45	97	23	21	11	12	9	31	
Global Equity Composite	-5.5	9.6	-23.3						
MSCI ACWI	-3.9	9.8	-18.4	-1.6	4.0	9.2	5.2	8.1	8.0
InvMetrics Public DB Glbl Eq Net Rank	99	99	97						
Federated Hermes Global Equity	-5.5	9.6	-23.3	-					
MSCI ACWI	-3.9	9.8	-18.4	-1.6	4.0	9.2	5.2	8.1	8.0
Global Large Stock Blend Mstar MF Rank	97	84	97						

Annualized Performance (Net of Fees)

Market Value: \$966.3 Million and 100.0% of Fund

	1 Mo (%)	3 Mo (%)	1 Yr (%)	2 Yrs (%)	3 Yrs (%)	4 Yrs (%)	5 Yrs (%)	7 Yrs (%)	10 Yrs (%)
Hedge Fund Composite	-0.5	4.6	-6.2	1.2	3.4	4.9	3.3	3.7	
HFRI Fund of Funds Composite Index	0.3	1.8	-5.2	0.3	3.7	4.9	3.0	3.3	3.5
HFRI Equity Hedge (Total) Index	-0.8	4.2	-10.2	0.1	5.7	7.7	4.5	5.9	5.6
InvMetrics Public DB Hedge Funds Net Rank	50	51	43	74	85	85	63	51	
ABS Offshore SPC Global	0.7	4.7	-8.5	-3.1	2.5	5.5	3.0	3.2	
HFRX Equity Hedge Index	-0.1	1.7	-3.2	4.2	4.3	5.9	2.6	3.3	3.3
Entrust Three Rivers Partners	-0.5	3.5	-4.0	2.4	3.5	3.3	-		
HFRI Fund of Funds Composite Index	0.3	1.8	-5.2	0.3	3.7	4.9	3.0	3.3	3.5
Parametric Defensive Equity	-1.9	6.7	-7.6	4.3	4.4	7.2	5.1		
CBOE S&P 500 Covered Combo Index	-2.1	6.5	-13.8	2.0	1.3	5.6	3.4	5.7	6.6
50% S&P 500/50% 91 Day T-Bill	-2.7	4.3	-8.2	2.1	4.7	7.4	5.7	6.5	6.8
Real Estate Composite	-3.4	-3.4	5.0	12.8	8.5	7.9	7.7	7.6	
NFI-ODCE	-5.1	-5.1	6.6	13.6	9.0	7.8	7.7	7.6	9.1
InvMetrics Public DB Real Estate Priv Net Rank	49	35	83	86	83	72	80	67	
Rreef America II	-3.5	-3.5	7.9	15.6	10.6	9.5	9.1	8.5	
NFI-ODCE	-5.1	-5.1	6.6	13.6	9.0	7.8	7.7	7.6	9.1
Barings Core Property Fund	-3.3	-3.3	2.2	10.2	6.6	6.5	6.4	6.8	
NFI-ODCE	-5.1	-5.1	6.6	13.6	9.0	7.8	7.7	7.6	9.1

Calendar Performance (Net of Fees)

Market Value: \$966.3 Million and 100.0% of Fund

Ca	lend	lar	Year
----	------	-----	------

	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
Total Fund Composite	-6.2	13.5	10.6	15.6	-0.1	11.7	8.1	3.2	9.2	13.6	12.3
Total Fund Composite Benchmark	-6.7	12.6	10.8	14.4	0.1	12.2	7.7	3.5	7.2	14.1	10.5
InvMetrics Public DB Net Rank	3	54	81	93	2	95	26	1	1	66	41
Dedicated Funding for CMPTF	7.0	8.5	7.3	9.5	7.5	7.5	7.6	7.5	13.2	8.1	9.8
Annual Return	7.2	7.2	7.2	7.2	7.5	7.5	7.5	7.5	7.5	8.0	8.0
Total Invested Portfolio	-12.4	15.8	12.1	19.5	-5.0	14.7	8.5	0.0	6.6	17.6	14.1
Total Invested Portfolio Benchmark	-12.8	14.7	13.3	19.5	-4.8	16.0	7.4	0.7	6.8	17.6	12.2
InvMetrics Public DB Net Rank	32	19	61	49	69	49	16	34	22	22	7
Fixed Income Composite	-10.8	-0.3	9.0	9.6	-0.9	4.3	4.5	0.0	6.1	-0.4	8.4
Bloomberg US Aggregate TR	-13.0	-1.5	7.5	8.7	0.0	3.5	2.6	0.5	6.0	-2.0	4.2
InvMetrics Public DB US Fix Inc Net Rank	54	16	21	13	91	39	47	56	15	32	35
Vanguard Ultra Short Duration	-0.4	0.2	2.1								
BofA Merrill Lynch 1 Year Treasury	-0.2	0.0	1.7	3.0	1.9	0.6	0.8	0.3	0.2	0.3	0.2
Ultrashort Bond MStar MF Rank	53	42	24								
Federated Investors	-12.4	-0.2	10.8	10.1	-0.9	4.3	4.8	-0.2	5.0	-0.8	7.1
Bloomberg US Aggregate TR	-13.0	-1.5	7.5	8.7	0.0	3.5	2.6	0.5	6.0	-2.0	4.2
eV US Core Fixed Inc Net Rank	18	6	4	9	88	18	7	89	80	19	23
BlackRock Total Return Fund	-14.1	-0.7	9.1	9.9	-0.8	4.3	3.5	0.4	8.2	-0.1	10.3
Bloomberg US Aggregate TR	-13.0	-1.5	7.5	8.7	0.0	3.5	2.6	0.5	6.0	-2.0	4.2
Intermediate Core Bond MStar MF Rank	82	14	26	5	76	35	45	35	2	18	14
U.S. Equity Composite	-18.0	25.9	17.8	31.1	-7.2	19.5	16.6	-2.3	12.5	34.2	17.8
Dow Jones U.S. Total Stock Market	-19.5	25.7	20.8	30.9	-5.3	21.2	12.6	0.4	12.5	33.5	16.4
InvMetrics Public DB US Eq Net Rank	62	47	49	15	73	70	2	84	14	50	4
SSgA S&P 500 Index Fund	-18.1	28.6	18.3	31.4	-4.4	21.8	12.0	1.4	13.8		
S&P 500	-18.1	28.7	18.4	31.5	-4.4	21.8	12.0	1.4	13.7	32.4	16.0
eV US Large Cap Core Equity Net Rank	67	31	29	29	32	46	20	36	33		-
Frontier Capital Management	-17.9	18.1	18.0	28.8	-13.5	18.6	20.1	-6.5	12.1	39.0	18.0
Russell 2500	-18.4	18.2	20.0	27.8	-10.0	16.8	17.6	-2.9	7.1	36.8	17.9
eV US Small-Mid Cap Core Equity Net Rank	57	79	41	48	80	35	5	88	1	26	29
Vanguard Russell 2000		-		-		_	-	-	-	-	-
Russell 2000	-20.4	14.8	20.0	25.5	-11.0	14.6	21.3	-4.4	4.9	38.8	16.3
Small Cap MStar MF Rank											

Calendar Performance (Net of Fees)

Market Value: \$966.3 Million and 100.0% of Fund

Calendar Year

	2022 (%)	2021 (%)	2020 (%)	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)
Emerging Manager Composite	-19.7	15.3	12.3	25.9	-9.8	16.9					
Emerging Manager Benchmark	-19.3	20.5	19.2	28.0	-8.4	18.9					
Twin Capital	-18.2	28.1	15.3	30.0	-6.5	20.7					
S&P 500	-18.1	28.7	18.4	31.5	-4.4	21.8	12.0	1.4	13.7	32.4	16.0
Russell 1000	-19.1	26.5	21.0	31.4	-4.8	21.7	12.1	0.9	13.2	33.1	16.4
eV US Large Cap Core Equity Net Rank	67	36	43	38	58	59					
CIM Investment Management	-21.2	7.0	11.6	28.0	-14.0	11.1					
Russell 2000	-20.4	14.8	20.0	25.5	-11.0	14.6	21.3	-4.4	4.9	38.8	16.3
eV US Small Cap Core Equity Net Rank	77	98	64	19	71	79					
Non-U.S. Equity Composite	-15.0	13.5	11.9	25.5	-11.4	28.5	1.9	-1.7	-4.2	12.9	21.3
MSCI ACWI ex USA	-16.0	7.8	10.7	21.5	-14.2	27.2	4.5	-5.7	-3.9	15.3	16.8
InvMetrics Public DB ex-US Eq Net Rank	14	1	59	12	6	48	83	23	62	82	8
MFS International Equity Fund	-14.8	15.2	11.1	28.4	-10.7	28.0	0.3	0.0	-4.2	18.6	22.5
MSCI EAFE	-14.5	11.3	7.8	22.0	-13.8	25.0	1.0	-0.8	-4.9	22.8	17.3
Foreign Large Blend MStar MF Rank	35	7	41	3	9	24	64	37	36	64	12
SSgA Active Emerging Markets Fund	-17.6	6.8	6.8	12.0	-14.6	34.3	11.7	-13.7	-3.3	-5.6	17.2
MSCI Emerging Markets	-20.1	-2.5	18.3	18.4	-14.6	37.3	11.2	-14.9	-2.2	-2.6	18.2
eV Emg Mkts Equity Net Rank	39	28	87	91	30	69	32	59	74	91	69
ABS Emerging Markets	-14.4	8.0	21.8	18.0	-13.3	26.7	4.9	-3.4			
HFRI Emerging Markets (Total) Index	-12.7	6.9	12.9	11.8	-10.9	19.4	7.0	-3.3	-2.6	5.5	10.4
MSCI Emerging Markets	-20.1	-2.5	18.3	18.4	-14.6	37.3	11.2	-14.9	-2.2	-2.6	18.2
eV Emg Mkts Equity Net Rank	23	25	38	62	19	95	73	2			
Global Equity Composite	-23.3	-		-	-	-	-	-	-	-	-
MSCI ACWI	-18.4	18.5	16.3	26.6	-9.4	24.0	7.9	-2.4	4.2	22.8	16.1
InvMetrics Public DB Glbl Eq Net Rank	97									-	-
Federated Hermes Global Equity	-23.3										
MSCI ACWI	-18.4	18.5	16.3	26.6	-9.4	24.0	7.9	-2.4	4.2	22.8	16.1
Global Large Stock Blend Mstar MF Rank	97										



Calendar Performance (Net of Fees)

Market Value: \$966.3 Million and 100.0% of Fund

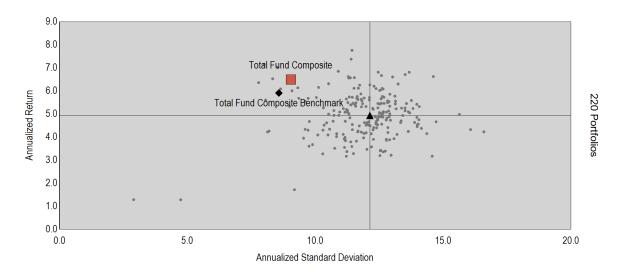
Calendar Year

	2022 (%)	2021 (%)	2020 (%)	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)
Hedge Fund Composite	-6.2	9.2	8.1	9.3	-2.9	9.0	0.7	0.0	4.9		
HFRI Fund of Funds Composite Index	-5.2	6.2	10.9	8.4	-4.0	7.8	0.5	-0.3	3.4	9.0	4.8
HFRI Equity Hedge (Total) Index	-10.2	11.7	17.9	13.7	-7.1	13.3	5.5	-1.0	1.8	14.3	7.4
InvMetrics Public DB Hedge Funds Net Rank	43	41	49	38	68	23	74	45	35	-	-
ABS Offshore SPC Global	-8.5	2.7	14.5	15.3	-6.4	12.3	-4.3	4.0	4.8	-	
HFRX Equity Hedge Index	-3.2	12.1	4.6	10.7	-9.4	10.0	0.1	-2.3	1.4	11.1	4.8
Entrust Three Rivers Partners	-4.0	9.1	5.7	2.6							
HFRI Fund of Funds Composite Index	-5.2	6.2	10.9	8.4	-4.0	7.8	0.5	-0.3	3.4	9.0	4.8
Parametric Defensive Equity	-7.6	17.7	4.6	16.3	-2.9	-	_			-	
CBOE S&P 500 Covered Combo Index	-13.8	20.8	-0.2	19.5	-4.9	15.4	7.9	4.3	5.5	16.4	7.5
50% S&P 500/50% 91 Day T-Bill	-8.2	13.7	9.9	16.1	-1.0	10.9	6.1	0.9	6.7	15.3	7.9
Real Estate Composite	5.0	21.2	0.3	6.1	6.9	6.5	8.4	14.4	11.0		
NFI-ODCE	6.6	21.1	0.3	4.4	7.4	6.7	7.8	14.0	11.5	12.9	9.8
InvMetrics Public DB Real Estate Priv Net Rank	83	69	69	34	80	63	43	7	67		
Rreef America II	7.9	23.9	1.1	6.3	7.4	6.4	8.1	15.6	12.0		
NFI-ODCE	6.6	21.1	0.3	4.4	7.4	6.7	7.8	14.0	11.5	12.9	9.8
Barings Core Property Fund	2.2	19.0	-0.3	6.0	6.3	6.6	8.6	13.0	-	-	
NFI-ODCE	6.6	21.1	0.3	4.4	7.4	6.7	7.8	14.0	11.5	12.9	9.8

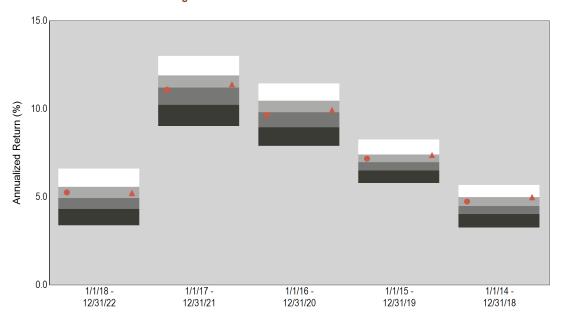
Invested Portfolio vs. Peer Universe

Market Value: \$629.5 Million and 65.1% of Fund

Annualized Return vs. Annualized Standard Deviation 5 Years Ending December 31, 2022



Rolling 5 Year Returns: Invested Portfolio



		Return (Rank)										
	5th Percentile	6.6		13.0		11.4		8.3		5.7		
	25th Percentile	5.6		11.9		10.5		7.4		5.0		
	Median	4.9		11.2		9.8		7.0		4.5		
	75th Percentile	4.3		10.2		8.9		6.5		4.0		
	95th Percentile	3.4		9.0		7.9		5.8		3.3		
	# of Portfolios	220		526		561		490		445		
•	Total Invested Portfolio Total Invested Portfolio Benchmark	5.3 5.2	(37) (39)	11.1 11.4	(55) (43)	9.7 9.9	(55) (44)	7.2 7.4	(38) (26)	4.7 5.0	(37) (25)	

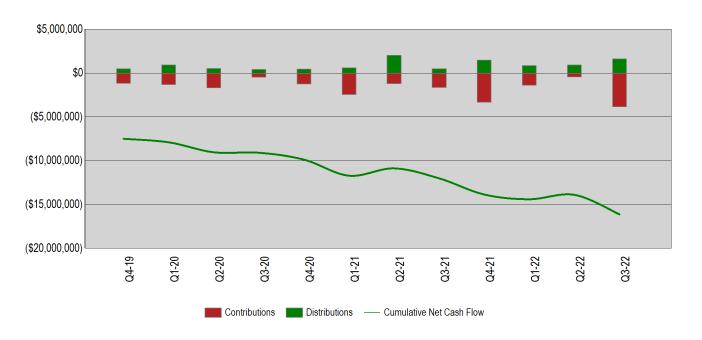
Private Equity Composite

Private Market Investments Overview

Detail for Period Ending September 30, 2022

Investments	Commit	Commitments		Contributions & Distributions		Valuations		Performance			
Investment Name	Vintage Yr	Commit (\$)	Unfunded Commit (\$)	Cumulative Contribution (\$)	Cumulative Distribution (\$)	Valuation (\$)	Total Value (\$)	DPI	RV Pl	TVP I	IRR (%)
Draper Triangle Ventures II, L.P.	2004	1,000,000	-112,121	1,112,121	1,300,576	3,010	1,303,586	1.17	0.00	1.17	2.57
Birchmere Ventures III, L.P.	2005	1,000,000	-47,694	1,047,694	893,418	17,890	911,308	0.85	0.02	0.87	-4.30
Draper Triangle Ventures III, L.P.	2013	2,000,000	27,819	2,044,497	180,118	2,222,009	2,402,127	0.09	1.09	1.17	2.84
Crescent Mezzanine Partners VIB, L.P.	2013	10,000,000	757,498	10,777,452	12,998,161	1,298,880	14,297,041	1.21	0.12	1.33	9.00
Crescent Mezzanine Partners VIIB, L.P.	2016	10,000,000	1,746,426	9,891,610	5,749,138	6,224,335	11,973,473	0.58	0.63	1.21	8.26
Siguler Guff Small Buyout Opportunities Fund IV, L.P.	2019	15,000,000	5,520,703	9,882,801	1,665,921	12,744,019	14,409,940	0.17	1.29	1.46	
Crescent Credit Solutions VIIIA-2, L.P.	2021	10,000,000	4,350,613	5,649,387	1,297,330	4,651,352	5,948,682	0.23	0.82	1.05	
Siguler Guff Small Buyout Opportunities Fund V, L.P.		15,000,000	14,640,000	360,000	26,963	451,755	478,718	0.07	1.25	1.33	
Total		64,000,000	26,883,244	40,765,562	24,111,625	27,613,250	51,724,875	0.59	0.68	1.27	7.53

Private Markets Cash Flow Analysis As of September 30, 2022



Investment Manager Statistics

Market Value: \$966.3 Million and 100.0% of Fund

3 Years Ending December 31, 2022

	Sharpe Ratio	Tracking Error	Alpha	Beta	R-Squared	Information Ratio	Standard Deviation	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Federated Investors	-0.2	2.3%	0.5%	1.0	0.9	0.8	3.4%	136.0%	90.0%
Bloomberg US Aggregate TR	-0.5						3.2%		
BlackRock Total Return Fund	-0.4	3.0%	0.1%	1.0	0.8	0.1	3.6%	117.2%	103.5%
Bloomberg US Aggregate TR	-0.5						3.2%		
SSgA S&P 500 Index Fund	0.3	0.0%	0.0%	1.0	1.0	-1.1	11.9%	99.9%	100.0%
S&P 500	0.3	-					11.9%		
Frontier Capital Management	0.1	6.1%	0.2%	1.2	1.0	0.1	18.7%	122.0%	110.7%
Russell 2500	0.1	-					16.1%		
MFS International Equity Fund	0.1	4.1%	0.5%	0.9	1.0	0.5	11.6%	103.2%	94.1%
MSCI EAFE	0.0						12.4%		
SSgA Active Emerging Markets Fund	-0.1	6.5%	0.3%	0.9	0.9	0.2	12.1%	94.3%	92.9%
MSCI Emerging Markets	-0.1						13.0%		
ABS Emerging Markets	0.2	4.7%	0.6%	1.2	1.0	0.5	9.9%	124.1%	103.0%
HFRI Emerging Markets (Total) Index	0.1						8.2%		
Twin Capital	0.3	1.3%	-0.2%	1.0	1.0	-0.6	11.6%	93.6%	98.3%
S&P 500	0.3						11.9%		
CIM Investment Management	-0.1	2.7%	-1.1%	1.0	1.0	-1.6	16.3%	85.4%	104.7%
Russell 2000	0.1						16.9%		
ABS Offshore SPC Global	0.1	6.1%	-0.4%	1.0	0.8	-0.3	6.4%	97.8%	122.1%
HFRX Equity Hedge Index	0.3				-		5.7%		
Parametric Defensive Equity	0.2	5.1%	0.7%	0.8	1.0	0.6	7.7%	88.0%	74.4%
CBOE S&P 500 Covered Combo Index	0.0						9.8%		

Investment Manager Statistics

Market Value: \$966.3 Million and 100.0% of Fund

5 Years Ending December 31, 2022

	Sharpe Ratio	Tracking Error	Alpha	Beta	R-Squared	Information Ratio	Standard Deviation	Up Mkt Capture Ratio Anlzd	Down Mkt Capture Ratio Anlzd
Federated Investors	0.0	2.0%	0.3%	1.0	0.9	0.7	2.9%	121.6%	89.9%
Bloomberg US Aggregate TR	-0.2						2.8%		
BlackRock Total Return Fund	-0.1	2.4%	0.1%	1.0	0.9	0.1	3.1%	109.9%	103.3%
Bloomberg US Aggregate TR	-0.2						2.8%		
SSgA S&P 500 Index Fund	0.4	0.0%	0.0%	1.0	1.0	-0.3	10.3%	100.0%	100.0%
S&P 500	0.4						10.3%		
Frontier Capital Management	0.1	4.9%	0.0%	1.1	1.0	0.0	15.5%	112.8%	111.1%
Russell 2500	0.2						13.7%		
MFS International Equity Fund	0.2	3.4%	0.7%	0.9	1.0	0.9	9.8%	109.8%	91.1%
MSCI EAFE	0.0						10.3%		
SSgA Active Emerging Markets Fund	-0.1	5.4%	0.0%	0.9	0.9	0.0	10.1%	92.3%	94.8%
MSCI Emerging Markets	-0.1						10.9%		
ABS Emerging Markets	0.1	4.2%	0.5%	1.2	1.0	0.5	8.4%	127.8%	107.4%
HFRI Emerging Markets (Total) Index	0.0						6.8%		
Twin Capital	0.4	1.1%	-0.2%	1.0	1.0	-0.9	10.1%	94.3%	99.3%
S&P 500	0.4						10.3%		
CIM Investment Management	0.0	3.2%	-0.6%	1.0	1.0	-0.9	14.1%	90.1%	102.9%
Russell 2000	0.1				-		14.3%		
ABS Offshore SPC Global	0.2	5.1%	0.1%	1.0	0.8	0.1	5.5%	107.4%	103.1%
HFRX Equity Hedge Index	0.1			-	-	-	5.1%		

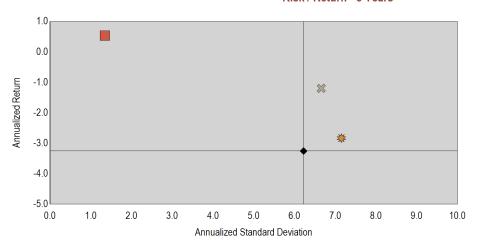
Fixed Income Composite

Characteristics

As of September 30, 2022

Market Value: \$92.8 Million and 10.0% of Fund

Risk / Return - 3 Years



- Vanguard Ultra Short Duration
- ⋇ Federated Investors
- * BlackRock Total Return Fund
- Bloomberg US Aggregate TR

	Characteristics	
	Portfolio	Index
	Q3-22	Q3-22
Yield to Maturity	5.0%	4.7%
Avg. Eff. Maturity	7.1 yrs.	8.7 yrs.
Avg. Duration	5.2 yrs.	6.4 yrs.
Avg. Quality	А	
		Number Of

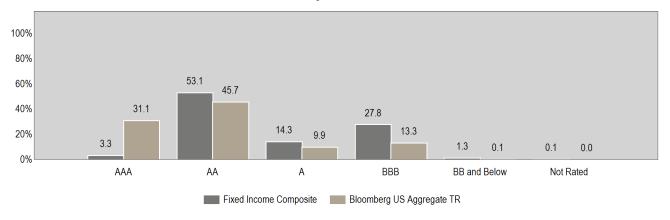
Region	Number Of Assets
North America ex U.S.	46
United States	2,535
Europe Ex U.K.	98
United Kingdom	46
Pacific Basin Ex Japan	16
Japan	29
Emerging Markets	48
Other	564
Total	3,382

Portfolio	Index
Q3-22	Q3-22
26.8	64.8
38.6	29.6
17.0	
10.7	0.1
0.4	5.3
0.2	0.2
-0.7	
	Q3-22 26.8 38.6 17.0 10.7 0.4 0.2

Sector

Maturity							
	Q3-22						
<1 Year	17.6%						
1-3 Years	21.6%						
3-5 Years	14.0%						
5-7 Years	7.9%						
7-10 Years	15.7%						
10-15 Years	13.0%						
15-20 Years	1.5%						
>20 Years	8.7%						
Not Rated/Cash	0.0%						

Quality Distribution



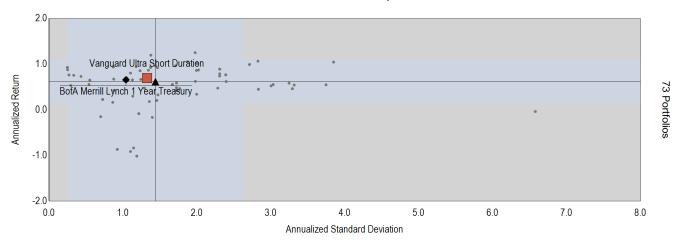
Vanguard Ultra Short Duration

Characteristics

As of September 30, 2022

Market Value: \$15.4 Million and 1.7% of Fund

Risk / Return - Since Inception



Characteristics		
	Portfolio	Index
	Q3-22	Q3-22
Yield to Maturity	4.7%	4.5%
Avg. Eff. Maturity	0.8 yrs.	2.0 yrs.
Avg. Duration	0.7 yrs.	1.9 yrs.
Avg. Quality	А	

Region	Number Of Assets
North America ex U.S.	24
United States	472
Europe Ex U.K.	37
United Kingdom	24
Pacific Basin Ex Japan	15
Japan	22
Emerging Markets	17

Sector		
	Portfolio	Index
	Q3-22	Q3-22
US Sector Allocation		
UST/Agency	14.8	64.8
Corporate	69.3	29.6
MBS	0.5	
ABS	13.7	0.1
Foreign	1.1	5.3
Muni		0.2

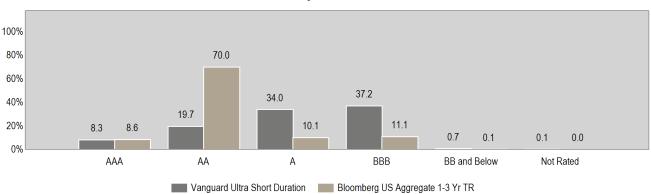
	Q3-22
<1 Year	73.0%
1-3 Years	26.7%
3-5 Years	0.1%
5-7 Years	0.2%
7-10 Years	0.0%
10-15 Years	0.0%
15-20 Years	0.0%
>20 Years	0.0%
Not Rated/Cash	0.0%

Maturity

Quality Distribution

8

619



Other

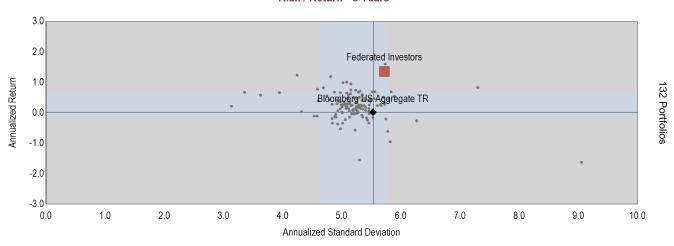
Total

Federated Investors

Characteristics

As of December 31, 2022 Market Value: \$58.5 Million and 6.1% of Fund

Risk / Return - 5 Years



Characteristics			
	Portfolio	Index	
	Q4-22	Q4-22	
Yield to Maturity	4.8%	4.6%	
Avg. Eff. Maturity	8.1 yrs.	8.5 yrs.	
Avg. Duration	6.0 yrs.	6.2 yrs.	
Avg. Quality	А		

	Portfolio	Index
	Q4-22	Q4-22
US Sector Allocation		
UST/Agency	32.5	64.6
Corporate	29.1	30.1
MBS	22.8	
ABS	4.9	0.1
Foreign	0.2	5.0
Muni		0.2

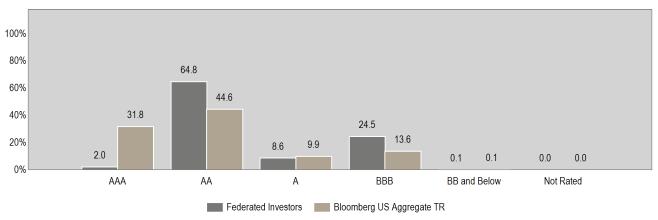
Sector

	Q4-22
<1 Year	4.1%
1-3 Years	20.8%
3-5 Years	18.1%
5-7 Years	7.7%
7-10 Years	37.4%
10-15 Years	0.3%
15-20 Years	1.7%
>20 Years	9.9%
Not Rated/Cash	0.0%

Maturity

Region	Number Of Assets
North America ex U.S.	2
United States	249
Europe Ex U.K.	4
United Kingdom	2
Emerging Markets	2
Other	1
Total	260

Quality Distribution



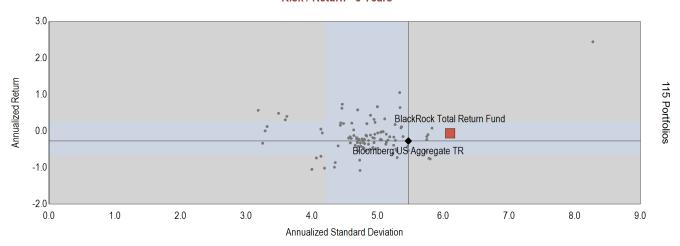
BlackRock Total Return Fund

Characteristics

As of September 30, 2022

Market Value: \$19.9 Million and 2.1% of Fund

Risk / Return - 5 Years



	Portfolio	Index
	Q3-22	Q3-22
Yield to Maturity	6.9%	4.7%
Avg. Eff. Maturity	8.8 yrs.	8.7 yrs.
Avg. Duration	5.8 yrs.	6.4 yrs.
Avg. Quality	А	

Characteristics

Region	Number Of Assets
North America ex U.S.	20
United States	1,862
Europe Ex U.K.	59
United Kingdom	20
Pacific Basin Ex Japan	1
Japan	8
Emerging Markets	29
Other	556
Total	2,555

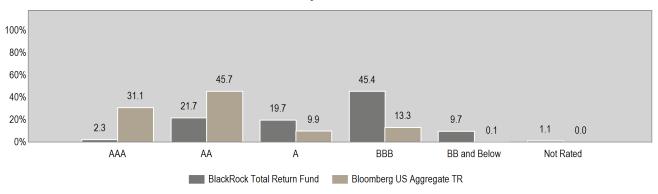
Sector		
	Portfolio	Index
	Q3-22	Q3-22
US Sector Allocation		
UST/Agency	12.4	64.8
Corporate	49.2	29.6
MBS	10.4	
ABS	24.1	0.1
Foreign	0.7	5.3
Muni	0.8	0.2
Cash	-3.7	

	Q3-22
<1 Year	7.0%
1-3 Years	18.6%
3-5 Years	19.0%
5-7 Years	13.8%
7-10 Years	20.8%
10-15 Years	3.1%
15-20 Years	3.0%
>20 Years	14.8%

Not Rated/Cash

Maturity

Quality Distribution



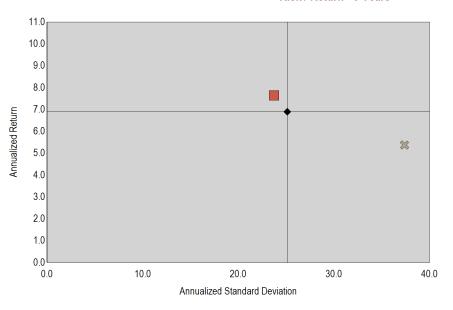
0.0%

U.S. Equity Composite

Characteristics

As of December 31, 2022 Market Value: \$243.9 Million and 25.2% of Fund

Risk / Return - 3 Years



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

Characteristics

	Portfolio	Dow Jones U.S. Total Stock Market
Number of Holdings	2,510	4,251
Weighted Avg. Market Cap. (\$B)	283.2	357.2
Median Market Cap. (\$B)	1.8	1.0
Price To Earnings	17.1	18.3
Price To Book	3.2	3.6
Price To Sales	1.9	2.2
Return on Equity (%)	20.8	22.4
Yield (%)	1.6	1.7
Beta	1.1	1.0
R-Squared	1.0	1.0

Characteristics

INDUSTRY SECTOR DISTRIBUTION (% Equity)	Portfolio	Dow Jones U.S. Total Stock Market
	F.4	F 0
Energy	5.1	5.2
Materials	3.9	3.0
Industrials	12.3	9.7
Consumer Discretionary	10.3	10.0
Consumer Staples	5.3	6.6
Health Care	15.2	15.5
Financials	12.4	12.3
Information Technology	21.6	24.6
Communication Services	5.6	6.7
Utilities	3.2	3.0
Real Estate	3.0	3.3
Unclassified	1.3	0.0

Largest Holdings

	Ena weight	Return
APPLE INC	3.9	-5.8
MICROSOFT CORP	3.6	3.3
AMAZON.COM INC	1.5	-25.7
BERKSHIRE HATHAWAY INC	1.1	15.7
ALPHABET INC	1.1	-7.8

Top Contributors

	Beg Wgt	Return	Contribution
EXXON MOBIL CORP	0.8	27.3	0.2
JPMORGAN CHASE & CO	0.7	29.5	0.2
BERKSHIRE HATHAWAY INC	1.1	15.7	0.2
CHEVRON CORP	0.6	25.9	0.1
MERCK & CO INC	0.5	29.7	0.1

Bottom Contributors

	Beg Wgt	Return	Contribution
TESLA INC	1.6	-53.6	-0.8
AMAZON.COM INC	2.2	-25.7	-0.6
APPLE INC	4.6	-5.8	-0.3
WOLFSPEED INC	0.4	-33.2	-0.1
ALPHABET INC	1.3	-7.8	-0.1

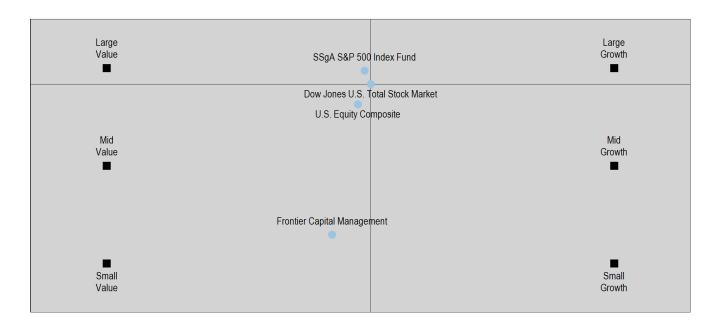
Market Capitalization

	Small Cap	Small/ Mid	Mid Cap	Mid/ Large	Large Cap
U.S. Equity Composite	16.0%	12.9%	14.0%	20.9%	36.2%
Dow Jones U.S. Total Stock Market	5.7%	7.5%	15.3%	26.5%	45.1%
Weight Over/Under	10.3%	5.4%	-1.3%	-5.6%	-8.9%

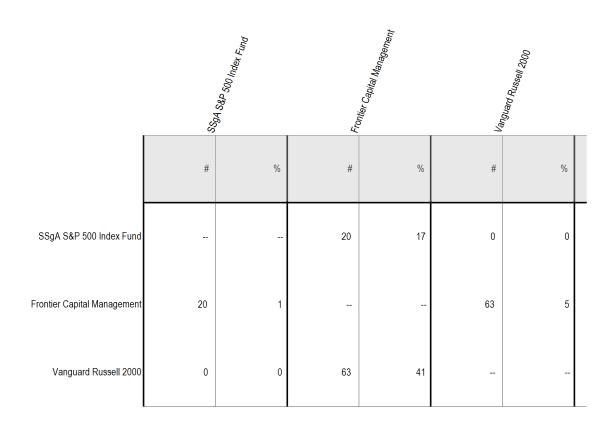


As of December 31, 2022

U.S. Equity Style Map 5 Years Ending December 31, 2022



Common Holdings Matrix



SSgA S&P 500 Index Fund

As of December 31, 2022

Characteristics

Market Value: \$162.3 Million and 16.8% of Fund

Style Drift - 5 Years



S&P 500

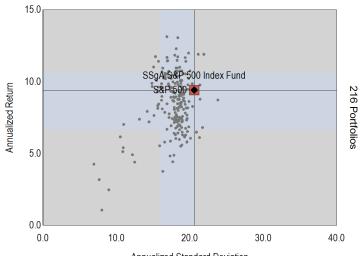
Characteristics

	Portfolio	S&P 500
Number of Holdings	504	503
Weighted Avg. Market Cap. (\$B)	409.9	415.6
Median Market Cap. (\$B)	29.6	29.6
Price To Earnings	19.3	19.5
Price To Book	3.8	3.9
Price To Sales	2.5	2.5
Return on Equity (%)	30.0	30.0
Yield (%)	1.8	1.7
Beta	1.0	1.0
R-Squared	1.0	1.0

Characteristics

	Portfolio	S&P 500
INDUSTRY SECTOR DISTRIBUTION (% Ed	μity)	
Energy	5.1	5.1
Materials	2.7	2.7
Industrials	8.5	8.6
Consumer Discretionary	9.6	10.0
Consumer Staples	7.1	7.8
Health Care	15.5	15.4
Financials	11.4	12.0
Information Technology	25.2	25.3
Communication Services	7.1	7.5
Utilities	4.0	3.0
Real Estate	2.6	2.6
Unclassified	0.1	0.0

Risk / Return - 5 Years



Annualized Standard Deviation

Largest Holdings

	End Weight	Return
APPLE INC	5.9	-5.8
MICROSOFT CORP	5.5	3.3
AMAZON.COM INC	2.3	-25.7
BERKSHIRE HATHAWAY INC	1.7	15.7
ALPHABET INC	1.6	-7.8

Top Contributors

	Beg Wgt	Return	Contribution
EXXON MOBIL CORP	1.2	27.3	0.3
JPMORGAN CHASE & CO	1.0	29.5	0.3
BERKSHIRE HATHAWAY INC	1.6	15.7	0.2
CHEVRON CORP	0.9	25.9	0.2
MERCK & CO INC	0.7	29.7	0.2

Bottom Contributors

	Beg Wgt	Return	Contribution
TESLA INC	2.3	-53.6	-1.2
AMAZON.COM INC	3.3	-25.7	-0.8
APPLE INC	6.9	-5.8	-0.4
ALPHABET INC	1.9	-7.8	-0.1
ALPHABET INC	1.7	-7.7	-0.1

Market Capitalization

	Small Cap	Small/ Mid	Mid Cap	Mid/ Large	Large Cap
SSgA S&P 500 Index Fund	0.0%	1.4%	15.8%	30.1%	52.7%
S&P 500	0.1%	1.4%	14.8%	29.8%	53.9%
Weight Over/Under	-0.1%	0.0%	1.0%	0.3%	-1.2%

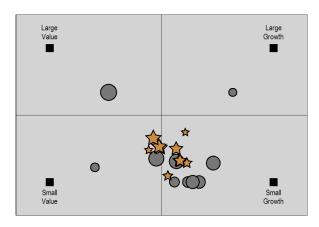
Frontier Capital Management

As of December 31, 2022

Characteristics

Market Value: \$41.9 Million and 4.3% of Fund

Style Drift - 5 Years



Frontier Capital Management

Russell 2500

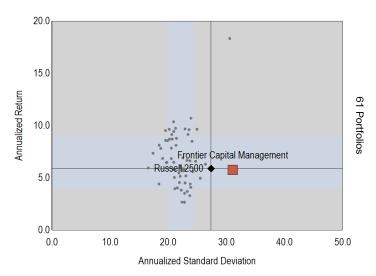
Characteristics

	Portfolio	Russell 2500
Number of Holdings	142	2,448
Weighted Avg. Market Cap. (\$B)	7.4	6.1
Median Market Cap. (\$B)	4.1	1.5
Price To Earnings	14.7	13.1
Price To Book	2.5	2.5
Price To Sales	1.2	1.4
Return on Equity (%)	11.9	11.2
Yield (%)	0.8	1.7
Beta	1.2	1.0
R-Squared	1.0	1.0

Characteristics

	Portfolio	Russell 2500
INDUSTRY SECTOR DISTRIBUTION (% Eq	juity)	
Energy	3.6	5.3
Materials	8.4	5.8
Industrials	23.7	18.0
Consumer Discretionary	13.2	11.2
Consumer Staples	0.0	3.4
Health Care	12.6	12.9
Financials	11.9	16.1
Information Technology	16.6	13.7
Communication Services	2.6	2.5
Utilities	0.0	3.1
Real Estate	1.5	8.0
Unclassified	6.0	0.0

Risk / Return - 5 Years



Largest Holdings

	End Weight	Return
BUILDERS FIRSTSOURCE INC	2.3	10.1
MRC GLOBAL INC	1.9	61.1
ARRAY TECHNOLOGIES INC	1.8	16.6
MACOM TECHNOLOGY SOLUTIONS HOLDINGS INC	1.8	21.6
INSULET CORPORATION	1.7	28.3

Top Contributors

	Beg Wgt	Return	Contribution
MRC GLOBAL INC	1.4	61.1	0.9
INSULET CORPORATION	1.8	28.3	0.5
MACOM TECHNOLOGY SOLUTIONS HOLDINGS INC	2.1	21.6	0.5
MASTEC INC.	1.2	34.4	0.4
KBR INC	1.8	22.4	0.4

Bottom Contributors

	Beg Wgt	Return	Contribution
WOLFSPEED INC	2.4	-33.2	-0.8
PACIRA BIOSCIENCES INC	0.9	-27.4	-0.3
SIGNATURE BANK	1.1	-23.4	-0.2
LIVENT CORP	0.7	-35.2	-0.2
CAESARSTONE LTD	0.6	-38.7	-0.2

Market Capitalization

	Small Cap	Small/ Mid	Mid Cap	Mid/ Large	Large Cap
Frontier Capital Management	35.5%	43.4%	19.9%	1.2%	0.0%
Russell 2500	36.4%	49.4%	14.1%	0.0%	0.0%
Weight Over/Under	-0.9%	-6.0%	5.8%	1.2%	0.0%

Frontier Capital Management

Attribution

As of December 31, 2022 Market Value: \$41.9 Million and 4.3% 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	4.1%	5.1%	-1.0%	7.6%	13.2%	-5.6%	-0.1%	-0.2%	-0.3%	0.3%	0.0%
Materials	8.4%	5.4%	3.0%	13.1%	16.0%	-2.9%	0.3%	-0.2%	0.0%	0.5%	0.5%
Industrials	23.1%	17.5%	5.6%	16.7%	10.8%	6.0%	0.2%	1.4%	1.6%	0.6%	2.1%
Consumer Discretionary	12.7%	10.9%	1.8%	17.8%	11.1%	6.6%	0.1%	0.8%	0.9%	0.4%	1.3%
Consumer Staples	0.0%	3.3%	-3.3%		10.3%		-0.1%	0.0%	-0.1%	0.1%	0.0%
Health Care	15.5%	13.4%	2.1%	9.0%	1.3%	7.7%	-0.1%	1.2%	1.1%	-0.8%	0.2%
Financials	14.6%	16.3%	-1.7%	3.1%	6.3%	-3.2%	0.0%	-0.5%	-0.5%	-0.2%	-0.6%
Information Technology	18.6%	14.2%	4.4%	8.8%	3.8%	4.9%	-0.2%	0.9%	0.8%	-0.5%	0.2%
Communication Services	1.4%	2.6%	-1.2%	4.2%	3.2%	1.0%	0.1%	0.0%	0.1%	-0.1%	0.0%
Utilities	0.0%	3.1%	-3.1%		7.9%		0.0%	0.0%	0.0%	0.0%	0.0%
Real Estate	1.6%	8.1%	-6.6%	13.6%	5.8%	7.8%	0.1%	0.1%	0.2%	-0.1%	0.1%
Total				11.3%	7.5%	3.8%	0.2%	3.5%	3.8%	0.0%	3.8%

Performance Attribution vs. Russell 2500

	Total	Selection	Allocation	Interaction
	Effects	Effect	Effect	Effects
Energy	-0.4%	-0.3%	-0.1%	0.1%
Materials	0.2%	-0.2%	0.5%	-0.1%
Industrials	2.0%	1.0%	0.6%	0.3%
Consumer Discretionary	1.0%	0.7%	0.2%	0.1%
Consumer Staples	-0.3%		-0.3%	
Health Care	1.2%	1.0%	0.0%	0.2%
Financials	-0.6%	-0.5%	-0.1%	0.1%
Information Technology	1.1%	0.7%	0.2%	0.2%
Communication Services	0.0%	0.0%	0.0%	0.0%
Utilities	-0.2%		-0.2%	
Real Estate	-0.3%	0.6%	-0.4%	-0.5%
Cash	0.0%			
Portfolio	3.8% =	3.2% +	0.2% +	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 8.86	25.7%	19.3%	6.4%	8.3%	5.9%	2.3%	-0.1%	0.6%	0.5%	-0.3%	0.2%
2) 5.61 - 8.86	14.1%	20.2%	-6.1%	13.3%	9.9%	3.5%	-0.1%	0.5%	0.3%	0.5%	0.8%
3) 3.50 - 5.61	17.3%	20.1%	-2.8%	12.5%	9.4%	3.2%	-0.1%	0.6%	0.5%	0.4%	0.9%
4) 1.55 - 3.50	18.7%	20.3%	-1.6%	10.8%	9.9%	1.0%	0.0%	0.2%	0.1%	0.5%	0.6%
5) 0.00 - 1.55	24.2%	20.1%	4.2%	12.7%	2.5%	10.2%	-0.2%	2.5%	2.3%	-1.0%	1.3%
Total				11.3%	7.5%	3.8%	-0.5%	4.3%	3.8%	0.0%	3.8%

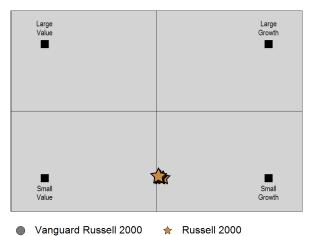
Vanguard Russell 2000

Characteristics

As of December 31, 2022

Market Value: \$39.8 Million and 4.1% of Fund

Style Drift - 5 Years



Russell 2000

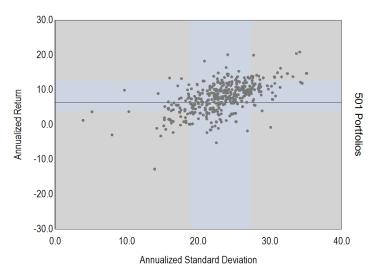
Characteristics

	Portfolio	Russell 2000
Number of Holdings	1,942	1,950
Weighted Avg. Market Cap. (\$B)	2.8	2.8
Median Market Cap. (\$B)	1.1	1.1
Price To Earnings	12.1	12.2
Price To Book	2.2	2.2
Price To Sales	1.3	1.3
Return on Equity (%)	5.4	5.3
Yield (%)	1.6	1.6
Beta		1.0
R-Squared		1.0

Characteristics

	Portfolio	Russell 2000
INDUSTRY SECTOR DISTRIBUTION (% Eq	uity)	
Energy	6.6	6.8
Materials	4.3	4.3
Industrials	15.5	15.5
Consumer Discretionary	10.3	10.3
Consumer Staples	3.6	3.6
Health Care	16.5	16.9
Financials	16.9	17.2
Information Technology	12.3	12.8
Communication Services	2.6	2.5
Utilities	3.5	3.5
Real Estate	6.2	6.4
Unclassified	1.5	0.0

Risk / Return - 5 Years



Largest Holdings

End Weight	Return
0.3	43.9
0.3	-26.1
0.3	42.0
0.3	28.4
0.3	57.9
	0.3 0.3 0.3 0.3

Top Contributors

	Beg Wgt	Return	Contribution
MADRIGAL PHARMACEUTICALS INC	0.0	346.6	0.1
MAXAR TECHNOLOGIES INC	0.1	176.5	0.1
CROCS INC	0.2	57.9	0.1
HALOZYME THERAPEUTICS INC	0.2	43.9	0.1
INSPIRE MEDICAL SYSTEMS INC	0.2	42.0	0.1

Bottom Contributors

	Beg Wgt	Return	Contribution
SHOCKWAVE MEDICAL INC	0.5	-26.1	-0.1
CHART INDUSTRIES INC	0.3	-37.5	-0.1
ROGERS CORP.	0.2	-50.7	-0.1
SILVERGATE CAPITAL CORPORATION	0.1	-76.9	-0.1
LIVENT CORP	0.2	-35.2	-0.1

Market Capitalization

	Small Cap	Small/ Mid	Mid Cap	Mid/ Large	Large Cap
Vanguard Russell 2000	67.2%	32.8%	0.0%	0.0%	0.0%
Russell 2000	70.2%	29.8%	0.0%	0.0%	0.0%
Weight Over/Under	-3.0%	3.0%	0.0%	0.0%	0.0%

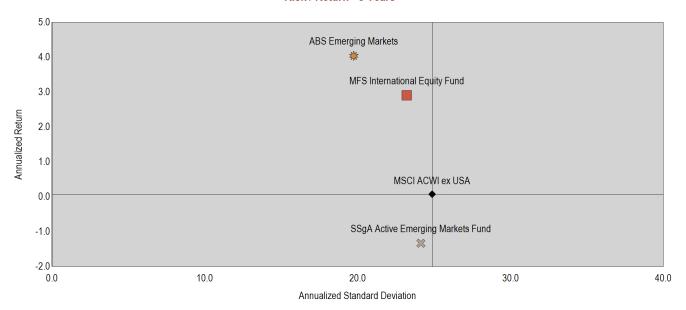
Non-U.S. Equity Composite

Characteristics

Market Value: \$104.2 Million and 10.8% of Fund

As of December 31, 2022

Risk / Return - 5 Years



Characteristics

	Portfolio	MSCI ACWI ex USA
Number of Holdings	335	2,259
Weighted Avg. Market Cap. (\$B)	91.0	80.7
Median Market Cap. (\$B)	9.7	8.9
Price To Earnings	14.5	12.8
Price To Book	2.5	2.4
Price To Sales	1.6	1.3
Return on Equity (%)	18.7	15.2
Yield (%)	2.9	3.4
Beta	0.9	1.0
R-Squared	1.0	1.0

Region	% of Total	% of Bench
North America ex U.S.	3.6%	7.7%
United States	1.5%	0.0%
Europe Ex U.K.	54.0%	31.7%
United Kingdom	9.3%	9.8%
Pacific Basin Ex Japan	4.8%	8.1%
Japan	12.3%	14.0%
Emerging Markets	12.9%	28.0%
Other	1.4%	0.7%
Total	100.0%	100.0%

Characteristics

Onar doteriotics		
	Portfolio	MSCI ACWI ex USA
INDUSTRY SECTOR DISTRIBUTION (% Equity)		
Energy	3.0	6.0
Materials	7.6	8.4
Industrials	16.4	12.3
Consumer Discretionary	10.6	11.4
Consumer Staples	12.1	8.9
Health Care	15.8	9.8
Financials	18.8	21.0
Information Technology	10.3	10.8
Communication Services	2.2	5.9
Utilities	1.6	3.4
Real Estate	0.3	2.3
Unclassified	0.0	0.0

Market Capitalization

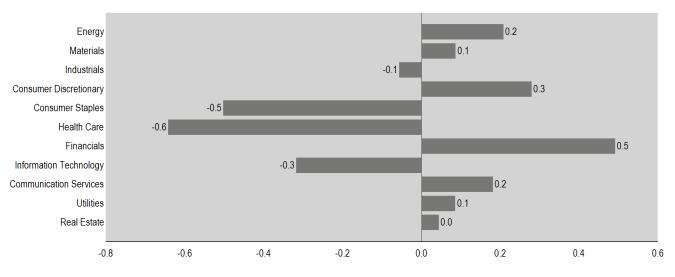
	Small Cap	Mid Cap	Large Cap
Non-U.S. Equity Composite	4.7%	17.1%	78.2%
MSCI ACWI ex USA	11.7%	24.9%	63.4%
Weight Over/Under	-7.0%	-7.8%	14.8%

Non-U.S. Equity Composite

Attribution

As of December 31, 2022 Market Value: \$104.2 Million and 10.8% of Fund

Active Contribution vs. MSCI ACWI ex USA



Non-U.S. Equity Composite

Market Cap Attribution vs. MSCI ACWI ex USA

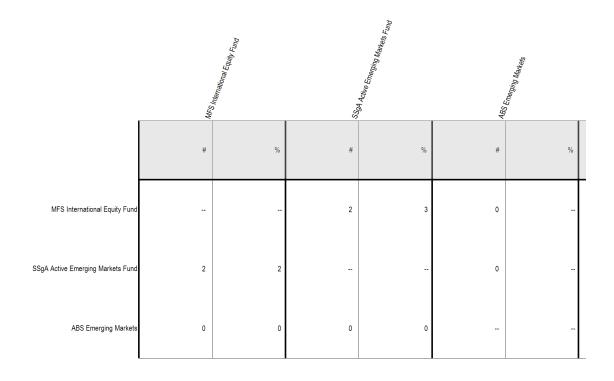
	Portfolio Weight	Index Weight	Excess Weight	Portfolio USD Return	Index USD Return	Excess USD Return	Allocation Effect (Local)	Selection Effect (Local)	Active Contrib.	Passive Contrib.	Total Contrib.
Market Cap. Quintile (\$Bil)											
1) Above 101.33	22.2%	19.9%	2.3%	13.5%	15.4%	-1.9%	0.0%	-0.3%	-0.3%	0.2%	-0.1%
2) 46.10 - 101.33	26.3%	20.1%	6.2%	17.7%	15.3%	2.4%	0.1%	1.0%	1.1%	0.2%	1.3%
3) 23.30 - 46.10	26.0%	20.0%	6.1%	12.6%	13.9%	-1.4%	-0.1%	0.1%	0.0%	-0.1%	-0.1%
4) 9.77 - 23.30	16.3%	20.0%	-3.7%	14.0%	13.4%	0.6%	0.0%	-0.1%	-0.1%	-0.2%	-0.3%
5) 0.00 - 9.77	9.1%	20.0%	-10.8%	20.0%	14.1%	5.9%	0.0%	-0.1%	-0.1%	-0.1%	-0.2%
Total				15.0%	14.4%	0.6%	0.1%	0.5%	0.6%	0.0%	0.6%

As of December 31, 2022

Equity Style Map 5 Years Ending December 31, 2022



Common Holdings Matrix



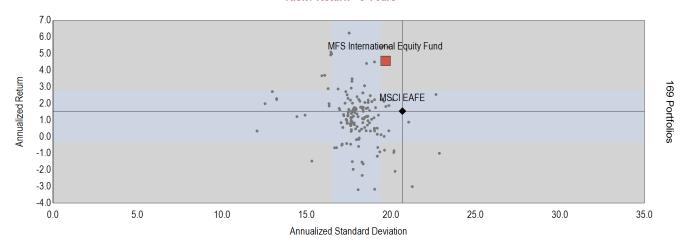
MFS International Equity Fund

Characteristics

As of December 31, 2022

Market Value: \$83.6 Million and 8.6% of Fund

Risk / Return - 5 Years



Characteristics

	Portfolio	MSCI EAFE
Number of Holdings	78	796
Weighted Avg. Market Cap. (\$B)	93.9	78.1
Median Market Cap. (\$B)	42.8	11.8
Price To Earnings	17.1	13.7
Price To Book	2.6	2.4
Price To Sales	1.9	1.3
Return on Equity (%)	18.7	15.2
Yield (%)	2.6	3.4
Beta	0.9	1.0
R-Squared	1.0	1.0

Region	% of Total	% of Bench
North America ex U.S.	4.0%	0.0%
United States	1.4%	0.0%
Europe Ex U.K.	59.5%	49.4%
United Kingdom	10.2%	15.3%
Pacific Basin Ex Japan	4.5%	12.7%
Japan	13.6%	21.9%
Emerging Markets	5.3%	0.0%
Other	1.4%	0.7%
Total	100.0%	100.0%

Characteristics

	Portfolio	MSCI EAFE
INDUSTRY SECTOR DISTRIBUTION	(% Equity)	
Energy	2.7	5.0
Materials	7.4	7.8
Industrials	17.5	15.1
Consumer Discretionary	10.5	11.1
Consumer Staples	12.9	10.5
Health Care	17.0	13.6
Financials	18.4	18.7
Information Technology	9.5	7.8
Communication Services	1.6	4.5
Utilities	1.4	3.5
Real Estate	0.0	2.6
Unclassified	0.0	0.0

Market Capitalization

	Small Cap	Mid Cap	Large Cap
MFS International Equity Fund	1.3%	15.9%	82.8%
MSCI EAFE	6.5%	24.5%	69.0%
Weight Over/Under	-5.2%	-8.6%	13.8%

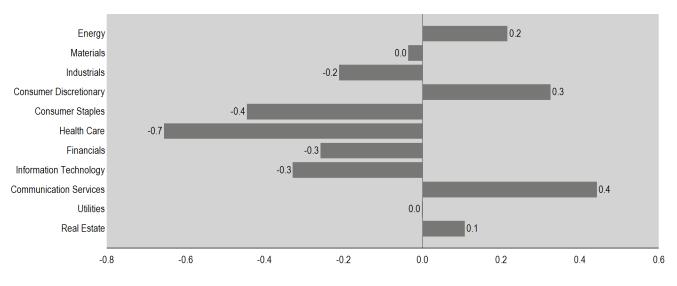
MFS International Equity Fund

Attribution

Market Value: \$83.6 Million and 8.6% of Fund

As of December 31, 2022

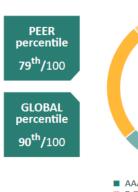
Active Contribution



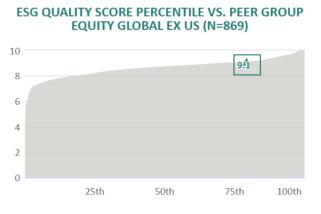
MFS International Equity Fund

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 103.98	21.2%	19.7%	1.5%	12.4%	16.8%	-4.4%	0.0%	-0.8%	-0.8%	-0.1%	-0.9%
2) 47.86 - 103.98	25.0%	20.0%	4.9%	20.7%	21.0%	-0.3%	0.2%	0.4%	0.5%	0.7%	1.2%
3) 27.31 - 47.86	30.1%	20.1%	10.0%	13.5%	17.7%	-4.2%	0.0%	-0.4%	-0.4%	0.0%	-0.3%
4) 12.37 - 27.31	17.2%	20.2%	-3.0%	11.2%	15.8%	-4.6%	0.0%	-1.1%	-1.0%	-0.3%	-1.3%
5) 0.00 - 12.37	6.6%	20.0%	-13.5%	27.5%	16.2%	11.3%	0.2%	-0.4%	-0.2%	-0.3%	-0.5%
Total				15.6%	17.5%	-1.9%	0.4%	-2.3%	-1.9%	0.0%	-1.9%











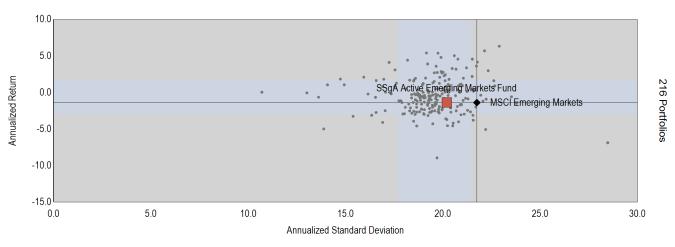
^{*}Sustainability metrics are from data gathered by MSCI

SSgA Active Emerging Markets Index Fund

Characteristics

As of December 31, 2022 Market Value: \$8.8 Million and 0.9% of Fund

Risk / Return - 5 Years



Characteristics

	Portfolio	Emerging Markets
Number of Holdings	260	1,375
Weighted Avg. Market Cap. (\$B)	61.8	95.7
Median Market Cap. (\$B)	4.5	6.5
Price To Earnings	7.1	11.4
Price To Book	1.9	2.6
Price To Sales	0.7	1.1
Return on Equity (%)	16.5	14.4
Yield (%)	5.8	3.4
Beta	0.9	1.0
R-Squared	0.9	1.0

Region	% of Total	% of Bench
EM Asia	66.8%	78.3%
EM Latin America	9.2%	8.5%
EM Europe & Middle East	1.4%	1.7%
EM Africa	4.4%	3.8%
Other	18.2%	7.7%
Total	100.0%	100.0%

Characteristics

	Portfolio	MSCI Emerging Markets
INDUSTRY SECTOR DISTRIBUTION (% Eq	uity)	
Energy	6.1	4.9
Materials	9.0	8.9
Industrials	5.9	6.1
Consumer Discretionary	11.3	14.1
Consumer Staples	4.5	6.4
Health Care	4.7	4.1
Financials	22.8	22.1
Information Technology	17.5	18.6
Communication Services	7.3	9.9
Utilities	4.4	3.0
Real Estate	3.6	1.9
Unclassified	0.1	0.0

	Small Cap	Mid Cap	Large Cap
SSgA Active Emerging Markets Fund	23.6%	30.9%	45.5%
MSCI Emerging Markets	12.8%	23.3%	63.9%
Weight Over/Under	10.8%	7.5%	-18.3%

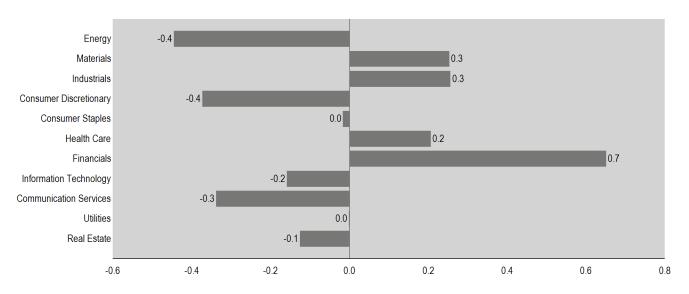
SSgA Active Emerging Markets Index Fund

Attribution

Market Value: \$8.8 Million and 0.9% of Fund

As of December 31, 2022

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 116.76	13.7%	18.8%	-5.0%	15.3%	14.5%	0.8%	-0.2%	-0.1%	-0.3%	0.9%	0.6%
2) 35.59 - 116.76	10.9%	21.3%	-10.4%	4.8%	4.1%	0.7%	0.4%	0.0%	0.3%	-1.2%	-0.9%
3) 13.41 - 35.59	15.1%	19.8%	-4.7%	1.0%	7.5%	-6.5%	0.1%	-1.1%	-1.0%	-0.4%	-1.5%
4) 5.12 - 13.41	24.0%	20.1%	3.9%	10.3%	10.8%	-0.5%	0.0%	0.0%	0.0%	0.2%	0.2%
5) 0.00 - 5.12	36.3%	20.0%	16.3%	13.0%	12.8%	0.2%	0.3%	0.7%	1.1%	0.6%	1.7%
Total				10.0%	9.8%	0.1%	0.6%	-0.5%	0.1%	0.0%	0.1%

ABS Emerging Markets

Characteristics

As of December 31, 2022

 Manager:
 ABS Investment Management

 Product:
 ABS Emerging Markets Portfolio

 Strategy:
 Hedge Fund of Fund - Hedged Equity

Market Value: \$11.8 Million and 1.2% of Fund

Date as of: Dec 31st, 2022

Benchmark 1: HFRI Equity Hedge (Total) Index Benchmark 2: MSCI Emerging Markets

Investment Strategy:

ABS Investment Management was founded in 2003 and is entirely dedicated to investing in long/short equity hedge funds. The firm was started by Alain De Coster, Laurence Russian, and Guilherme who are Swiss, American, and Brazilian respectively. Since inception the firm has allocated to funds across the globe; leveraging the glboal networks and insights of their three cofounders. Building off of a decade of experience backing managers focused on investing in emerging markets, ABS launched the fund dedicated to the strategy in 2012. The fund will invest in 15-25 underlying funds focused on emerging markets. The fund is long biased with average gross exposure of 100%-125% and net exposure of 60%-80%.

Monthly Returns: (Net of Fees)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
2022	-3.38%	-2.17%	-1.49%	-2.82%	-0.77%	-4.27%	0.89%	0.96%	-4.87%	-0.87%	4.87%	-1.11%	-14.37%
2021	2.35%	2.20%	-0.78%	2.21%	2.81%	0.56%	-2.66%	2.30%	-0.82%	0.14%	-1.51%	1.09%	7.99%
2020	-1.15%	-2.89%	-14.12%	6.94%	2.31%	6.66%	7.94%	2.14%	-1.14%	0.04%	8.66%	6.69%	21.61%
2019	5.58%	2.68%	2.24%	1.10%	-4.16%	4.00%	-0.91%	-2.52%	1.36%	3.21%	-0.43%	4.60%	17.55%
2018	4.66%	-1.95%	-1.28%	-0.40%	-1.97%	-3.50%	0.71%	-3.05%	-2.99%	-4.78%	1.84%	-1.65%	-13.77%
2017	4.62%	2.52%	2.18%	1.78%	1.12%	0.69%	2.80%	1.72%	0.45%	2.52%	0.17%	2.95%	26.12%

Growth of \$1000 Since Inception



Trailing Returns				3MO	1YR	3YR	5YR	10YR	INCEPT		
Manager				2.80%	-14.37%	3.99%	2.65%	4.24%	4.73%		
HFRI Equity Hedge (Total) Index				4.17%	-10.21%	5.73%	4.53%	5.56%	5.81%		
MSCI Emerging Markets				9.70%	-20.09%	-2.69%	-1.40%	1.44%	2.62%		
Calendar Returns	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Manager	7 33%	8 19%	-2 86%	-3 95%	4 36%	26 12%	-13 77%	17 55%	21 61%	7 99%	-14 37%

-0.97%

-14.92%

5.46%

11.19%

13.29%

37.28%

1.78%

-2.19%

Risk and Return 3YR Statistics	Risk and Return Since Inception Statistics
RISK and Return 31K Statistics	Kisk and Keturn Since inception Statistics

14.28%

-2.60%

5.35%

13.75%

	Manager	Benchmark 1	Benchmark 2		Manager	Benchmark 1	Benchmark 2
Annualized Return	3.99%	5.73%	-2.69%	Annualized Return	4.73%	5.81%	2.62%
Standard Deviation	14.65%	12.34%	20.55%	Standard Deviation	10.89%	8.24%	16.47%
Sharpe Ratio	0.32	0.47	-0.05	Sharpe Ratio	0.37	0.62	0.12
Skew	-0.65	-0.58	0.02	Skew	-0.54	-0.67	-0.01
Kurtosis	3.05	2.12	1.04	Kurtosis	3.12	4.46	0.97
Up Capture		99.05%	74.77%	Up Capture		109.13%	62.85%
Down Capture		109.51%	63.74%	Down Capture		123.69%	59.00%

Benchmark Based Return Statistics 3 Year	Benchmark Based Return Statistics Since Inception
--	---

	Benchmark1	Benchmark2		Benchmark1	Benchmark2	
Alpha	-2.36%	5.76%	Alpha	-2.04%	3.15%	
Beta	1.11	0.66	Beta	1.17	0.61	
R2	86.84%	85 40%	R2	77 68%	83 93%	

Crisis Performance

HFRI Equity Hedge (Total) Index

MSCI Emerging Markets

	Financial Crisis	Euro Crisis	Taper Tantrum
	May '07 - Feb '09	April '11 - Sept '11	April '13 - Aug '13
Manager			-4.8%
HFRI Equity Hedge (Tota			1.0%
MSCI Emerging Markets			-9.4%

Investment Terms	s & Service Providers	
Inception Date	7/31/2012	

-7.14%

-14.58%

13.71%

18.44%

17.89%

18.31%

11.67%

-2.54%

-10.21%

-20.09%

Inception Date	7/31/2012
Administrator	Citco
Auditors	KPMG

Crisis Performance Cont

	Oil/Shale Crash	COVID-19
	May '15 - Jan '16	Dec '19 - Mar '20
Manager	-15.3%	-17.6%
HFRI Equity Hedge (Tota	-9.9%	-14.6%
MSCI Emerging Markets	-24.7%	-23.6%

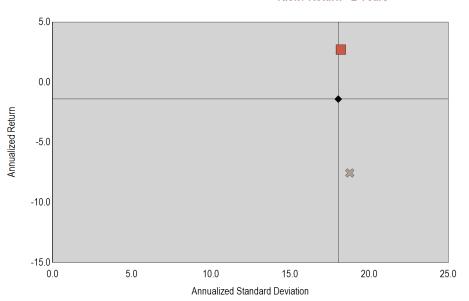


Emerging Manager Composite

Characteristics

As of December 31, 2022 Market Value: \$6.4 Million and 0.7% of Fund

Risk / Return - 2 Years



- Twin Capital
- CIM Investment Management
- Emerging Manager Benchmark

Characteristics

	Portfolio	MSCI ACWI
Number of Holdings	408	2,883
Weighted Avg. Market Cap. (\$B)	257.6	274.2
Median Market Cap. (\$B)	5.8	11.9
Price To Earnings	15.6	16.1
Price To Book	2.9	3.2
Price To Sales	1.7	1.9
Return on Equity (%)	18.7	22.0
Yield (%)	1.5	2.4
Beta	1.0	1.0
R-Squared	1.0	1.0

Largest Holdings

	End Weight	Return
APPLE INC	3.9	-5.8
MICROSOFT CORP	3.6	3.3
AMAZON.COM INC	1.5	-25.7
BERKSHIRE HATHAWAY INC	1.1	15.7
ALPHABET INC	1.1	-7.8

Characteristics

	Portfolio	MSCI ACWI
INDUSTRY SECTOR DISTRIBUTION (% Equity)		
Energy	5.1	5.6
Materials	3.9	5.0
Industrials	12.3	10.2
Consumer Discretionary	10.3	10.4
Consumer Staples	5.3	7.7
Health Care	15.2	13.4
Financials	12.4	15.2
Information Technology	21.6	20.0
Communication Services	5.6	6.8
Utilities	3.2	3.2
Real Estate	3.0	2.6
Unclassified	1.3	0.0

Top Contributors

	Beg Wgt	Return	Contribution
EXXON MOBIL CORP	0.8	27.3	0.2
JPMORGAN CHASE & CO	0.7	29.5	0.2
BERKSHIRE HATHAWAY INC	1.1	15.7	0.2
CHEVRON CORP	0.6	25.9	0.1
MERCK & CO INC	0.5	29.7	0.1

Bottom Contributors

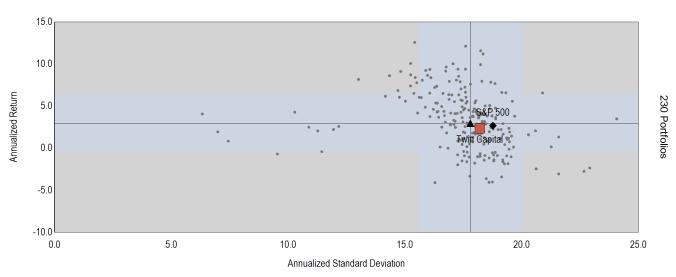
	Beg Wgt	Return	Contribution
TESLA INC	1.6	-53.6	-0.8
AMAZON.COM INC	2.2	-25.7	-0.6
APPLE INC	4.6	-5.8	-0.3
WOLFSPEED INC	0.4	-33.2	-0.1
ALPHABET INC	1.3	-7.8	-0.1

	Small Cap	Mid Cap	Large Cap
Emerging Manager Composite	38.2%	9.4%	52.3%
MSCI ACWI	5.1%	16.3%	78.6%
Weight Over/Under	33.1%	-6.8%	-26.3%

Market Value: \$3.8 Million and 0.4% of Fund

As of December 31, 2022

Risk / Return - 2 Years



Characteristics

	Portfolio	S&P 500
Number of Holdings	176	503
Weighted Avg. Market Cap. (\$B)	426.2	415.6
Median Market Cap. (\$B)	45.9	29.6
Price To Earnings	17.1	19.5
Price To Book	3.4	3.9
Price To Sales	2.0	2.5
Return on Equity (%)	27.6	30.0
Yield (%)	1.7	1.7
Beta	1.0	1.0
R-Squared	1.0	1.0

Characteristics

	Ροπτοιιο	5&P 500		
INDUSTRY SECTOR DISTRIBUTION (% Equity)				
Energy	5.2	5.1		
Materials	2.3	2.7		
Industrials	8.5	8.6		
Consumer Discretionary	9.5	10.0		
Consumer Staples	7.8	7.8		
Health Care	15.8	15.4		
Financials	11.7	12.0		
Information Technology	25.0	25.3		
Communication Services	7.4	7.5		
Utilities	3.1	3.0		
Real Estate	2.5	2.6		
Unclassified	1.2	0.0		

Largest Holdings

End Weight	Return
6.5	-5.8
5.6	3.3
2.3	-25.7
2.0	15.7
1.9	-7.8
	6.5 5.6 2.3 2.0

Top Contributors

	End Weight	Return	Contribution
JPMORGAN CHASE & CO	1.5	29.5	0.4
EXXON MOBIL CORP	1.5	27.3	0.4
CHEVRON CORP	1.3	25.9	0.3
PROCTER & GAMBLE CO (THE)	1.5	20.9	0.3
BERKSHIRE HATHAWAY INC	2.0	15.7	0.3

Bottom Contributors

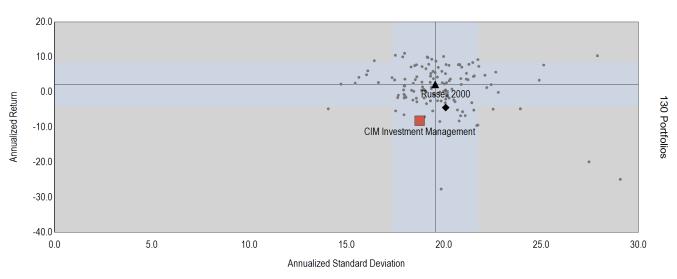
	End Weight	Return	Contribution
TESLA INC	1.1	-53.6	-0.6
AMAZON.COM INC	2.3	-25.7	-0.6
APPLE INC	6.5	-5.8	-0.4
ALPHABET INC	1.9	-7.8	-0.1
ALPHABET INC	1.3	-7.7	-0.1

	Small Cap	Small/ Mid	Mid Cap	Mid/ Large	Large Cap
Twin Capital	0.0%	3.5%	20.1%	25.1%	51.4%
S&P 500	0.1%	1.4%	14.8%	29.8%	53.9%
Weight Over/Under	-0.1%	2.1%	5.2%	-4.8%	-2.5%

Market Value: \$2.6 Million and 0.3% of Fund

As of December 31, 2022

Risk / Return - 2 Years



Characteristics

	Portfolio	Russell 2000
Number of Holdings	233	1,950
Weighted Avg. Market Cap. (\$B)	4.4	2.8
Median Market Cap. (\$B)	2.6	1.1
Price To Earnings	13.3	12.2
Price To Book	2.4	2.2
Price To Sales	1.3	1.3
Return on Equity (%)	4.1	5.3
Yield (%)	1.3	1.6
Beta	1.0	1.0
R-Squared	1.0	1.0

Characteristics

	Portfolio	Russell 2000
INDUSTRY SECTOR DISTRIBUTION (% E	quity)	
Energy	2.3	6.8
Materials	4.6	4.3
Industrials	17.4	15.5
Consumer Discretionary	10.8	10.3
Consumer Staples	4.1	3.6
Health Care	13.8	16.9
Financials	15.7	17.2
Information Technology	14.4	12.8
Communication Services	2.2	2.5
Utilities	4.3	3.5
Real Estate	5.1	6.4
Unclassified	5.4	0.0

Largest Holdings

	End Weight	Return
ISHARES TRUST - ISHARES RUSSELL 2000 ETF	1.9	6.2
M/I HOMES INC	1.3	27.5
EMCOR GROUP INC.	1.3	28.4
ENERSYS	1.3	27.2
FEDERATED HERMES INC	1.3	10.5

Top Contributors

	End Weight	Return	Contribution
TG THERAPEUTICS INC	0.5	99.8	0.5
YEXT INC	0.9	46.4	0.4
EMCOR GROUP INC.	1.3	28.4	0.4
CROCS INC	0.6	57.9	0.4
M/I HOMES INC	1.3	27.5	0.4

Bottom Contributors

	End Weight	Return	Contribution
BLINK CHARGING CO	0.7	-38.1	-0.3
LIVENT CORP	0.6	-35.2	-0.2
SUNNOVA ENERGY INTERNATIONAL INC	0.9	-18.4	-0.2
APELLIS PHARMACEUTICALS INC	0.6	-24.3	-0.2
QUALYS INC	0.7	-19.5	-0.1

	Small Cap	Small/ Mid	Mid Cap	Mid/ Large	Large Cap
CIM Investment Management	57.2%	40.2%	0.6%	2.0%	0.0%
Russell 2000	70.2%	29.8%	0.0%	0.0%	0.0%
Weight Over/Under	-13.0%	10.4%	0.6%	2.0%	0.0%

ABS Offshore SPC Global

Characteristics

As of September 30, 2022

			ter		

	ABS Investment Management
Product Assets	\$801.8
# Underlying Managers	28
% of Portfolio in Top 3 Funds	9.6%
Aggregate Portfolio Leverage	0.0%
# Managers Hired Over Quarter	0
# Managers Fired Over Quarter	0
Total Outflows from the Fund	\$11.6
Pending Outflows	\$0.0
Total Inflows to the Fund	\$0.0
% of Fund Liquid in 6Months	88.7%
% of Fund Liquid in 12Months	100.0%
% of Fund Liquid in 24Months	100.0%

Strategy Breakdown

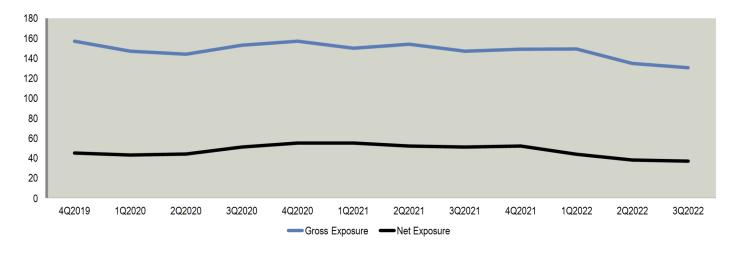
	Weight(%)	Attribution(%)
Credit	0.0%	0.0%
Event Driven	0.0%	0.0%
Global Macro/CTA	0.0%	0.0%
Multi-Strategy	0.0%	0.0%
Hedged Equity	100.0%	-3.0%
Relative Value	0.0%	0.0%
Short Selling	0.0%	0.0%
Other	0.0%	0.0%
Total	100.0%	-3.0%

Security Geographic Exposure	Weight(%)
US Exposure	65.8%
International Exposure	31.0%
Cash	3.2%

Top Ten Holdings Invetsment Detail

Fund	Туре	Fair Market Value (\$M)	Weight %	Quarter Return
Seligman Tech	Hedged Equity	\$36.0	4.4%	-11.8%
TPG PEP	Hedged Equity	\$36.9	4.5%	-2.0%
Toronado	Hedged Equity	\$42.0	5.2%	-5.9%
Sagil	Hedged Equity	\$41.2	5.1%	0.9%
Energy Dynamics	Hedged Equity	\$50.4	6.2%	5.5%
Riposte	Hedged Equity	\$35.9	4.4%	1.6%
One01	Hedged Equity	\$35.4	4.3%	-6.4%
140 Summer	Hedged Equity	\$36.8	4.5%	0.4%
Azora	Hedged Equity	\$41.9	5.1%	3.0%
Medina Singh	Hedged Equity	\$35.7	4.4%	3.0%
Fund	Fund Size (\$M)	Fund Inception	Investment Inception	SEC Registered
	Fund Size (\$M) \$1,300.0	Fund Inception 15-Feb	Investment Inception 15-Feb	SEC Registered Yes
	· ,	•	•	
Seligman Tech	\$1,300.0	15-Feb	15-Feb	Yes
Seligman Tech TPG PEP	\$1,300.0 \$2,370.0	15-Feb 15-Jun	15-Feb 15-Jun	Yes Yes
Seligman Tech TPG PEP Toronado	\$1,300.0 \$2,370.0 \$351.5	15-Feb 15-Jun 13-Jun	15-Feb 15-Jun 18-Aug	Yes Yes Yes
Seligman Tech TPG PEP Toronado Sagil	\$1,300.0 \$2,370.0 \$351.5 \$381.0	15-Feb 15-Jun 13-Jun 17-Mar	15-Feb 15-Jun 18-Aug 17-Mar	Yes Yes Yes Yes
Seligman Tech TPG PEP Toronado Sagil Energy Dynamics	\$1,300.0 \$2,370.0 \$351.5 \$381.0 \$1,820.6	15-Feb 15-Jun 13-Jun 17-Mar 18-Apr	15-Feb 15-Jun 18-Aug 17-Mar 18-Apr	Yes Yes Yes Yes Yes
Seligman Tech TPG PEP Toronado Sagil Energy Dynamics Riposte	\$1,300.0 \$2,370.0 \$351.5 \$381.0 \$1,820.6 \$299.0	15-Feb 15-Jun 13-Jun 17-Mar 18-Apr 13-Nov	15-Feb 15-Jun 18-Aug 17-Mar 18-Apr 16-Feb	Yes Yes Yes Yes Yes Yes
Seligman Tech TPG PEP Toronado Sagil Energy Dynamics Riposte One01	\$1,300.0 \$2,370.0 \$351.5 \$381.0 \$1,820.6 \$299.0 \$343.0	15-Feb 15-Jun 13-Jun 17-Mar 18-Apr 13-Nov 20-Jul	15-Feb 15-Jun 18-Aug 17-Mar 18-Apr 16-Feb 20-Jul	Yes Yes Yes Yes Yes Yes Yes Yes Yes

Gross/Net Positioning

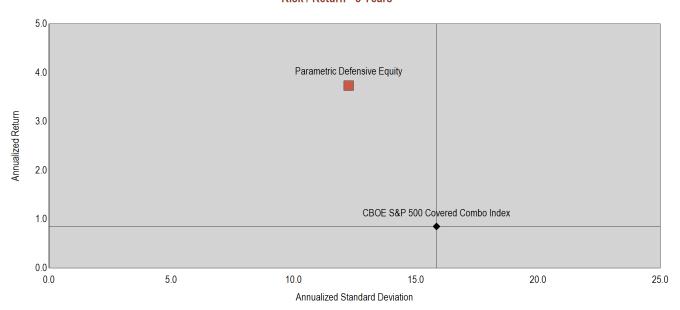


Parametric Defensive Equity

Characteristics

As of September 30, 2022

Risk / Return - 3 Years



Characteristics

Strategy Breakdown

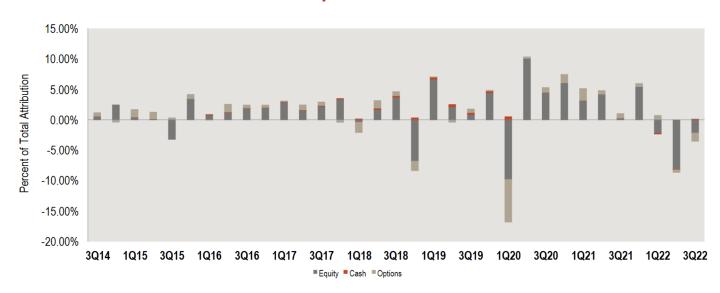
Parame	etric Defensive Equity
	\$5.54 billion

Portfolio Value	\$5.54 billion
Standard Deviation	8.2%
Sharpe Ratio	0.8

Fully Funded Base Portfolio with Option Overlay

S&P 500 Index	50.0%
Sells covered puts below current market price	
U.S. Treasury Bills	50.0%
Sells covered calls above current market price	

Quarterly Performance Attribution



Rreef America II Characteristics

As of September 30, 2022

Market Value: \$27.8 Million and 3.0% of Fund

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Fund GAV (\$MM)	\$19,713.0
Fund NAV (\$MM)	\$16,683.8
Cash (% of NAV)	1.9%
# of Investments	127
% in Top 10 by NAV	23.9%
Leverage %	17.9%
Occupancy	93.0%
# of MSAs	36
1-Year Dividend Yield	2.9%
As of Date	30-Sep-22

Strategy Breakdown

	% of Portfolio	Top Five Metro Areas	% of NAV
Pre-Development	1.3%	Los Angeles	10.1%
Development	1.5%	San Francisco	9.6%
Initial Leasing		New York	8.6%
Operating	97.2%	Boston	7.8%
Re-Development		Seattle	7.2%
Other			

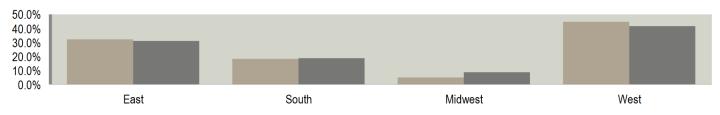
Queue In:	
Contribution Queue (\$MM)	\$145.67
Anticipated Drawdown (Months)	6

Queue Out:	
Redemption Queue (\$MM)	\$871.78
Anticipated Payout (Months)	6

Top Ten Holdings Investment Detail

Top Ten Holanigo investment betain						
#	Property	Туре	Location	% of Fund NAV		
1	Riverfront Office Park	Office	Cambridge,MA	4.9%		
2	Fullerton Crossroads	Industrial	Fullerton,CA	3.5%		
3	New Jersey Port Industrial	Industrial	Jersey City,NJ	2.8%		
4	Manhattan Village	Retail	Manhattan Beach,CA	2.2%		
5	Alvarado Business Park	Industrial	Union City,CA	1.9%		
6	Harris Business Center	Industrial	City of Commerce,CA	1.8%		
7	Sharon Green Apartments	Apartment	Menlo Park,CA	1.8%		
8	222 Broadway	Office	New York,NY	1.7%		
9	Gateway Commerce Center IND	Industrial	Columbia,ML	1.7%		
10	Stadium Plaza Business Park	Industrial	Anaheim,CA	1.7%		
Total				23.9%		

Regional Breakdown by NAV (Excluding Cash & Debt)



Property Type Breakdown by NAV (Excluding Cash & Debt)



Property Size Breakdown by NAV (Excluding Cash & Debt)



Barings Core Property Fund

Characteristics

Anticipated Payout (Months)

As of September 30, 2022

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Fund GAV (\$MM)	\$3,935.7
Fund NAV (\$MM)	\$2,886.2
Cash (% of NAV)	0.7%
# of Investments	45
% in Top 10 by NAV	39.5%
Leverage %	24.4%
Occupancy	94.4%
# of MSAs	20
1-Year Dividend Yield	3.6%
As of Date	30-Sep-22

Strategy Breakdown

	% of Portfolio	Top Five Metro Areas	% of NAV
Pre-Development	0.0%	Los Angeles, CA	18.3%
Development	1.2%	New York - Newark	15.2%
Initial Leasing	1.5%	Dallas - Ft Worth. TX	15.1%
Operating	95.7%	Boston, MA	10.0%
Re-Development	0.4%	Austin, TX	7.9%
Other	1.3%		
Queue In:		Queue Out:	
Contribution Queue (\$MM)	\$0.00	Redemption Queue (\$MM)	\$202.76

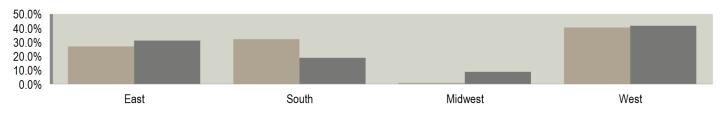
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Top Ten Holdings Investment Detail

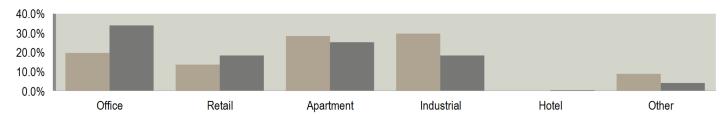
Anticipated Drawdown (Months)

	Top Ten Holdings investment betain			
#	Property	Туре	Location	% of Fund NAV
1	100 Wall Street	Office	New York, NY	6.7%
2	Water Tower Flats	Apartment	Arvada, CO	4.4%
3	Ridge	Apartment	Waltham, MA	3.9%
4	One Patriots Park	Other	Bedford, MA	3.8%
5	Gateway 190 Portfolio	Industrial	Garland / Plano, TX	3.7%
6	Sun Valley Industrial Park	Industrial	Sun Valley, CA	3.5%
7	Metro Point Logistics Center	Industrial	Ridgefield, NJ	3.5%
8	Jupiter Road Industrial Park	Industrial	Garland, TX	3.5%
9	701 Rio	Office	Austin, TX	3.4%
10	Riverpark 500-600	Industrial	Fort Worth, TX	3.3%
Total				39.5%

Regional Breakdown by NAV (Excluding Cash & Debt)



Property Type Breakdown by NAV (Excluding Cash & Debt)



Property Size Breakdown by NAV (Excluding Cash & Debt)



Total Fund Composite

Fee Schedule

Market Value: \$966.3 Million and 100.0% of Fund

Asset Class	Investment Manager	Fee Schedule	Expense Ratio & Estimated Annual Fee ¹	Industry Median ²
Short-Term Fixed Income	Vanguard Ultra Short Duration	0.10% on the Balance	0.10% \$35,576	0.47%
Core Fixed Income	Federated Investors	0.25% on the Balance	0.25% \$146,370	0.30%
Core Fixed Income	BlackRock Total Return Fund	0.40% on the Balance	0.40% \$81,193	0.56%
Large-Cap Core	SSgA S&P 500 Index Fund	0.04% on the Balance	0.04% \$64,903	0.02%
Large-Cap Core	Twin Capital	0.35% on the first \$50 million 0.20% on the Balance	0.35% \$13,300	0.55%
Smid-Cap Core	Frontier Capital Management	0.75% on the Balance	0.75% \$314,180	0.80%
Small-Cap Core	Vanguard Russell 2000	0.08% on the Balance	0.08% \$31,810	0.19%
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	0.69% \$18,190	0.85%
Global Core Equity	Federated Hermes Global Equity	0.74% on the Balance	0.74% \$57,833	0.85%
Non-U.S. Large-Cap Core	MFS International Equity Fund	0.69% on the Balance	0.69% \$576,617	0.85%
Emerging Markets	SSgA Active Emerging Markets Fund	0.75% on the Balance	0.75% \$65,843	0.90%
Emerging Markets	ABS Emerging Markets	0.80% on the Balance	0.80% \$100,353	1.00%
Hedged Equity Hedge FoF	ABS Offshore SPC Global	1.00% on the Balance	1.00% \$164,678	1.00%
Multi-Strat. Hedge Fund	Entrust Three Rivers Partners	1.25% on the Balance	1.250% \$326,965	1.00%
Defensive Equity	Parametric Defensive Equity	0.325% on the first \$50 million 0.30% on the next \$50 million 0.275% on the Balance	0.32% \$46,065	0.70%
Core Real Estate	Rreef America II	0.95% on the Balance	0.95% \$252,911	1.00%

Total Fund Composite

Fee Schedule

Market Value: \$966.3 Million and 100.0% of Fund

Asset Class	Investment Manager	Fee Schedule	Expense Ratio & Estimated Annual Fee ¹	Industry Median ²
Core Real Estate	Barings Core Property Fund	1.10% on the first \$15 million 1.00% on the next \$10 million 0.80% on the Balance	1.06% \$267,677	1.00%
Venture Private Equity	Draper Triangle Ventures III, LP	2.50% on total commitments plus 20% carried interest	2.25% \$50,000	2.03%
Mezz. Private Equity	Crescent Mezzanine Partners VIB, LP	1.50% on total commitments plus 20% carried interest after 8% preferred return	11.55% \$150,000	11.55%
Mezzanine Debt	Crescent Mezzanine Partners VIIB, L.P.	0.75% on total commitments 0.75% on invested capital plus 20% carried interest after 8% preferred return	1.98% \$120,684	1.98%
Direct Lending	Crescent Credit Solutions VIII A-2	1.35% on the Balance plus 20% carried interest after 8% preferred return	1.35% \$62,793	1.50%
LBO Private Equity FoF	Siguler Guff Small Buyout Opportunities Fund IV	0.75% on Committed Capital 15% Carried Interest above 8% Preferred Return	0.84% \$112,500	2.25%
LBO Private Equity FoF	Siguler Guff Small Buyout Opportunities Fund V	0.55% on Committed Capital (1st Close Di 5% Carried Interest on Fund Investments 15% Carried Interest on Coinvestments Plus 8% Preferred Return	 \$82,500	
Venture Private Equity	Magarac Ventures L.P.	2.00% on Committed Capital plus 20% carried interest	 \$60,000	
Fixed Income Annuity	Dedicated Funding for CMPTF	0.00% on the Balance	0.00% \$0	-
Total Investment Management Fees			0.33% \$3,202,940	0.41%
Custodian	PNC Bank	0.015% on the all assets, excluding Dedicated Funding for CMPTF	0.01% \$94,600	
Total Fund			0.34% \$3,297,540	

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