

Kern County Employees' Retirement Association

Investment Performance Review

Period Ending: March 31, 2022



[VERUSINVESTMENTS.COM](https://www.verusinvestments.com)

SEATTLE 206-622-3700

LOS ANGELES 310-297-1777

SAN FRANCISCO 415-362-3484

PITTSBURGH 412-784-6678

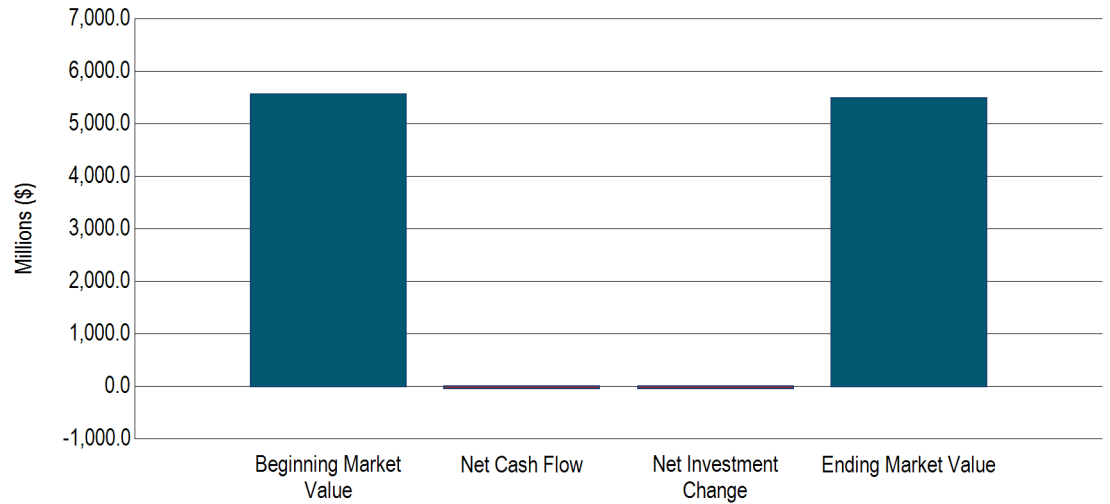
Total Fund Portfolio Reconciliation

Period Ending: March 31, 2022

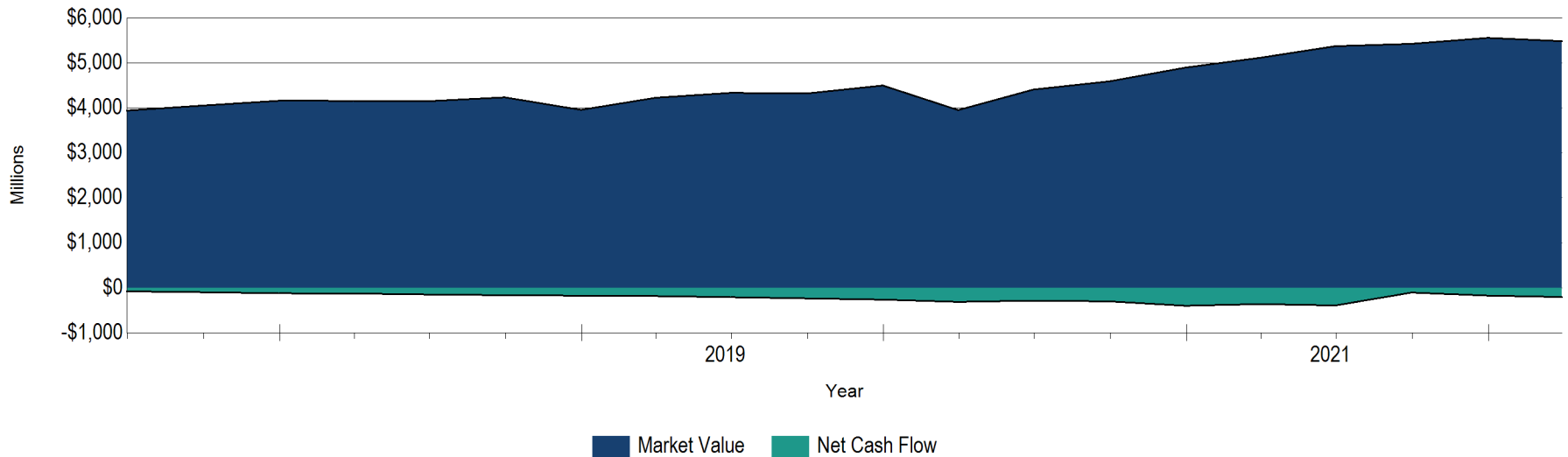
Portfolio Reconciliation

	Last Three Months
Beginning Market Value	\$5,557,439,932
Net Cash Flow	-\$28,585,677
Net Investment Change	-\$44,364,805
Ending Market Value	\$5,484,489,450

Change in Market Value Last Three Months



Market Value History

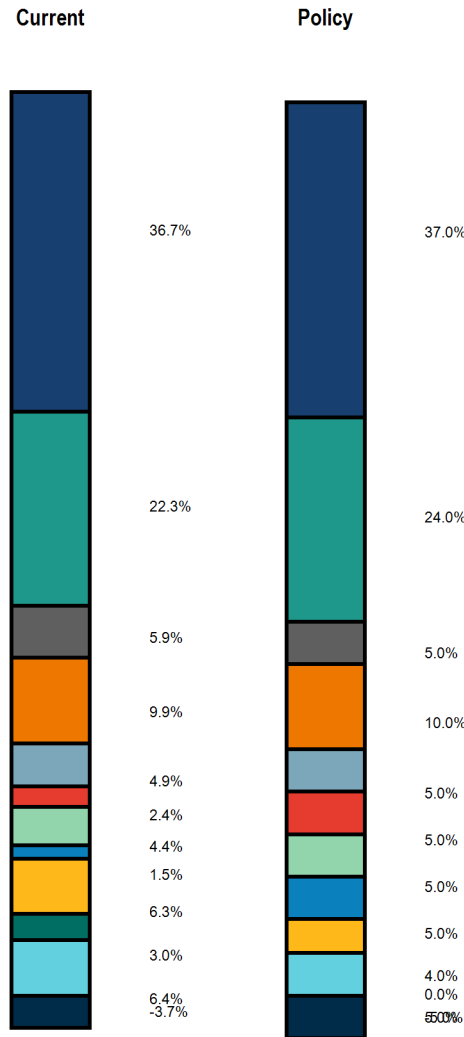


Contributions and withdrawals may include intra-account transfers between managers/funds. The Kern County Property Fund was removed at the beginning of 1Q 2016. Market value doesn't include Myriad holdback value of \$33,015.

Total fund

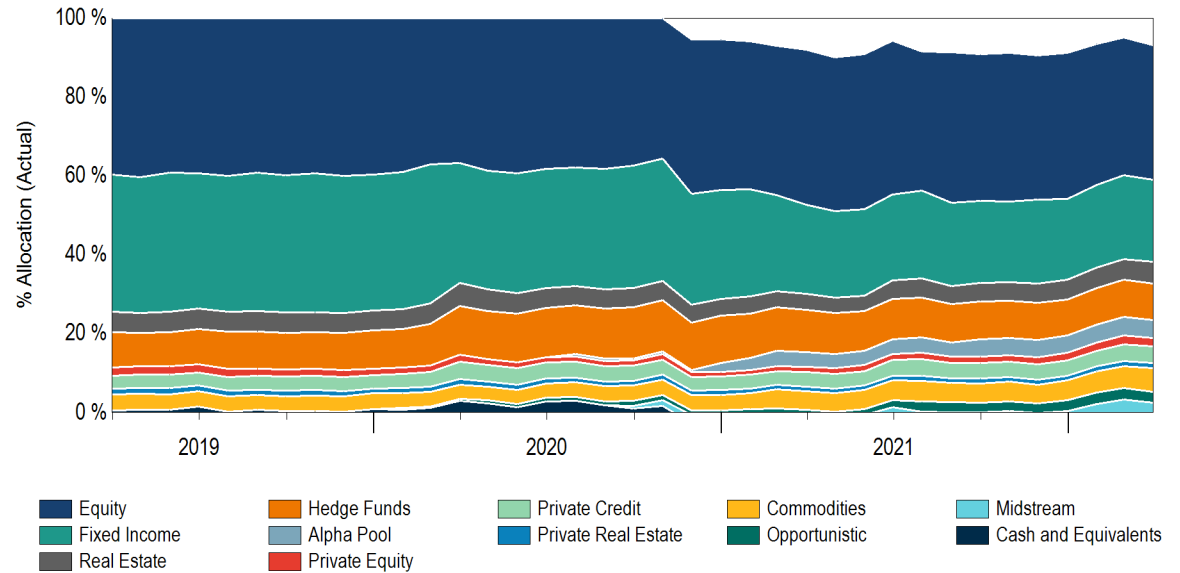
Asset Allocation vs. Policy

Period Ending: March 31, 2022



	Current Balance	Current Allocation	Policy	Difference	Policy Range	Within IPS Range?
Equity	\$2,010,379,072	36.7%	37.0%	-\$18,785,146	32.0% - 46.0%	Yes
Fixed Income	\$1,222,866,553	22.3%	24.0%	-\$93,348,075	20.0% - 34.0%	Yes
Real Estate	\$323,231,741	5.9%	5.0%	\$49,020,360	3.0% - 7.0%	Yes
Hedge Funds	\$542,790,982	9.9%	10.0%	-\$5,631,780	5.0% - 15.0%	Yes
Alpha Pool	\$268,899,258	4.9%	5.0%	-\$5,312,123	0.0% - 7.0%	Yes
Private Equity	\$130,114,637	2.4%	5.0%	-\$144,096,744	0.0% - 10.0%	Yes
Private Credit	\$242,494,017	4.4%	5.0%	-\$31,717,364	0.0% - 10.0%	Yes
Private Real Estate	\$84,857,111	1.5%	5.0%	-\$189,354,270	0.0% - 10.0%	Yes
Commodities	\$347,789,751	6.3%	4.0%	\$128,420,646	2.0% - 6.0%	No
Opportunistic	\$164,445,849	3.0%	0.0%	\$164,445,849	0.0% - 10.0%	Yes
Midstream	\$350,123,956	6.4%	5.0%	\$75,912,575	0.0% - 7.0%	Yes
Cash and Equivalents	-\$203,765,310	-3.7%	-5.0%	\$70,446,071	-7.0% - 5.0%	Yes
Total	\$5,484,227,616	100.0%	100.0%			

Asset Allocation History



Market value does not include residual \$261,833.73 in Fidelity International. Market value doesn't include Myriad holdback value of \$33,015.

Total Fund
Executive Summary (Gross of Fees)

Period Ending: March 31, 2022

	Market Value	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Fiscal 2021	Fiscal 2020	Fiscal 2019	Fiscal 2018	Fiscal 2017
Total Fund	5,484,522,465	-0.8	3.4	9.3	11.1	9.0	8.1	24.4	3.2	5.7	6.8	12.1
<i>Policy Index</i>		-1.3	2.6	8.4	10.7	9.0	7.5	24.1	3.3	6.4	7.0	10.0
<i>InvMetrics Public DB > \$1B Gross Rank</i>		1	13	15	50	68	79	89	16	42	96	74
Equity	2,010,640,756	-5.5	0.0	6.9	14.0	12.0	11.2	41.2	0.7	5.3	12.4	20.6
<i>MSCI ACWI IMI GR</i>		-5.4	-0.5	6.7	14.0	11.9	10.5	41.5	1.7	5.1	11.7	19.6
Domestic Equity	1,067,126,022	-5.3	4.8	13.2	18.8	16.0	--	43.6	6.3	9.2	16.1	19.4
<i>Russell 3000</i>		-5.3	3.4	11.9	18.2	15.4	--	44.2	6.5	9.0	14.8	18.5
International Developed Equity	665,724,639	-5.9	-3.1	2.7	9.4	8.0	--	37.0	-5.5	-0.6	9.1	23.1
<i>MSCI World ex USA GR</i>		-4.7	-2.2	3.6	9.1	7.7	--	34.2	-5.0	1.8	7.6	20.1
Emerging Markets Equity	277,789,409	-5.3	-11.5	-7.5	3.9	3.9	--	40.6	-10.9	0.4	4.0	20.4
<i>MSCI Emerging Markets</i>		-7.0	-15.6	-11.4	4.9	6.0	--	40.9	-3.4	1.2	8.2	23.7
Fixed Income	1,222,866,553	-5.8	-6.0	-3.4	2.9	3.1	3.1	5.4	6.6	7.9	0.2	4.6
<i>Fixed Income Custom Benchmark</i>		-5.7	-5.6	-3.4	2.2	2.7	3.0	4.1	5.2	8.4	0.0	3.2
Core Plus Fixed Income	640,350,017	-6.5	-6.4	-4.3	2.2	2.6	--	1.0	9.5	8.0	0.0	1.4
<i>Bloomberg US Aggregate TR</i>		-5.9	-5.9	-4.2	1.7	2.1	--	-0.3	8.7	7.9	-0.4	-0.3
High Yield/ Specialty Credit	337,601,070	-3.2	-1.4	1.3	4.8	4.9	--	13.6	0.0	7.5	3.3	10.4
<i>ICE BofAML High Yield Master II</i>		-4.5	-3.0	-0.3	4.4	4.6	--	15.6	-1.1	7.6	2.5	12.8
Emerging Market Debt	244,801,211	-7.0	-10.2	-6.4	0.2	0.8	--	9.4	-1.2	8.5	-3.6	9.6
<i>50 JPM EMBI Global Div/ 50 JPM GBI EM</i>		-6.5	-8.2	-4.3	0.6	1.7	--	8.7	-3.0	11.2	-1.8	6.5
Commodities	347,789,751	23.3	28.7	44.0	18.2	11.1	--	43.5	-10.7	-6.2	13.7	-3.1
<i>Bloomberg Commodity Index TR USD</i>		25.5	31.7	49.3	16.1	9.0	--	45.6	-17.4	-6.8	7.3	-6.5
Hedge Funds	542,823,996	0.4	2.6	4.7	9.2	7.4	6.6	16.3	7.3	2.6	7.6	8.0
<i>75% 90 Day TBills +4% / 25% MSCI ACWI</i>		-0.5	2.4	5.1	7.3	7.1	6.2	12.3	5.1	6.6	7.0	8.1
Alpha Pool	268,899,258	0.8	2.2	3.9	--	--	--	14.5	--	--	--	--
<i>91-Day T-Bill +4%</i>		1.0	3.1	4.1	--	--	--	4.1	--	--	--	--
Midstream Energy	350,123,956	19.1	20.2	39.1	--	--	--	--	--	--	--	--
<i>Alerian Midstream Index</i>		23.9	22.0	42.0	--	--	--	--	--	--	--	--
Core Real Estate	323,231,741	7.3	20.1	23.4	9.9	8.5	--	6.6	2.3	6.1	7.4	6.1
<i>NCREIF-ODCE</i>		7.4	23.6	28.5	11.3	9.9	--	8.0	2.2	6.4	8.4	7.9

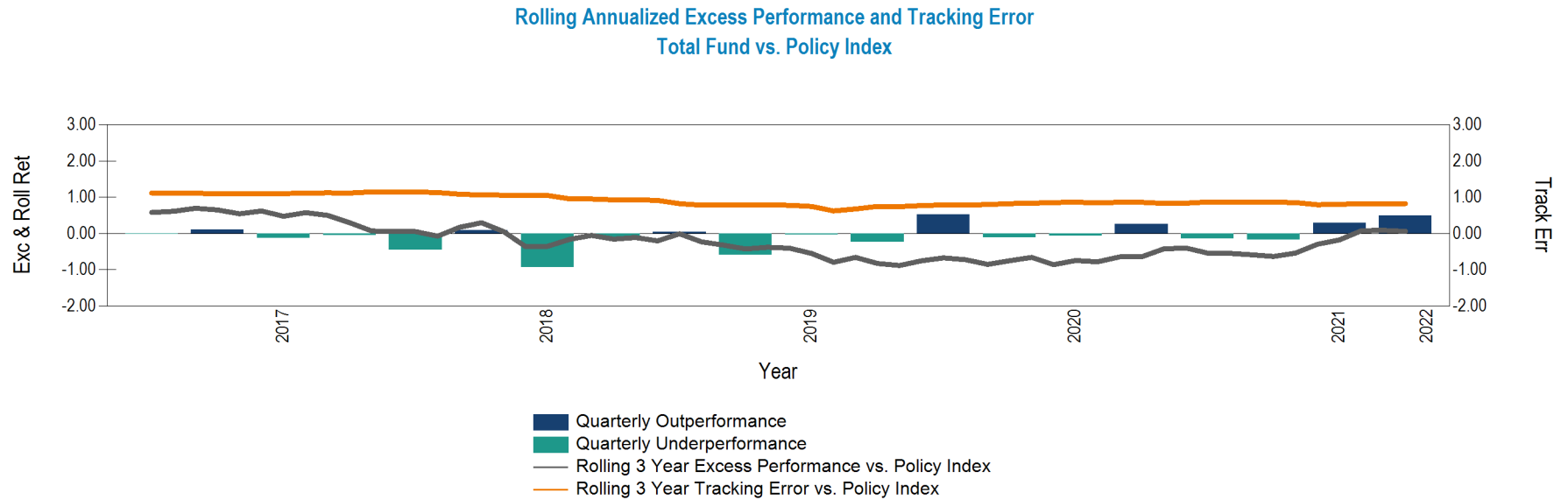
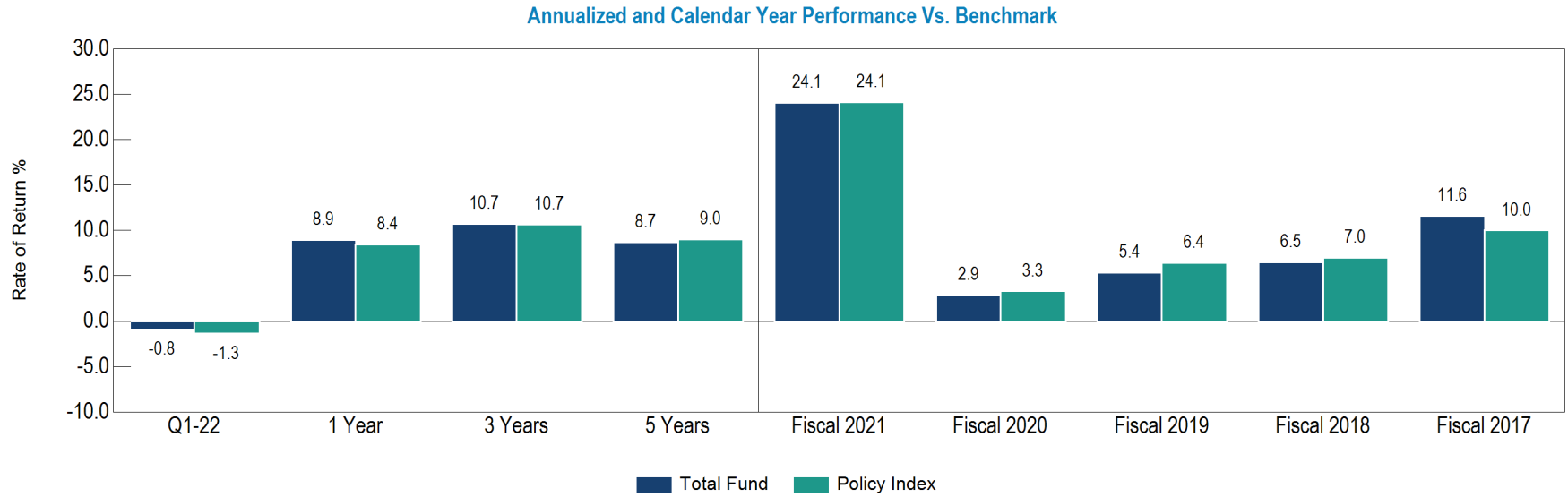
Total Fund
Executive Summary (Gross of Fees)

Period Ending: March 31, 2022

	Market Value	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Fiscal 2021	Fiscal 2020	Fiscal 2019	Fiscal 2018	Fiscal 2017
Private Real Estate	86,780,188	7.9	27.2	27.9	14.4	10.9	12.9	12.1	4.4	9.0	5.4	6.4
Private Equity	130,114,637	3.9	21.3	27.4	16.8	14.0	12.4	41.7	-10.5	10.9	7.8	14.8
Private Credit	240,570,940	-1.4	0.0	2.9	4.5	7.1	--	4.8	5.5	9.7	9.3	10.2
Opportunistic	164,445,849	-1.1	4.9	16.4	--	--	--	59.9	--	--	--	--
Assumed Rate of Return +3%		2.5	7.7	10.4	--	--	--	10.4	--	--	--	--
Cash	-203,765,310											

Total Fund
Performance vs. Policy (Net of Fees)

Period Ending: March 31, 2022



Performance and Attribution

Total Fund
Performance (Net of Fees)

Period Ending: March 31, 2022

	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Fiscal 2021	Fiscal 2020	Fiscal 2019	Fiscal 2018	Fiscal 2017	Inception	Inception Date
Total Fund	5,484,522,465	100.0	-0.8	3.2	8.9	10.7	8.7	7.7	24.1	2.9	5.4	6.5	11.6	7.4	Jun-11
<i>Policy Index</i>			-1.3	2.6	8.4	10.7	9.0	7.5	24.1	3.3	6.4	7.0	10.0	7.2	Jun-11
Equity	2,010,640,905	36.7	-5.6	-0.2	6.7	13.6	11.6	10.7	40.7	0.3	4.8	11.8	20.1		
<i>MSCI ACWI IMI GR</i>			-5.4	-0.5	6.7	14.0	11.9	10.5	41.5	1.7	5.1	11.7	19.6		
Domestic Equity	1,067,126,172	19.5	-5.3	4.7	13.0	18.5	15.6	--	43.2	6.0	8.8	15.5	18.9		
<i>Russell 3000</i>			-5.3	3.4	11.9	18.2	15.4	--	44.2	6.5	9.0	14.8	18.5		
Equity Beta Exposure	448,770,788	8.2	-4.6	6.4	15.2	--	--	--	--	--	--	--	--	23.0	Jul-20
<i>S&P 500</i>			-4.6	6.5	15.6	--	--	--	--	--	--	--	--	23.4	Jul-20
Russell 2000 Overlay	16,427,880	0.3	-7.0	--	--	--	--	--	--	--	--	--	--	-3.0	Sep-21
<i>Russell 2000</i>			-7.5	--	--	--	--	--	--	--	--	--	--	-5.5	Sep-21
Mellon DB SL Stock Index Fund	334,684,458	6.1	-4.6	6.5	15.6	18.9	--	--	40.8	7.5	10.4	--	--	15.7	Oct-17
<i>S&P 500</i>			-4.6	6.5	15.6	18.9	--	--	40.8	7.5	10.4	--	--	15.7	Oct-17
PIMCO StocksPLUS	118,147,151	2.2	-5.5	5.2	14.4	18.9	15.9	15.2	41.7	7.7	10.6	14.1	19.1	11.5	Jul-03
<i>S&P 500</i>			-4.6	6.5	15.6	18.9	16.0	14.6	40.8	7.5	10.4	14.4	17.9	10.7	Jul-03
AB US Small Cap Value Equity	97,008,034	1.8	-5.4	-0.8	2.3	13.5	8.4	--	77.5	-19.4	-6.9	13.2	23.9	9.5	Jul-15
<i>Russell 2000 Value</i>			-2.4	-1.2	3.3	12.7	8.6	--	73.3	-17.5	-6.2	13.1	24.9	9.4	Jul-15
Geneva Capital Small Cap Growth	52,087,862	0.9	-14.0	-10.5	-6.1	12.7	13.5	--	37.6	9.3	8.6	22.7	21.2	11.9	Jul-15
<i>Russell 2000 Growth</i>			-12.6	-17.6	-14.3	9.9	10.3	--	51.4	3.5	-0.5	21.9	24.4	8.3	Jul-15
International Developed Equity	665,724,639	12.1	-5.9	-3.2	2.6	9.1	7.8	--	36.7	-5.7	-0.9	8.7	22.6		
<i>MSCI World ex USA IMI NR</i>			-5.2	-3.0	2.3	8.7	7.2	--	34.8	-5.1	0.2	7.7	19.7		
Mellon DB SL World ex-US Index Fund	551,232,061	10.1	-4.4	-1.9	4.5	9.4	--	--	35.6	-5.5	--	--	--	6.5	Jul-18
<i>MSCI World ex USA IMI GR</i>			-5.1	-2.8	2.8	9.2	--	--	35.4	-4.7	--	--	--	6.4	Jul-18
Cevian Capital II	33,981,461	0.6	-5.1	0.6	2.1	12.2	6.4	--	46.8	-8.2	-5.0	2.9	32.9	6.9	Dec-14
<i>MSCI Europe</i>			-7.4	-3.6	3.5	8.2	6.9	--	35.1	-6.8	1.9	5.3	21.1	5.3	Dec-14
American Century Non-US Small Cap	80,249,283	1.5	-15.6	-11.8	-5.6	--	--	--	--	--	--	--	--	1.3	Dec-20
<i>MSCI World ex US Small Cap Growth</i>			-11.5	-10.3	-5.6	--	--	--	--	--	--	--	--	2.1	Dec-20
Emerging Markets Equity	277,789,409	5.1	-5.5	-11.9	-8.1	3.0	3.0	--	39.5	-11.8	-0.6	2.9	19.3		
<i>MSCI EM IMI GR</i>			-6.6	-14.2	-9.2	6.1	6.6	--	43.7	-3.6	0.9	8.3	23.2		
DFA Emerging Markets Value I	84,643,560	1.5	0.5	-2.4	4.5	5.9	5.6	--	47.6	-17.7	2.0	5.7	27.6	4.9	Mar-14
<i>MSCI Emerging Markets Value GR</i>			-3.4	-8.4	-3.1	3.7	4.8	--	42.2	-15.3	5.6	4.8	22.1	3.5	Mar-14

Total Fund

Executive Summary (Net of Fees)

Period Ending: March 31, 2022

	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Fiscal 2021	Fiscal 2020	Fiscal 2019	Fiscal 2018	Fiscal 2017	Inception	Inception Date
AB Emerging Markets Strategic Core Equity Collective Trust	99,106,335	1.8	-8.8	-15.4	-14.2	2.9	2.2	--	33.6	-5.1	-2.6	1.2	--	4.3	Nov-16
<i>MSCI Emerging Markets Gross</i>			-6.9	-15.4	-11.1	5.3	6.4	--	41.4	-3.0	1.6	8.6	--	8.2	Nov-16
Mellon Emerging Markets Stock Index Fund	94,039,515	1.7	-7.0	-15.6	-11.2	--	--	--	41.1	--	--	--	--	9.8	Jun-20
<i>MSCI Emerging Markets Gross</i>			-6.9	-15.4	-11.1	--	--	--	41.4	--	--	--	--	14.6	Jun-20
Fixed Income	1,222,866,553	22.3	-5.9	-6.2	-3.7	2.6	2.8	2.9	5.1	6.3	7.6	-0.1	4.3		
<i>Fixed Income Custom Benchmark</i>			-5.7	-5.6	-3.4	2.2	2.7	3.0	4.1	5.2	8.4	0.0	3.2		
Core Plus Fixed Income	640,350,017	11.7	-6.6	-6.5	-4.4	2.0	2.5	--	0.8	9.3	7.9	-0.2	1.3		
<i>Bloomberg US Aggregate TR</i>			-5.9	-5.9	-4.2	1.7	2.1	--	-0.3	8.7	7.9	-0.4	-0.3		
Mellon DB SL Aggregate Bond Index Fund	227,866,012	4.2	-5.9	-5.9	-4.2	1.7	2.1	2.2	-0.4	8.8	7.9	-0.4	-0.3	2.7	Jan-11
<i>Bloomberg US Aggregate TR</i>			-5.9	-5.9	-4.2	1.7	2.1	2.2	-0.3	8.7	7.9	-0.4	-0.3	2.7	Jan-11
PIMCO Core Plus	200,426,586	3.7	-5.5	-5.2	-3.1	2.1	2.6	2.5	1.1	8.7	6.3	1.0	1.4	3.0	Jan-11
<i>Bloomberg US Aggregate TR</i>			-5.9	-5.9	-4.2	1.7	2.1	2.2	-0.3	8.7	7.9	-0.4	-0.3	2.7	Jan-11
Western Asset Core Plus	212,057,418	3.9	-8.3	-8.4	-6.0	2.1	2.7	3.2	2.4	9.3	9.4	-0.4	3.0	4.4	May-04
<i>Bloomberg US Aggregate TR</i>			-5.9	-5.9	-4.2	1.7	2.1	2.2	-0.3	8.7	7.9	-0.4	-0.3	3.7	May-04
High Yield/ Specialty Credit	337,601,070	6.2	-3.4	-1.8	0.8	4.3	4.4	--	13.1	-0.5	7.0	2.8	9.9		
<i>ICE BofAML High Yield Master II</i>			-4.5	-3.0	-0.3	4.4	4.6	--	15.6	-1.1	7.6	2.5	12.8		
Western Asset High Yield Fixed Income	207,777,536	3.8	-4.5	-2.8	0.3	4.5	4.6	5.5	16.5	-2.2	8.3	2.2	11.7	6.6	May-05
<i>50% Bloomberg US HY Ba 2%/50% Bloomberg US HY B 2% CAP</i>			-4.9	-3.3	-0.9	4.8	4.8	5.7	13.4	2.1	8.8	1.8	10.9	6.5	May-05
TCW Securitized Opportunities	129,823,534	2.4	-2.2	-0.7	1.1	3.3	3.8	--	6.4	2.2	5.2	4.3	6.3	4.0	Feb-16
<i>Bloomberg US HY 2% Issuer Cap</i>			-4.8	-3.3	-0.7	4.6	4.7	--	15.3	0.0	7.5	2.6	12.7	7.2	Feb-16
Emerging Market Debt	244,801,211	4.5	-7.1	-10.4	-6.7	-0.2	0.3	--	9.1	-1.7	7.9	-4.2	8.9		
<i>50 JPM EMBI Global Div/ 50 JPM GBI EM</i>			-6.5	-8.2	-4.3	0.6	1.7	--	8.7	-3.0	11.2	-1.8	6.5		
Stone Harbor Emerging Markets Debt Blend Portfolio	97,517,056	1.8	-8.2	-11.3	-7.6	-0.2	0.5	--	9.5	-1.8	8.2	-3.1	6.3	0.2	Aug-12
<i>50 JPM GBI-EM Global Div/ 40 JPM EMBI Global Div/ 10 JPM Corporate EM Bond Idx</i>			-8.1	-11.1	-7.9	-0.3	1.1	--	7.2	-0.8	10.6	-1.7	6.3	1.2	Aug-12
PIMCO EMD	147,284,155	2.7	-6.3	-9.8	-6.0	--	--	--	8.7	--	--	--	--	-2.9	Jan-20
<i>50 JPM EMBI Global Div / 50 JPM GBI EM Global Div</i>			-8.2	-11.3	-8.0	--	--	--	7.1	--	--	--	--	-4.6	Jan-20

Total Fund

Executive Summary (Net of Fees)

Period Ending: March 31, 2022

	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Fiscal 2021	Fiscal 2020	Fiscal 2019	Fiscal 2018	Fiscal 2017	Inception	Inception Date
Commodities	347,789,751	6.3	23.1	28.1	43.0	17.4	10.5	--	42.5	-11.3	-6.7	13.3	-3.7		
<i>Bloomberg Commodity Index TR USD</i>			25.5	31.7	49.3	16.1	9.0	--	45.6	-17.4	-6.8	7.3	-6.5		
Gresham MTAP Commodity Builder Fund	94,868,223	1.7	24.5	28.1	44.8	15.7	9.3	--	46.8	-16.3	-9.0	12.4	-3.8	0.7	Sep-13
<i>Bloomberg Commodity Index TR USD</i>			25.5	31.7	49.3	16.1	9.0	--	45.6	-17.4	-6.8	7.3	-6.5	0.5	Sep-13
WTC-CTF	252,921,527	4.6	22.4	28.0	42.2	18.9	11.4	--	40.2	-7.5	-5.4	14.2	-3.3	2.2	Sep-13
<i>S&P GSCI Commodity Equal Weighted</i>			21.9	28.7	42.7	16.7	11.0	--	40.9	-12.4	-3.5	12.6	-2.3	2.1	Sep-13
Hedge Funds	542,823,996	9.9	0.4	2.4	4.5	9.0	7.3	6.0	16.1	7.0	2.5	7.6	7.1		
<i>75% 90 Day TBills +4% / 25% MSCI ACWI</i>			-0.5	2.4	5.1	7.3	7.1	6.2	12.3	5.1	6.6	7.0	8.1		
Aristeia International Limited	67,195,663	1.2	-0.6	1.8	3.4	11.4	8.7	--	21.6	8.7	9.2	2.6	13.1	5.5	May-14
Brevan Howard Fund	68,513,907	1.2	8.1	9.5	8.1	15.3	10.2	--	6.1	20.5	12.7	7.8	1.0	7.9	Nov-13
D.E. Shaw Composite Fund	55,799,874	1.0	11.1	21.9	26.4	19.9	16.7	--	19.0	15.6	11.5	11.3	8.0	14.3	Jul-13
HBK Fund II	56,778,731	1.0	-0.9	4.2	5.9	6.2	5.2	--	11.0	1.5	5.5	3.0	6.7	4.5	Nov-13
Hudson Bay Cap Structure Arbitrage Enhanced Fund	74,505,348	1.4	1.7	6.0	7.6	--	--	--	14.2	16.2	--	--	--	13.0	Jun-19
Indus Pacific Opportunities Fund	37,438,472	0.7	-0.1	-6.9	0.3	13.7	8.1	--	38.0	15.8	-19.2	15.8	15.1	8.1	Jun-14
Magnetar Structured Credit Fund	9,441,422	0.2	-0.8	1.9	6.5	12.4	9.9	--	38.1	-0.2	5.4	7.7	8.6	8.4	May-14
Pharo Macro Fund	60,578,227	1.1	-4.9	-8.5	-8.4	--	--	--	3.5	--	--	--	--	-1.0	Dec-19
PIMCO Commodity Alpha Fund	60,367,071	1.1	-6.6	3.6	6.9	6.6	8.1	--	14.2	4.8	5.2	10.4	17.0	9.5	May-16
River Birch International	774,799	0.0	-0.5	-0.2	0.6	-7.7	-4.1	--	-0.7	-19.9	-0.5	2.8	9.6	-2.1	Aug-15
Sculptor Enhanced Domestic Partners	51,397,468	0.9	-2.9	-6.7	-4.3	7.3	--	--	16.8	6.5	--	--	--	9.6	Mar-19
Alpha Pool	268,899,258	4.9	0.8	2.2	3.9	--	--	--	14.5	--	--	--	--		
<i>91-Day T-Bill +4%</i>			1.0	3.1	4.1	--	--	--	4.1	--	--	--	--		
Hudson Bay Cap Structured Arbitrage Enhanced Fund	57,549,476	1.0	1.5	5.4	6.8	--	--	--	--	--	--	--	--	10.7	Jul-20
Davidson Kempner Institutional Partners	54,621,168	1.0	-0.1	-0.5	2.5	--	--	--	--	--	--	--	--	6.0	Dec-20
HBK Fund II	54,602,995	1.0	-1.1	3.6	5.1	--	--	--	--	--	--	--	--	6.6	Dec-20
HBK Opportunities Platform - SPAC Series	50,340,049	0.9	-0.6	-1.4	-0.8	--	--	--	--	--	--	--	--	5.0	Dec-20
Garda Fixed Income Relative Value Opportunity Fund	51,785,570	0.9	4.1	3.2	--	--	--	--	--	--	--	--	--	3.2	Sep-21

Total Fund

Executive Summary (Net of Fees)

Period Ending: March 31, 2022

	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Fiscal 2021	Fiscal 2020	Fiscal 2019	Fiscal 2018	Fiscal 2017	Inception	Inception Date
Midstream Energy	350,123,956	6.4	19.1	20.2	39.1	--	--	--	--	--	--	--	--		
<i>Alerian Midstream Index</i>			23.9	22.0	42.0	--	--	--	--	--	--	--	--		
Harvest Midstream	201,971,779	3.7	24.6	25.9	48.5	--	--	--	--	--	--	--	--	58.1	Sep-20
<i>Alerian Midstream Index</i>			23.9	22.0	42.0	--	--	--	--	--	--	--	--	47.2	Sep-20
PIMCO Midstream	148,152,177	2.7	12.4	13.4	28.2	--	--	--	--	--	--	--	--	39.6	Oct-20
<i>50/25/25 Alerian Midstream/ ICE BofA US Pipeline/ ICE BofA US HY Midstream</i>			8.3	8.5	19.8	--	--	--	--	--	--	--	--	--	Oct-20
Core Real Estate	323,231,741	5.9	7.1	19.4	22.4	8.9	8.0	--	5.6	1.4	5.9	7.4	5.6		
<i>NCREIF-ODCE</i>			7.4	23.6	28.5	11.3	9.9	--	8.0	2.2	6.4	8.4	7.9		
ASB Allegiance Real Estate Fund	186,488,399	3.4	7.7	17.4	20.1	8.3	7.5	--	5.4	1.5	6.8	7.1	3.3	8.8	Sep-13
<i>NCREIF-ODCE</i>			7.4	23.6	28.5	11.3	9.9	--	8.0	2.2	6.4	8.4	7.9	10.7	Sep-13
JPMCB Strategic Property Fund	136,743,343	2.5	6.3	22.2	25.4	9.8	8.5	--	5.9	1.3	5.0	7.6	7.4	9.1	Jul-14
<i>NCREIF-ODCE</i>			7.4	23.6	28.5	11.3	9.9	--	8.0	2.2	6.4	8.4	7.9	10.5	Jul-14
Private Real Estate	86,780,188	1.6	7.9	27.2	27.9	14.4	10.9	12.3	12.1	4.4	9.0	5.4	5.7		
<i>Private Real Estate Benchmark</i>			7.9	27.2	27.9	14.4	10.9	12.3	12.1	4.4	9.0	5.4	5.7		
Private Equity	130,114,637	2.4	3.9	21.3	27.4	16.8	14.0	12.0	41.7	-10.5	10.9	7.8	14.1		
<i>Private Equity Benchmark</i>			3.9	21.3	27.4	16.8	14.0	12.0	41.7	-10.5	10.9	7.8	14.1		
Private Credit	240,570,940	4.4	-1.4	0.0	2.9	4.5	7.1	--	4.8	5.5	9.7	9.3	10.2		
<i>Private Credit Benchmark</i>			-1.4	0.0	2.9	4.5	7.1	--	4.8	5.5	9.7	9.3	10.2		
Opportunistic	164,445,849	3.0	-1.1	4.9	16.4	--	--	--	59.9	--	--	--	--		
<i>Assumed Rate of Return +3%</i>			2.5	7.7	10.4	--	--	--	10.4	--	--	--	--		
DB Investors Fund IV	39,889,093	0.7	-9.1	2.6	19.2	--	--	--	95.1	--	--	--	--	35.9	Jan-20
Sixth Street TAO Partners (D)	72,450,649	1.3	2.7	6.7	14.2	--	--	--	39.6	--	--	--	--	22.1	Apr-20
Aristeia Select Opportunities II	52,106,107	1.0	0.6	4.2	--	--	--	--	--	--	--	--	--	4.2	Jul-21
<i>Assumed Rate of Return +3%</i>			2.5	7.7	--	--	--	--	--	--	--	--	--	7.7	Jul-21
Cash	-203,765,310	-3.7	-0.1	-0.1	-0.1	0.5	1.5	--	0.1	1.0	2.0	3.2	2.7		

IRR Analysis as of IRR date												
Vintage Year	Manager/Fund	Estimated Market Value as of 3/31/2022	Total Commitment	Capital Called	% Called	Remaining Commitment	Capital Returned	Market Value as of IRR date	Distrib./ Paid-In (DPI) ¹	Tot. Value/ Paid-In (TVPI) ²	Net IRR Since Inception ³	IRR Date
Private Equity												
2001	Abbott Capital PE IV	\$1,156,229	\$50,000,000	\$49,650,000	99%	\$350,000	\$85,714,140	\$1,104,670	1.73x	1.75x	11.0%	12/31/20
2005	Abbott Capital PE V	\$4,656,643	\$65,000,000	\$62,790,000	97%	\$2,210,000	\$89,361,494	\$5,280,775	1.42x	1.50x	6.9%	09/30/21
2008	Abbott Capital PE VI	\$23,208,334	\$50,000,000	\$49,750,000	100%	\$250,000	\$75,850,074	\$28,869,137	1.52x	1.99x	13.9%	09/30/21
2006	Pantheon Global III	\$1,080,477	\$50,000,000	\$47,300,000	95%	\$2,700,000	\$51,500,000	\$1,080,477	1.09x	1.11x	1.9%	12/31/21
1998	Pantheon USA III	\$51,595	\$7,500,000	\$7,335,000	98%	\$165,000	\$8,197,500	\$51,595	1.12x	1.12x	1.9%	12/31/21
2002	Pantheon USA V	\$425,173	\$25,000,000	\$24,350,000	97%	\$650,000	\$37,950,000	\$425,173	1.56x	1.58x	9.0%	12/31/21
2004	Pantheon USA VI	\$644,486	\$35,000,000	\$33,075,000	95%	\$1,925,000	\$50,378,827	\$819,486	1.52x	1.54x	6.8%	12/31/21
2006	Pantheon USA VII	\$9,827,470	\$50,000,000	\$46,600,000	93%	\$3,400,000	\$77,775,000	\$10,677,469	1.67x	1.88x	10.3%	12/31/21
2020	Vista Foundation Fund IV	\$9,495,697	\$25,000,000	\$9,835,795	39%	\$15,164,205	\$30,252	\$9,525,949	0.00x	0.97x	30.5%	12/31/21
2021	Crown Global Secondaries V Master S.C	\$16,701,892	\$50,000,000	\$13,250,000	27%	\$36,750,000	\$0	N/A	N/A	N/A	N/A	N/A
2021	Brighton Park Capital Fund I	\$36,438,508	\$30,000,000	\$28,532,231	95%	\$1,467,769	\$1,167,799	N/A	0.04x	1.32x	N/A	N/A
2021	Warren Equity Partners Fund III	\$15,874,846	\$32,500,000	\$14,911,186	46%	\$17,588,814	\$508,290	N/A	0.03x	1.10x	N/A	N/A
2021	Peak Rock Capital Fund III	\$9,011,672	\$30,000,000	\$9,236,350	31%	\$20,763,650	\$0	N/A	N/A	N/A	N/A	N/A
2021	Level Equity Growth Partners V	\$1,544,021	\$15,000,000	\$1,688,471	11%	\$13,311,529	\$0	N/A	N/A	N/A	N/A	N/A
2021	Level Equity Opportunities Fund 2021	\$2,406	\$15,000,000	\$21,489	0%	\$14,978,511	\$0	N/A	N/A	N/A	N/A	N/A
Total Private Equity		\$130,114,637	\$530,000,000	\$398,325,522	75%	\$131,674,478	\$478,433,377	\$57,834,731	1.20x	1.53x		
% of Portfolio (Market Value)		2.4%										

¹(DPI) is equal to (capital returned / capital called)

²(TVPI) is equal to (market value + capital returned) / capital called

³Net IRR is calculated on the cash flows of all the limited partners of the fund and is net of all fees. Each IRR figure is provided by its respective manager.

IRR Analysis as of IRR date												
Vintage Year	Manager/Fund	Estimated Market Value 12/31/2021	Total Commitment	Capital Called	% Called	Remaining Commitment	Capital Returned	Market Value as of IRR date	Distrib./ Paid-In (DPI) ¹	Tot. Value/ Paid-In (TVPI) ²	Net IRR Since Inception ³	IRR Date
Private Credit												
2015	Colony Distressed Credit IV* ⁴	\$34,399,797	\$60,000,000	\$73,340,099	122%	-\$5,500,870	\$24,003,132	\$51,535,333	0.33x	0.80x	1.0%	6/30/21
2017	Brookfield Real Estate Finance Fund V	\$23,059,142	\$50,000,000	\$35,545,586	71%	\$14,454,414	\$21,702,372	\$23,191,827	0.61x	1.26x	8.1%	12/31/21
2017	Sixth Street TAO Partners (B)	\$37,001,079	\$50,000,000	\$64,060,356	128%	-\$14,060,356	\$39,332,902	\$36,662,874	0.61x	1.19x	11.3%	12/31/21
2018	Magnetar Constellation Fund V	\$36,817,069	\$60,000,000	\$64,905,493	108%	-\$4,905,493	\$35,077,469	N/A	0.54x	1.11x	26.6%	2/28/22
2019	H.I.G Bayside Loan Opportunity Fund V	\$47,114,733	\$60,000,000	\$33,496,503	56%	\$26,503,497	\$5,260,705	N/A	0.16x	1.56x	37.2%	12/31/21
2020	Blue Torch Credit Opportunities Fund II	\$16,280,915	\$20,000,000	\$16,613,092	83%	\$3,386,908	\$1,580,113	N/A	0.10x	1.08x	N/A	N/A
2020	Fortress Credit Opportunitites Fund V Expans	\$11,826,948	\$40,000,000	\$10,851,947	27%	\$29,148,053	\$468,590	N/A	0.04x	1.13x	N/A	N/A
2021	Fortress Lending Fund II	\$30,071,257	\$40,000,000	\$30,137,851	75%	\$9,862,149	\$1,683,446	N/A	0.06x	1.05x	N/A	N/A
2022	Fortress Lending Fund III	\$4,000,000	\$40,000,000	\$4,000,000	10%	\$36,000,000	\$0	N/A	N/A	N/A	N/A	N/A
Total Private Credit		\$240,570,940	\$420,000,000	\$332,950,927	79%	\$94,888,302	\$129,108,731	\$111,390,034	0.39x	1.11x		
% of Portfolio (Market Value)		4.4%										

¹(DPI) is equal to (capital returned / capital called)

²(TVPI) is equal to (market value + capital returned) / capital called

³Net IRR is calculated on the cash flows of all the limited partners of the fund and is net of all fees. Each IRR figure is provided by its respective manager.

⁴\$14,360,749 is recallable capital as of 6/30/2020.

IRR Analysis as of IRR date												
Vintage Year	Manager/Fund	Estimated Market Value 12/31/2021	Total Commitment	Capital Called	% Called	Remaining Commitment	Capital Returned	Market Value as of IRR date	Distrib./ Paid-In (DPI) ¹	Tot. Value/ Paid-In (TVPI) ²	Net IRR Since Inception ³	IRR Date
Private Real Estate												
2012	Invesco Real Estate III	\$0	\$60,000,000	\$55,519,583	93%	\$4,480,417	\$81,560,296	\$286,862	1.47x	1.47x	13.6%	12/31/20
2014	Invesco Real Estate Value-Add Fund IV	\$8,193,566	\$50,000,000	\$43,637,717	87%	\$6,362,283	\$51,606,600	\$24,596,747	1.18x	1.37x	12.3%	12/31/20
2017	Landmark Real Estate Partners VIII	\$22,712,467	\$60,000,000	\$31,768,833	53%	\$28,231,167	\$18,356,034	\$18,637,114	0.58x	1.29x	16.4%	09/30/21
2018	Long Wharf Real Estate Partners VI	\$28,674,828	\$50,000,000	\$31,982,160	64%	\$18,017,840	\$12,487,611	\$28,674,828	0.39x	1.29x	36.0%	12/31/21
2020	Covenant Apartment Fund X	\$23,593,320	\$30,000,000	\$17,700,000	59%	\$12,300,000	\$1,468,639	N/A	0.08x	1.42x	N/A	N/A
2021	Singerman Real Estate Opportunity Fund IV	\$1,682,930	\$35,000,000	\$1,890,000	5%	\$33,110,000	\$0	N/A	N/A	N/A	N/A	N/A
2022	LBA Logistics Value Fund IX, L.P.	\$1,923,077	\$40,000,000	\$1,923,077	5%	\$38,076,923	\$0	N/A	N/A	N/A	N/A	N/A
Total Private Real Estate		\$86,780,188	\$325,000,000	\$184,421,370	57%	\$140,578,630	\$165,479,181	\$72,195,551	0.90x	1.37x		
% of Portfolio (Market Value)		1.6%										

¹(DPI) is equal to (capital returned / capital called)

²(TVPI) is equal to (market value + capital returned) / capital called

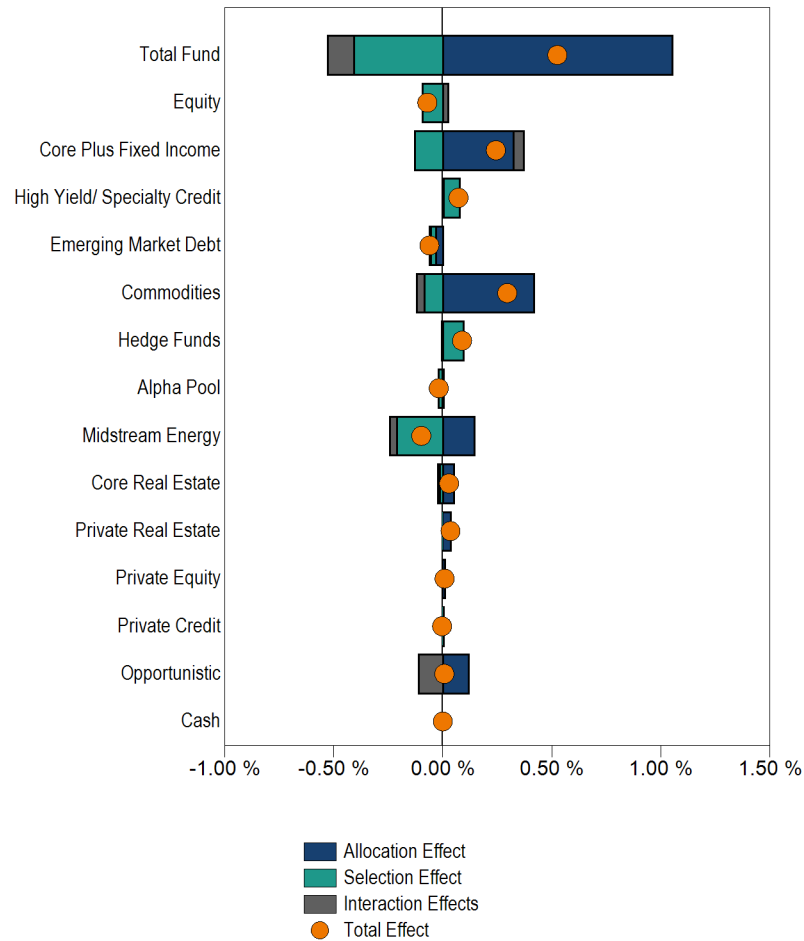
³Net IRR is calculated on the cash flows of all the limited partners of the fund and is net of all fees. Each IRR figure is provided by its respective manager.

Total Fund
Attribution Analysis - Asset Class Level (Net of Fees)

Period Ending: March 31, 2022

Attribution Effects
Last Three Months

Performance Attribution



	Quarter	Fiscal YTD
Wtd. Actual Return	-0.78%	3.37%
Wtd. Index Return *	-1.32%	2.63%
Excess Return	0.53%	0.75%
Selection Effect	-0.41%	-0.48%
Allocation Effect	1.05%	1.36%
Interaction Effect	-0.12%	-0.13%

*Calculated from benchmark returns and weightings of each component.

Attribution Summary
Last Three Months

	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
Equity	-5.6%	-5.4%	-0.2%	-0.1%	0.0%	0.0%	-0.1%
Core Plus Fixed Income	-6.6%	-5.9%	-0.6%	-0.1%	0.3%	0.0%	0.2%
High Yield/ Specialty Credit	-3.4%	-4.5%	1.1%	0.1%	0.0%	0.0%	0.1%
Emerging Market Debt	-7.1%	-6.5%	-0.5%	0.0%	0.0%	0.0%	-0.1%
Commodities	23.1%	25.5%	-2.5%	-0.1%	0.4%	0.0%	0.3%
Hedge Funds	0.4%	-0.5%	0.9%	0.1%	0.0%	0.0%	0.1%
Alpha Pool	0.8%	1.0%	-0.3%	0.0%	0.0%	0.0%	0.0%
Midstream Energy	19.1%	23.9%	-4.8%	-0.2%	0.1%	0.0%	-0.1%
Core Real Estate	7.1%	7.4%	-0.3%	0.0%	0.0%	0.0%	0.0%
Private Real Estate	7.9%	7.9%	0.0%	0.0%	0.0%	0.0%	0.0%
Private Equity	3.9%	3.9%	0.0%	0.0%	0.0%	0.0%	0.0%
Private Credit	-1.4%	-1.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Opportunistic	-1.1%	2.5%	-3.6%	0.0%	0.1%	-0.1%	0.0%
Cash	--	--	--	--	--	--	--
Total	-0.8%	-1.3%	0.5%	-0.4%	1.1%	-0.1%	0.5%

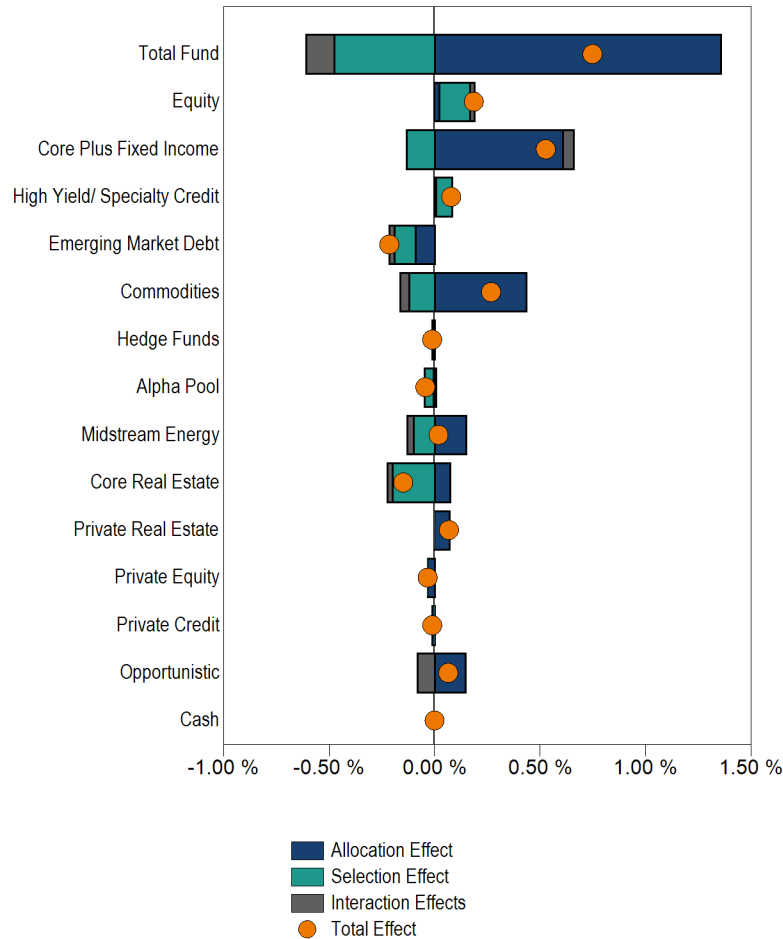
Weighted returns shown in attribution analysis may differ from actual returns. Negative cash allocation unable to be shown in Attribution Summary table.

Total Fund

Attribution Analysis - Asset Class Level (Net of Fees)

Period Ending: March 31, 2022

Attribution Effects Fiscal YTD



Performance Attribution

	Quarter	Fiscal YTD
Wtd. Actual Return	-0.78%	3.37%
Wtd. Index Return *	-1.32%	2.63%
Excess Return	0.53%	0.75%
Selection Effect	-0.41%	-0.48%
Allocation Effect	1.05%	1.36%
Interaction Effect	-0.12%	-0.13%

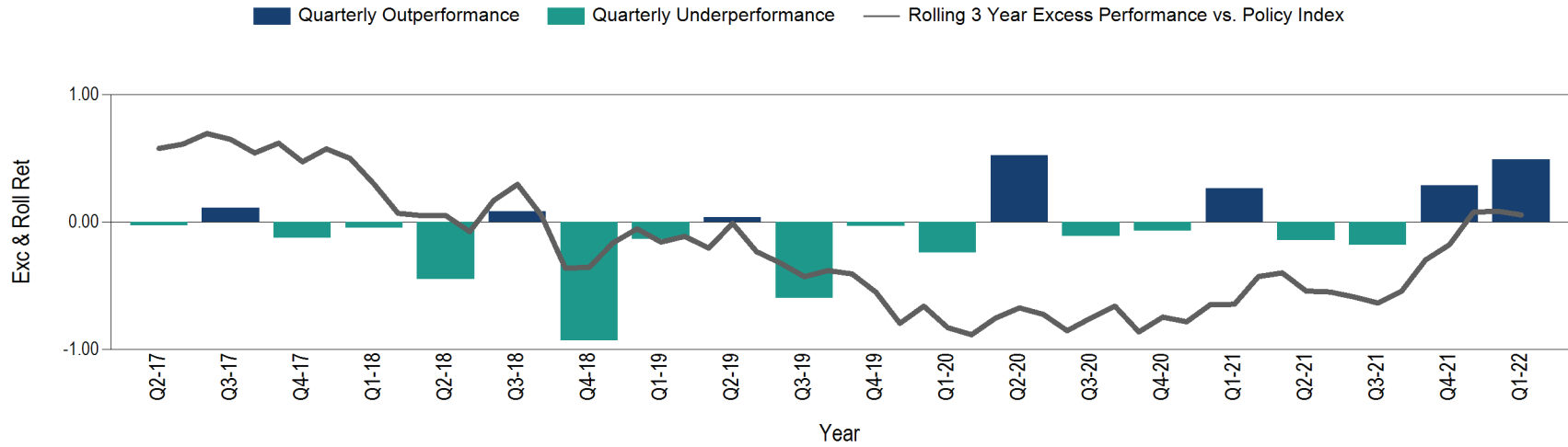
*Calculated from benchmark returns and weightings of each component.

Attribution Summary Fiscal YTD

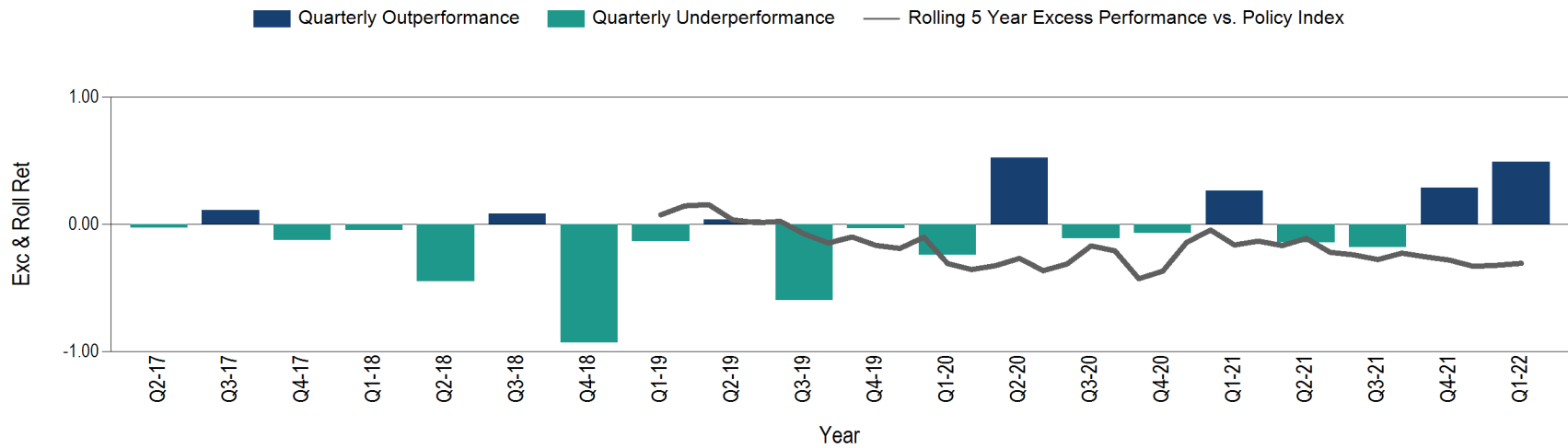
	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
Equity	-0.2%	-0.5%	0.4%	0.1%	0.0%	0.0%	0.2%
Core Plus Fixed Income	-6.5%	-5.9%	-0.6%	-0.1%	0.6%	0.0%	0.5%
High Yield/ Specialty Credit	-1.8%	-3.0%	1.2%	0.1%	0.0%	0.0%	0.1%
Emerging Market Debt	-10.4%	-8.2%	-2.3%	-0.1%	-0.1%	0.0%	-0.2%
Commodities	28.1%	31.7%	-3.7%	-0.1%	0.4%	0.0%	0.3%
Hedge Funds	2.4%	2.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Alpha Pool	2.2%	3.1%	-0.8%	0.0%	0.0%	0.0%	0.0%
Midstream Energy	20.2%	22.0%	-1.7%	-0.1%	0.1%	0.0%	0.0%
Core Real Estate	19.4%	23.6%	-4.2%	-0.2%	0.1%	0.0%	-0.1%
Private Real Estate	27.2%	27.2%	0.0%	0.0%	0.1%	0.0%	0.1%
Private Equity	21.3%	21.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Private Credit	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Opportunistic	4.9%	7.7%	-2.8%	0.0%	0.1%	-0.1%	0.1%
Cash	--	--	--	--	--	--	--
Total	3.4%	2.6%	0.7%	-0.5%	1.4%	-0.1%	0.7%

Weighted returns shown in attribution analysis may differ from actual returns. Negative cash allocation unable to be shown in Attribution Summary table.

Rolling 3 Year Annualized Excess Performance



Rolling 5 Year Annualized Excess Performance



Total Fund Rolling Risk Statistics (Net of Fees)

Period Ending: March 31, 2022

Rolling Information Ratio



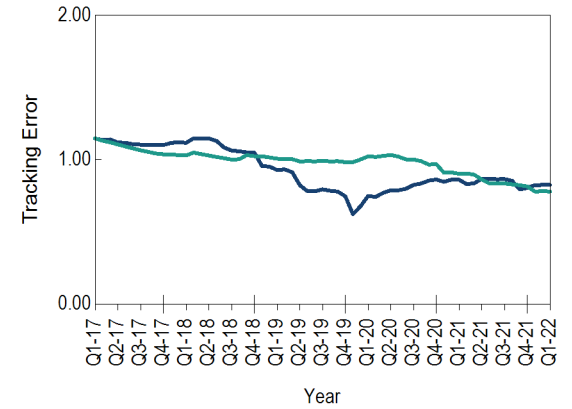
— Total Fund Rolling 3 Year — Total Fund Rolling 5 Year

Rolling Annual Excess Benchmark Return



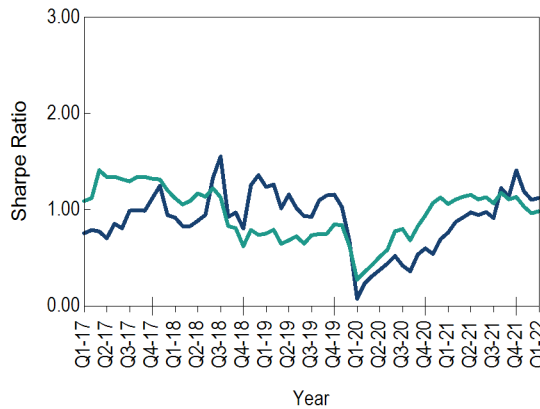
— Total Fund Rolling 3 Year — Total Fund Rolling 5 Year

Rolling Tracking Error



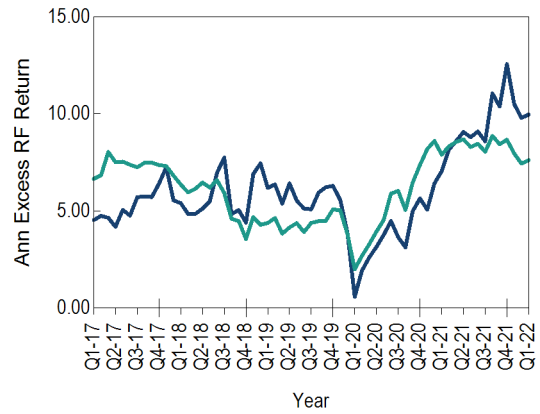
— Total Fund Rolling 3 Year — Total Fund Rolling 5 Year

Rolling Sharpe Ratio



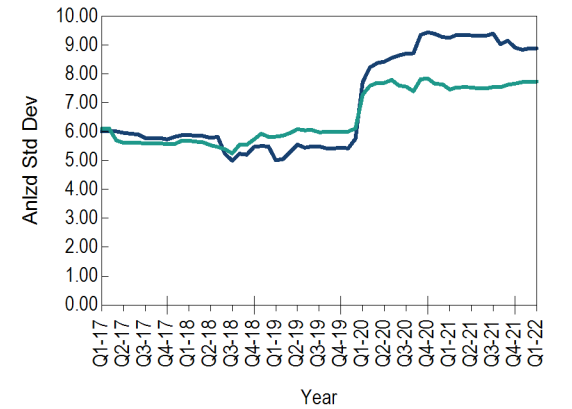
— Total Fund Rolling 3 Year — Total Fund Rolling 5 Year

Rolling Annual Excess Risk Free Return



— Total Fund Rolling 3 Year — Total Fund Rolling 5 Year

Rolling Annualized Standard Deviation



— Total Fund Rolling 3 Year — Total Fund Rolling 5 Year

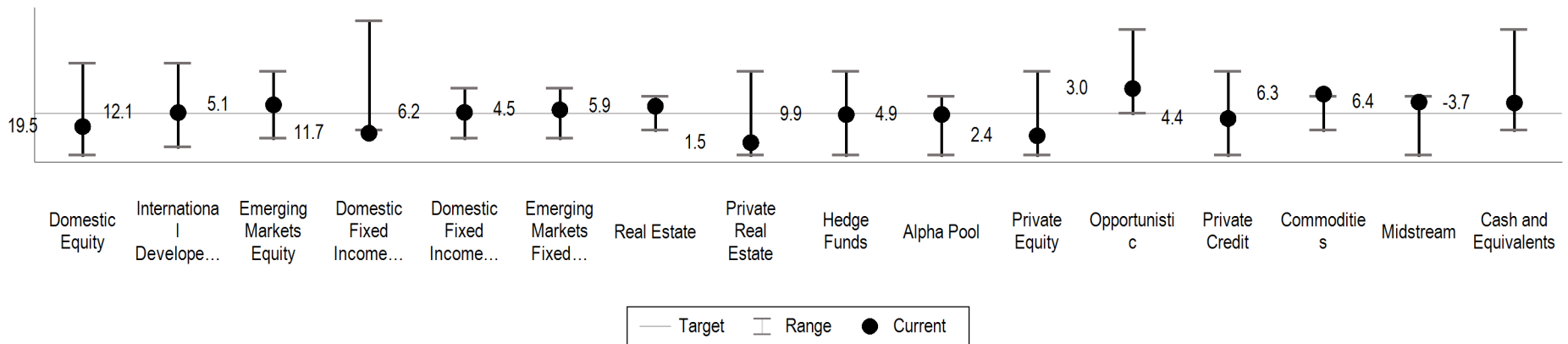
Asset Allocation

Total Fund Sub-Asset Class Allocation

Period Ending: March 31, 2022

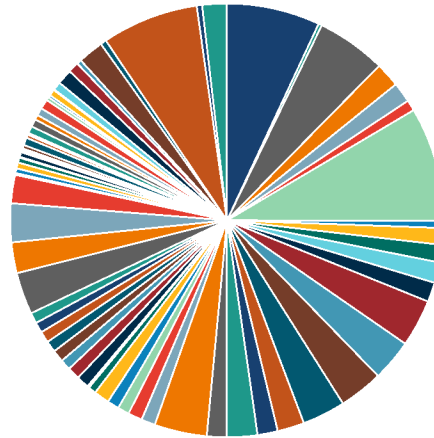
	Current Balance	Current Allocation	Policy	Difference	Policy Range	Within IPS Range?
Domestic Equity	\$1,067,126,857	19.5%	21.0%	-\$84,560,943	16.0% - 27.0%	Yes
International Developed Equity	\$665,462,806	12.1%	12.0%	\$7,355,492	8.0% - 18.0%	Yes
Emerging Markets Equity	\$277,789,409	5.1%	4.0%	\$58,420,305	1.0% - 9.0%	Yes
Domestic Fixed Income Core Plus	\$640,464,272	11.7%	14.0%	-\$127,327,594	12.0% - 25.0%	No
Domestic Fixed Income High Yield	\$337,601,070	6.2%	6.0%	\$8,547,413	3.0% - 9.0%	Yes
Emerging Markets Fixed Income	\$244,801,211	4.5%	4.0%	\$25,432,106	1.0% - 7.0%	Yes
Real Estate	\$323,231,741	5.9%	5.0%	\$49,020,360	3.0% - 7.0%	Yes
Private Real Estate	\$84,857,111	1.5%	5.0%	-\$189,354,270	0.0% - 10.0%	Yes
Hedge Funds	\$542,790,982	9.9%	10.0%	-\$5,631,780	5.0% - 15.0%	Yes
Alpha Pool	\$268,899,258	4.9%	5.0%	-\$5,312,123	0.0% - 7.0%	Yes
Private Equity	\$130,114,637	2.4%	5.0%	-\$144,096,744	0.0% - 10.0%	Yes
Opportunistic	\$164,445,849	3.0%	0.0%	\$164,445,849	0.0% - 10.0%	Yes
Private Credit	\$242,494,017	4.4%	5.0%	-\$31,717,364	0.0% - 10.0%	Yes
Commodities	\$347,789,751	6.3%	4.0%	\$128,420,646	2.0% - 6.0%	No
Midstream	\$350,123,956	6.4%	5.0%	\$75,912,575	0.0% - 7.0%	Yes
Cash and Equivalents	-\$203,765,310	-3.7%	-5.0%	\$70,446,071	-7.0% - 5.0%	Yes
Total	\$5,484,227,616	100.0%	100.0%			

Actual vs. Target



Market value does not include residual \$261,833.73 in Fidelity International.

Current Allocation: by Manager



- | | | | |
|--|--|--|---------------------------------|
| Equity Beta Exposure | Stone Harbor Emerging Markets Debt Blend Portfolio | HBK Fund II | Brighton Park Capital Fund I |
| Russell 2000 Overlay | PIMCO EMD | HBK Opportunities Platform - SPAC Series | Warren Equity Partners Fund III |
| Mellon DB SL Stock Index Fund | Gresham MTAP Commodity Builder Fund | Garda Fixed Income Relative Value Opportunity Fund | Peak Rock Capital Fund III |
| PIMCO StocksPLUS | WTC-CTF | Harvest Midstream | Colony Distressed Credit IV |
| AB US Small Cap Value Equity | Aristeia International Limited | PIMCO Midstream | Sixth Street TAO Partners (B) |
| Geneva Capital Small Cap Growth | Brevan Howard Fund | ASB Allegiance Real Estate Fund | |
| Mellon DB SL World ex-US Index Fund | D.E. Shaw Composite Fund | JPMCB Strategic Property Fund | |
| Cevian Capital II | HBK Fund II | Invesco Real Estate Value-Add Fund IV | |
| American Century Non-US Small Cap | Hudson Bay Cap Structure Arbitrage Enhanced Fund | Landmark Real Estate Partners VIII | |
| DFA Emerging Markets Value I | Indus Pacific Opportunities Fund | Long Wharf Real Estate | |
| AB Emerging Markets Strategic Core Equity Collective Trust | Magnetar Structured Credit Fund | Covenant Apartment Fund X | |
| Mellon Emerging Markets Stock Index Fund | Pharo Macro Fund | Abbott V | |
| Mellon DB SL Aggregate Bond Index Fund | PIMCO Commodity Alpha Fund | Abbott VI | |
| PIMCO Core Plus | Sculptor Enhanced Domestic Partners | Pantheon VII | |
| Western Asset Core Plus | Hudson Bay Cap Structured Arbitrage Enhanced Fund | Vista Foundation Fund IV | |
| Western Asset High Yield Fixed Income | Davidson Kempner Institutional Partners | Crown Global Secondaries V Master S.C.Sp | |
| TCW Securitized Opportunities | | | |

Total Fund
3 Year Correlation Matrix (Net of Fees)

Period Ending: March 31, 2022

Correlation Matrix
3 Years Ending March 31, 2022

	Total Fund Equity	Domestic Equity	International Developed Equity	Fixed Income	Core Plus Fixed Income	High Yield/ Specialty Credit	Emerging Market Debt	Commodities	Hedge Funds	Core Real Estate	Private Real Estate	Private Equity	Private Credit	Policy Index	
Total Fund	1.00	--	--	--	--	--	--	--	--	--	--	--	--	--	
Equity	0.99	1.00	--	--	--	--	--	--	--	--	--	--	--	--	
Domestic Equity	0.98	0.99	1.00	--	--	--	--	--	--	--	--	--	--	--	
International Developed Equity	0.99	0.99	0.98	1.00	--	--	--	--	--	--	--	--	--	--	
Fixed Income	0.69	0.71	0.72	0.70	1.00	--	--	--	--	--	--	--	--	--	
Core Plus Fixed Income	0.27	0.31	0.33	0.28	0.88	1.00	--	--	--	--	--	--	--	--	
High Yield/ Specialty Credit	0.96	0.96	0.95	0.96	0.79	0.41	1.00	--	--	--	--	--	--	--	
Emerging Market Debt	0.92	0.91	0.90	0.92	0.88	0.57	0.93	1.00	--	--	--	--	--	--	
Commodities	0.68	0.61	0.58	0.63	0.07	-0.39	0.57	0.49	1.00	--	--	--	--	--	
Hedge Funds	0.91	0.92	0.90	0.91	0.70	0.31	0.89	0.89	0.60	1.00	--	--	--	--	
Core Real Estate	-0.28	-0.33	-0.32	-0.30	-0.68	-0.71	-0.40	-0.44	0.26	-0.41	1.00	--	--	--	
Private Real Estate	-0.23	-0.23	-0.22	-0.22	-0.59	-0.58	-0.41	-0.41	0.01	-0.30	0.71	1.00	--	--	
Private Equity	-0.02	-0.04	-0.06	0.01	-0.35	-0.46	-0.02	-0.24	0.15	-0.15	0.38	0.29	1.00	--	
Private Credit	-0.60	-0.60	-0.62	-0.55	-0.22	0.11	-0.53	-0.47	-0.65	-0.60	-0.04	0.03	0.16	1.00	
Policy Index	1.00	0.99	0.98	0.99	0.72	0.30	0.97	0.93	0.66	0.91	-0.30	-0.26	-0.01	-0.58	1.00

Cash Flows

Total Fund
Net Cash Flow - Three Months Ended

Period Ending: March 31, 2022

	Equity					
	Beginning Market Value	Contributions	Withdrawals	Fees	Net Investment Change	Ending Market Value
Equity Beta Exposure	\$586,960,975	\$0	-\$109,733,550	\$0	-\$28,456,638	\$448,770,788
Russell 2000 Overlay	\$28,707,840	\$0	-\$10,071,669	\$0	-\$2,208,292	\$16,427,880
Mellon DB SL Stock Index Fund	\$350,801,307	\$0	\$0	-\$24,751	-\$16,116,849	\$334,684,458
PIMCO StocksPLUS	\$125,028,886	\$0	\$0	-\$146,128	-\$6,881,734	\$118,147,151
AB US Small Cap Value Equity	\$102,353,305	\$0	\$0	-\$208,277	-\$5,345,271	\$97,008,034
Geneva Capital Small Cap Growth	\$60,425,575	\$0	\$0	-\$98,290	-\$8,337,714	\$52,087,862
Mellon DB SL World ex-US Index Fund	\$576,312,450	\$0	\$0	\$0	-\$25,080,389	\$551,232,061
Cevian Capital II	\$35,807,322	\$0	\$0	\$0	-\$1,825,861	\$33,981,461
Fidelity Non-US Small Cap Equity	\$366,241	\$0	-\$99,114	-\$176	-\$5,293	\$261,834
American Century Non-US Small Cap	\$96,405,600	\$0	-\$1,131,325	-\$66,404	-\$15,024,991	\$80,249,283
DFA Emerging Markets Value I	\$84,198,233	\$0	\$0	-\$114,809	\$445,327	\$84,643,560
AB Emerging Markets Strategic Core Equity Collective Trust	\$108,256,998	\$0	\$0	-\$370,224	-\$9,150,663	\$99,106,335
Mellon Emerging Markets Stock Index Fund	\$101,097,044	\$0	\$0	\$0	-\$7,057,529	\$94,039,515
Transition Equity	\$717	\$0	\$0	\$0	-\$32	\$685
Total	\$2,256,722,493	\$0	-\$121,035,657	-\$1,029,058	-\$125,045,930	\$2,010,640,905

	Fixed Income					
	Beginning Market Value	Contributions	Withdrawals	Fees	Net Investment Change	Ending Market Value
Mellon DB SL Aggregate Bond Index Fund	\$225,377,240	\$16,000,000	\$0	-\$17,631	-\$13,511,227	\$227,866,012
PIMCO Core Plus	\$211,833,662	\$0	\$0	-\$151,421	-\$11,407,076	\$200,426,586
Western Asset Core Plus	\$228,425,712	\$3,223,911	-\$322,391	-\$119,758	-\$19,269,814	\$212,057,418
Western Asset High Yield Fixed Income	\$190,741,578	\$25,000,000	\$0	-\$96,307	-\$7,964,041	\$207,777,536
TCW Securitized Opportunities	\$132,717,932	\$0	\$0	-\$328,197	-\$2,894,398	\$129,823,534
Stone Harbor Emerging Markets Debt Blend Portfolio	\$106,209,436	\$0	\$0	-\$150,004	-\$8,692,381	\$97,517,056
PIMCO EMD	\$157,179,215	\$0	\$0	-\$18,747	-\$9,895,060	\$147,284,155
Transition Fixed Income	\$116,059	\$0	\$0	\$0	-\$1,804	\$114,255
Total	\$1,252,600,835	\$44,223,911	-\$322,391	-\$882,065	-\$73,635,801	\$1,222,866,553

Total Fund

Net Cash Flow - Three Months Ended

Period Ending: March 31, 2022

Commodities

	Beginning Market Value	Contributions	Withdrawals	Fees	Net Investment Change	Ending Market Value
Gresham MTAP Commodity Builder Fund	\$93,802,946	\$0	-\$20,000,000	-\$123,555	\$21,065,277	\$94,868,223
WTC-CTF	\$206,268,356	\$0	\$0	-\$440,910	\$46,653,171	\$252,921,527
Total	\$300,071,302	\$0	-\$20,000,000	-\$564,464	\$67,718,448	\$347,789,751

Hedge Funds

	Beginning Market Value	Contributions	Withdrawals	Fees	Net Investment Change	Ending Market Value
Aristeia International Limited	\$67,577,644	\$0	\$0	\$0	-\$381,980	\$67,195,663
Brevan Howard Fund	\$68,109,600	\$28,924	-\$4,799,168	\$0	\$5,174,551	\$68,513,907
D.E. Shaw Composite Fund	\$59,670,684	\$0	-\$9,465,005	\$0	\$5,594,195	\$55,799,874
HBK Fund II	\$57,300,333	\$0	\$0	\$0	-\$521,602	\$56,778,731
Hudson Bay Cap Structure Arbitrage Enhanced Fund	\$73,262,598	\$0	\$0	\$0	\$1,242,750	\$74,505,348
Indus Pacific Opportunities Fund	\$37,466,384	\$0	\$0	\$0	-\$27,911	\$37,438,472
Magnetar Structured Credit Fund	\$10,874,643	\$0	-\$1,359,330	\$0	-\$73,891	\$9,441,422
Myriad Opportunities Offshore Fund	\$1,175,290	\$0	-\$430,928	\$0	-\$744,362	--
Pharo Macro Fund	\$63,709,761	\$0	\$0	\$0	-\$3,131,534	\$60,578,227
PIMCO Commodity Alpha Fund	\$64,665,216	\$0	\$0	-\$261,445	-\$4,298,145	\$60,367,071
River Birch International	\$839,041	\$0	-\$60,504	\$0	-\$3,739	\$774,799
Sculptor Enhanced Domestic Partners	\$52,929,967	\$0	\$0	\$0	-\$1,532,499	\$51,397,468
Total	\$557,581,161	\$28,924	-\$16,114,935	-\$261,445	\$1,295,831	\$542,790,982

Alpha Pool

	Beginning Market Value	Contributions	Withdrawals	Fees	Net Investment Change	Ending Market Value
Hudson Bay Cap Structured Arbitrage Enhanced Fund	\$56,589,550	\$203,908	-\$109,742	\$0	\$865,760	\$57,549,476
Davidson Kempner Institutional Partners	\$54,564,532	\$195,937	-\$104,163	\$0	-\$35,138	\$54,621,168
HBK Fund II	\$55,104,610	\$197,231	-\$104,123	\$0	-\$594,723	\$54,602,995
HBK Opportunities Platform - SPAC Series	\$50,536,171	\$178,669	-\$95,994	\$0	-\$278,797	\$50,340,049
Garda Fixed Income Relative Value Opportunity Fund	\$49,650,185	\$183,407	-\$98,751	\$0	\$2,050,729	\$51,785,570
Total	\$266,445,048	\$959,152	-\$512,773	\$0	\$2,007,831	\$268,899,258

Total Fund

Net Cash Flow - Three Months Ended

Period Ending: March 31, 2022

Midstream Energy

	Beginning Market Value	Contributions	Withdrawals	Fees	Net Investment Change	Ending Market Value
Harvest Midstream	\$161,784,382	\$0	\$0	-\$340,227	\$40,187,397	\$201,971,779
PIMCO Midstream	\$131,583,828	\$0	\$0	-\$246,400	\$16,568,349	\$148,152,177
Total	\$293,368,210	\$0	\$0	-\$586,628	\$56,755,746	\$350,123,956

Core Real Estate

	Beginning Market Value	Contributions	Withdrawals	Fees	Net Investment Change	Ending Market Value
ASB Allegiance Real Estate Fund	\$172,835,315	\$0	\$0	-\$345,099	\$13,653,083	\$186,488,399
JPMCB Strategic Property Fund	\$128,641,589	\$0	\$0	-\$259,495	\$8,101,754	\$136,743,343
Total	\$301,476,904	\$0	\$0	-\$604,595	\$21,754,837	\$323,231,741

Private Real Estate

	Beginning Market Value	Contributions	Withdrawals	Fees	Net Investment Change	Ending Market Value
Invesco Real Estate Fund III	\$277,169	\$0	-\$263,617	\$0	-\$13,552	\$0
Invesco Real Estate Value-Add Fund IV	\$7,764,801	\$0	\$0	\$0	\$428,765	\$8,193,566
Landmark Real Estate Partners VIII	\$25,796,483	\$0	-\$3,084,016	\$0	\$0	\$22,712,467
Long Wharf Real Estate	\$22,780,498	\$5,738,355	-\$2,775,024	\$0	\$2,930,999	\$28,674,828
Covenant Apartment Fund X	\$18,845,316	\$3,300,000	-\$1,330,258	\$0	\$2,778,262	\$23,593,320
Singerman Real Estate Opportunity Fund IV	\$1,758,750	\$131,250	\$0	\$0	-\$207,070	\$1,682,930
LBA Logistics Value Fund IX, L.P.	--	\$1,923,077	\$0	\$0	\$0	\$1,923,077
Total	\$77,223,017	\$11,092,682	-\$7,452,915	\$0	\$5,917,405	\$86,780,188

Total Fund

Net Cash Flow - Three Months Ended

Period Ending: March 31, 2022

	Private Equity					
	Beginning Market Value	Contributions	Withdrawals	Fees	Net Investment Change	Ending Market Value
Abbott IV	\$1,156,229	\$0	\$0	\$0	\$0	\$1,156,229
Abbott V	\$4,656,643	\$0	\$0	\$0	\$0	\$4,656,643
Abbott VI	\$26,208,334	\$0	-\$3,000,000	\$0	\$0	\$23,208,334
Pantheon Secondary III	\$1,087,500	\$0	\$0	\$0	-\$7,023	\$1,080,477
Pantheon III	\$52,823	\$0	\$0	\$0	-\$1,228	\$51,595
Pantheon V	\$429,727	\$0	\$0	\$0	-\$4,554	\$425,173
Pantheon VI	\$860,950	\$0	-\$175,000	\$0	-\$41,464	\$644,486
Pantheon VII	\$10,606,938	\$0	-\$849,999	\$0	\$70,531	\$9,827,470
Vista Foundation Fund IV	\$9,379,623	\$0	-\$30,252	\$0	\$146,326	\$9,495,697
Crown Global Secondaries V Master S.C.Sp	\$16,630,053	\$0	\$0	\$0	\$71,839	\$16,701,892
Brighton Park Capital Fund I	\$24,592,195	\$8,588,829	\$0	\$0	\$3,257,484	\$36,438,508
Warren Equity Partners Fund III	\$14,452,892	\$0	\$0	\$0	\$1,421,954	\$15,874,846
Peak Rock Capital Fund III	\$6,020,541	\$2,991,131	\$0	\$0	\$0	\$9,011,672
Level Equity Growth Partners V	\$1,688,471	\$0	\$0	\$0	-\$144,450	\$1,544,021
Level Equity Opportunities Fund 2021	\$21,489	\$0	\$0	\$0	-\$23,895	-\$2,406
Total	\$117,844,408	\$11,579,960	-\$4,055,251	\$0	\$4,745,520	\$130,114,637

	Private Credit					
	Beginning Market Value	Contributions	Withdrawals	Fees	Net Investment Change	Ending Market Value
Colony Distressed Credit IV	\$43,189,865	\$0	\$0	\$0	-\$8,790,068	\$34,399,797
Sixth Street TAO Partners (B)	\$38,088,624	\$0	-\$4,010,702	\$0	\$2,923,157	\$37,001,079
Brookfield Real Estate Finance Fund V	\$22,575,965	\$0	\$0	\$0	\$483,177	\$23,059,142
Magnetar Constellation Fund V	\$37,670,607	\$0	-\$1,010,232	\$0	\$156,694	\$36,817,069
H.I.G. Bayside Loan Opportunity Fund V	\$37,253,822	\$9,000,000	\$0	\$0	\$860,911	\$47,114,733
Blue Torch Credit Opportunities Fund II	\$14,092,264	\$2,007,665	-\$219,300	\$0	\$400,286	\$16,280,915
Fortress Credit Opportunites Fund V Expansion	\$11,178,043	\$0	\$0	\$0	\$648,905	\$11,826,948
Fortress Lending Fund II	\$30,831,222	\$0	-\$886,259	\$0	\$126,294	\$30,071,257
Fortress Lending Fund III	--	\$4,000,000	\$0	\$0	\$0	\$4,000,000
Total	\$234,880,412	\$15,007,665	-\$6,126,493	\$0	-\$3,190,644	\$240,570,940

Total Fund

Net Cash Flow - Three Months Ended

Period Ending: March 31, 2022

	Opportunistic					
	Beginning Market Value	Contributions	Withdrawals	Fees	Net Investment Change	Ending Market Value
DB Investors Fund IV	\$43,892,738	\$0	\$0	\$0	-\$4,003,645	\$39,889,093
Sixth Street TAO Partners (D)	\$70,762,776	\$2,902,533	-\$3,116,800	\$0	\$1,902,140	\$72,450,649
Aristeia Select Opportunities II	\$51,810,492	\$0	\$0	\$0	\$295,614	\$52,106,107
Total	\$166,466,006	\$2,902,533	-\$3,116,800	\$0	-\$1,805,891	\$164,445,849

	Cash					
	Beginning Market Value	Contributions	Withdrawals	Fees	Net Investment Change	Ending Market Value
Short Term Cash Account	\$1	\$0	\$0	\$0	\$0	\$1
Short Term Investment Funds	\$17,374,754	\$101,795,871	-\$97,122,236	\$0	\$22,700	\$22,071,089
Parametric Cash Overlay	\$192,353,604	\$170,408,744	-\$239,633,169	\$0	\$39,756	\$123,168,935
Goldman Sachs Cash Account	-\$12,618,071	\$193,226,245	-\$209,349,891	\$0	\$0	-\$28,741,718
Futures Offset	-\$615,668,815	\$150,470,148	\$0	\$0	\$0	-\$465,198,668
Collateral Cash	\$31,402,000	\$2,748,000	-\$8,187,000	\$0	\$0	\$25,963,000
BlackRock Short Duration Fund	\$119,916,665	\$0	\$0	-\$67,127	-\$944,615	\$118,972,050
Total	-\$267,239,863	\$618,649,007	-\$554,292,296	-\$67,127	-\$882,158	-\$203,765,310

Total Fund
Cash Flow History

Period Ending: March 31, 2022

Portfolio Reconciliation

	Quarter-To-Date	Fiscal Year-To-Date	One Year	Three Years	Five Years	Ten Years
Beginning Market Value	\$5,557,439,932	\$5,373,108,431	\$5,115,843,957	\$4,225,559,295	\$3,906,871,326	\$2,680,070,954
Contributions	\$704,443,835	\$2,713,448,031	\$3,453,839,897	\$8,059,633,865	\$10,202,019,150	\$15,404,803,011
Withdrawals	-\$733,029,512	-\$2,514,777,181	-\$3,282,252,088	-\$8,037,020,507	-\$10,337,524,637	-\$15,187,421,555
Fees	-\$3,995,381	-\$11,519,828	-\$15,542,653	-\$44,185,899	-\$69,267,105	-\$119,579,913
Net Cash Flow	-\$28,585,677	\$198,670,850	\$171,587,809	\$22,613,358	-\$135,505,487	\$217,381,456
Net Investment Change	-\$44,364,805	-\$87,289,831	\$197,057,684	\$1,236,316,797	\$1,713,123,612	\$2,587,037,040
Ending Market Value	\$5,484,489,450	\$5,484,489,450	\$5,484,489,450	\$5,484,489,450	\$5,484,489,450	\$5,484,489,450
Net Change	-\$72,950,482	\$111,381,019	\$368,645,492	\$1,258,930,155	\$1,577,618,124	\$2,804,418,496

Contribution and withdrawals include transfers in and out of accounts. Ending market value is net of fees. Market value and flows do not include the Short Term Cash Account balance. Market value does not include Myriad holdback value of \$33,015.

Asset Class Details

Total Fund

Risk Analysis - 3 Years (Net of Fees)

Period Ending: March 31, 2022

	Alpha	Beta	R-Squared	Anlzd Return	Information Ratio	Ann Excess BM Return	Tracking Error	Sharpe Ratio	Ann Excess RF Return	Anlzd Standard Deviation	Sortino Ratio	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Total Fund	0.01%	1.00	0.99	10.73%	0.07	0.06%	0.82%	1.12	9.96%	8.88%	1.35	98.96%	97.70%
Equity	-0.02%	0.99	1.00	13.61%	-0.42	-0.42%	1.01%	0.74	12.94%	17.55%	1.01	97.43%	99.36%
Domestic Equity	0.04%	0.98	1.00	18.48%	0.23	0.24%	1.06%	0.98	17.82%	18.19%	1.38	99.23%	98.42%
International Developed Equity	0.03%	1.01	1.00	9.13%	0.44	0.45%	1.01%	0.47	8.47%	17.87%	0.70	103.89%	101.18%
Fixed Income	0.02%	1.09	0.98	2.59%	0.43	0.39%	0.91%	0.36	1.93%	5.33%	0.56	111.82%	106.86%
Core Plus Fixed Income	0.02%	1.09	0.93	2.01%	0.26	0.32%	1.25%	0.30	1.35%	4.56%	0.63	117.51%	113.44%
High Yield/ Specialty Credit	0.05%	0.82	0.97	4.32%	-0.04	-0.08%	2.09%	0.48	3.66%	7.66%	0.36	79.34%	74.74%
Emerging Market Debt	-0.06%	1.09	0.96	-0.18%	-0.31	-0.76%	2.45%	-0.07	-0.85%	11.85%	-0.02	107.39%	110.26%
Commodities	0.15%	0.96	0.92	17.44%	0.27	1.32%	4.90%	1.00	16.78%	16.82%	1.47	100.70%	95.49%
Hedge Funds	0.15%	0.98	0.62	9.02%	0.53	1.71%	3.25%	1.58	8.36%	5.30%	1.61	103.31%	60.11%
Core Real Estate	0.23%	0.54	0.82	8.94%	-0.60	-2.35%	3.91%	1.87	8.28%	4.42%	6.33	53.64%	74.88%

Total Fund
Risk Return Statistics: Last Three Years

Period Ending: March 31, 2022

Last Three Years			Last Three Years		Last Three Years		Last Three Years				
Equity	MSCI ACWI IMI GR		Core Plus Fixed Income	Bloomberg US Aggregate TR	High Yield/ Specialty Credit	ICE BofAML High Yield Master II	Emerging Market Debt	50 JPM EMBI Global Div/ 50 JPM GBI EM			
RETURN SUMMARY STATISTICS			RETURN SUMMARY STATISTICS		RETURN SUMMARY STATISTICS		RETURN SUMMARY STATISTICS				
Number of Periods	36	36	Number of Periods	36	36	Number of Periods	36	36	Number of Periods	36	36
Maximum Return	12.43	12.70	Maximum Return	2.64	2.59	Maximum Return	3.61	4.78	Maximum Return	6.74	5.49
Minimum Return	-14.74	-14.33	Minimum Return	-3.14	-2.78	Minimum Return	-10.52	-11.76	Minimum Return	-13.80	-12.61
Annualized Return	13.61	14.03	Annualized Return	2.01	1.69	Annualized Return	4.32	4.40	Annualized Return	-0.18	0.57
Total Return	46.63	48.27	Total Return	6.16	5.15	Total Return	13.53	13.78	Total Return	-0.55	1.73
Annualized Excess Return Over Risk Free	12.94	13.37	Annualized Excess Return Over Risk Free	1.35	1.03	Annualized Excess Return Over Risk Free	3.66	3.74	Annualized Excess Return Over Risk Free	-0.85	-0.09
Annualized Excess Return	-0.42	0.00	Annualized Excess Return	0.32	0.00	Annualized Excess Return	-0.08	0.00	Annualized Excess Return	-0.76	0.00
RISK SUMMARY STATISTICS			RISK SUMMARY STATISTICS		RISK SUMMARY STATISTICS		RISK SUMMARY STATISTICS				
Beta	0.99	1.00	Beta	1.09	1.00	Beta	0.82	1.00	Beta	1.09	1.00
Upside Deviation	9.97	10.13	Upside Deviation	2.59	2.56	Upside Deviation	3.66	4.96	Upside Deviation	6.07	5.52
Downside Deviation	13.47	13.27	Downside Deviation	3.18	2.69	Downside Deviation	12.10	12.42	Downside Deviation	11.54	10.39
RISK/RETURN SUMMARY STATISTICS			RISK/RETURN SUMMARY STATISTICS		RISK/RETURN SUMMARY STATISTICS		RISK/RETURN SUMMARY STATISTICS				
Annualized Standard Deviation	17.55	17.64	Annualized Standard Deviation	4.56	4.03	Annualized Standard Deviation	7.66	9.23	Annualized Standard Deviation	11.85	10.69
Alpha	-0.02	0.00	Alpha	0.02	0.00	Alpha	0.05	0.00	Alpha	-0.06	0.00
Sharpe Ratio	0.74	0.76	Sharpe Ratio	0.30	0.25	Sharpe Ratio	0.48	0.40	Sharpe Ratio	-0.07	-0.01
Excess Return Over Market / Risk	-0.02	0.00	Excess Return Over Market / Risk	0.07	0.00	Excess Return Over Market / Risk	-0.01	0.00	Excess Return Over Market / Risk	-0.06	0.00
Tracking Error	1.01	0.00	Tracking Error	1.25	0.00	Tracking Error	2.09	0.00	Tracking Error	2.45	0.00
Information Ratio	-0.42	--	Information Ratio	0.26	--	Information Ratio	-0.04	--	Information Ratio	-0.31	--
CORRELATION STATISTICS			CORRELATION STATISTICS		CORRELATION STATISTICS		CORRELATION STATISTICS				
R-Squared	1.00	1.00	R-Squared	0.93	1.00	R-Squared	0.97	1.00	R-Squared	0.96	1.00
Correlation	1.00	1.00	Correlation	0.97	1.00	Correlation	0.99	1.00	Correlation	0.98	1.00
Market Proxy: MSCI ACWI IMI GR Risk-Free Proxy: 91 Day T-Bills			Market Proxy: Bloomberg US Aggregate TR		Market Proxy: ICE BofAML High Yield Master II Risk-Free Proxy: 91 Day T-Bills		Market Proxy: 50 JPM EMBI Global Div/ 50 JPM GBI EM Risk-Free Proxy: 91 Day T-Bills				

91 Day T-Bills used as risk-free proxy

Total Fund
Risk Return Statistics: Last Three Years

Period Ending: March 31, 2022

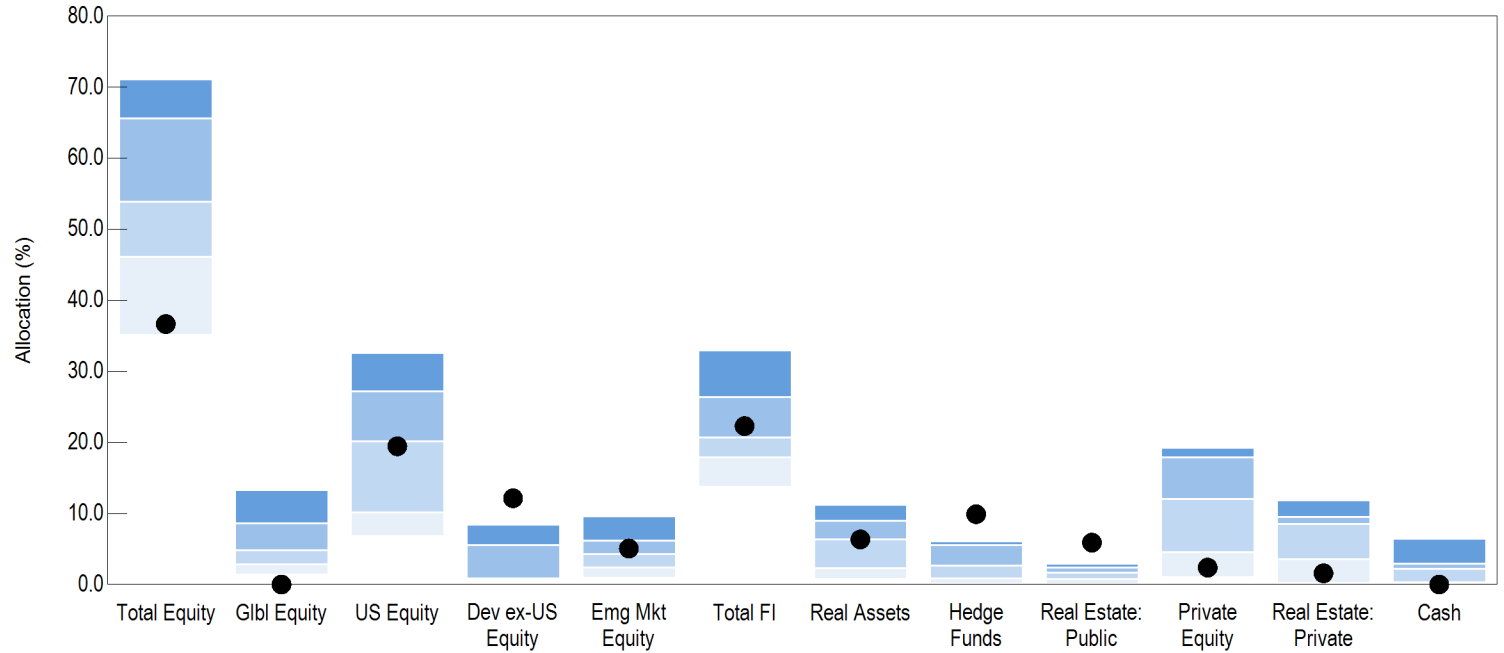
Last Three Years			Last Three Years			Last Three Years		
	Commodities	Bloomberg Commodity Index TR USD	Hedge Funds	75% 90 Day TBills +4% / 25% MSCI ACWI		Core Real Estate		NCREIF-ODCE
RETURN SUMMARY STATISTICS			RETURN SUMMARY STATISTICS			RETURN SUMMARY STATISTICS		
Number of Periods	36	36	36	36	36	36	36	36
Maximum Return	8.01	8.78	3.99	3.34	3.34	5.39	7.97	7.97
Minimum Return	-12.65	-12.81	-5.24	-3.02	-3.02	-1.17	-1.56	-1.56
Annualized Return	17.44	16.12	9.02	7.31	7.31	8.94	11.29	11.29
Total Return	61.98	56.59	29.57	23.57	23.57	29.30	37.85	37.85
Annualized Excess Return Over Risk Free	16.78	15.46	8.36	6.65	6.65	8.28	10.63	10.63
Annualized Excess Return	1.32	0.00	1.71	0.00	0.00	-2.35	0.00	0.00
RISK SUMMARY STATISTICS			RISK SUMMARY STATISTICS			RISK SUMMARY STATISTICS		
Beta	0.96	1.00	0.98	1.00	1.00	0.54	1.00	1.00
Upside Deviation	8.78	8.23	3.35	2.58	2.58	4.48	9.84	9.84
Downside Deviation	11.89	12.37	5.59	2.97	2.97	1.41	--	--
RISK/RETURN SUMMARY STATISTICS			RISK/RETURN SUMMARY STATISTICS			RISK/RETURN SUMMARY STATISTICS		
Annualized Standard Deviation	16.82	16.74	5.30	4.26	4.26	4.42	7.44	7.44
Alpha	0.15	0.00	0.15	0.00	0.00	0.23	0.00	0.00
Sharpe Ratio	1.00	0.92	1.58	1.56	1.56	1.87	1.43	1.43
Excess Return Over Market / Risk	0.08	0.00	0.32	0.00	0.00	-0.53	0.00	0.00
Tracking Error	4.90	0.00	3.25	0.00	0.00	3.91	0.00	0.00
Information Ratio	0.27	--	0.53	--	--	-0.60	--	--
CORRELATION STATISTICS			CORRELATION STATISTICS			CORRELATION STATISTICS		
R-Squared	0.92	1.00	0.62	1.00	1.00	0.82	1.00	1.00
Correlation	0.96	1.00	0.79	1.00	1.00	0.91	1.00	1.00

Market Proxy: Bloomberg Commodity Index TR USD

91 Day T-Bills used as risk-free proxy

Peer Comparison

Total Plan Allocation vs. InvMetrics Public DB > \$1B Gross
As of March 31, 2022

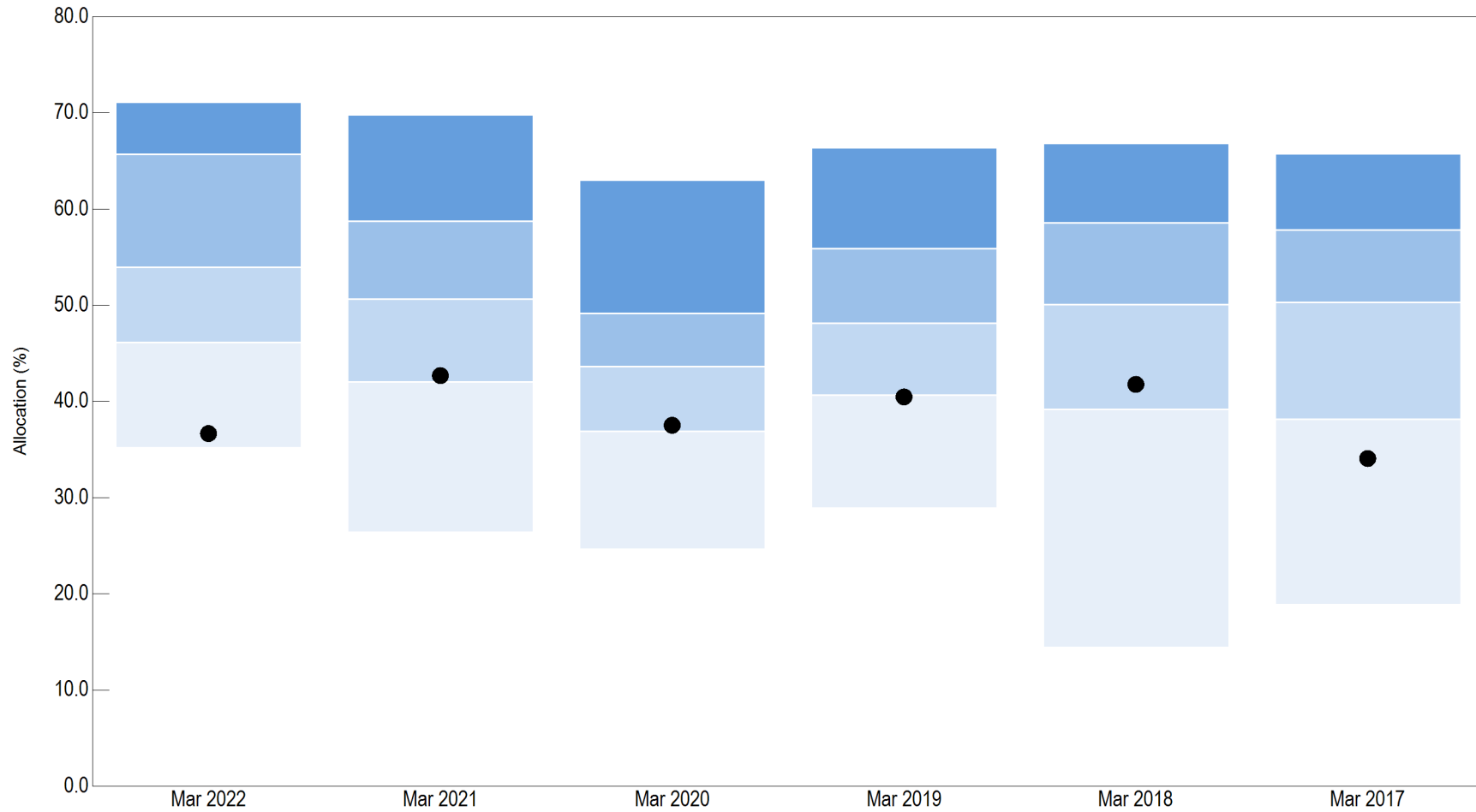


Allocation (Rank)

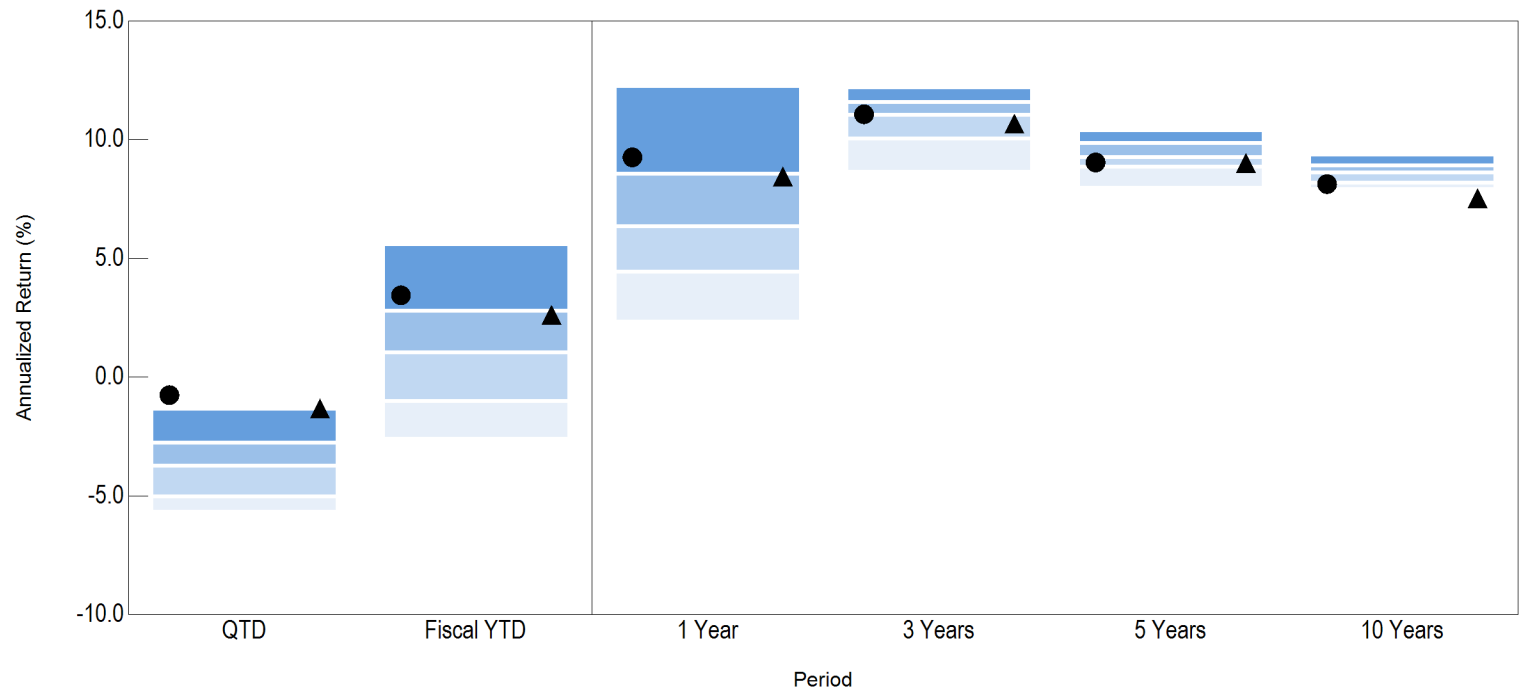
5th Percentile	71.1	13.3	32.6	8.4	9.6	33.0	11.2	6.1	3.0	19.2	11.9	6.5	--
25th Percentile	65.7	8.7	27.3	5.6	6.3	26.5	9.0	5.6	2.4	18.0	9.6	3.0	--
Median	54.0	4.9	20.2	0.9	4.4	20.8	6.4	2.7	1.8	12.1	8.6	2.3	--
75th Percentile	46.2	2.9	10.2	0.7	2.5	18.0	2.4	1.0	0.9	4.7	3.6	0.5	--
95th Percentile	35.2	1.5	6.9	0.6	1.1	13.8	0.9	0.3	0.2	1.2	0.3	0.4	--
# of Portfolios	16	8	11	6	13	16	8	8	3	11	14	16	--
● Total Fund	36.7 (94)	0.0 (99)	19.5 (53)	12.1 (1)	5.1 (45)	22.3 (38)	6.3 (51)	9.9 (1)	5.9 (1)	2.4 (86)	1.6 (89)	0.0 (99)	--

Private Credit allocation of 4.4% not included in the above chart. Opportunistic and midstream allocations not included in chart.

Total Equity Allocation vs. InvMetrics Public DB > \$1B Gross

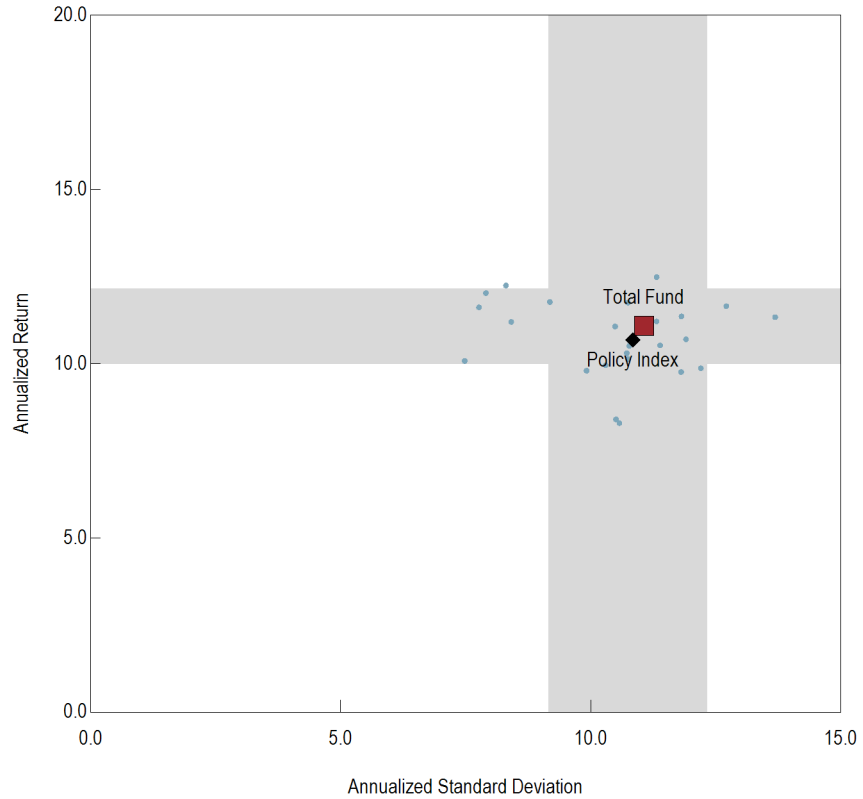


InvMetrics Public DB > \$1B Gross Return Comparison
Ending March 31, 2022



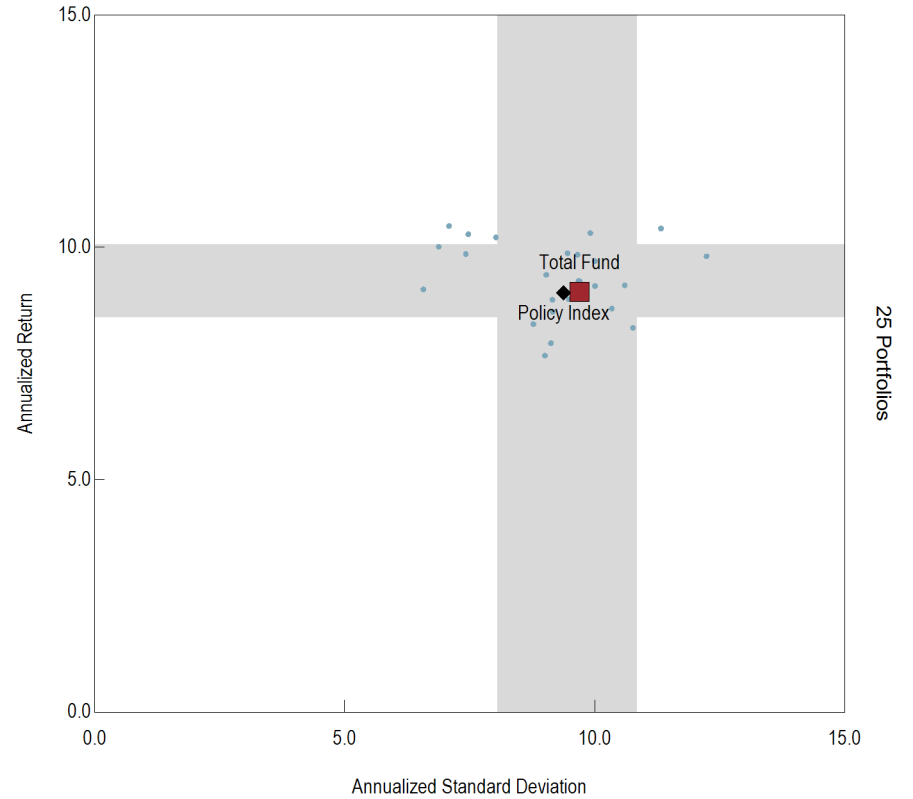
	Return (Rank)											
5th Percentile	-1.3	(26)	5.6	(13)	12.2	(15)	12.2	(50)	10.4	(68)	9.4	(79)
25th Percentile	-2.7	(5)	2.8	(30)	8.6	(26)	11.6	(55)	9.9	(69)	8.9	(99)
Median	-3.7		1.1		6.4		11.1		9.3		8.6	
75th Percentile	-5.0		-1.0		4.5		10.1		8.9		8.2	
95th Percentile	-5.7		-2.6		2.4		8.7		8.0		7.9	
# of Portfolios	26		25		25		25		25		25	
● Total Fund	-0.8	(1)	3.4	(13)	9.3	(15)	11.1	(50)	9.0	(68)	8.1	(79)
▲ Policy Index	-1.3	(5)	2.6	(30)	8.4	(26)	10.7	(55)	9.0	(69)	7.5	(99)

Annualized Return vs. Annualized Standard Deviation
3 Years Ending March 31, 2022



- Total Fund
- ◆ Policy Index
- 68% Confidence Interval
- InvMetrics Public DB > \$1B Gross

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



- Total Fund
- ◆ Policy Index
- 68% Confidence Interval
- InvMetrics Public DB > \$1B Gross

Other

Total Fund Investment Fund Fee Analysis

Period Ending: March 31, 2022

Name	Fee Schedule	Market Value	Estimated Fee Value	Estimated Fee
Equity Beta Exposure		\$448,770,788		
Russell 2000 Overlay		\$16,427,880		
Mellon DB SL Stock Index Fund	0.03% of Assets	\$334,684,458	\$100,405	0.03%
PIMCO StocksPLUS	0.50% of Assets	\$118,147,151	\$590,736	0.50%
AB US Small Cap Value Equity	1.00% of First 25.0 Mil, 0.90% of Next 25.0 Mil, 0.75% Thereafter	\$97,008,034	\$827,560	0.85%
Geneva Capital Small Cap Growth	0.75% of Assets	\$52,087,862	\$390,659	0.75%
Mellon DB SL World ex-US Index Fund		\$551,232,061		
Cevian Capital II	Performance-based 1.50 and 18.00	\$33,981,461	\$509,722	1.50%
American Century Non-US Small Cap	0.32% of Assets	\$80,249,283	\$256,798	0.32%
DFA Emerging Markets Value I	0.54% of Assets	\$84,643,560	\$457,075	0.54%
AB Emerging Markets Strategic Core Equity Collective Trust	1.45% of Assets	\$99,106,335	\$1,437,042	1.45%
Mellon Emerging Markets Stock Index Fund	0.05% of Assets	\$94,039,515	\$47,020	0.05%
Mellon DB SL Aggregate Bond Index Fund	0.05% of First 50.0 Mil, 0.04% of Next 50.0 Mil, 0.02% Thereafter	\$227,866,012	\$70,573	0.03%
PIMCO Core Plus	0.50% of First 25.0 Mil, 0.38% of Next 25.0 Mil, 0.25% Thereafter	\$200,426,586	\$594,816	0.30%
Western Asset Core Plus	0.30% of First 100.0 Mil, 0.15% Thereafter	\$212,057,418	\$468,086	0.22%
Western Asset High Yield Fixed Income	0.20% of Assets	\$207,777,536	\$415,555	0.20%
TCW Securitized Opportunities	1.00% of Assets	\$129,823,534	\$1,298,235	1.00%
Stone Harbor Emerging Markets Debt Blend Portfolio	0.60% of First 100.0 Mil, 0.55% Thereafter	\$97,517,056	\$585,102	0.60%
PIMCO EMD	0.05% of Assets	\$147,284,155	\$73,642	0.05%
Gresham MTAP Commodity Builder Fund	0.75% of Assets	\$94,868,223	\$711,512	0.75%
WTC-CTF	0.75% of Assets	\$252,921,527	\$1,896,911	0.75%
Aristeia International Limited	Performance-based 1.00 and 20.00	\$67,195,663	\$720,993	1.07%
Brevan Howard Fund	Performance-based 2.00 and 20.00	\$68,513,907	\$2,053,109	3.00%
D.E. Shaw Composite Fund	Performance-based 2.50 and 25.00	\$55,799,874	\$2,073,187	3.72%
HBK Fund II	Performance-based 1.50 and 20.00	\$56,778,731	\$851,681	1.50%
Hudson Bay Cap Structure Arbitrage Enhanced Fund		\$74,505,348		

Mutual fund fees shown are sourced from Morningstar and are as of the most current prospectus.

Total Fund Investment Fund Fee Analysis

Period Ending: March 31, 2022

Name	Fee Schedule	Market Value	Estimated Fee Value	Estimated Fee
Indus Pacific Opportunities Fund	Performance-based 1.50 and 20.00	\$37,438,472	\$615,882	1.65%
Magnetar Structured Credit Fund	Performance-based 1.50 and 20.00	\$9,441,422	\$145,617	1.54%
Pharo Macro Fund		\$60,578,227		
PIMCO Commodity Alpha Fund	Performance-based 1.70 and 20.00	\$60,367,071	\$1,026,240	1.70%
River Birch International	Performance-based 1.50 and 20.00	\$774,799	\$11,622	1.50%
Sculptor Enhanced Domestic Partners		\$51,397,468		
Hudson Bay Cap Structured Arbitrage Enhanced Fund		\$57,549,476		
Davidson Kempner Institutional Partners		\$54,621,168		
HBK Fund II		\$54,602,995		
HBK Opportunities Platform - SPAC Series		\$50,340,049		
Garda Fixed Income Relative Value Opportunity Fund		\$51,785,570		
Harvest Midstream	0.75% of First 100.0 Mil, 0.70% of Next 50.0 Mil, 0.65% of Next 50.0 Mil, 0.60% of Next 50.0 Mil, 0.55% of Next 50.0 Mil, 0.50% Thereafter	\$201,971,779	\$1,436,831	0.71%
PIMCO Midstream	0.69% of Assets	\$148,152,177	\$1,022,250	0.69%
ASB Allegiance Real Estate Fund	1.25% of First 5.0 Mil, 1.00% of Next 10.0 Mil, 0.75% Thereafter	\$186,488,399	\$1,448,663	0.78%
JPMCB Strategic Property Fund	1.00% of Assets	\$136,743,343	\$1,367,433	1.00%
Invesco Real Estate Fund III	1.50% of Assets	\$0	\$0	0.00%
Invesco Real Estate Value-Add Fund IV	1.50% of Assets	\$8,193,566	\$122,903	1.50%
Landmark Real Estate Partners VIII	777,717 Annually	\$22,712,467	\$777,717	3.42%
Long Wharf Real Estate	1.50% of Assets	\$28,674,828	\$430,122	1.50%
Covenant Apartment Fund X		\$23,593,320		
Singerman Real Estate Opportunity Fund IV	1.50% of Assets	\$1,682,930	\$25,244	1.50%
LBA Logistics Value Fund IX, L.P.		\$1,923,077		
Abbott IV	330,000 Annually	\$1,156,229	\$330,000	28.54%
Abbott V	545,000 Annually	\$4,656,643	\$545,000	11.70%
Abbott VI	1.00% of First 25.0 Mil, 0.90% Thereafter	\$23,208,334	\$232,083	1.00%
Pantheon Secondary III	73,114 Quarterly	\$1,080,477	\$292,456	27.07%

Mutual fund fees shown are sourced from Morningstar and are as of the most current prospectus.

Total Fund Investment Fund Fee Analysis

Period Ending: March 31, 2022

Name	Fee Schedule	Market Value	Estimated Fee Value	Estimated Fee
Pantheon III	0 Annually	\$51,595	\$0	0.00%
Pantheon V	16,345 Quarterly	\$425,173	\$65,380	15.38%
Pantheon VI	149,262 Annually	\$644,486	\$149,262	23.16%
Pantheon VII	303,750 Annually	\$9,827,470	\$303,750	3.09%
Vista Foundation Fund IV		\$9,495,697		
Crown Global Secondaries V Master S.C.Sp		\$16,701,892		
Brighton Park Capital Fund I		\$36,438,508		
Warren Equity Partners Fund III		\$15,874,846		
Peak Rock Capital Fund III		\$9,011,672		
Level Equity Growth Partners V	2.50% of Assets	\$1,544,021	\$38,601	2.50%
Level Equity Opportunities Fund 2021	1.00% of Assets	-\$2,406	-\$24	1.00%
Colony Distressed Credit IV	0.38% of Assets	\$34,399,797	\$128,999	0.38%
Sixth Street TAO Partners (B)	1.35% of Assets	\$37,001,079	\$499,515	1.35%
Magnetar Constellation Fund V	Performance-based 1.50 and 17.50	\$36,817,069	\$552,256	1.50%
H.I.G. Bayside Loan Opportunity Fund V		\$47,114,733		
Blue Torch Credit Opportunities Fund II		\$16,280,915		
Fortress Credit Opportunites Fund V Expansion		\$11,826,948		
Fortress Lending Fund II		\$30,071,257		
Fortress Lending Fund III		\$4,000,000		
DB Investors Fund IV		\$39,889,093		
Sixth Street TAO Partners (D)		\$72,450,649		
Aristeia Select Opportunities II		\$52,106,107		
Short Term Cash Account		\$1		
Short Term Investment Funds		\$22,071,089		
Parametric Cash Overlay		\$123,168,935		
Goldman Sachs Cash Account		-\$28,741,718		
Futures Offset		-\$465,198,668		
Collateral Cash		\$25,963,000		
BlackRock Short Duration Fund	0.23% of First 100.0 Mil, 0.20% of Next 150.0 Mil, 0.18% Thereafter	\$118,972,050	\$267,944	0.23%
Total		\$5,461,053,534	\$28,266,166	0.52%

Mutual fund fees shown are sourced from Morningstar and are as of the most current prospectus.

Total Fund Watch List (Gross of Fees)

Period Ending: March 31, 2022

Name	Allocation Group	Status	Rule 1	Rule 2	Rule 3	Rule 4	Rule 5	Rule 6	Rule 7	Rule 8	Rule 9
Equity Beta Exposure	Domestic Equity	No Issues	--	--	--	--	--	--	--	--	✓
Russell 2000 Overlay	Domestic Equity	No Issues	--	--	--	--	--	--	--	--	--
Mellon DB SL Stock Index Fund	Domestic Equity	No Issues	--	--	--	--	--	--	--	--	✓
PIMCO StocksPLUS	Domestic Equity	No Issues	✓	✓	R	✓	✓	✓	✓	--	--
AB US Small Cap Value Equity	Domestic Equity	No Issues	✓	✓	R	✓	✓	R	✓	--	--
Geneva Capital Small Cap Growth	Domestic Equity	No Issues	✓	✓	✓	R	✓	R	✓	--	--
Mellon DB SL World ex-US Index Fund	International Developed Equity	No Issues	--	--	--	--	--	--	--	--	R
American Century Non-US Small Cap	International Developed Equity	No Issues	✓	✓	✓	--	--	--	--	--	--
DFA Emerging Markets Value I	Emerging Markets Equity	No Issues	R	✓	✓	✓	✓	✓	✓	--	--
AB Emerging Markets Strategic Core Equity Collective Trust	Emerging Markets Equity	No Issues	✓	✓	R	R	R	R	R	R	--
Mellon Emerging Markets Stock Index Fund	Emerging Markets Equity	No Issues	--	--	--	--	--	--	--	--	✓
Mellon DB SL Aggregate Bond Index Fund	Domestic Fixed Income Core Plus	No Issues	--	--	--	--	--	--	--	--	✓
PIMCO Core Plus	Domestic Fixed Income Core Plus	No Issues	✓	✓	✓	R	✓	R	✓	--	--
Western Asset Core Plus	Domestic Fixed Income Core Plus	No Issues	✓	R	R	R	✓	R	✓	--	--
Western Asset High Yield Fixed Income	Domestic Fixed Income High Yield	No Issues	✓	✓	✓	✓	R	✓	R	--	--
TCW Securitized Opportunities	Domestic Fixed Income High Yield	No Issues	R	✓	✓	✓	R	✓	✓	--	--

Rule 1 - Manager has outperformed the 10th percentile in the appropriate style universe for the one year period.

Rule 2 - Manager has underperformed the 75th percentile in the appropriate style universe for the one year period.

Rule 3 - Manager has underperformed the benchmark index for the one year period.

Rule 4 - Manager has underperformed the 50th percentile in the appropriate style universe for the three year period.

Rule 5 - Manager has underperformed the benchmark index for the three year period.

Rule 6 - Manager has underperformed the 50th percentile in the appropriate style universe for the five year period.

Rule 7 - Manager has underperformed the benchmark index for the five year period.

Rule 8 - Fund experiences non-performance related issues including personnel turnover, changes in investment philosophy or drift, excessive asset growth, change in ownership and any other reason that raises concern.

Rule 9 - Index Fund Tracking Error exceeds 0.25% of the appropriate benchmark over the one year period.

Total Fund Watch List (Gross of Fees)

Period Ending: March 31, 2022

Name	Allocation Group	Status	Rule 1	Rule 2	Rule 3	Rule 4	Rule 5	Rule 6	Rule 7	Rule 8	Rule 9
Stone Harbor Emerging Markets Debt Blend Portfolio	Emerging Markets Fixed Income	No Issues	✓	✓	✓	⚠	✓	⚠	⚠	⚠	--
PIMCO EMD	Emerging Markets Fixed Income	No Issues	✓	✓	✓	--	--	--	--	--	--
Gresham MTAP Commodity Builder Fund	Commodities	Watch	✓	⚠	⚠	⚠	✓	⚠	✓	--	--
WTC-CTF	Commodities	No Issues	✓	⚠	✓	✓	✓	✓	✓	--	--
Garda Fixed Income Relative Value Opportunity Fund	Alpha Pool	No Issues	--	--	--	--	--	--	--	--	--
Harvest Midstream	Midstream	No Issues	✓	✓	✓	--	--	--	--	--	--
PIMCO Midstream	Midstream	No Issues	--	--	--	--	--	--	--	--	⚠
ASB Allegiance Real Estate Fund	Real Estate	No Issues	--	--	⚠	--	⚠	--	⚠	--	--

Rule 1 - Manager has outperformed the 10th percentile in the appropriate style universe for the one year period.

Rule 2 - Manager has underperformed the 75th percentile in the appropriate style universe for the one year period.

Rule 3 - Manager has underperformed the benchmark index for the one year period.

Rule 4 - Manager has underperformed the 50th percentile in the appropriate style universe for the three year period.

Rule 5 - Manager has underperformed the benchmark index for the three year period.

Rule 6 - Manager has underperformed the 50th percentile in the appropriate style universe for the five year period.

Rule 7 - Manager has underperformed the benchmark index for the five year period.

Rule 8 - Fund experiences non-performance related issues including personnel turnover, changes in investment philosophy or drift, excessive asset growth, change in ownership and any other reason that raises concern.

Rule 9 - Index Fund Tracking Error exceeds 0.25% of the appropriate benchmark over the one year period.

Total Fund
Quarterly Historical Net Returns

Period Ending: March 31, 2022

	2022 Q1	2021 Q4	2021 Q3	2021 Q2	2021 Q1	2020 Q4	2020 Q3	2020 Q2	2020 Q1	2019 Q4	2019 Q3	2019 Q2
Total Fund	-0.8	3.6	0.5	5.5	3.5	8.8	4.4	10.7	-11.3	4.6	0.2	3.1
<i>Policy Index</i>	<i>-1.3</i>	<i>3.3</i>	<i>0.7</i>	<i>5.7</i>	<i>3.3</i>	<i>8.8</i>	<i>4.5</i>	<i>10.1</i>	<i>-11.1</i>	<i>4.6</i>	<i>0.8</i>	<i>3.0</i>

	2019 Q1	2018 Q4	2018 Q3	2018 Q2	2018 Q1	2017 Q4	2017 Q3	2017 Q2	2017 Q1	2016 Q4	2016 Q3	2016 Q2
Total Fund	6.8	-6.4	2.3	0.3	-0.1	3.0	3.2	2.7	4.2	0.8	3.5	1.9
<i>Policy Index</i>	<i>7.0</i>	<i>-5.5</i>	<i>2.2</i>	<i>0.7</i>	<i>-0.1</i>	<i>3.2</i>	<i>3.1</i>	<i>2.8</i>	<i>3.5</i>	<i>0.5</i>	<i>2.9</i>	<i>2.2</i>

	2016 Q1	2015 Q4	2015 Q3	2015 Q2	2015 Q1	2014 Q4	2014 Q3	2014 Q2	2014 Q1	2013 Q4	2013 Q3	2013 Q2
Total Fund	1.1	2.2	-5.4	0.7	2.4	0.8	-1.5	3.6	2.1	4.1	4.4	-0.6
<i>Policy Index</i>	<i>1.8</i>	<i>1.4</i>	<i>-4.9</i>	<i>0.4</i>	<i>2.0</i>	<i>0.4</i>	<i>-1.4</i>	<i>3.4</i>	<i>2.4</i>	<i>3.8</i>	<i>4.4</i>	<i>-0.5</i>

Performance Return Calculations

Performance is calculated using a Time Weighted Rates of Return (TWRR) methodology. Monthly returns are linked geometrically and annualized for periods longer than one year.

Data Source

Verus is an independent third party consulting firm and calculates returns from best source book of record data. Returns calculated by Verus may deviate from those shown by the manager in part, but not limited to, differences in prices and market values reported by the custodian and manager, as well as significant cash flows into or out of an account. It is the responsibility of the manager and custodian to provide insight into the pricing methodologies and any difference in valuation.

Illiquid Alternatives

Due to the inability to receive final valuation prior to report production, closed end funds (including but are not limited to Real Estate, Hedge Funds, Private Equity, and Private Credit) performance is typically reported at a one-quarter lag. Valuation is reported at a one-quarter lag, adjusted for current quarter flow (cash flows are captured real time). Closed end fund performance is calculated using a time-weighted return methodology consistent with all portfolio and total fund performance calculations. For Private Markets, performance reports also include Verus-calculated multiples based on flows and valuations (e.g. DPI and TVPI) and manager-provided IRRs.

Manager Line Up

<u>Manager</u>	<u>Fund Incepted</u>	<u>Data Source</u>	<u>Manager</u>	<u>Fund Incepted</u>	<u>Data Source</u>
AB Emerging Markets Strategic Core	11/3/2016	Northern Trust	LGT Crown	2/1/2021	LGT
AB US Small Cap Value Equity	7/7/2015	Northern Trust	Long Wharf Real Estate	6/27/2019	Long Wharf
Abbott Capital PE IV	7/13/2001	Abbott Capital	Magnetar Constellation	11/14/2018	Magnetar
Abbott Capital PE V	5/25/2005	Abbott Capital	Magnetar Structured Credit	5/1/2014	Magnetar
Abbott Capital PE VI	3/31/2008	Abbott Capital	Mellon Aggregate Bond Index Fund	1/14/2011	Mellon
American Century Non-US Small Cap	12/15/2020	American Century	Mellon EB DV Stock Index	10/18/2017	Mellon
Aristeia International Limited	5/1/2014	Northern Trust	Mellon EB DV World ex-US Index	8/1/2018	Mellon
ASB Real Estate	9/30/2013	ASB	Myriad Opportunities Offshore	5/19/2016	Northern Trust
BlackRock Short Duration Fund	9/8/2021	BlackRock	Pantheon Global III		Pantheon
Blue Torch Credit Opportunities	7/24/2020	Blue Torch	Pantheon USA III		Pantheon
Brevan Howard	11/1/2013	Northern Trust	Pantheon USA V		Pantheon
Brighton Private Equity	3/28/2021	Brighton	Pantheon USA VI		Pantheon
Brookfield Real Estate Finance Fund V	12/18/2017	Northern Trust	Pantheon USA VII		Pantheon
Cevian Capital II	12/30/2014	Northern Trust	Parametric Overlay/ Cap Efficiency Program	7/31/2020	Parametric
Colony Distressed Debt IV	12/28/2015	Colony	Peak Rock Capital Fund III	7/13/2021	Peak Rock
Covenant Apartment Fund X	10/29/2020	Covenant	PIMCO Commodity Alpha	5/4/2016	PIMCO
DB Investors Fund IV	1/29/2020	DB	PIMCO Core Plus	1/21/2011	Northern Trust
D.E. Shaw	6/30/2013	Northern Trust	PIMCO EMD		Northern Trust
DFA Emerging Markets Value I	3/7/2014	Northern Trust	PIMCO Midstream	10/9/2020	PIMCO
Fortress Credit Opportunities	12/17/2020	Fortress	PIMCO StocksPLUS	7/14/2003	PIMCO
Fortress Lending Fund II	3/15/2021	Fortress	Fidelity Non-US Small Cap Equity	6/10/2008	Northern Trust
Garda Fixed Income Relative Value Opp	9/30/2021	Garda	River Birch	8/3/2015	Northern Trust
Geneva Capital Small Cap Growth	7/22/2015	Geneva	Singerman Real Estate Opportunity Fund IV	10/27/2021	Singerman
Gresham MTAP Commodity	9/3/2013	Gresham	Sculptor Enhanced Domestic Partners	3/26/2019	Sculptor
Harvest Midstream	9/28/2020	Harvest Midstream	Short Term Cash Account		Northern Trust
HBK Fund II	11/1/2013	Northern Trust	Short Term Investment Funds		Northern Trust
Henderson Smallcap Growth	7/22/2015	Northern Trust	Stone Harbor Emerging Markets Debt	8/8/2012	Stone Harbor
H.I.G Bayside Loan Opportunities Fund V	7/24/2019	H.I.G. Capital	TAO Contingent	4/16/2020	TPG Sixth Street
Hudson Bay	6/7/2019	Northern Trust	TCW Securitized Opportunities	2/3/2016	TCW
Indus Pacific Opportunities	6/30/2014	Northern Trust	Transition Equity		Northern Trust
Invesco Real Estate III	6/30/2013	Invesco	Transition Fixed Income		Northern Trust
Invesco Real Estate IV	12/18/2015	Invesco	TSSP Adjacent Opportunities Partners	11/17/2017	TPG Sixth Street
J.P. Morgan Strategic Property	7/2/2014	J.P. Morgan	Vista Equity Partners	7/24/2020	Vista Equity
Landmark Real Estate Partners VIII	4/29/2018	Landmark	Warren Equity	4/1/2021	Warren
LBA Logistics Value Fund IX, L.P.	2/22/2022	LBA	Wellington Commodities	9/10/2013	Wellington
Level Equity Growth Partners V	11/1/2021	Level Equity	Western Asset Core Plus	5/31/2004	Northern Trust
Level Equity Opportunities Fund 2021	11/1/2021	Level Equity	Western Asset High Yield Fixed income	5/31/2005	Northern Trust

Policy & Custom Index Composition	
Policy Index: 7/1/2021-Present	37% MSCI ACWI IMI, 14% Bloomberg US Aggregate, 6% Ice BofA ML High Yield Master II Index, 2% JPM Emerging Markets Bond Index Global Diversified, 2% JPM Government Bond Index-Emerging Markets, 4% Bloomberg Commodity Index, 7.5% 3-Month T-bill +400bps, 2.5% MSCI ACWI, 5% NCREIF-ODCE, 2% actual time-weighted Private Equity Returns*, 4% actual time-weighted Private Credit Returns*, 1% actual time-weighted Private Real Estate Returns*, 3% MSCI ACWI*, 1% Bloomberg US Aggregate*, 4% Bloomberg US Aggregate, 5% Alerian Midstream, 5% 3-Month T-bill +400bps, 91 Day T-Bills, -5% 3-Month T-bill.
Policy Index: 1/1/2021-6/30/2021	37% MSCI ACWI IMI, 14% Bloomberg US Aggregate, 6% Ice BofA ML High Yield Master II Index, 2% JPM Emerging Markets Bond Index Global Diversified, 2% JPM Government Bond Index-Emerging Markets, 4% Bloomberg Commodity Index, 7.5% 3-Month T-bill +400bps, 2.5% MSCI ACWI, 5% NCREIF-ODCE, 1% actual time-weighted Private Equity Returns*, 4% actual time-weighted Private Credit Returns*, 1% actual time-weighted Private Real Estate Returns*, 4% MSCI ACWI*, 1% Bloomberg US Aggregate*, 4% Bloomberg US Aggregate, 5% Alerian Midstream, 5% 3-Month T-bill +400bps, 91 Day T-Bills, -5% 3-Month T-bill.
Policy Index: 7/1/2020-12/31/2020	37% MSCI ACWI IMI, 14% Bloomberg US Aggregate, 6% Ice BofA ML High Yield Master II Index, 2% JPM Emerging Markets Bond Index Global Diversified, 2% JPM Government Bond Index-Emerging Markets, 4% Bloomberg Commodity Index, 7.5% 3-Month T-bill +400bps, 2.5% MSCI ACWI, 5% NCREIF-ODCE, 1% actual time-weighted Private Equity Returns*, 4% actual time-weighted Private Credit Returns*, 1% actual time-weighted Private Real Estate Returns*, 4% MSCI ACWI*, 5% Bloomberg US Aggregate, 1% Alerian Midstream, 4% Bloomberg US
Policy Index: 4/1/2020-6/30/2020	37% MSCI ACWI IMI, 19% Bloomberg US Aggregate, 6% Ice BofA ML High Yield Master II Index, 2% JPM Emerging Markets Bond Index Global Diversified, 2% JPM Government Bond Index-Emerging Markets, 4% Bloomberg Commodity Index, 7.5% 3-Month T-bill +400bps, 2.5% MSCI ACWI, 5% NCREIF-ODCE, 1% actual time-weighted Private Equity Returns*, 4% actual time-weighted Private Credit Returns*, 1% actual time-weighted Private Real Estate Returns*, 3% MSCI ACWI*, 5% Bloomberg US Aggregate*.
Policy Index: 1/1/2020-3/31/2020	37% MSCI ACWI IMI, 19% Bloomberg US Aggregate, 6% Ice BofA ML High Yield Master II Index, 2% JPM Emerging Markets Bond Index Global Diversified, 2% JPM Government Bond Index-Emerging Markets, 4% Bloomberg Commodity Index, 7.5% 3-Month T-bill +400bps, 2.5% MSCI ACWI, 5% NCREIF-ODCE, 2% actual time-weighted Private Equity Returns*, 4% actual time-weighted Private Credit Returns*, 1% actual time-weighted Private Real Estate Returns*, 3% MSCI ACWI*, 5% Bloomberg US Aggregate*.
Policy Index: 10/1/2019-12/31/2019	37% MSCI ACWI IMI, 19% Bloomberg US Aggregate, 6% Ice BofA ML High Yield Master II Index, 2% JPM Emerging Markets Bond Index Global Diversified, 2% JPM Government Bond Index-Emerging Markets, 4% Bloomberg Commodity Index, 7.5% 3-Month T-bill +400bps, 2.5% MSCI ACWI, 5% NCREIF-ODCE, 2% actual time-weighted Private Equity Returns*, 3% actual time-weighted Private Credit Returns*, 1% actual time-weighted Private Real Estate Returns*, 3% MSCI ACWI*, 6% Bloomberg US Aggregate*.
Policy Index: 7/1/2019-9/30/2019	37% MSCI ACWI IMI, 19% Bloomberg US Aggregate, 6% Ice BofA ML High Yield Master II Index, 2% JPM Emerging Markets Bond Index Global Diversified, 2% JPM Government Bond Index-Emerging Markets, 4% Bloomberg Commodity Index, 7.5% 3-Month T-bill +400bps, 2.5% MSCI ACWI, 5% NCREIF-ODCE, 2% actual time-weighted Private Equity Returns*, 4% actual time-weighted Private Credit Returns*, 1% actual time-weighted Private Real Estate Returns*, 3% MSCI ACWI*, 5% Bloomberg US Aggregate*.
Policy Index: 4/1/2019-6/30/2019	37% MSCI ACWI IMI, 19% Bloomberg US Aggregate, 6% Ice BofA ML High Yield Master II Index, 2% JPM Emerging Markets Bond Index Global Diversified, 2% JPM Government Bond Index-Emerging Markets, 4% Bloomberg Commodity Index, 7.5% 3-Month T-bill +400bps, 2.5% MSCI ACWI, 5% NCREIF-ODCE, 2% actual time-weighted Private Equity Returns*, 3% actual time-weighted Private Credit Returns*, 1% actual time-weighted Private Real Estate Returns*, 3% MSCI ACWI*, 6% Bloomberg US Aggregate*.
Policy Index: 1/1/2019-3/31/2019	37% MSCI ACWI IMI, 19% Bloomberg US Aggregate, 6% Ice BofA ML High Yield Master II Index, 2% JPM Emerging Markets Bond Index Global Diversified, 2% JPM Government Bond Index-Emerging Markets, 4% Bloomberg Commodity Index, 7.5% 3-Month T-bill +400bps, 2.5% MSCI ACWI, 5% NCREIF-ODCE, 2% actual time-weighted Private Equity Returns*, 3% actual time-weighted Private Credit Returns*, 2% actual time-weighted Private Real Estate Returns*, 3% MSCI ACWI*, 5% Bloomberg US Aggregate*.
Policy Index: 10/1/2018-12/31/2018	37% MSCI ACWI IMI, 19% Bloomberg US Aggregate, 6% Ice BofA ML High Yield Master II Index, 2% JPM Emerging Markets Bond Index Global Diversified, 2% JPM Government Bond Index-Emerging Markets, 4% Bloomberg Commodity Index, 7.5% 3-Month T-bill +400bps, 2.5% MSCI ACWI, 5% NCREIF-ODCE, 2% actual time-weighted Private Equity Returns*, 2% actual time-weighted Private Credit Returns*, 2% actual time-weighted Private Real Estate Returns*, 3% MSCI ACWI*, 6% Bloomberg US Aggregate*.
Policy Index: 7/1/2018-9/30/2018	37% MSCI ACWI IMI, 19% Bloomberg US Aggregate, 6% Ice BofA ML High Yield Master II Index, 2% JPM Emerging Markets Bond Index Global Diversified, 2% JPM Government Bond Index-Emerging Markets, 4% Bloomberg Commodity Index, 7.5% 3-Month T-bill +400bps, 2.5% MSCI ACWI, 5% NCREIF-ODCE, 3% actual time-weighted Private Equity Returns*, 2% actual time-weighted Private Credit Returns*, 1% actual time-weighted Private Real Estate Returns*, 2% MSCI ACWI*, 7% Bloomberg US Aggregate*.
Policy Index: 1/1/2017- 6/30/2018	19% Russell 3000 Index, 18% MSCI ACWI ex US, 29% Bloomberg US Aggregate, 10% NCREIF-ODCE, 4% Bloomberg Commodity Index, 7.5% 91-day T-bills + 400bps, 2.5% MSCI ACWI, 5% Russell 3000 Index + 300 bps, 5% ICE BofA ML High Yield + 200 bps.
Policy Index: 4/1/2014-12/31/2016	23% Russell 3000 Index, 29% Bloomberg US Aggregate, 22% MSCI ACWI ex US,

Other Disclosures

*Private Asset actual weights, rounded to 1%, and actual time-weighted returns of Private Equity, Private Credit, Private Real Estate used in policy with the difference in weight versus target allocated to private market's public market "equivalent". Private Equity to Global Equity, Private Credit and Private Real Estate to Core Plus.

All data prior to 2Q 2011 has been provided by the investment managers.

Effective 1/1/2017, only traditional asset class (public equity, public fixed income, REITs) investment manager fees will be included in the gross of fee return calculation

Fiscal year end: 6/30.

Glossary

Allocation Effect: An attribution effect that describes the amount attributable to the managers' asset allocation decisions, relative to the benchmark.

Alpha: The excess return of a portfolio after adjusting for market risk. This excess return is attributable to the selection skill of the portfolio manager. Alpha is calculated as: $\text{Portfolio Return} - [\text{Risk-free Rate} + \text{Portfolio Beta} \times (\text{Market Return} - \text{Risk-free Rate})]$.

Benchmark R-squared: Measures how well the Benchmark return series fits the manager's return series. The higher the Benchmark R-squared, the more appropriate the benchmark is for the manager.

Beta: A measure of systematic, or market risk; the part of risk in a portfolio or security that is attributable to general market movements. Beta is calculated by dividing the covariance of a security by the variance of the market.

Book-to-Market: The ratio of book value per share to market price per share. Growth managers typically have low book-to-market ratios while value managers typically have high book-to-market ratios.

Capture Ratio: A statistical measure of an investment manager's overall performance in up or down markets. The capture ratio is used to evaluate how well an investment manager performed relative to an index during periods when that index has risen (up market) or fallen (down market). The capture ratio is calculated by dividing the manager's returns by the returns of the index during the up/down market, and multiplying that factor by 100.

Correlation: A measure of the relative movement of returns of one security or asset class relative to another over time. A correlation of 1 means the returns of two securities move in lock step, a correlation of -1 means the returns of two securities move in the exact opposite direction over time. Correlation is used as a measure to help maximize the benefits of diversification when constructing an investment portfolio.

Excess Return: A measure of the difference in appreciation or depreciation in the price of an investment compared to its benchmark, over a given time period. This is usually expressed as a percentage and may be annualized over a number of years or represent a single period.

Information Ratio: A measure of a manager's ability to earn excess return without incurring additional risk. Information ratio is calculated as: $\text{excess return} / \text{tracking error}$.

Interaction Effect: An attribution effect that describes the portion of active management that is contributable to the cross interaction between the allocation and selection effect. This can also be explained as an effect that cannot be easily traced to a source.

Portfolio Turnover: The percentage of a portfolio that is sold and replaced (turned over) during a given time period. Low portfolio turnover is indicative of a buy and hold strategy while high portfolio turnover implies a more active form of management.

Price-to-Earnings Ratio (P/E): Also called the earnings multiplier, it is calculated by dividing the price of a company's stock into earnings per share. Growth managers typically hold stocks with high price-to-earnings ratios whereas value managers hold stocks with low price-to-earnings ratios.

R-Squared: Also called the coefficient of determination, it measures the amount of variation in one variable explained by variations in another, i.e., the goodness of fit to a benchmark. In the case of investments, the term is used to explain the amount of variation in a security or portfolio explained by movements in the market or the portfolio's benchmark.

Selection Effect: An attribution effect that describes the amount attributable to the managers' stock selection decisions, relative to the benchmark.

Sharpe Ratio: A measure of portfolio efficiency. The Sharpe Ratio indicates excess portfolio return for each unit of risk associated with achieving the excess return. The higher the Sharpe Ratio, the more efficient the portfolio. Sharpe ratio is calculated as: $\text{Portfolio Excess Return} / \text{Portfolio Standard Deviation}$.

Sortino Ratio: Measures the risk-adjusted return of an investment, portfolio, or strategy. It is a modification of the Sharpe Ratio, but penalizes only those returns falling below a specified benchmark. The Sortino Ratio uses downside deviation in the denominator rather than standard deviation, like the Sharpe Ratio.

Standard Deviation: A measure of volatility, or risk, inherent in a security or portfolio. The standard deviation of a series is a measure of the extent to which observations in the series differ from the arithmetic mean of the series. For example, if a security has an average annual rate of return of 10% and a standard deviation of 5%, then two-thirds of the time, one would expect to receive an annual rate of return between 5% and 15%.

Style Analysis: A return based analysis designed to identify combinations of passive investments to closely replicate the performance of funds

Style Map: A specialized form or scatter plot chart typically used to show where a Manager lies in relation to a set of style indices on a two-dimensional plane. This is simply a way of viewing the asset loadings in a different context. The coordinates are calculated by rescaling the asset loadings to range from -1 to 1 on each axis and are dependent on the Style Indices comprising the Map.

Disclaimer

This report contains confidential and proprietary information and is subject to the terms and conditions of the Consulting Agreement. It is being provided for use solely by the customer. The report may not be sold or otherwise provided, in whole or in part, to any other person or entity without written permission from Verus Advisory, Inc., (hereinafter Verus) or as required by law or any regulatory authority. The information presented does not constitute a recommendation by Verus and cannot be used for advertising or sales promotion purposes. This does not constitute an offer or a solicitation of an offer to buy or sell securities, commodities or any other financial instruments or products.

The information presented has been prepared using data from third party sources that Verus believes to be reliable. While Verus exercised reasonable professional care in preparing the report, it cannot guarantee the accuracy of the information provided by third party sources. Therefore, Verus makes no representations or warranties as to the accuracy of the information presented. Verus takes no responsibility or liability (including damages) for any error, omission, or inaccuracy in the data supplied by any third party. Nothing contained herein is, or should be relied on as a promise, representation, or guarantee as to future performance or a particular outcome. Even with portfolio diversification, asset allocation, and a long-term approach, investing involves risk of loss that the investor should be prepared to bear.

The information presented may be deemed to contain forward-looking information. Examples of forward looking information include, but are not limited to, (a) projections of or statements regarding return on investment, future earnings, interest income, other income, growth prospects, capital structure and other financial terms, (b) statements of plans or objectives of management, (c) statements of future economic performance, and (d) statements of assumptions, such as economic conditions underlying other statements. Such forward-looking information can be identified by the use of forward looking terminology such as believes, expects, may, will, should, anticipates, or the negative of any of the foregoing or other variations thereon comparable terminology, or by discussion of strategy. No assurance can be given that the future results described by the forward-looking information will be achieved. Such statements are subject to risks, uncertainties, and other factors which could cause the actual results to differ materially from future results expressed or implied by such forward looking information. The findings, rankings, and opinions expressed herein are the intellectual property of Verus and are subject to change without notice. The information presented does not claim to be all-inclusive, nor does it contain all information that clients may desire for their purposes. The information presented should be read in conjunction with any other material provided by Verus, investment managers, and custodians.

Verus will make every reasonable effort to obtain and include accurate market values. However, if managers or custodians are unable to provide the reporting period's market values prior to the report issuance, Verus may use the last reported market value or make estimates based on the manager's stated or estimated returns and other information available at the time. These estimates may differ materially from the actual value. Hedge fund market values presented in this report are provided by the fund manager or custodian. Market values presented for private equity investments reflect the last reported NAV by the custodian or manager net of capital calls and distributions as of the end of the reporting period. These values are estimates and may differ materially from the investments actual value. Private equity managers report performance using an internal rate of return (IRR), which differs from the time-weighted rate of return (TWRR) calculation done by Verus. It is inappropriate to compare IRR and TWRR to each other. IRR figures reported in the illiquid alternative pages are provided by the respective managers, and Verus has not made any attempts to verify these returns. Until a partnership is liquidated (typically over 10-12 years), the IRR is only an interim estimated return. The actual IRR performance of any LP is not known until the final liquidation.

Verus receives universe data from InvMetrics, eVestment Alliance, and Morningstar. We believe this data to be robust and appropriate for peer comparison. Nevertheless, these universes may not be comprehensive of all peer investors/managers but rather of the investors/managers that comprise that database. The resulting universe composition is not static and will change over time. Returns are annualized when they cover more than one year. Investment managers may revise their data after report distribution. Verus will make the appropriate correction to the client account but may or may not disclose the change to the client based on the materiality of the change.