

Callan

June 21, 2023

Mcera



First Quarter 2023 Summary Investment Presentation

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Economic and Capital Markets Review

Equity and Fixed Income Markets Up Together in 4Q22 and 1Q23

Declines for stocks and bonds in first three quarters of 2022 eased by market rebound

S&P 500 up 7.5% in both 1Q23 and 4Q22.

- Loss through first three quarters of 2022 was 23.8%; rebound in last two quarters reduced the loss to -9.7%. Similar loss reduction across all equity market segments: developed, emerging, small cap

Fixed income recovered as high inflation began to ease, leading to speculation about interest rates

- Bloomberg Aggregate: up 3% in 1Q, after a 1.9% rise in 4Q22, lowering the loss since the start of 2022 to 8.4%
- CPI-U: +5% year-over year for 1Q, down from 6.5% for the year ended Dec. 2022
- Inflation hit the highest rate (9%) in decades in June.
- Economic data show growth slowed in 2022; GDP gained only 1.1% in 1Q
 - Job market remains solid, providing support to Fed efforts to fight inflation

Returns for Periods ended 3/31/23

	Quarter	Year to Date	1 Year	5 Years	10 Years	25 Years
U.S. Equity						
Russell 3000	7.18	7.18	-8.58	10.45	11.73	7.45
S&P 500	7.50	7.50	-7.73	11.19	12.24	7.39
Russell 2000	2.74	2.74	-11.61	4.71	8.04	6.84
Global ex-U.S. Equity						
MSCI World ex USA	8.02	8.02	-2.74	3.80	4.91	4.39
MSCI Emerging Markets	3.96	3.96	-10.70	-0.91	2.00	--
MSCI ACWI ex USA Small Cap	4.70	4.70	-10.37	1.67	5.06	6.45
Fixed Income						
Bloomberg Aggregate	2.96	2.96	-4.78	0.91	1.36	4.03
90-day T-Bill	1.07	1.07	2.50	1.41	0.87	1.90
Bloomberg Long Gov/Credit	5.76	5.76	-13.40	0.63	2.35	5.56
Bloomberg Global Agg ex-US	3.06	3.06	-10.72	-3.17	-0.99	2.80
Real Estate						
NCREIF Property	-1.81	-1.81	-1.63	6.71	8.34	8.79
FTSE Nareit Equity	2.68	2.68	-19.22	6.02	5.97	8.01
Alternatives						
CS Hedge Fund Index	0.16	0.16	-0.89	4.18	3.89	5.54
Cambridge Private Equity*	0.80	0.80	-8.16	16.14	15.12	14.10
Bloomberg Commodity	-5.36	-5.36	-12.49	5.36	-1.72	1.80
Gold Spot Price	8.76	8.76	1.65	8.40	2.21	7.81
Inflation - CPI-U	1.70	1.70	4.98	3.88	2.63	2.51

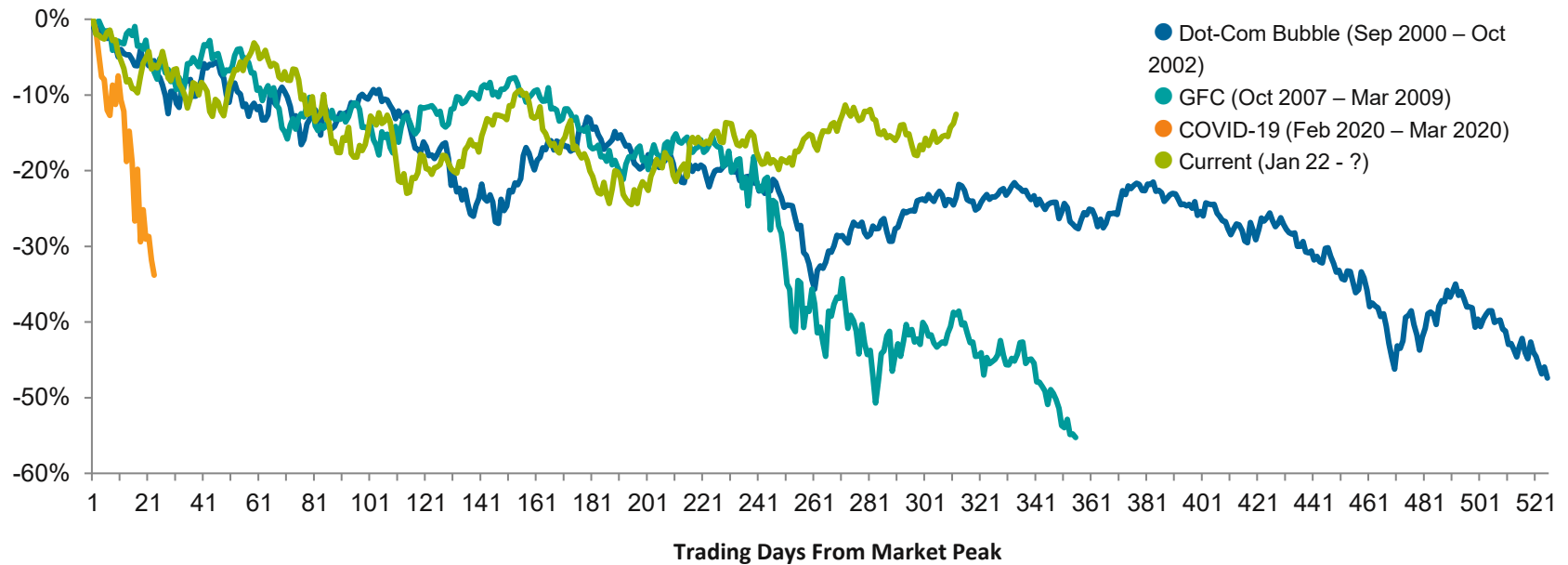
*Cambridge PE data as of 4Q22.

Sources: Bloomberg, Callan, Cambridge, Credit Suisse, FTSE Russell, MSCI, NCREIF, S&P Dow Jones Indices

Current Equity Drawdown: A More 'Typical' Correction?

S&P 500 Cumulative Returns

Market Peak-to-Trough for Recent Corrections vs. 1/4/22 Through 3/31/23



- ▶ While the COVID correction was swift and intense, the 2022 correction resembles the GFC and Dot-Com Bubble.
- ▶ The current drawdown has been 312 trading days through March.
- ▶ It would take another 43 trading days to get to the bottom of the GFC and 213 trading days to get to the bottom of the Dot-Com Bubble.

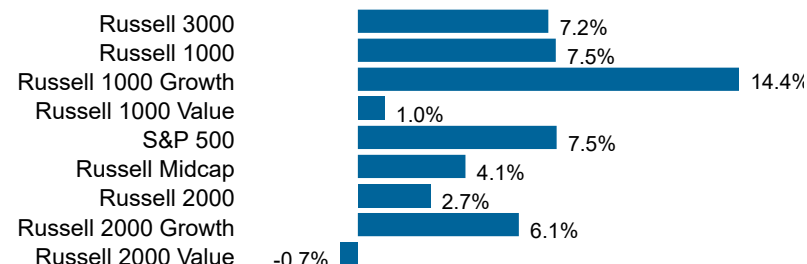
Sources: Callan, S&P Dow Jones Indices

U.S. Equity Performance: 1Q23

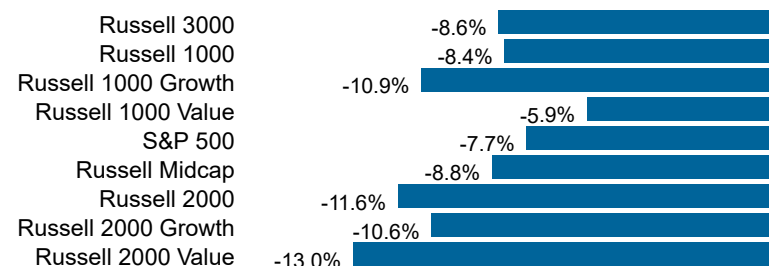
Large cap growth stocks lead broad indices higher; small cap indices hurt by regional bank sell-off

- ▶ The S&P 500 posted a second straight quarter of positive performance, gaining 7.5%; large cap growth led all styles, advancing 14.4%; Russell 2000 Value was an exception with a slight decline (0.7%) due to greater exposure to Financials, specifically small banks.
- ▶ Three sectors comprising 44% of S&P 500 (63% of Russell 1000 Growth) drove performance: Technology (+21.8%), Communication Services (+20.5%), and Consumer Discretionary (+16.1%). Financials, Energy, and Health Care were negative but had only a modest impact given smaller weights in these benchmarks.
- ▶ Small caps (Russell 2000) underperformed large caps (Russell 1000) and growth outperformed value during the quarter, a reversal of trend from 2022. Greater exposure to small banks in Russell 2000 (8.3%) versus Russell 1000 (3.3%) was one differentiator; strong returns for mega-cap Technology also increased divergence.

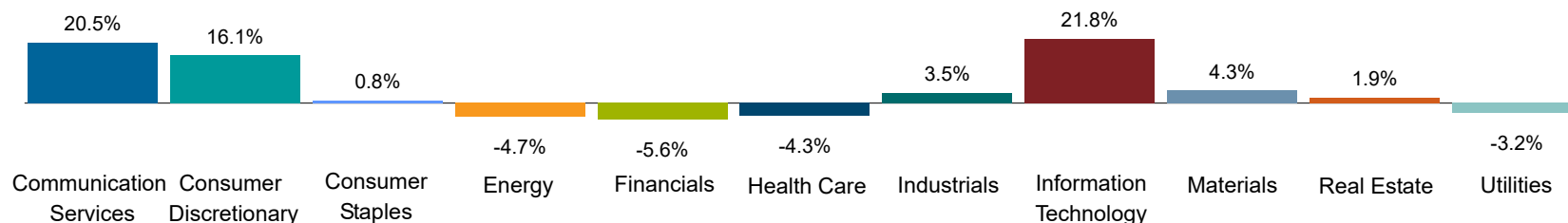
U.S. Equity: Quarter Ended 3/31/23



U.S. Equity: One-Year Returns Ended 3/31/23



Industry Sector Quarterly Performance (S&P 500) as of 3/31/23



Sources: FTSE Russell, S&P Dow Jones Indices

Global/Global ex-U.S. Equity Performance: 1Q23

1Q23 brought global and global ex-U.S. equity markets back to black. Positive results despite hiccups

- ▶ The first quarter of the year was marked by the collapse of Silicon Valley Bank and Credit Suisse, which sent fears of a banking crisis across global markets.
- ▶ Despite Fed hikes during the period, investors began to price in lower rate expectations.
- ▶ Europe outperformed other regions, making up ground lost in 2022 as inflation eased and recession fears lessened.

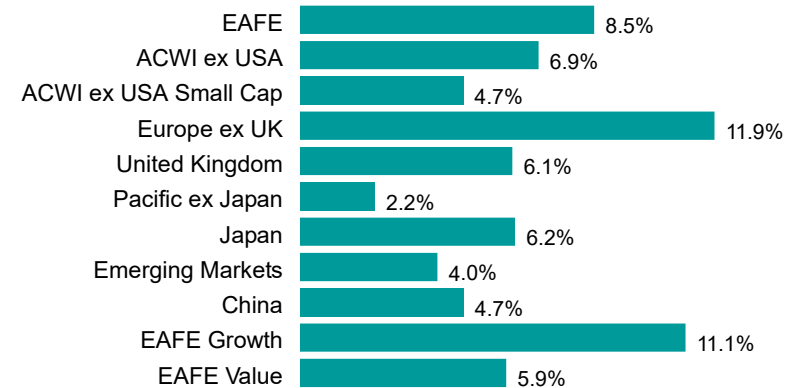
Growth vs. value

- ▶ Growth outpaced value across developed and emerging markets.
 - In a reversal from 2022, investors preferred growth alongside a drawdown in banks; Information Technology was the largest outperformer.

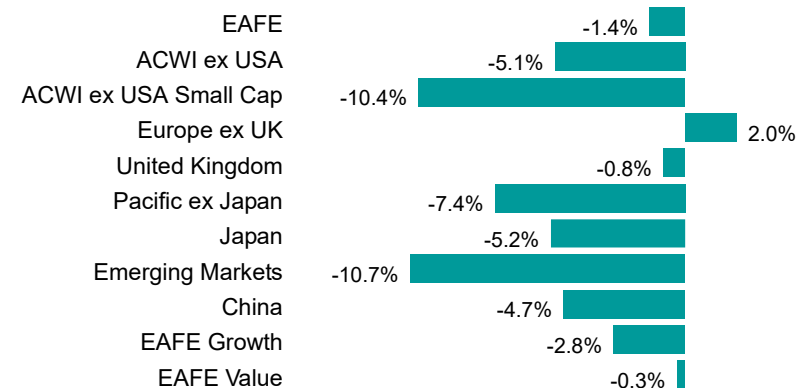
U.S. dollar vs. other currencies

- ▶ After some strength early in the quarter, the U.S. dollar declined 1% as interest rate differentials narrowed globally.

Global Equity Returns: Quarter Ended 3/31/23



Global Equity Returns: One Year Ended 3/31/23



Source: MSCI

U.S. Fixed Income Performance: 1Q23

Fixed income was positive in 1Q following its worst year ever.

- ▶ It was a bumpy ride with solid returns in January and March sandwiching a negative February:
 - January: +3.1%
 - February: -2.6%
 - March: +2.5%

U.S. Treasury volatility was pronounced

- ▶ 2-year US Treasury yield high was 5.08% on March 8th and low was 3.77% on March 24th

Yield curve remained inverted as of quarter end

- ▶ Difference between 2yr/10yr: -58 bps
- ▶ Difference between 1yr/10yr: -116 bps

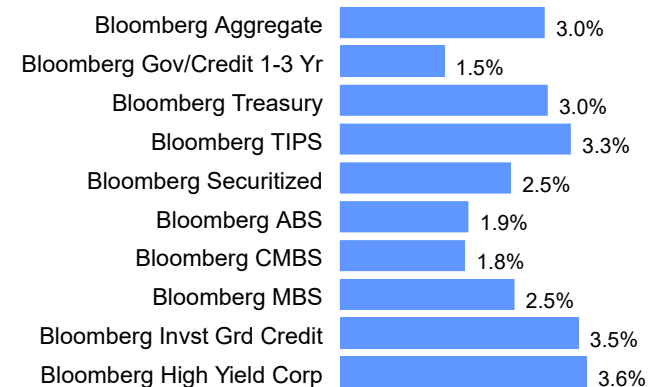
Fed raised rates 50bps during the quarter bringing target to 4.75%–5.00%

- ▶ Median expectation from Fed is 5.1% for year-end 2023; market pricing in Fed cuts by year-end
- ▶ Inflation moderated but still high and job market tight

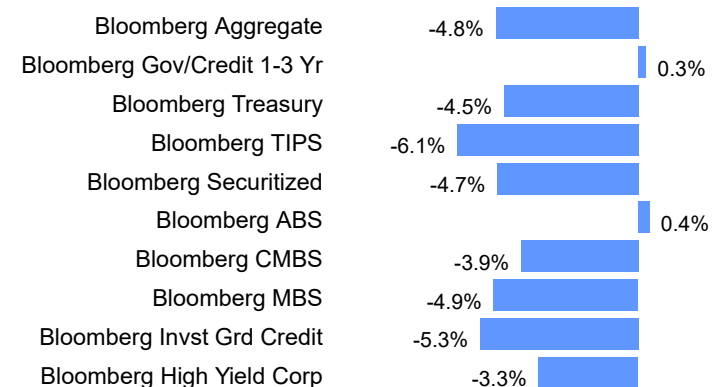
Sector performance was positive

- ▶ High yield (+3.6%) performed well as defaults remained low, supply subdued, and equity markets climbed.
- ▶ Investment grade credit (+3.5%) and TIPS (+3.3%) were also top performers.

U.S. Fixed Income Returns: Quarter Ended 3/31/23



U.S. Fixed Income Returns: One Year Ended 3/31/23



Sources: Bloomberg, S&P Dow Jones Indices

U.S. Private Real Estate Performance: 1Q23

Appreciation returns negative once again

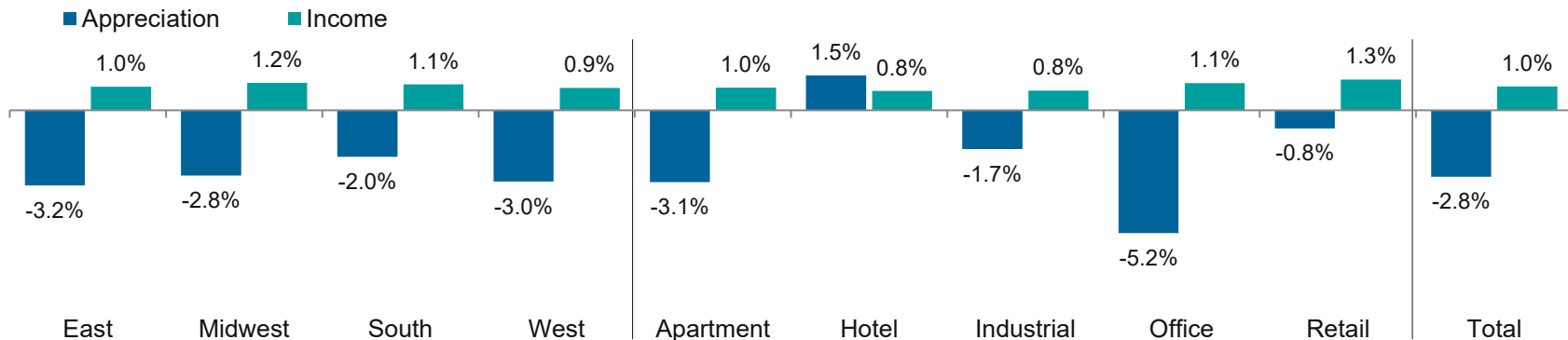
Negative appreciation in four major sectors

- Income returns were positive across sectors and regions.
- All property sectors and regions, except for Hotel, experienced negative appreciation.
- Valuations are reflective of higher interest rates, which have put upward pressure on capitalization rate and discount rate assumptions.
- Return dispersion by manager within the ODCE Index was due to the composition of underlying portfolios.

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
NCREIF ODCE	-3.4%	-3.9%	7.5%	6.6%	8.5%
Income	0.6%	2.5%	2.8%	3.0%	3.4%
Appreciation	-4.0%	-6.3%	4.6%	3.5%	5.0%
NCREIF Property Index	-1.8%	-1.6%	7.2%	6.7%	8.3%
Income	1.0%	3.9%	4.1%	4.3%	4.6%
Appreciation	-2.8%	-5.4%	3.0%	2.4%	3.6%

Returns are geometrically linked

NCREIF Property Index Quarterly Returns by Region and Property Type



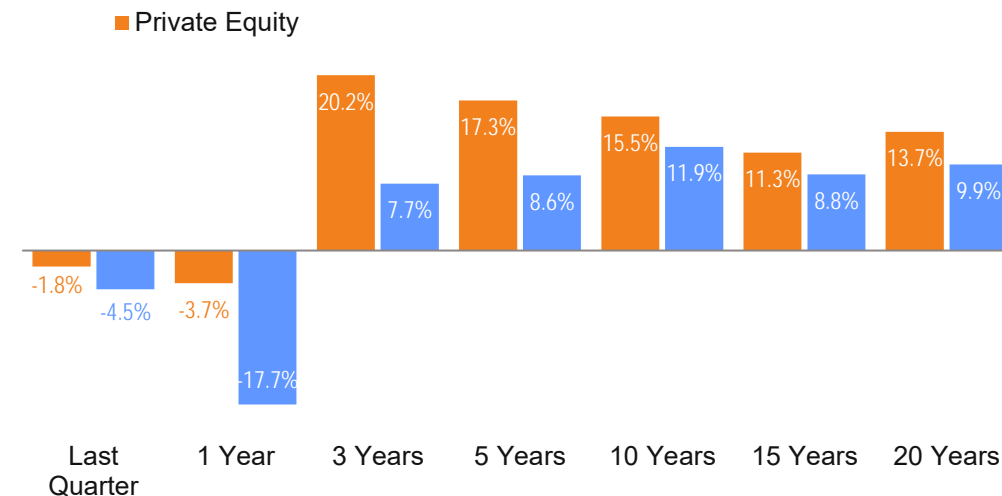
Source: NCREIF, ODCE return is net

Private Equity Performance

Smoothing effect in 3Q22 private equity returns

- ▶ As is typical for the asset class, private equity returns have experienced a smoothing effect in 2022 compared to the sharp declines seen in the public markets.
- ▶ Private equity was only down about a third as much as the public markets during 2022, on a PME basis.
- ▶ Portfolio companies are typically valued internally by the manager on a quarterly basis. Valuations are based on the operating metrics of the company, recent comparable transactions, and public market comps.
- ▶ Venture capital and growth equity experienced the sharpest declines so far this year, given their technology focus as well as post-IPO public equity holdings.

Net IRRs as of 09/30/22



Net IRRs by Strategy as of 09/30/22

Strategy	Last Quarter	1 Year	3 Years	5 Years	10 Years	20 Years
Venture Capital	-2.7%	-9.1%	28.4%	23.8%	19.4%	12.4%
Growth Equity	-1.8%	-9.4%	20.8%	18.4%	15.7%	14.3%
Buyouts	-1.9%	-1.4%	18.5%	16.1%	15.2%	14.7%
Mezzanine	0.2%	5.0%	11.8%	11.1%	11.3%	11.1%
Credit Opportunities	0.7%	3.9%	8.4%	7.2%	8.3%	9.9%
Control-Oriented Distressed	-0.2%	11.3%	19.4%	13.8%	12.7%	11.9%
Total Private Equity	-1.8%	-3.7%	20.2%	17.3%	15.5%	13.7%

Source: Refinitiv/Cambridge

Private Equity Overview

Fundraising slows and timelines become extended

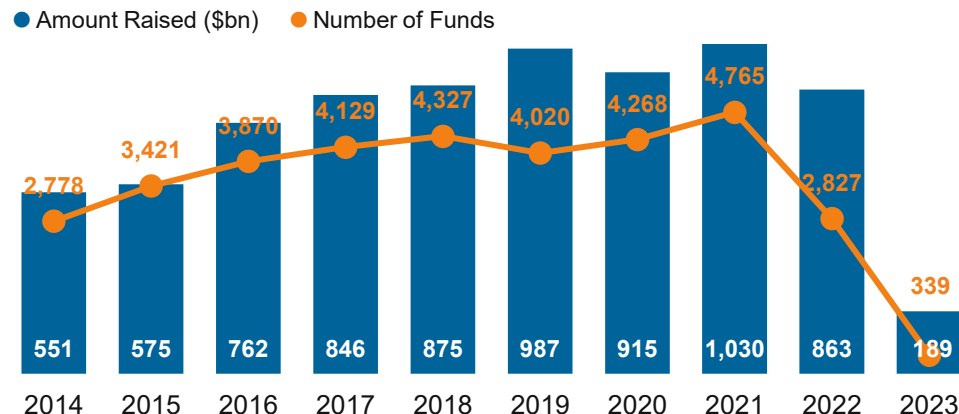
Fundraising continues to slow in 1Q23

- ▶ Total capital raised during the quarter was in line with 4Q22 but was significantly down relative to a year ago.
- ▶ LPs have slimmer commitment budgets this year and have been consolidating with high-conviction GPs.
- ▶ Fundraising timelines extending due to so many funds in the market, slowing distributions, and constrained LP commitment budgets because of the “denominator effect,” delaying many final closes

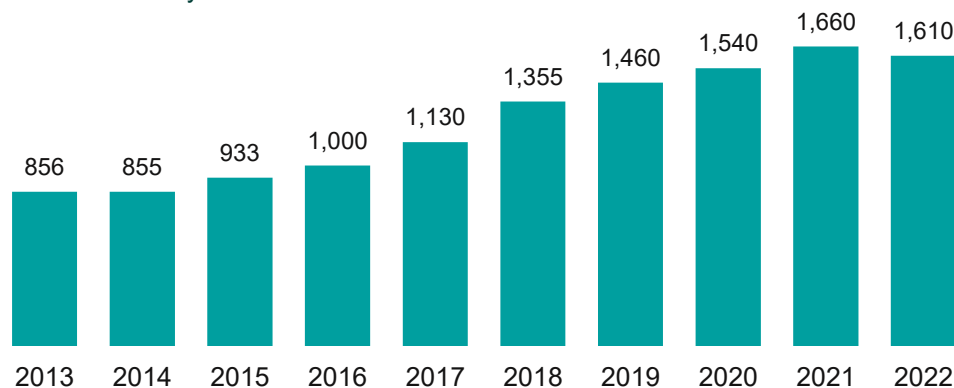
Dry powder levels off

- ▶ Level of dry powder influenced by two factors: fundraising and capital deployment.
- ▶ Dry powder peaked in 2021 at \$1.7 trillion due to strong annual fundraising levels.
- ▶ Dry powder dropped slightly in 2022 due to a slower fundraising environment.

Annual Fundraising



Dry Powder (\$bn) Cumulative as of yearend

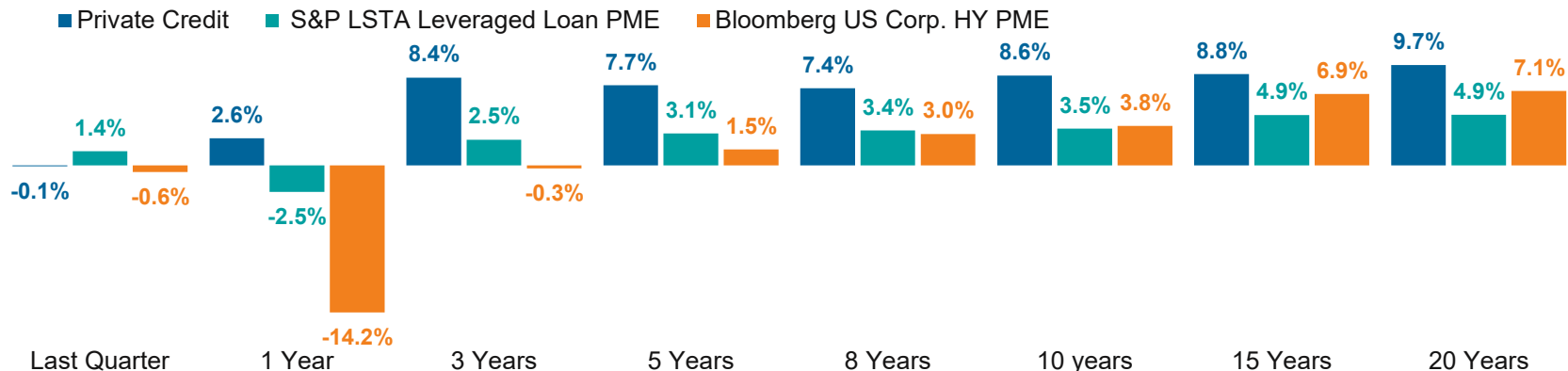


Source: PitchBook

Private Credit Market Overview

Performance over time and compared to relevant indices

Pooled Horizon Net IRRs as of 9/30/22



Pooled Horizon Net IRRs by Strategy as of 9/30/22

Strategy	Last Quarter	1 Year	3 Years	5 Years	8 Years	10 Years	15 Years	20 Years
Senior Debt	-2.4%	-3.5%	4.6%	5.1%	5.7%	5.9%	6.3%	6.1%
Mezzanine	0.2%	5.0%	11.8%	11.1%	10.8%	11.3%	10.5%	11.3%
Credit Opportunities	0.7%	3.9%	8.4%	7.2%	6.6%	8.3%	8.6%	9.7%
Total Private Credit	-0.1%	2.6%	8.4%	7.7%	7.4%	8.6%	8.8%	9.7%

- ▶ Private credit performance varies across sub-asset class and underlying return drivers. On average, the asset class has generated net IRRs of 8% to 10% for trailing periods ended Sept. 30, 2022. Higher-risk strategies performed better than lower-risk strategies.

*PME: Public market equivalent, a benchmark that applies the cash flows of the private credit funds to a public market index and then calculates an IRR.

Source: Refinitiv/Cambridge

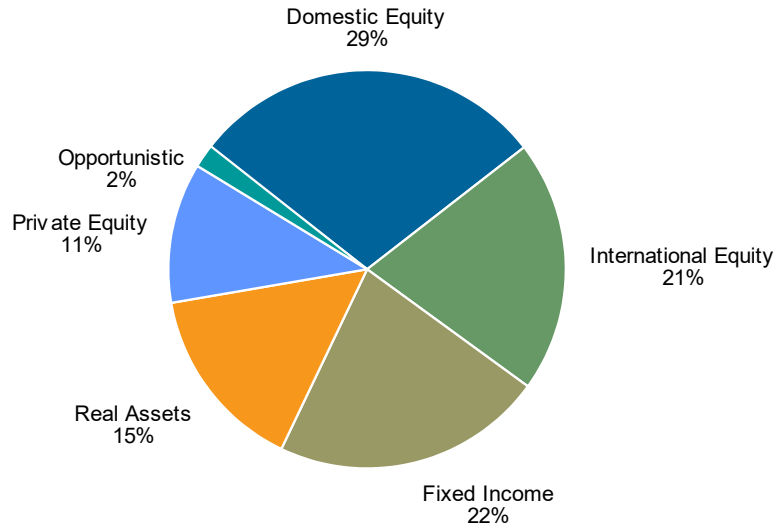
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MCERA Total Fund Review

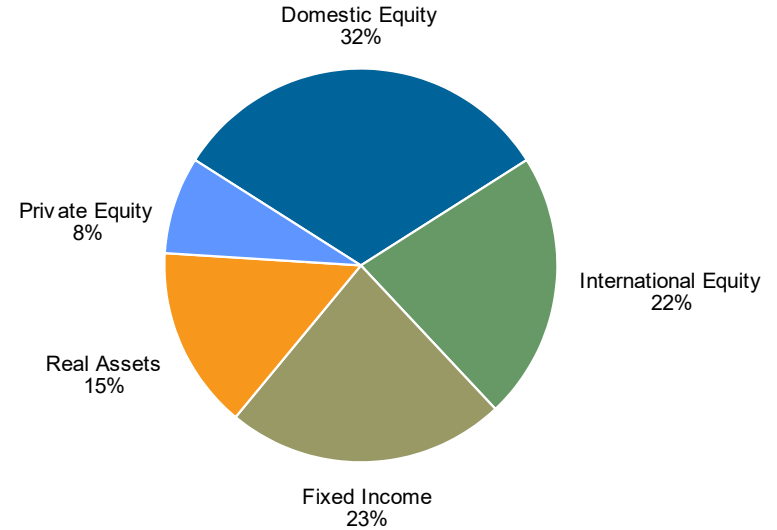
Total Fund Asset Allocation

As of March 31, 2023

Actual Asset Allocation



Target Asset Allocation



Asset Class	\$000s Actual	Weight Actual	Min Target	Target	Max Target	Percent Difference	\$000s Difference
Domestic Equity	890,612	29.0%	28.0%	32.0%	36.0%	(3.0%)	(93,161)
International Equity	630,358	20.5%	19.0%	22.0%	25.0%	(1.5%)	(45,986)
Fixed Income	678,175	22.1%	20.0%	23.0%	26.0%	(0.9%)	(28,913)
Real Assets	466,030	15.2%	12.0%	15.0%	18.0%	0.2%	4,886
Private Equity	350,960	11.4%	0.0%	8.0%	12.0%	3.4%	105,016
Opportunistic	58,158	1.9%	0.0%	0.0%	5.0%	1.9%	58,158
Total	3,074,293	100.0%		100.0%			

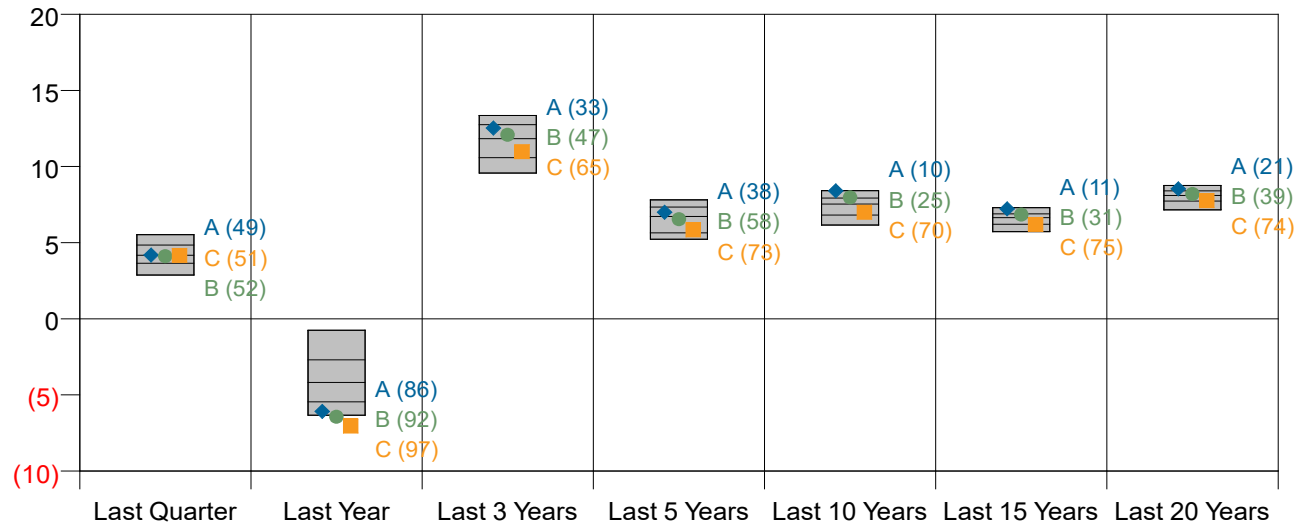
Total Fund Asset Distribution

	March 31, 2023				December 31, 2022	
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
Domestic Equity	\$890,612,416	28.97%	\$9,183,331	\$54,324,093	\$827,104,991	27.86%
Parametric Domestic Equity Futures (1)	-29,528,288	(0.96%)	12,820,878	(1,110,301)	-41,238,865	(1.39%)
SSGA Russell 1000 Index (2)	690,402,965	22.46%	(2,802,863)	47,870,083	645,335,745	21.74%
DFA Small Cap Core	229,737,739	7.47%	(834,683)	7,564,311	223,008,111	7.51%
International Equity	\$630,358,332	20.50%	\$(23,228,207)	\$52,213,147	\$601,373,392	20.26%
Morgan Stanley Value	202,589,135	6.59%	0	20,310,673	182,278,462	6.14%
Artisan Partners Growth	192,836,964	6.27%	0	15,197,309	177,639,655	5.98%
TimesSquare Intl Small Cap	103,940,439	3.38%	(207,696)	8,751,857	95,396,278	3.21%
FIAM Select Emerging Equity	100,491,675	3.27%	0	5,000,074	95,491,601	3.22%
Parametric International Equity Futures	30,500,120	0.99%	(23,020,511)	2,953,235	50,567,396	1.70%
Fixed Income	\$678,174,679	22.06%	\$8,503,236	\$21,857,484	\$647,813,959	21.82%
Wellington Core Plus	286,610,320	9.32%	(3,075,802)	9,592,036	280,094,086	9.43%
Western Core Plus	304,094,857	9.89%	(2,364,385)	10,629,614	295,829,628	9.96%
Parametric Fixed Income Futures	87,469,502	2.85%	13,943,423	1,635,834	71,890,245	2.42%
Real Assets	\$466,029,724	15.16%	\$(3,668,325)	\$(5,711,466)	\$475,409,515	16.01%
Real Estate	\$241,440,562	7.85%	\$(3,574,772)	\$(11,955,288)	\$256,970,623	8.66%
Woodmont	17,099,992	0.56%	0	(999,998)	18,099,990	0.61%
UBS Trumbull Property Fund	101,360,702	3.30%	(885,277)	(7,686,450)	109,932,429	3.70%
AEW Core Property Trust	122,979,869	4.00%	(1,344,707)	(4,613,628)	128,938,204	4.34%
Public Real Assets	\$224,589,162	7.31%	\$(93,552)	\$6,243,822	\$218,438,892	7.36%
INVECO Commodities Fund	54,047,565	1.76%	(93,552)	(827,686)	54,968,803	1.85%
BlackRock TIPS Index Fund	57,722,544	1.88%	0	1,972,478	55,750,067	1.88%
KBI Global Resources Fund	60,073,774	1.95%	0	3,672,875	56,400,899	1.90%
Blackrock REIT Index Fund	52,745,279	1.72%	0	1,426,154	51,319,124	1.73%
Opportunistic (3)	\$58,158,129	1.89%	\$(6,521,275)	\$2,227,441	\$62,451,963	2.10%
CarVal Credit Value V	22,865,882	0.74%	(81,620)	558,471	22,389,031	0.75%
Fortress Credit Opps Fund V	11,744,597	0.38%	(39,121)	274,777	11,508,941	0.39%
Varde Dislocation Fund	23,547,650	0.77%	(6,400,534)	1,394,193	28,553,991	0.96%
Private Equity (4)	\$350,959,816	11.42%	\$(3,795,876)	\$0	\$354,755,692	11.95%
Abbott ACE VI	35,571,436	1.16%	(2,000,000)	0	37,571,436	1.27%
Abbott ACE VII	40,952,045	1.33%	(875,000)	0	41,827,045	1.41%
Abbott 2016	70,284,000	2.29%	0	0	70,284,000	2.37%
Abbott 2017	19,617,358	0.64%	0	0	19,617,358	0.66%
Abbott 2021	8,417,012	0.27%	0	0	8,417,012	0.28%
Pathway PPEF 2008	43,690,165	1.42%	(979,685)	(0)	44,669,850	1.50%
Pathway PE I-7	33,931,271	1.10%	(256,715)	(0)	34,187,986	1.15%
Pathway PE I-8	63,403,608	2.06%	(751,699)	(0)	64,155,307	2.16%
Pathway PE I-9	17,392,144	0.57%	0	0	17,392,144	0.59%
Pathway PE I-10	17,700,778	0.58%	1,067,224	0	16,633,554	0.56%
Total Fund	\$3,074,293,096	100.0%	\$(19,527,114)	\$124,910,700	\$2,968,909,511	100.0%

Total Fund Performance – Annualized

Returns for Periods Ended March 31, 2023

Group: Callan Public Fund Sponsor - Large (>1B)



10th Percentile	5.53	(0.75)	13.36	7.81	8.43	7.31	8.77
25th Percentile	4.85	(2.69)	12.75	7.35	7.94	6.90	8.41
Median	4.18	(4.17)	11.83	6.72	7.54	6.65	8.11
75th Percentile	3.66	(5.45)	10.59	5.65	6.82	6.21	7.74
90th Percentile	2.87	(6.32)	9.57	5.23	6.16	5.73	7.17

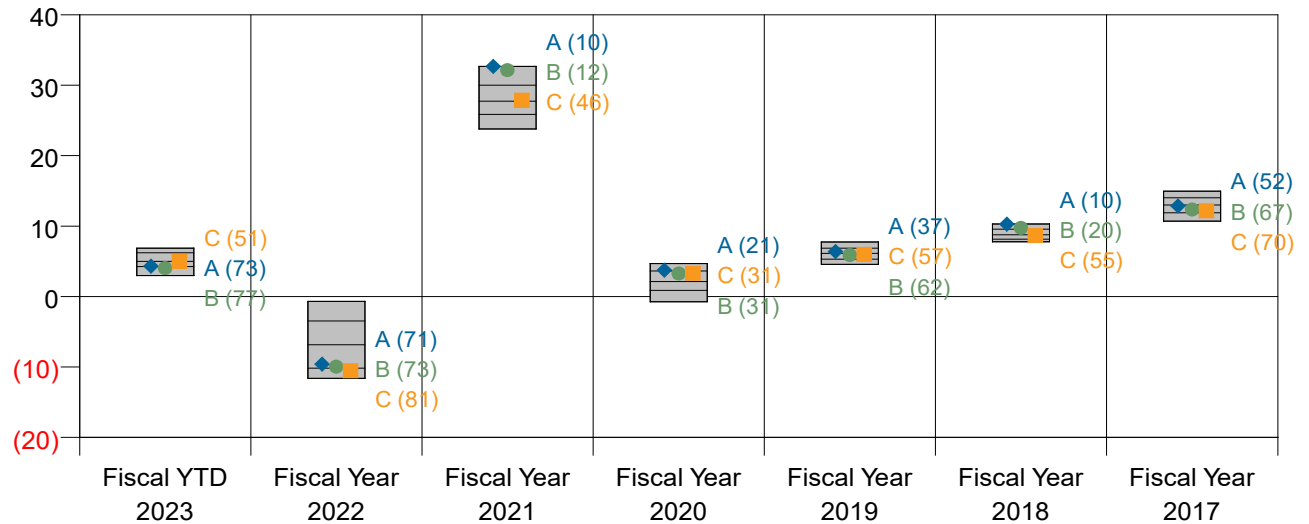
MCERA Total Fund - Gross	◆ A	4.19	(6.07)	12.53	7.00	8.41	7.23	8.54
MCERA Total Fund - Net	● B	4.11	(6.43)	12.09	6.54	7.97	6.84	8.20
MCERA Total Fund Target	■ C	4.16	(7.04)	10.98	5.84	7.01	6.20	7.77

Current Quarter Target = 32.0% Russell 3000 Index, 22.0% MSCI ACWI ex US IMI Index, 11.5% Bloomberg Aggregate Index, 5.8% Bloomberg Intermediate Credit Index, 5.8% FTSE World Government Bond Index, 8.0% NCREIF NFI-ODCE Equal Weight Net, 1.8% Bloomberg Commodity Price Index, 1.8% S&P Global Natural Resources Index, 1.8% S&P DJ US Select REIT Index, 1.8% Bloomberg US TIPS Index, 4.8% Russell 3000 Index (Lagged) and 3.2% MSCI ACWI ex US IMI Index (Lagged).

Total Fund Performance – Fiscal Year

Fiscal Year Returns

Group: Callan Public Fund Sponsor - Large (>1B)



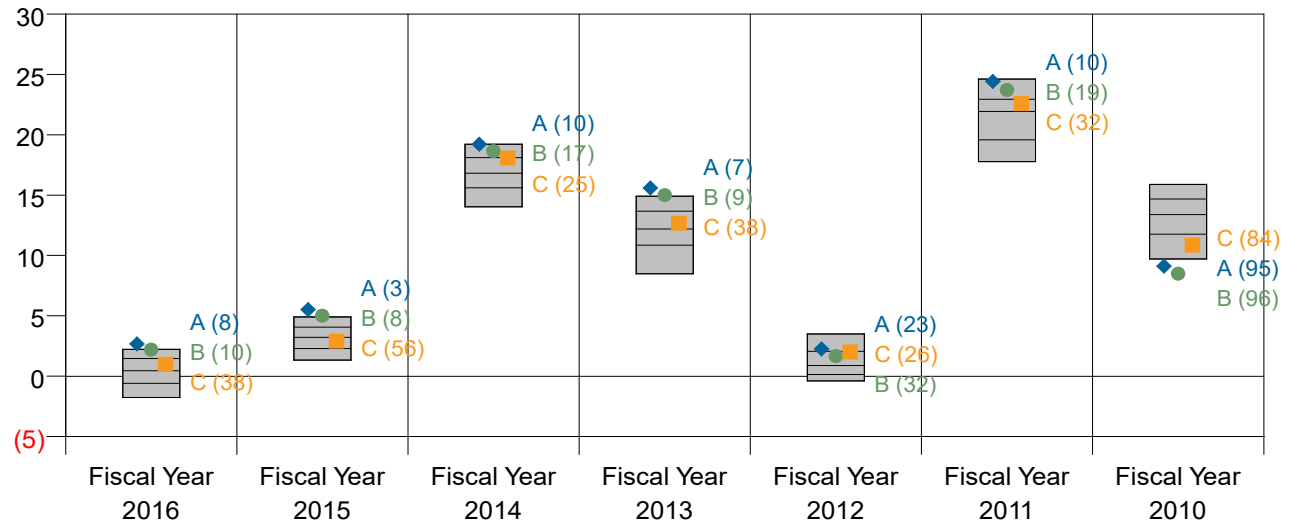
10th Percentile	6.87	(0.68)	32.69	4.70	7.76	10.32	14.96
25th Percentile	6.22	(3.45)	30.01	3.63	6.87	9.56	14.03
Median	5.00	(6.83)	27.74	2.13	6.13	8.78	13.00
75th Percentile	4.27	(10.16)	25.87	0.88	5.31	8.14	11.90
90th Percentile	2.97	(11.60)	23.80	(0.72)	4.58	7.79	10.72

MCERA Total Fund - Gross	◆ A	4.33	(9.60)	32.69	3.74	6.39	10.29	12.88
MCERA Total Fund - Net	● B	4.04	(9.95)	32.15	3.26	5.88	9.74	12.37
MCERA Total Fund Target	■ C	4.99	(10.52)	27.89	3.29	5.99	8.67	12.20

Total Fund Performance – Fiscal Year

Fiscal Year Returns

Group: Callan Public Fund Sponsor - Large (>1B)



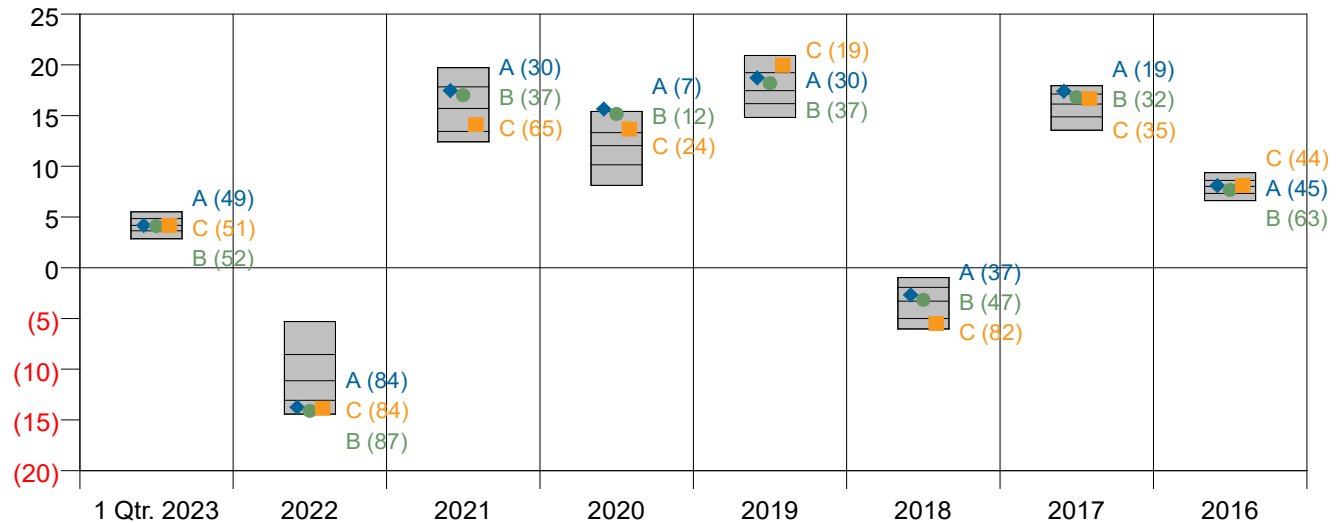
10th Percentile	2.24	4.92	19.23	14.91	3.51	24.62	15.90
25th Percentile	1.47	4.07	18.11	13.67	2.07	22.95	14.69
Median	0.46	3.23	16.83	12.20	0.88	21.94	13.40
75th Percentile	(0.58)	2.29	15.61	10.86	0.15	19.59	11.76
90th Percentile	(1.75)	1.34	14.04	8.49	(0.39)	17.79	9.71

MCERA Total Fund - Gross	◆ A	2.68	5.52	19.22	15.60	2.26	24.42	9.11
MCERA Total Fund - Net	● B	2.19	5.02	18.65	15.01	1.67	23.71	8.49
MCERA Total Fund Target	■ C	0.98	2.91	18.09	12.68	2.02	22.58	10.87

Total Fund Performance – Calendar Years

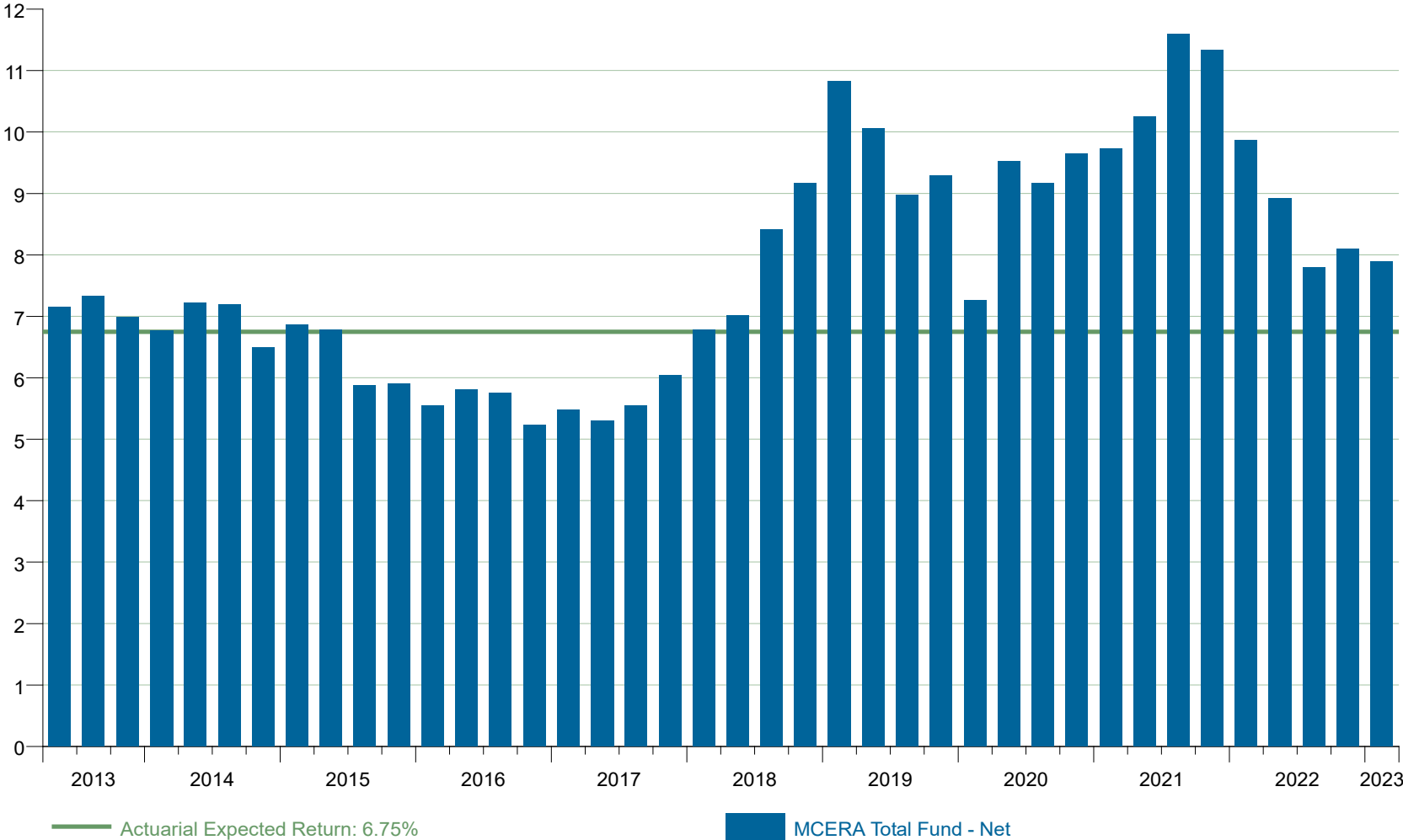
Returns for Periods Ended March 31, 2023

Group: Callan Public Fund Sponsor - Large (>1B)



10th Percentile	5.53	(5.29)	19.72	15.41	20.92	(0.95)	17.97	9.39	
25th Percentile	4.85	(8.54)	17.84	13.33	19.24	(1.92)	17.13	8.63	
Median	4.18	(11.12)	15.71	12.04	17.45	(3.28)	16.14	8.02	
75th Percentile	3.66	(13.06)	13.44	10.16	16.18	(4.99)	14.89	7.33	
90th Percentile	2.87	(14.41)	12.43	8.13	14.83	(6.02)	13.57	6.63	
Total Fund - Gross	◆ A	4.19	(13.75)	17.47	15.66	18.73	(2.68)	17.41	8.10
MCERA Total Fund - Net	● B	4.11	(14.09)	17.01	15.16	18.19	(3.16)	16.81	7.68
Total Fund Target	■ C	4.16	(13.84)	14.12	13.68	19.97	(5.49)	16.68	8.13

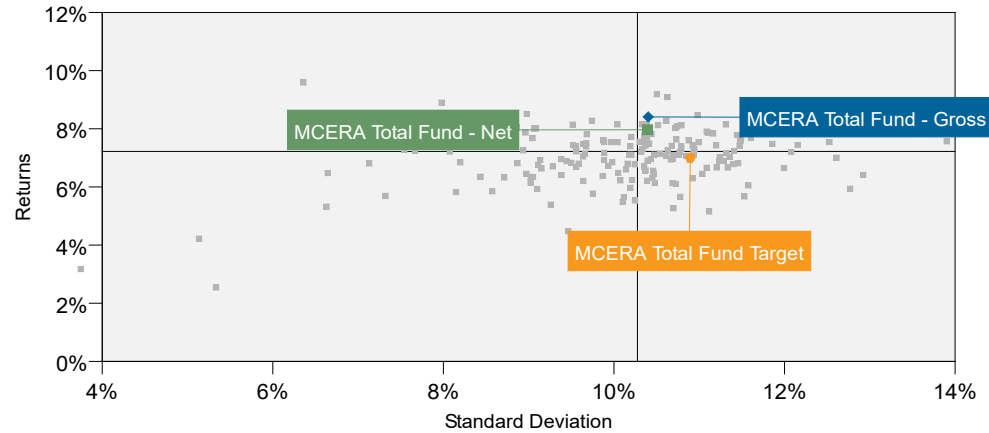
Annualized 10 Year Total Fund Net Returns (Quarterly Roll)



Total Fund – Cumulative Returns Relative to Target

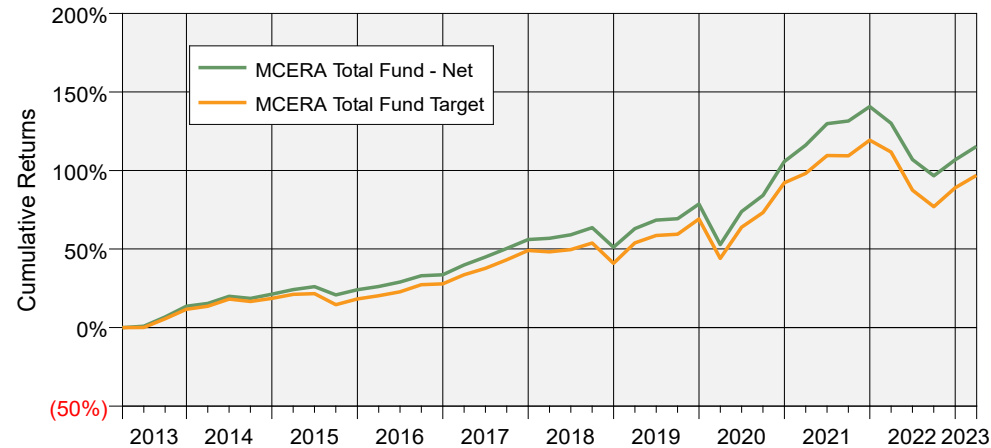
Ten Year Annualized Risk vs. Return

As of March 31, 2023



Total Fund Cumulative Returns vs. Target

10 Years Ended March 31, 2023



Watchlist

Investment Manager Monitoring Summary Report Active Managers as of March 31, 2023

Investment Manager	Organization/ Team	3 Year Performance vs Benchmark	3 Year Performance vs Peers	5 Year Performance vs Benchmark	5 Year Performance vs Peers	Qualify for Watchlist?	Date Added
DFA Small Cap Core Equity <i>Russell 2000 Index</i>				N/A	N/A		
Morgan Stanley International Value Equity <i>MSCI EAFE Index</i>						No	4Q17
Artisan International Growth Equity <i>MSCI EAFE Index</i>						Yes	4Q17
TimesSquare International Small Cap Equity <i>MSCI EAFE Small Cap Index</i>				N/A	N/A		
Fidelity Emerging Markets Equity <i>MSCI Emerging Markets Index</i>		N/A	N/A	N/A	N/A		
Wellington Core Plus Fixed Income <i>Bloomberg U.S Aggregate Index</i>						No	
Western Asset Core Plus Fixed Income <i>Bloomberg U.S Aggregate Index</i>		N/A	N/A	N/A	N/A		
Invesco Balanced Risk Commodity Fund <i>Bloomberg Commodity Index</i>						Yes	4Q20
KBI Global Natural Resources Fund <i>S&P Global Natural Resource Index</i>			N/A		N/A	No	
UBS Trumbull Property Fund* <i>NFI-ODCE Index</i>		N/A	N/A	N/A	N/A		4Q19

*UBS Trumbull Property Fund placed on watch for organizational concerns. Quantitative criteria for private market portfolios under review by Governance Committee.

Quantitative Criteria

If a manager trails its relevant benchmark by more than 100 basis points (net of fees) and ranks in the bottom quartile of its peer universe (gross of fees ranking) for the trailing three years, or if a manager trails its relevant benchmark (net of fees) or ranks below median of its peer universe (gross of fees ranking) for the trailing five years, then the manager may be placed on the Watchlist.

Color Code

	meets watch list criteria, no concerns, no actions recommended
	concerns exist, no actions recommended
	violates watch list criteria, concerns exist, action to be determined

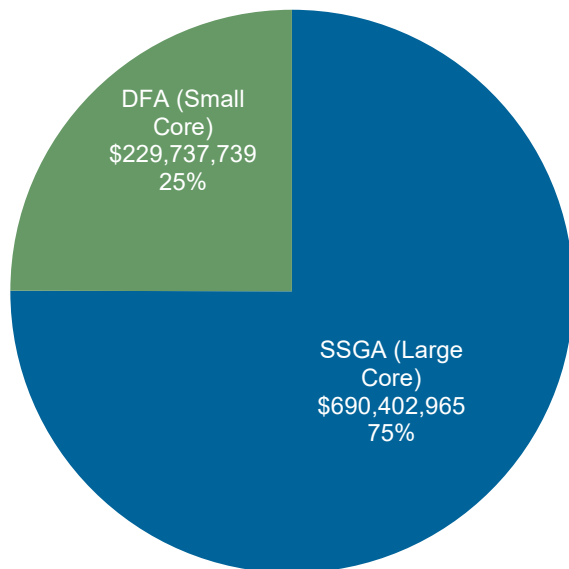
Watchlist

Investment Manager	3 Year Net Return Trails Benchmark by more than 100 bps (relative return shown in bps)	<u>AND</u>	3 Year Gross Return Ranks 75th - 100th%	<u>OR</u>	5 Year Net Return Trails Benchmark (relative return shown in bps)	<u>OR</u>	5 Year Gross Return Ranks 50th - 100th%	Qualify for Watchlist (Quantitative)
DFA Small Cap Core Equity <i>Russell 2000 Index</i>	698		14th		N/A		N/A	No
Morgan Stanley International Value Equity <i>MSCI EAFE Index</i>	-94		95th		6		18th	No
Artisan International Growth Equity <i>MSCI EAFE Index</i>	-351		83rd		9		58th	Yes
TimesSquare International Small Cap Equity <i>MSCI EAFE Small Cap Index</i>	-295		86th		N/A		N/A	Yes
Fidelity Emerging Markets Equity <i>MSCI Emerging Markets Index</i>	N/A		N/A		N/A		N/A	No
Wellington Core Plus Fixed Income <i>Bloomberg U.S Aggregate Index</i>	158		69th		68		32nd	No
Western Asset Core Plus Fixed Income <i>Bloomberg U.S Aggregate Index</i>	N/A		N/A		N/A		N/A	No
Invesco Balanced Risk Commodity Fund <i>Bloomberg Commodity Index</i>	201		40th		-8		63rd	Yes
KBI Global Natural Resources Fund <i>S&P Global Natural Resource Index</i>	234		N/A		556		N/A	No
UBS Trumbull Property Fund <i>NCREIF NFI-ODCE Index</i>	Quantitative criteria for private markets portfolios under review by Governance Committee. On watch due to organizational changes.							Under Review

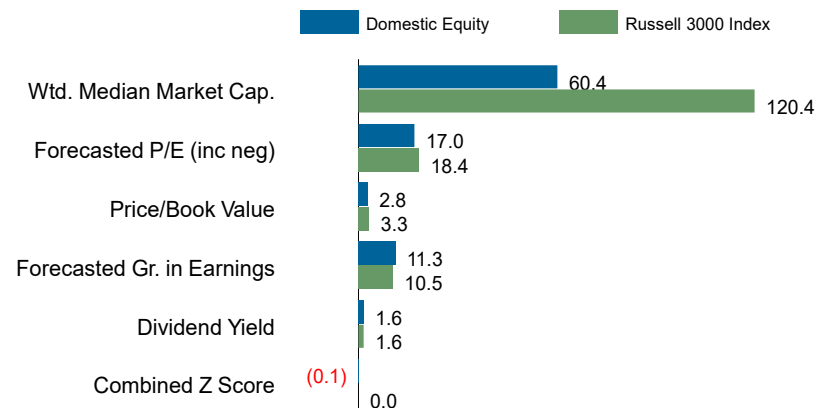
Callan

MCERA Asset Class Review

Domestic Equity Composite



Portfolio Characteristics as of March 31, 2023

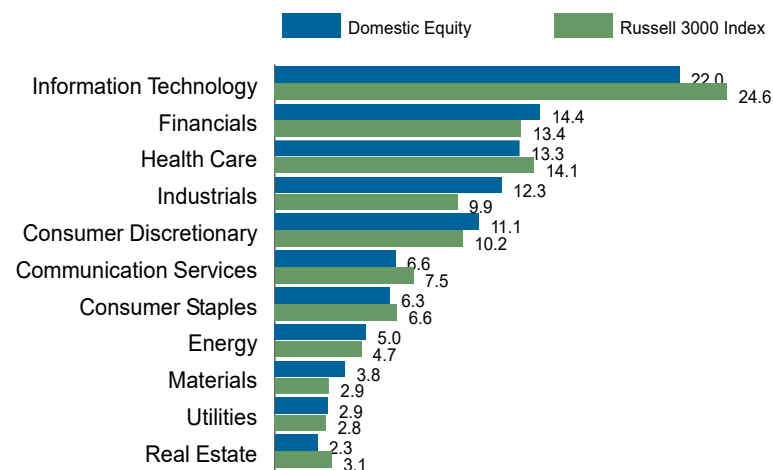


Style Exposure Matrix

Holdings as of March 31, 2023

	-- Domestic Equity				-- Russell 3000 Index			
	Value	Core	Growth	Total	Value	Core	Growth	Total
Large	14.9% (91)	18.1% (95)	28.9% (106)	61.9% (292)	18.8% (91)	22.9% (95)	36.4% (106)	78.1% (292)
Mid	4.9% (173)	5.8% (209)	6.1% (197)	16.9% (579)	5.1% (173)	5.1% (213)	5.2% (198)	15.4% (584)
Small	4.8% (243)	7.1% (363)	6.2% (303)	18.2% (909)	1.6% (313)	2.3% (490)	2.0% (366)	5.8% (1169)
Micro	1.4% (362)	1.1% (249)	0.5% (136)	3.1% (747)	0.2% (257)	0.3% (457)	0.1% (162)	0.7% (876)
Total	26.0% (869)	32.2% (916)	41.8% (742)	100.0% (2527)	25.7% (834)	30.6% (1255)	43.8% (832)	100.0% (2921)

Sector Allocation as of March 31, 2023



Domestic Equity Composite

Returns and Rankings for Periods Ended March 31, 2023

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Domestic Equity - Net	6.51	(7.14)	20.57	10.33	11.56
Domestic Equity Target	7.18	(8.58)	18.48	10.45	11.73
SSGA - Net	7.42	(8.36)	17.64	10.63	11.97
Large Cap Blended Benchmark	7.46	(8.39)	17.62	10.63	11.96
Ranking vs. Large Cap Equity	45	58	58	44	52
DFA Small Core - Net	3.30	(5.26)	24.49	--	--
Russell 2000 Index	2.74	(11.61)	17.51	4.71	8.04
Ranking vs. Small Cap Equity	50	30	14	--	--

Returns and Rankings for Calendar Years

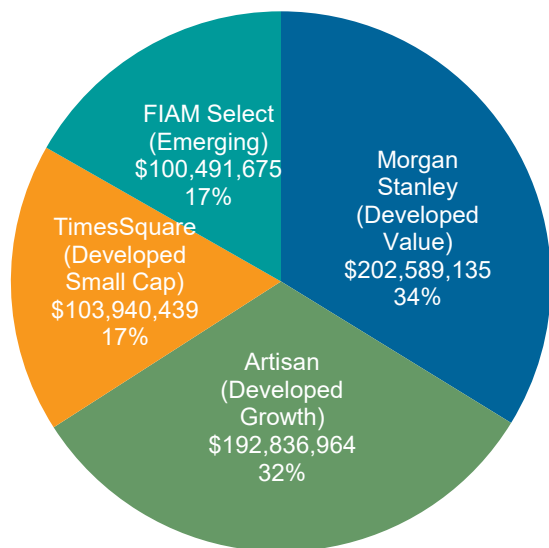
	1 Qtr. 2023	2022	2021	2020	2019	2018
Domestic Equity - Net	6.51	(17.43)	29.74	17.85	28.77	(5.34)
Domestic Equity Target	7.18	(19.21)	25.66	20.89	31.02	(5.24)
SSGA - Net	7.42	(19.06)	27.16	18.33	31.43	(4.38)
Large Cap Blended Benchmark	7.46	(19.13)	27.15	18.40	31.49	(4.38)
Ranking vs. Large Cap Equity	45	55	49	53	43	46
DFA Small Core - Net	3.30	(12.97)	29.22	11.74	21.77	--
Russell 2000 Index	2.74	(20.44)	14.82	19.96	25.52	(11.01)
Ranking vs. Small Cap Equity	50	21	21	54	71	--

- The domestic equity composite underperformed the benchmark over the quarter but outperformed over the last year.
- Although small cap has underperformed large cap recently, DFA's relative outperformance (due to its exclusion of stocks with the lowest profitability and highest relative prices) has been very beneficial, especially over the last year.

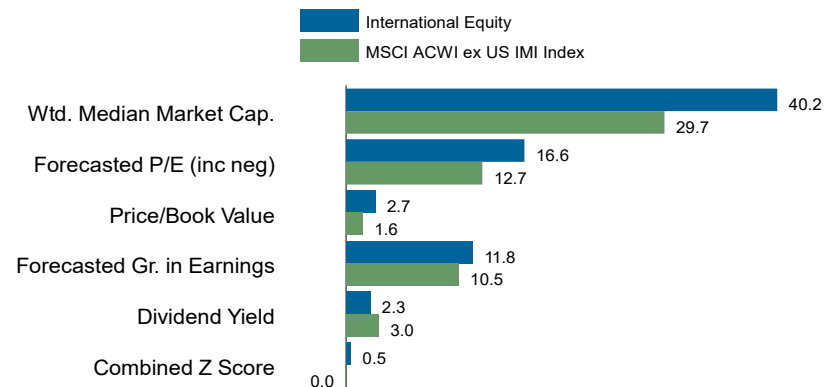
The Domestic Equity Target is comprised of 51.1% S&P/BARRA Value, 22.2% S&P 500, 15.6% Russell 2000 and 11.1% S&P/BARRA Growth through 12/31/1999, 80% S&P 500 and 20% Russell 2000 from 12/31/1999 to 06/30/2010, and 100% Russell 3000 from 06/30/2010 to present.

The Large Cap Blended Benchmark consists of the S&P 500 Index to 7/31/2021 and the Russell 1000 Index thereafter.

International Equity Composite



Portfolio Characteristics as of March 31, 2023

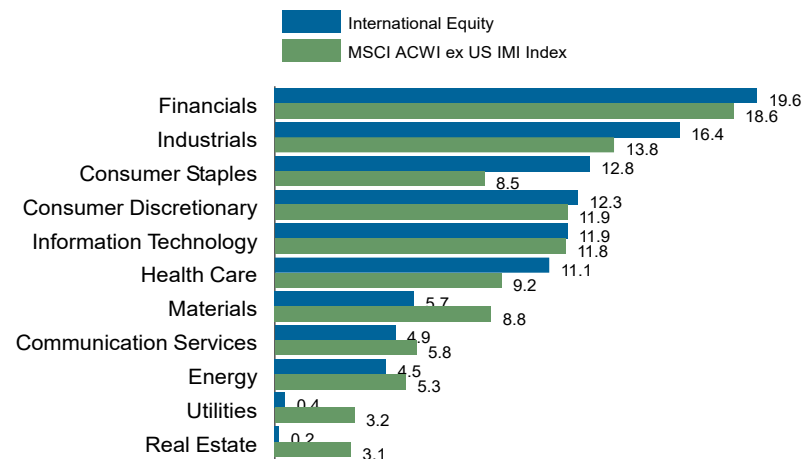


Region & Style Exposure Matrix

Holdings as of March 31, 2023

	-- International Equity				-- MSCI ACWI ex US IMI Index			
	Value	Core	Growth	Total	Value	Core	Growth	Total
Europe	12.9% (22)	16.9% (38)	30.1% (59)	59.9% (119)	12.8%	12.2%	16.1%	41.1%
N. America	0.8% (1)	0.5% (3)	5.8% (7)	7.0% (11)	1.4%	1.8%	1.3%	4.6%
Pacific	0.5% (3)	2.9% (8)	8.3% (26)	11.6% (37)	9.0%	7.5%	8.2%	24.7%
Emerging	3.1% (30)	9.2% (42)	9.1% (42)	21.4% (114)	7.8%	10.1%	11.7%	29.6%
Total	17.3% (56)	29.4% (91)	53.3% (134)	100.0% (281)	31.0%	31.7%	37.3%	100.0%

Sector Allocation as of March 31, 2023



International Equity Composite

Returns and Rankings for Periods Ended March 31, 2023

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
International Equity - Net	8.71	(2.85)	10.01	1.74	4.38
International Equity - Target	6.56	(5.84)	12.20	2.35	4.28
MSIM - Net	10.99	2.45	12.05	3.58	4.65
MSCI EAFE Index	8.47	(1.38)	12.99	3.52	5.00
Ranking vs. Non-US Developed Value Equity	4	27	95	18	59
Artisan - Net	8.56	(0.10)	9.48	3.61	4.86
MSCI EAFE Index	8.47	(1.38)	12.99	3.52	5.00
Ranking vs. Non-US Developed Growth Equity	68	14	83	58	76
TimesSquare - Net	9.18	(6.73)	9.12	--	--
MSCI EAFE Small Cap	4.92	(9.83)	12.07	0.87	5.86
Ranking vs. International Small Cap Equity	5	40	86	--	--
FIAM Select EM - Net	5.24	(9.74)	--	--	--
MSCI Emerging Markets Index	3.96	(10.70)	7.83	(0.91)	2.00
Ranking vs. Emerging Markets Equity	38	57	--	--	--

Returns and Rankings for Periods Ended March 31, 2023

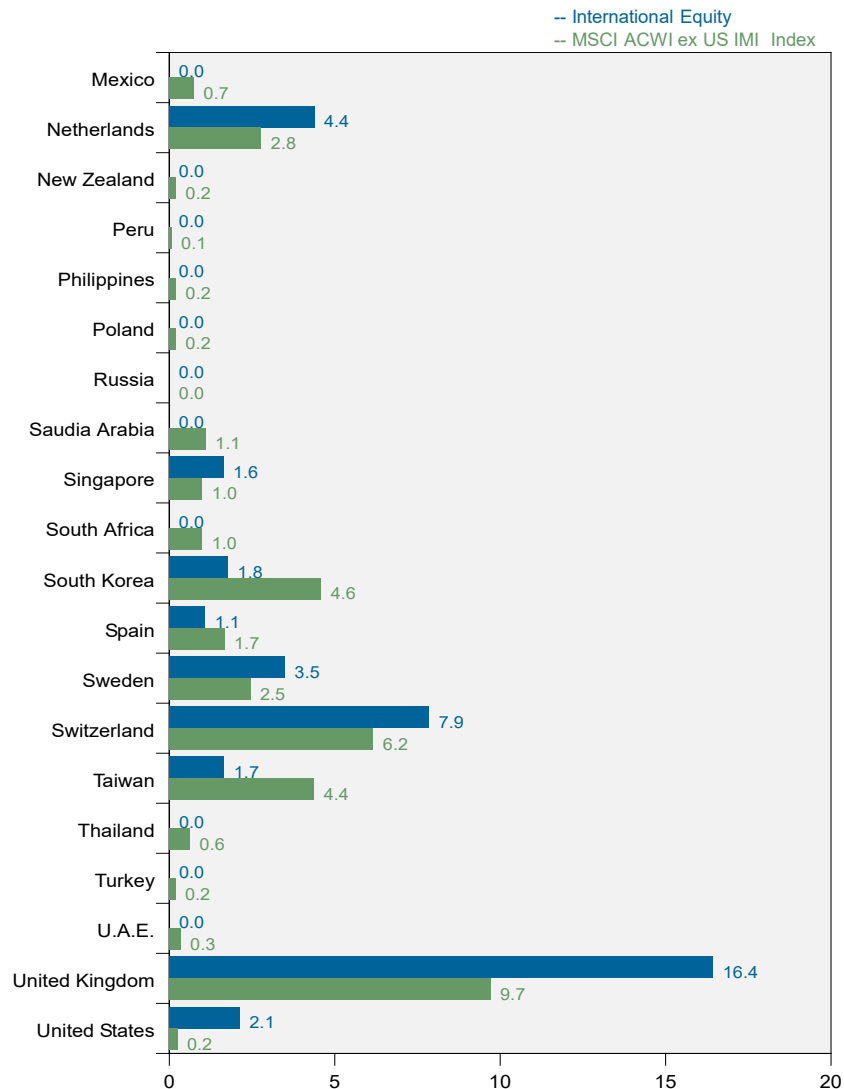
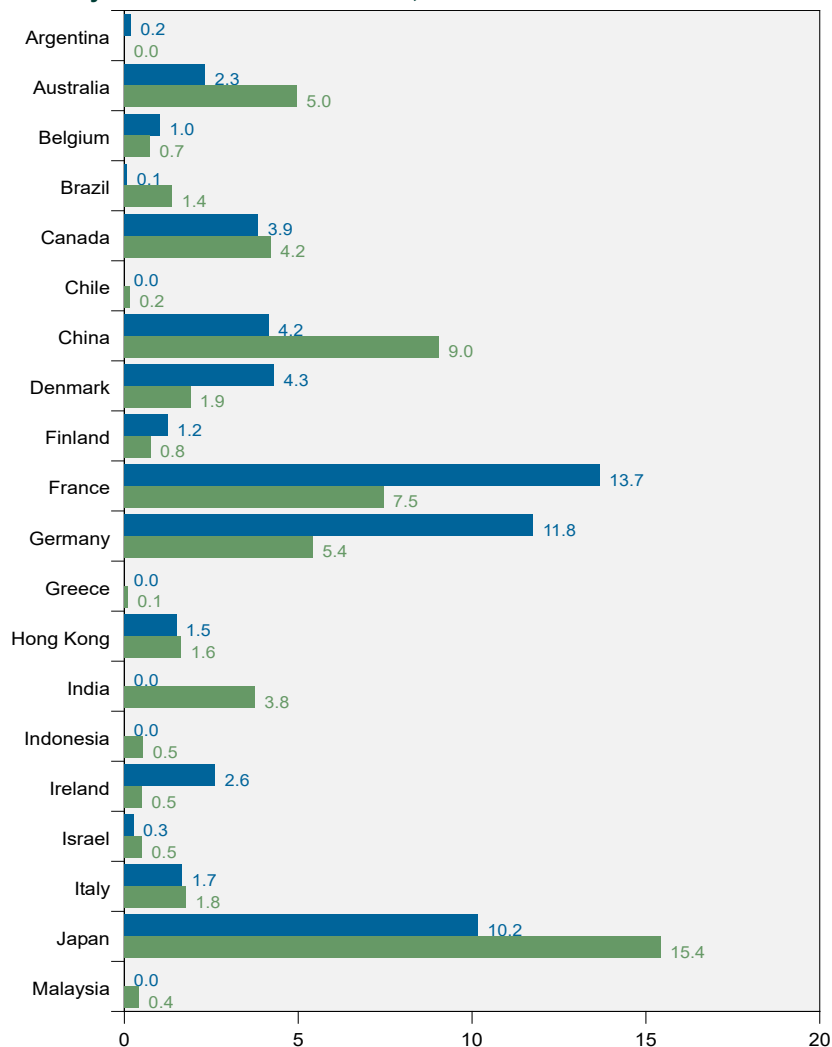
	1 Qtr. 2023	2022	2021	2020	2019
International Equity - Net	8.71	(19.28)	5.28	10.79	23.52
International Equity - Target	6.56	(16.58)	8.53	11.12	21.63
MSIM - Net	10.99	(13.62)	4.70	12.00	20.93
MSCI EAFE Index	8.47	(14.45)	11.26	7.82	22.01
Ranking vs. Non-US Developed Value Equity	4	92	98	1	34
Artisan - Net	8.56	(19.08)	8.59	8.09	29.62
MSCI EAFE Index	8.47	(14.45)	11.26	7.82	22.01
Ranking vs. Non-US Developed Growth Equity	68	30	60	96	26
TimesSquare - Net	9.18	(26.82)	2.18	13.87	--
MSCI EAFE Small Cap	4.92	(21.39)	10.10	12.34	24.96
Ranking vs. International Small Cap Equity	5	74	93	39	--
FIAM Select EM - Net	5.24	(23.89)	--	--	--
MSCI Emerging Markets Index	3.96	(20.09)	(2.54)	18.31	18.44
Ranking vs. Emerging Markets Equity	38	70	--	--	--

- The International Equity composite and all of the underlying managers outperformed on a relative basis during the last quarter and last year.
 - Morgan Stanley: an overweight to IT and selection within IT, consumer discretionary, and financials contributed to performance.
 - Artisan: positive selection within consumer discretionary and communication services outweighed an underweight to the strong performing IT sector.
 - TimesSquare: the portfolio's quality growth style was in favor, benefitting performance. Stock selection in industrials and energy was positive.
 - FIAM: selection within consumer staples and IT plus an underweight to utilities contributed to returns.

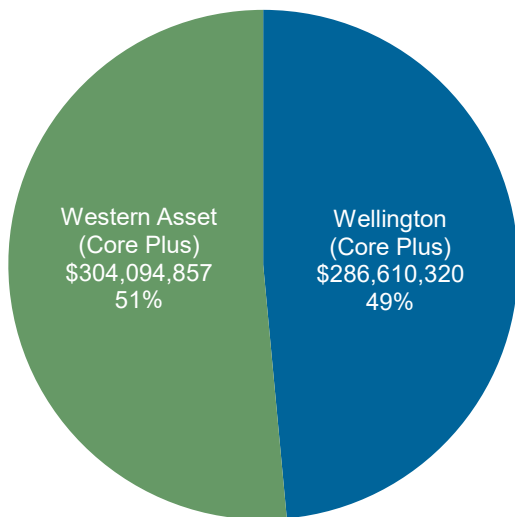
The International Equity Target is comprised of 100% MSCI EAFE Index through 06/30/2010, and 100% MSCI ACWI ex-US IMI Index thereafter.

International Equity Composite

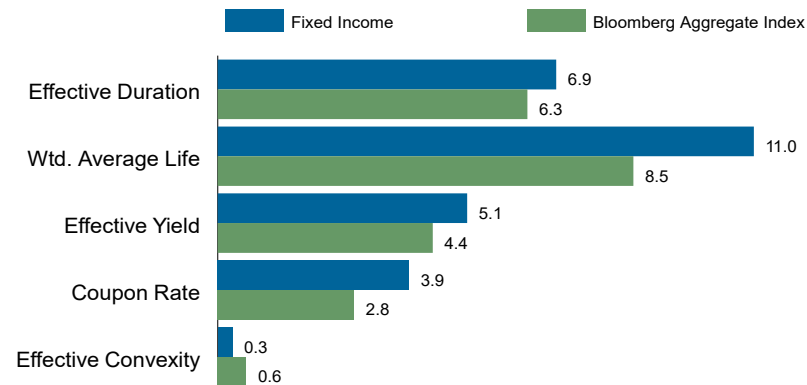
Country Allocations as of March 31, 2023



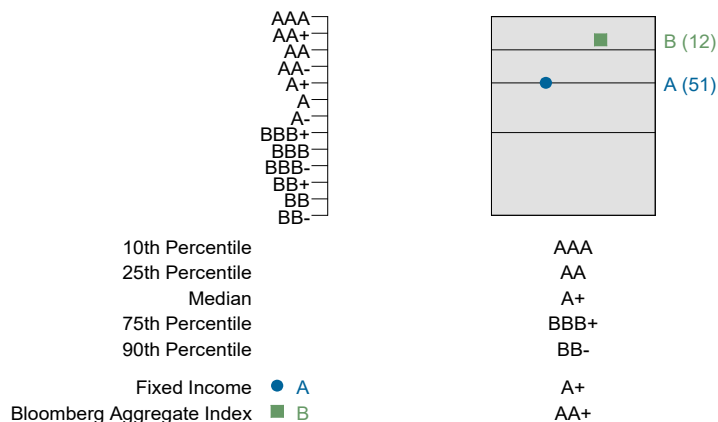
Fixed Income Composite



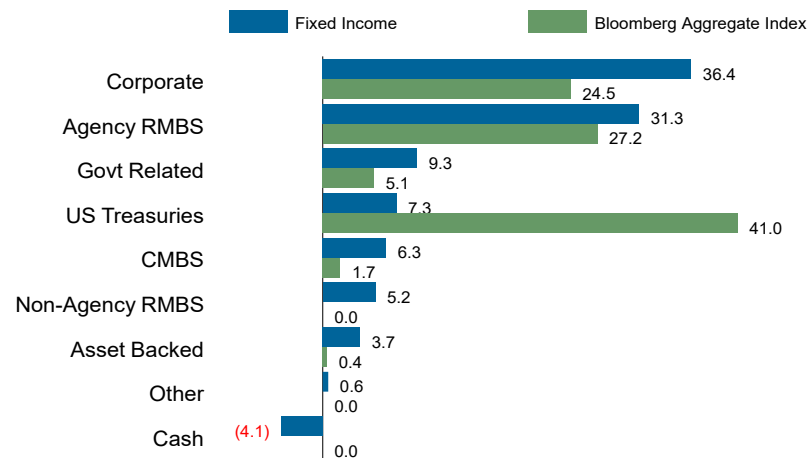
Portfolio Characteristics as of March 31, 2023



Quality Rating as of March 31, 2023 Total Domestic Fixed Income Database



Sector Allocation as of March 31, 2023



Fixed Income Composite

Returns and Rankings for Periods Ended March 31, 2023

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Fixed Income - Net	3.32	(7.53)	(1.63)	0.58	1.41
Fixed Income Target	2.96	(5.49)	(2.70)	0.29	0.94
Wellington - Net	3.39	(4.76)	(1.19)	1.59	2.14
Bloomberg Aggregate Index	2.96	(4.78)	(2.77)	0.91	1.36
Ranking vs. Core Plus Fixed Income	30	36	69	32	44
Western Asset - Net	3.55	(3.51)	1.38	2.14	2.27
Western Asset Blended Benchmark	2.96	(3.48)	(0.18)	1.52	1.69

Returns and Rankings for Calendar Years

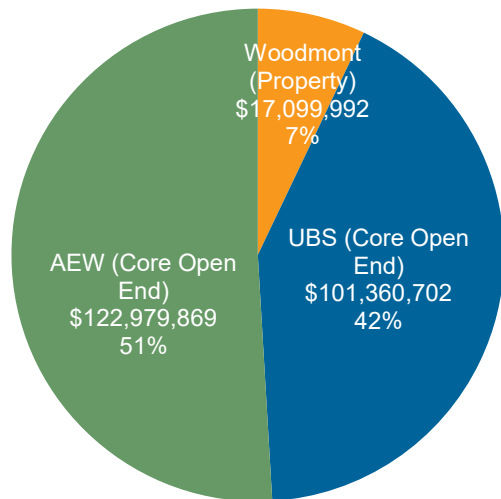
	1 Qtr. 2023	2022	2021	2020	2019	2018
Fixed Income - Net	3.32	(15.56)	(2.50)	11.47	8.60	(0.34)
Fixed Income Target	2.96	(13.58)	(2.79)	8.08	8.21	(0.19)
Wellington - Net	3.39	(13.68)	(0.71)	9.93	9.95	(0.39)
Bloomberg Aggregate Index	2.96	(13.01)	(1.54)	7.51	8.72	0.01
Ranking vs. Core Plus Fixed Income	30	63	64	26	43	43
Western Asset - Net	3.55	(11.71)	(0.43)	10.03	9.82	(0.35)
Western Asset Blended Benchmark	2.96	(11.01)	(1.03)	7.08	9.52	0.01

- The Fixed Income composite outperformed the benchmark during the quarter but trailed over the last year. Performance over the last year still includes the Colchester Global and Western Asset Intermediate Credit portfolios (transitioned in 4Q22).
 - Wellington: investment grade credit and high yield allocations contributed to relative returns.
 - Western Asset: emerging markets and high yield allocations contributed to performance.

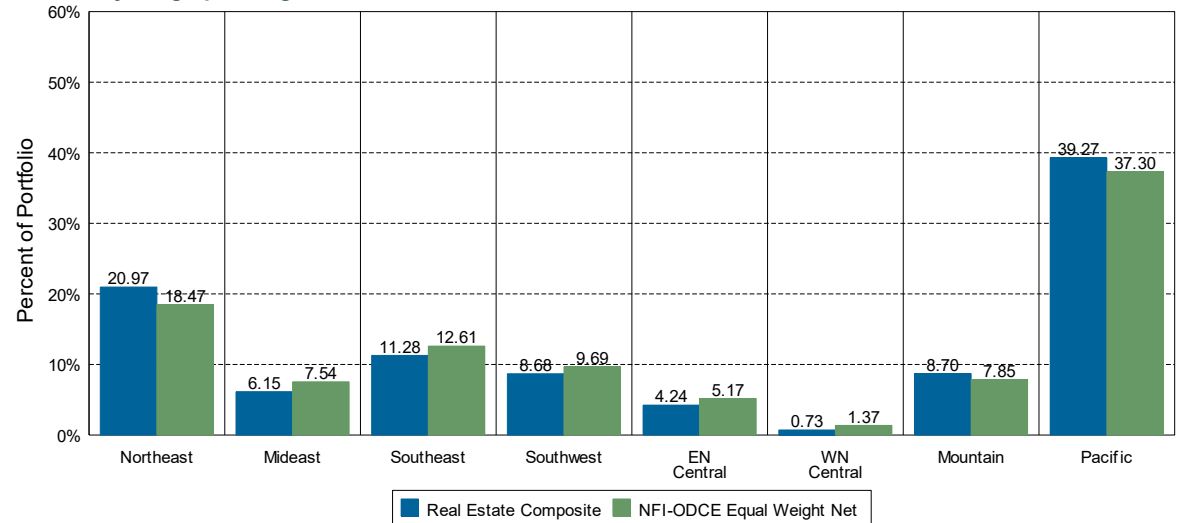
Fixed Income Target is comprised of 100% Bloomberg Aggregate Index until March 2014, 50% Bloomberg Aggregate Index, 25% Bloomberg Intermediate Credit Index, and 25% FTSE World Government Bond Index until November 2022, and 100% Bloomberg Index thereafter.

Western Asset Blended Benchmark is comprised of the Bloomberg US Aggregate Index until March 2014, the Bloomberg US Intermediate Credit Index to 11/6/2022, and the Bloomberg US Aggregate Index thereafter.

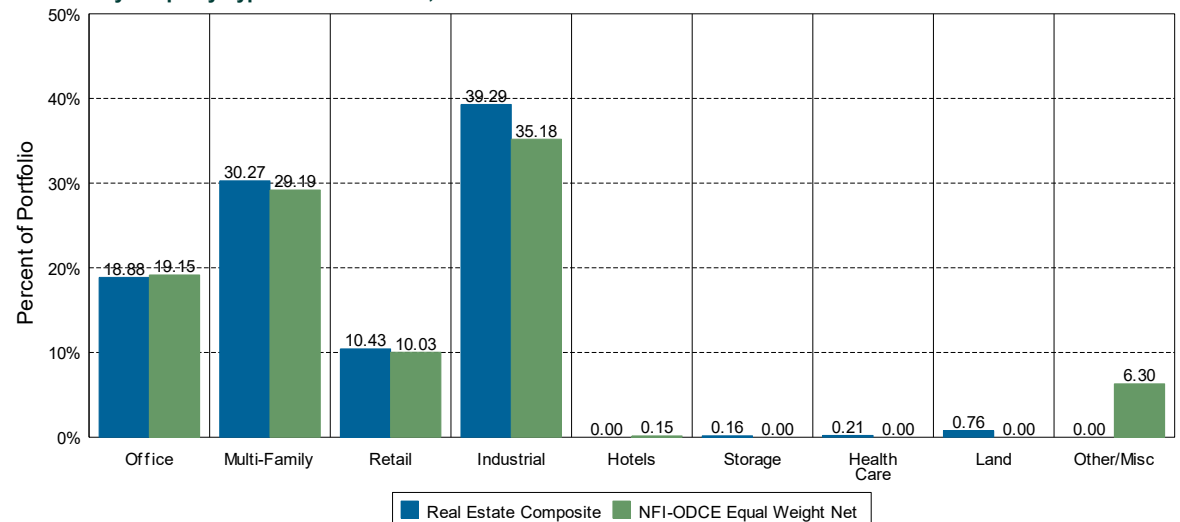
Real Estate Composite



Diversification by Geographic Region as of March 31, 2023



Diversification by Property Type as of March 31, 2023



Real Estate Composite

Returns and Rankings for Periods Ended March 31, 2023

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Real Estate - Net	(5.37)	(6.24)	4.46	3.75	8.38
Real Estate Target	(3.50)	(3.69)	8.17	7.13	8.76
AEW Core Property Trust - Net	(3.79)	(4.04)	8.49	6.97	8.31
NFI-ODCE Equal Wt Net Index	(3.50)	(3.69)	8.17	7.13	8.82
Ranking vs. Core Open End Funds	84	78	49	71	72
UBS Trumbull Property Fund - Net	(7.20)	(8.92)	2.33	1.72	5.15
NFI-ODCE Equal Wt Net Index	(3.50)	(3.69)	8.17	7.13	8.82
Ranking vs. Core Open End Funds	96	95	92	96	95

Returns and Rankings for Calendar Years

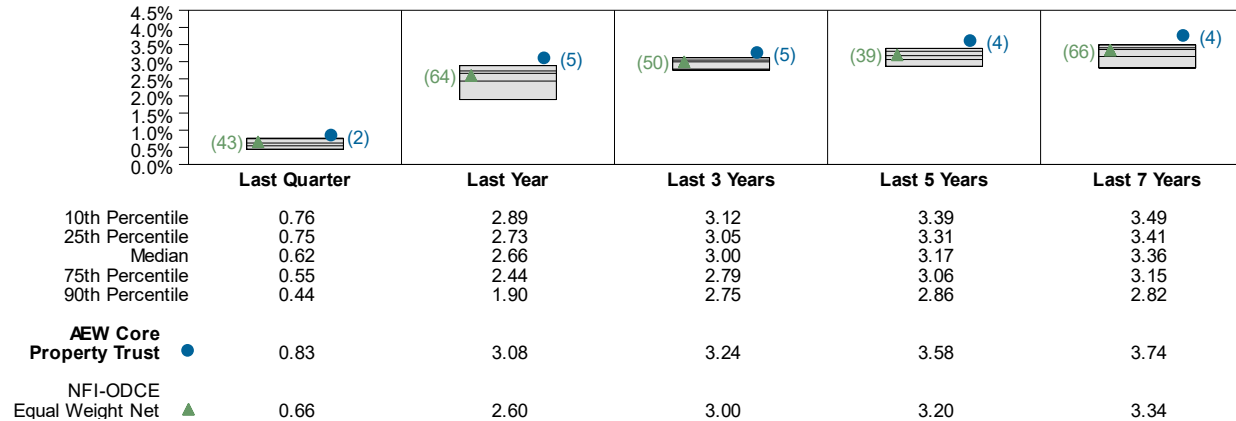
	1 Qtr. 2023	2022	2021	2020	2019	2018
Real Estate - Net	(5.37)	6.20	16.16	(2.29)	0.64	6.46
Real Estate Target	(3.50)	7.56	21.88	0.75	5.18	7.30
AEW Core Property Trust - Net	(3.79)	7.95	21.00	0.57	5.29	6.77
NFI-ODCE Equal Wt Net Index	(3.50)	7.56	21.88	0.75	5.18	7.30
Ranking vs. Core Open End Funds	84	54	59	66	71	76
UBS Trumbull Property Fund - Net	(7.20)	5.21	15.41	(4.68)	(2.88)	6.12
NFI-ODCE Equal Wt Net Index	(3.50)	7.56	21.88	0.75	5.18	7.30
Ranking vs. Core Open End Funds	96	82	89	96	96	89

- The AEW Core Property Trust's current leverage is 26% (NFI-ODCE leverage: 22.7%).
 - All sectors produced negative returns for AEW during the quarter.
- The UBS Trumbull Property Fund's current leverage is 20%.
 - During the quarter, retail produced positive returns, but all other sectors were negative.

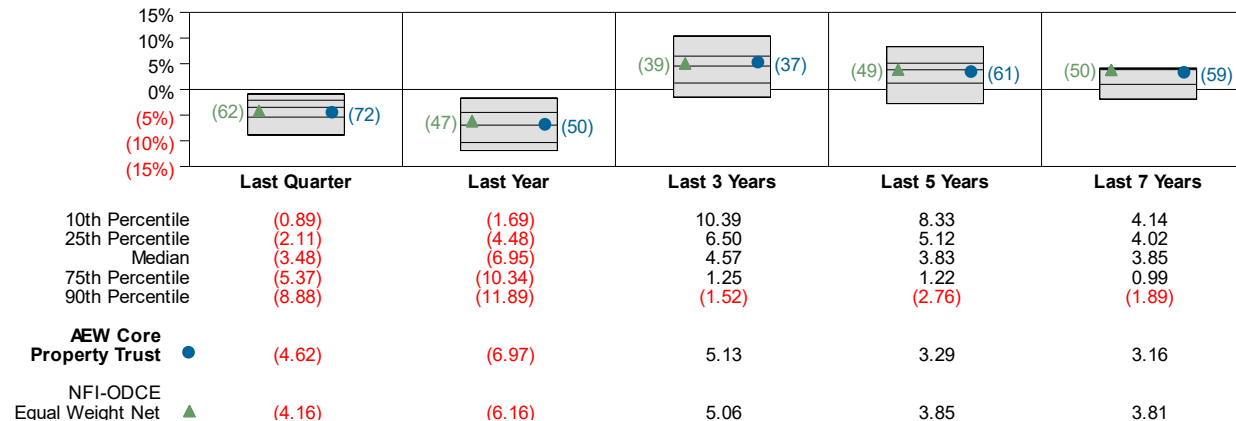
The Real Estate Target is comprised of the NCREIF Classic Index through 12/31/2004, NCREIF Total Property Index through 12/31/2014, and the NFI-ODCE Equal Weight Net thereafter.

AEW Income and Appreciation Returns

Income Rankings vs Callan Real Estate ODCE Periods ended March 31, 2023

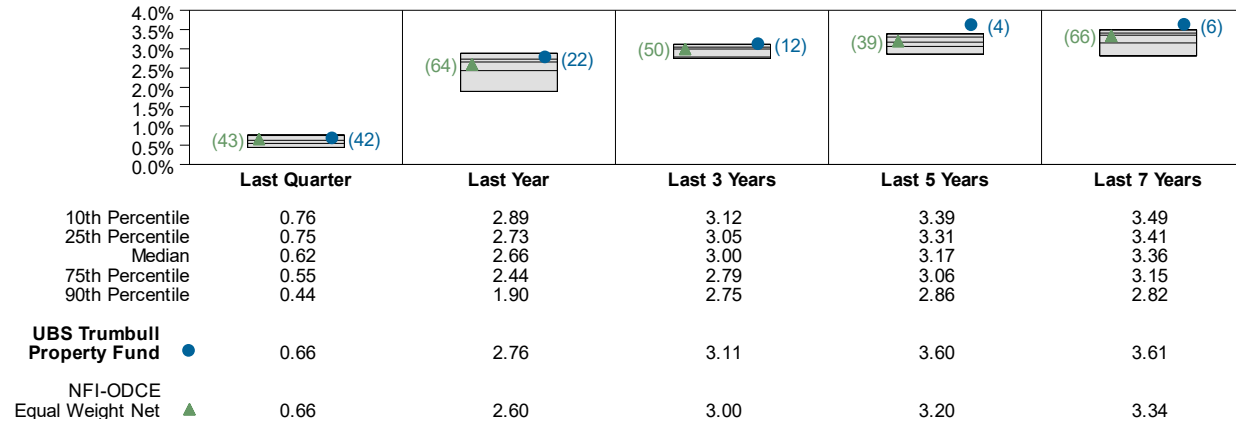


Appreciation Rankings vs Callan Real Estate ODCE Periods ended March 31, 2023

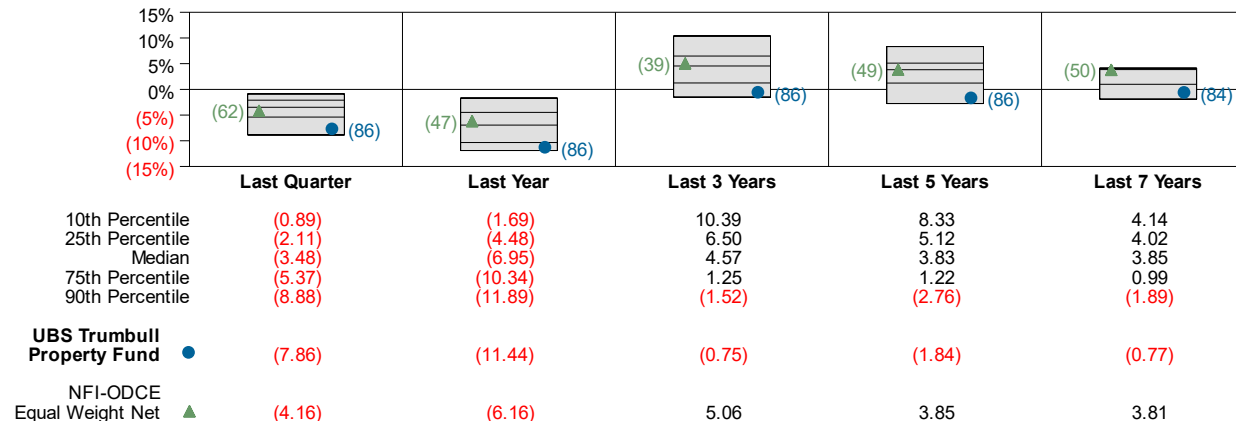


UBS Income and Appreciation Returns

Income Rankings vs Callan Real Estate ODCE Periods ended March 31, 2023



Appreciation Rankings vs Callan Real Estate ODCE Periods ended March 31, 2023



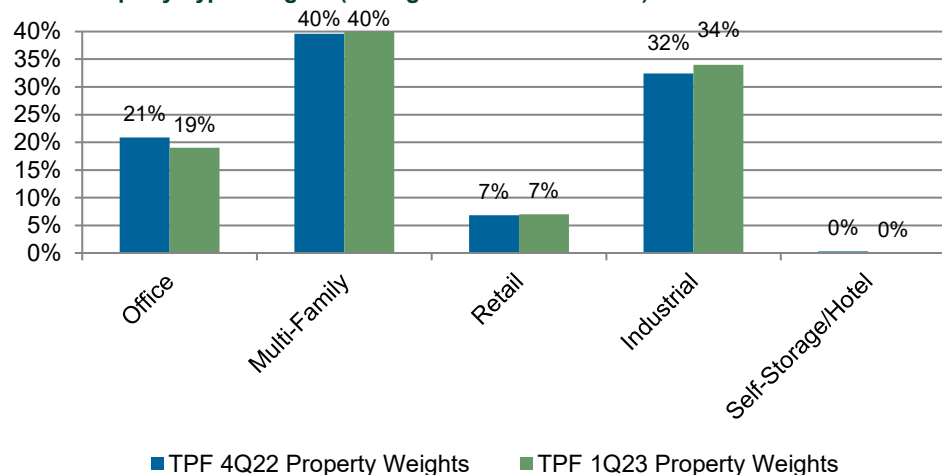
UBS Trumbull Property Fund Snapshot

As of March 31, 2023

As of 1Q 2023

Gross Asset Value	\$15.7B
Net Asset Value	\$12.4B
Leverage	20.0%
Number of Investments	141
Number of Investors	439
Redemption Queue	\$6.5 billion
1Q23 Redemption Queue Payout	\$0 million
Contribution Queue	\$0 million

Property Type Weights (Change from Prior Quarter)



- The Fund has a current redemption pool of \$6.5 billion. The Fund did not make a 1Q 2023 redemption payment in April 2023. In 2022, the Fund paid out a total of \$1.85 billion, compared to the initial target for 2022 redemption payments of \$2.5 billion. The Non-Strategic Asset portfolio began with 44 properties and now has five assets representing 2% of the total fund remaining. Subsequent to quarter end, one apartment and one retail asset were sold out of the non-strategic portfolio.
- In September 2019, the fund announced investors would have a choice between two fee incentives: Loyalty Incentive (discounted fees of 15% over 3 years or 25% over 4 years) and Top-up Incentive (\$0 base fee on additional dollars deposited). In January 2023, UBS announced they are extending these programs.
 - In 2019, MCERA elected for the 4 year/25% discount loyalty incentive on approximately \$100 million NAV (effective January 1, 2020). In 2023, MCERA again elected for the 4 year/25% discount loyalty incentive on the total NAV effective January 1, 2024.

NFI-ODCE Funds - Net of Fee Returns

As of March 31, 2023

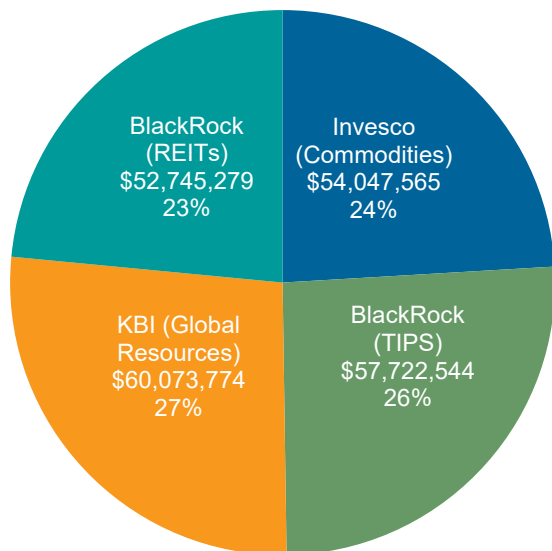
Fund Name	Last Quarter	Last Year	Last 3 Years	Last 5 Years
AEW Core Property Trust	-3.77%	-3.98%	8.58%	7.05%
AFL-CIO Building Investment Trust	-8.03%	-14.47%	-0.39%	1.45%
ARA Core Property Fund	-3.51%	-3.44%	7.75%	7.08%
ASB Allegiance Real Estate Fund	-5.72%	-3.88%	5.65%	5.30%
Bailard Real Estate Fund	-1.99%	3.84%	11.18%	11.04%
Barings Core Property Fund	-3.77%	-7.52%	5.05%	5.52%
BentallGreenOak BGO Diversified	-2.55%	-0.48%	8.45%	7.37%
BlackRock U.S. Core Property Fund	-4.00%	-2.79%	7.87%	7.18%
CBRE U.S. Core Partners LP	-1.21%	-4.65%	12.74%	10.77%
CIM Urban Income Investments	-3.39%	-3.71%	7.26%	7.84%
Clarion Lion Property Fund	-5.27%	-3.53%	8.17%	7.69%
DWS RREEF America REIT II	-5.66%	-4.33%	8.01%	7.29%
GWL U.S. Property Fund L.P.	-1.93%	-3.49%	9.49%	7.75%
Heitman America Real Estate Trust	-3.71%	-3.14%	9.73%	6.56%
Intercontinental U.S. Real Estate Investment Fund	-3.76%	-2.05%	7.86%	7.69%
Invesco Core Real Estate USA	-4.16%	-3.68%	5.84%	6.19%
J.P. Morgan Strategic Property Fund	-3.24%	-5.66%	5.97%	5.50%
LaSalle US Property Fund	-3.28%	-4.27%	8.90%	7.49%
MetLife Core Property Fund	-3.02%	-2.03%	10.11%	8.83%
Morgan Stanley Prime Property Fund	-1.24%	-2.06%	8.61%	7.70%
NYL Madison Core Property Fund	-3.01%	0.09%	11.59%	9.58%
PGIM PRISA	-1.81%	-2.55%	7.93%	7.24%
Principal U.S. Core Property	-3.18%	-6.03%	7.46%	7.00%
Stockbridge Smart Markets Fund	-2.01%	-3.10%	10.81%	9.18%
TA Realty	-0.67%	-0.02%	13.33%	11.32%
UBS Trumbull Property Fund	-7.22%	-9.00%	2.28%	1.70%

NFI-ODCE Funds - Gross of Fee All Sector Returns

As of March 31, 2023

Fund	Retail 1Q 2023	Apartment 1Q 2023	Industrial 1Q 2023	Office 1Q 2023
AEW	-0.33%	-3.24%	-0.35%	-6.46%
AFL-CIO	-4.36%	-9.41%	-1.78%	-13.14%
ARA	-0.62%	-2.75%	-0.35%	-7.32%
ASB	-2.36%	-4.28%	-1.58%	-6.75%
Bailard	-0.57%	-2.41%	1.63%	-8.08%
Barings	0.41%	-2.90%	-6.03%	-3.58%
BGO	-6.60%	-2.44%	0.25%	-3.36%
BlackRock	-0.33%	-2.42%	-1.10%	-5.80%
CBRE	0.97%	-0.48%	-0.70%	-0.79%
CIM Group	-0.37%	-0.60%	2.84%	-7.16%
Clarion	-2.08%	-3.46%	-2.74%	-7.10%
DWS	-0.88%	-3.32%	-2.72%	-12.92%
Everwest	3.37%	-0.69%	-0.65%	-6.85%
Heitman	-1.04%	-3.69%	-1.77%	-4.97%
Intercontinental	1.05%	-3.06%	-3.06%	-3.14%
Invesco	0.52%	-2.87%	-7.28%	-5.14%
JP Morgan	1.38%	-1.28%	-2.52%	-3.91%
MetLife	0.17%	-2.09%	-0.50%	-3.94%
MSIM	-1.21%	0.33%	0.48%	-3.10%
NYLIM	1.92%	-2.78%	-0.23%	-3.15%
PGIM	1.36%	-1.98%	0.15%	-3.26%
Principal	-0.21%	-1.89%	0.78%	-3.47%
Stockbridge	-0.54%	-1.44%	-1.80%	-1.37%
TA Realty	0.18%	-0.13%	0.73%	-5.34%
UBS	1.30%	-4.76%	-3.46%	-19.63%

Real Assets Composite



- The BlackRock TIPS and REITs Funds are passive.
- The Invesco Balanced Risk Commodities Fund has been underweight to natural gas. This underweight has helped the last few quarters as natural gas has declined 51%.
- KBI handily outperformed the index with the energy efficiency and water infrastructure segments driving returns.

Returns and Rankings for Periods Ended March 31, 2023

	Last Quarter	Last Year	Last 3 Years	Last 5 Years
Real Assets - Net	2.75	(8.82)	16.59	7.06
Real Assets Target	0.29	(11.10)	15.55	5.83
BlackRock TIPS Index Fund - Net	3.53	(6.06)	1.84	3.01
Bloomberg US TIPS Index	3.34	(6.06)	1.75	2.94
Ranking vs. Real Returns Database	12	35	47	29
BlackRock REIT Index Fund - Net	2.76	(21.08)	11.21	4.60
S&P Dow Jones US Select REIT	2.77	(20.98)	11.32	4.66
Ranking vs. Real Estate Mutual Funds	43	68	25	74
Invesco Commodity Fund - Net	(1.68)	(6.56)	22.83	5.28
Bloomberg Commodity Index	(5.36)	(12.49)	20.82	5.36
Ranking vs. Commodities Funds	10	6	40	63
KBI Global Resources Fund - Net	6.29	(2.78)	28.12	11.72
S&P Global Natural Resources Index	0.41	(5.62)	26.86	7.11

Returns and Rankings Calendar Years

	1 Qtr. 2023	2022	2021	2020
Real Assets - Net	2.75	(9.41)	23.96	11.08
Real Assets Target	0.29	(3.52)	25.60	0.57
BlackRock TIPS Index Fund - Net	3.53	(11.96)	5.92	11.17
Bloomberg US TIPS Index	3.34	(11.85)	5.96	10.99
Ranking vs. Real Returns Database	12	76	41	18
BlackRock REIT Index Fund - Net	2.76	(26.08)	45.80	(11.21)
S&P Dow Jones US Select REIT Index	2.77	(25.96)	45.91	(11.20)
Ranking vs. Real Estate Mutual Funds	43	50	17	96
Invesco Commodity Fund - Net	(1.68)	9.00	19.68	7.58
Bloomberg Commodity Index	(5.36)	16.09	27.11	(3.12)
Ranking vs. Commodities Funds	10	83	87	1
KBI Global Resources Fund - Net	6.29	(7.85)	24.08	29.17
S&P Global Natural Resources Index	0.41	9.59	24.40	(0.05)

The Real Assets Target is comprised of 25% Bloomberg US TIPS Index, 25% Bloomberg Commodity Index, 25% S&P Dow Jones US Select REIT Index, and 25% S&P Global Natural Resources Index.

The KBI Custom Benchmark consists of 1/3 each: S-Network Global Water Index, Wilderhill New Energy Global Innovation Index, and Dax Global Agribusiness Index.

Private Equity Portfolio (as of 12/31/22)

- 91% Paid-In through 12/31/22.
- When ranked against the Thomson-Cambridge Private Equity Database, MCERA is ranked in the second quartile for Total Value to Paid-In (TVPI) basis.
- The total portfolio is well diversified by vintage year and investment type.

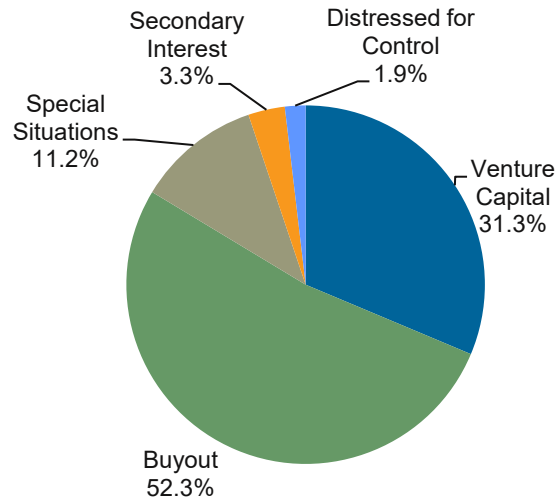
	December 31, 2022	Quarter Change	September 30, 2022
Summary			
Vintage Years	16 in 2008-2023		16 in 2008-2023
# Total Partnerships	533	3	530
# Active Partnerships	510	9	501
# Liquidated Partnerships	23	2	21
Changes in Value			
Capital Commitments	\$450,000,000	-	\$450,000,000
Paid-In Capital	\$409,665,531	\$3,582,686	\$406,082,845
Uncalled Capital	\$55,646,927	\$(3,238,623)	\$58,885,550
% Paid-In	91.04%	0.80%	90.24%
Distributed Capital	\$460,209,877	\$10,662,556	\$449,547,321
Net Asset Value	\$354,755,692	\$(10,104,916)	\$364,860,608
Total Realized and Unrealized Value	\$814,965,569	\$557,640	\$814,407,929
Ratios and Performance			
Distributions to Paid-In Capital (DPI)	1.12x	0.02x	1.11x
Residual Value to Paid-In Capital (RVPI)	0.87x	(0.03)x	0.90x
Total Value to Paid-In Capital (TVPI)	1.99x	(0.02)x	2.01x
Quartile Ranking	2nd		2nd
Net IRR	15.49%	(0.33%)	15.82%
Additional Performance Metrics			
Distribution Rate, as % of Beginning NAV		2.92%	
Unrealized Gain/(Loss), Dollars		\$(3,025,046)	
Unrealized Gain/(Loss), %		(0.83%)	

Quartile Rankings against the All Private Equity, All Regions Refinitiv/Cambridge Database.

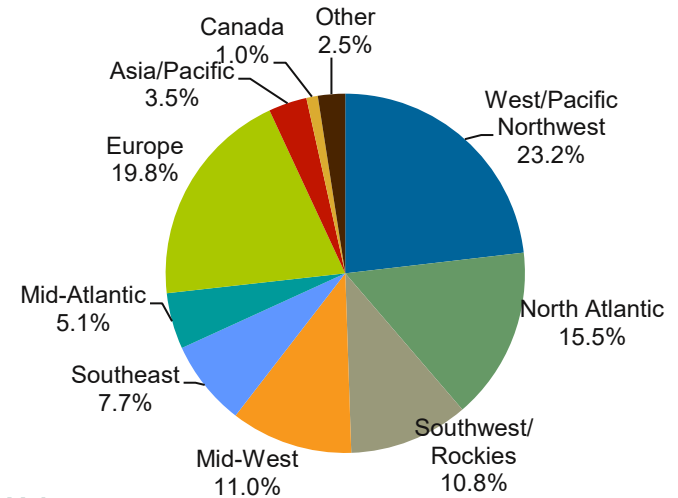
Uncalled capital above does not reflect currency fluctuations for Pathway's investments in foreign partnerships.

Private Equity Portfolio Exposure

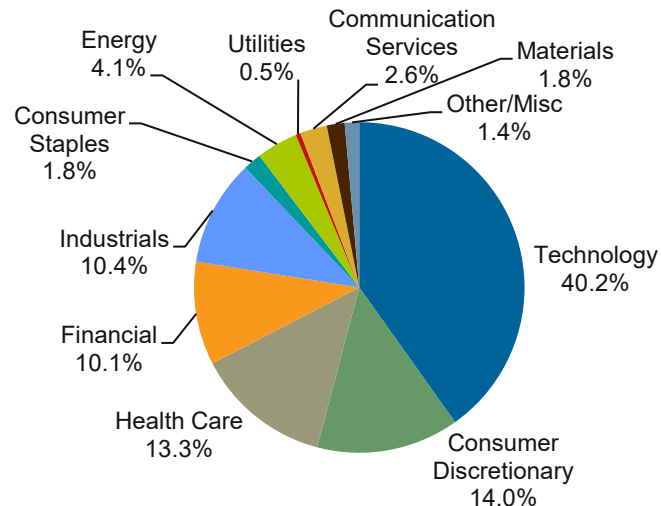
Strategy Mix by Net Asset Value



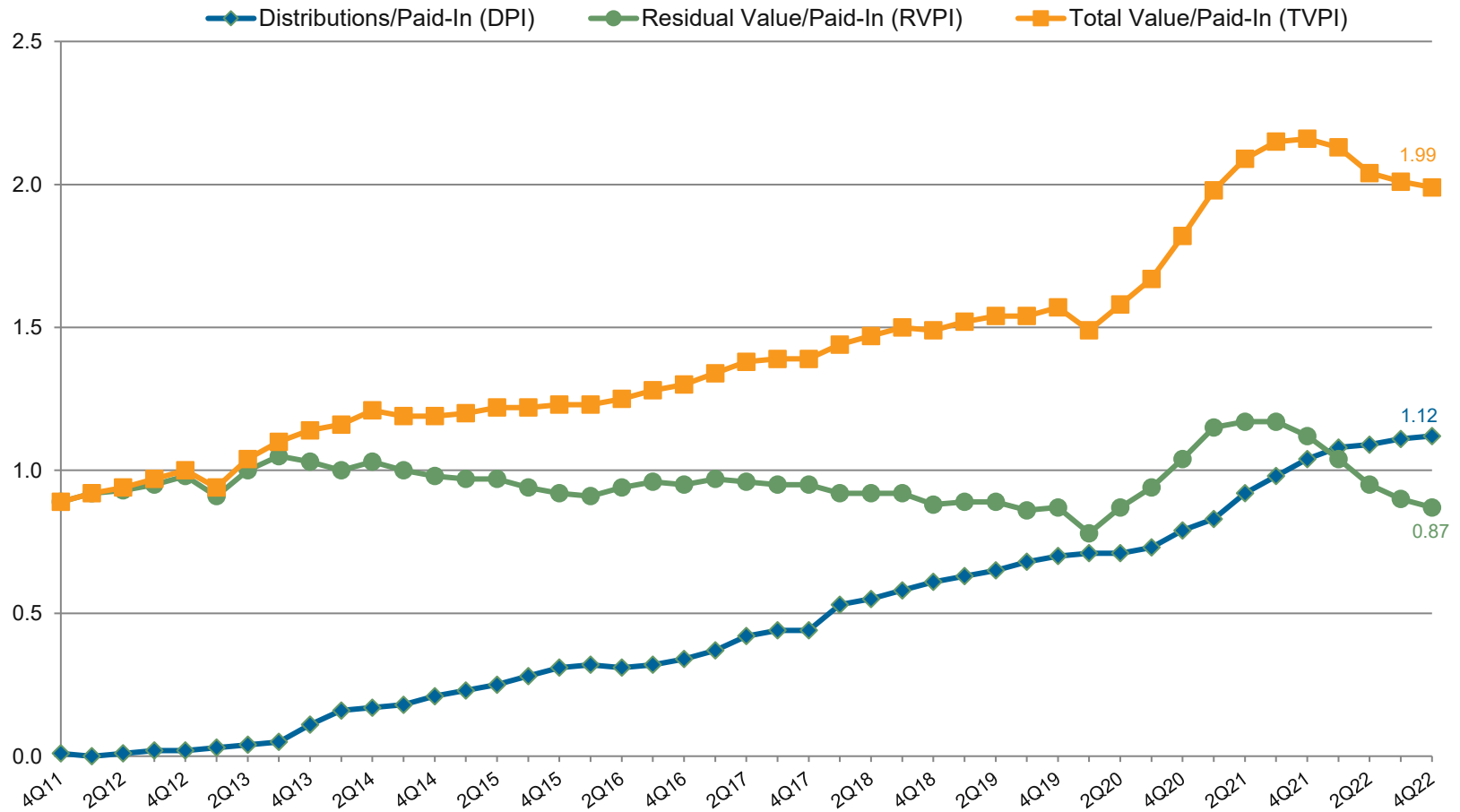
Geographic Mix by Net Asset Value



Industry Mix by Net Asset Value



Private Equity Ratios – Changes Over Time



Opportunistic Portfolio

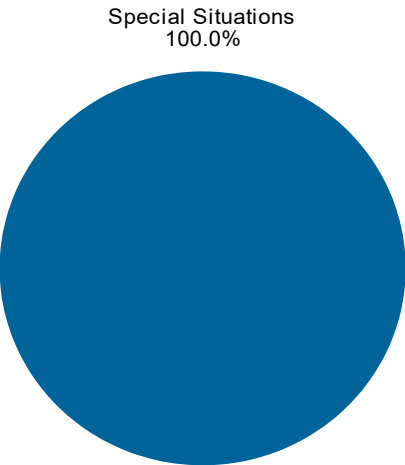
- 62% Paid-In through 3/31/23.
- The total portfolio is diversified by industry type and geographic location.

	March 31, 2023	Quarter Change	December 31, 2022
Summary			
Vintage Year	2020		2020
# Total Partnerships	193	-	193
# Active Partnerships	193	-	193
# Liquidated Partnerships	0	-	0
Changes in Value			
Capital Commitments	\$100,000,000	-	\$100,000,000
Paid-In Capital	\$62,071,145	-	\$62,071,145
Uncalled Capital	\$39,757,764	-	\$39,757,764
% Paid-In	62.07%	-	62.07%
Distributed Capital	\$9,788,256	\$6,303,946	\$3,484,310
Net Asset Value	\$58,158,129	\$(4,293,833)	\$62,451,963
Total Realized and Unrealized Value	\$67,946,385	\$2,010,113	\$65,936,273
Ratios and Performance			
Distributions to Paid-In Capital (DPI)	0.16x	0.10x	0.06x
Residual Value to Paid-In Capital (RVPI)	0.94x	(0.07)x	1.01x
Total Value to Paid-In Capital (TVPI)	1.09x	0.03x	1.06x
Quartile Ranking	3rd		3rd
Net IRR	6.52%	1.39%	5.14%
Additional Performance Metrics			
Distribution Rate, as % of Beginning NAV		10.09%	
Unrealized Gain/(Loss), Dollars		\$2,010,113	
Unrealized Gain/(Loss), %		3.22%	

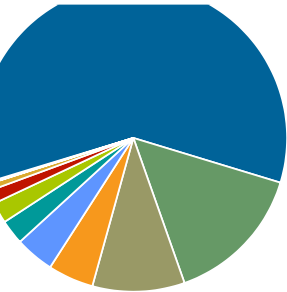
Quartile rankings against the 2020 vintage Control Oriented Distressed and Credit Opportunities Refinitiv/Cambridge Database.

Opportunistic Portfolio Exposure

Strategy Mix by Net Asset Value

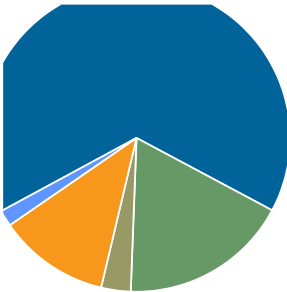


Industry Mix by Net Asset Value



Other/Misc	59.51%
Financial	14.88%
Consumer Discretionary	9.70%
Energy	4.76%
Communication Services	4.08%
Materials	2.58%
Utilities	2.19%
Industrials	1.40%
Consumer Staples	0.69%
Technology	0.20%

Geographic Mix by Net Asset Value



United States	65.73%
Europe	17.75%
Other	3.15%
Asia/Pacific	11.66%
Latin America & Caribbean	1.71%

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Appendix

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended March 31, 2023. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Returns for Periods Ended March 31, 2023

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Domestic Equity	6.54%	(7.04%)	20.70%	10.48%	11.66%
Equity Benchmark	7.18%	(8.58%)	18.48%	10.45%	11.73%
SSGA Russell 1000 Index (1)	7.43%	(8.34%)	17.66%	10.65%	11.99%
Blended Benchmark*	7.46%	(8.39%)	17.62%	10.63%	11.96%
DFA Small Cap Core	3.38%	(4.94%)	24.90%	-	-
Russell 2000 Index	2.74%	(11.61%)	17.51%	4.71%	8.04%
International Equity	8.88%	(2.23%)	10.75%	2.46%	5.11%
International Benchmark	6.56%	(5.84%)	12.20%	2.35%	4.28%
Morgan Stanley Value	11.14%	3.03%	12.69%	4.19%	5.30%
Artisan Partners Growth	8.77%	0.70%	10.35%	4.44%	5.80%
MSCI EAFE Index	8.47%	(1.38%)	12.99%	3.52%	5.00%
TimesSquare Intl Small Cap	9.40%	(5.93%)	10.05%	-	-
MSCI EAFE Small Cap Index	4.92%	(9.83%)	12.07%	0.87%	5.86%
FIAM Select Emerging Equity	5.38%	(9.22%)	-	-	-
MSCI Emerging Markets Index	3.96%	(10.70%)	7.83%	(0.91%)	2.00%
Fixed Income	3.36%	(7.36%)	(1.42%)	0.84%	1.61%
Fixed Income Benchmark	2.96%	(5.47%)	(2.69%)	0.29%	0.95%
Wellington Core Plus	3.44%	(4.59%)	(1.00%)	1.79%	2.27%
Bloomberg Aggregate Index	2.96%	(4.78%)	(2.77%)	0.91%	1.36%
Western Asset Core Plus	3.60%	(3.29%)	1.61%	2.40%	2.44%
Blended Benchmark**	2.96%	(3.48%)	(0.18%)	1.52%	1.69%
Real Assets	(1.48%)	(6.86%)	9.79%	5.72%	8.90%
Real Asset Benchmark	(1.73%)	(6.69%)	11.90%	6.92%	7.83%
Private Real Estate	(5.18%)	(5.56%)	5.20%	4.56%	9.18%
NFI-ODCE Equal Weight Net	(3.50%)	(3.69%)	8.17%	7.13%	8.82%
UBS Trumbull Property Fund	(7.04%)	(8.34%)	2.98%	2.47%	6.02%
AEW Core Property Trust	(3.58%)	(3.20%)	9.46%	7.97%	9.31%
Public Real Assets	2.86%	(8.45%)	17.07%	7.50%	-
Public Real Assets Benchmark	0.29%	(11.10%)	15.55%	5.83%	-
BlackRock TIPS Index Fund	3.54%	(6.03%)	1.87%	3.04%	-
Bloomberg US TIPS Index	3.34%	(6.06%)	1.75%	2.94%	1.49%
BlackRock REIT Index Fund	2.78%	(21.03%)	11.28%	4.66%	-
DJ US Select REIT Index	2.77%	(20.98%)	11.32%	4.66%	5.31%
Invesco Commodity Fund	(1.51%)	(5.95%)	23.67%	6.01%	-
Bloomberg Commodity Index	(5.36%)	(12.49%)	20.82%	5.36%	(1.72%)
KBI Global Resources Fund	6.51%	(1.95%)	29.20%	12.67%	-
S&P Global Natural Resources Index	0.41%	(5.62%)	26.86%	7.11%	4.44%
Opportunistic****	3.76%	3.87%	-	-	-
S&P/LSTA Leveraged Loans Index + 250	3.79%	5.23%	11.10%	6.21%	6.31%
Private Equity****	0.00%	(10.07%)	24.86%	18.63%	17.64%
Total Fund	4.19%	(6.07%)	12.53%	7.00%	8.41%
Total Fund - NOF	4.11%	(6.43%)	12.09%	6.54%	7.92%
Total Fund - IRR	4.23%	(6.14%)	12.87%	6.89%	8.41%
Total Fund Target	4.16%	(7.04%)	10.98%	5.84%	7.01%
Public Fund Sponsor Database	4.55%	(4.78%)	11.15%	6.22%	7.22%

The Total Fund/Plan IRR Calculation is based upon best available data.

(1) MCERA changed mandates from the S&P 500 Index to Russell 1000 Index on 7/31/2021.

*Blended Benchmark = S&P 500 Index through 7/31/21 and Russell 1000 Index thereafter.

**Blended Benchmark = Bloomberg Aggregate through 2/10/14 and Bloomberg U.S. Intermediate Credit until 11/06/2022.

Currently the Bloomberg Aggregate.

****Current market values are those of the prior quarter, adjusted for capital calls and distributions of current quarter.

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended June 30. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

	6/2022- 3/2023	FY 2022	FY 2021	FY 2020	FY 2019
Domestic Equity	10.60%	(13.33%)	50.89%	2.37%	6.41%
Equity Benchmark	9.75%	(13.87%)	44.16%	6.53%	8.98%
SSGA Russell 1000 Index (1)	9.95%	(12.71%)	40.82%	7.46%	10.44%
Blended Benchmark*	9.93%	(12.78%)	40.79%	7.51%	10.42%
DFA Small Cap Core	10.38%	(14.63%)	67.48%	(11.40%)	-
Russell 2000 Index	6.75%	(25.20%)	62.03%	(6.63%)	(3.31%)
International Equity	12.77%	(22.45%)	30.86%	(1.79%)	3.12%
International Benchmark	9.85%	(19.86%)	37.18%	(4.74%)	0.26%
Morgan Stanley Value	16.14%	(18.82%)	28.11%	0.59%	0.95%
Artisan Partners Growth	16.85%	(21.86%)	25.10%	0.73%	9.99%
MSCI EAFE Index	15.36%	(17.77%)	32.35%	(5.13%)	1.08%
TimesSquare Intl Small Cap	14.26%	(30.98%)	37.57%	(2.24%)	-
MSCI EAFE Small Cap Index	9.54%	(23.98%)	40.98%	(3.52%)	(6.35%)
FIAM Select Emerging Equity	2.16%	-	-	-	-
MSCI Emerging Markets Index	0.84%	(25.28%)	40.90%	(3.39%)	1.22%
Fixed Income	(1.47%)	(11.73%)	2.95%	9.35%	7.68%
Fixed Income Benchmark	0.01%	(11.61%)	0.60%	7.29%	7.36%
Wellington Core Plus	1.52%	(11.52%)	1.97%	10.09%	8.35%
Bloomberg Aggregate Index	(0.09%)	(10.29%)	(0.33%)	8.74%	7.87%
Western Asset Core Plus	1.12%	(9.79%)	4.87%	8.18%	8.94%
Blended Benchmark**	0.16%	(8.96%)	2.25%	6.97%	8.23%
Colchester Global	-	(16.40%)	4.53%	4.09%	5.88%
FTSE World Govt Bond Index	(0.71%)	(16.77%)	0.76%	4.60%	5.48%
Real Assets	(3.96%)	11.77%	18.88%	(1.63%)	3.10%
Real Asset Benchmark	(3.80%)	17.17%	19.87%	(3.21%)	3.80%
Private Real Estate	(8.65%)	23.78%	4.20%	0.99%	3.08%
NFI-ODCE Equal Weight Net	(7.70%)	28.90%	7.97%	1.70%	5.99%
UBS Trumbull Property Fund	(11.86%)	24.51%	1.99%	(0.86%)	0.04%
AEW Core Property Trust	(6.32%)	28.42%	8.95%	2.35%	6.92%
Public Real Assets	1.63%	(0.30%)	41.18%	(4.91%)	3.14%
Public Real Assets Benchmark	0.32%	4.24%	34.55%	(10.20%)	0.91%
BlackRock TIPS Index Fund	0.07%	(5.12%)	6.64%	8.43%	4.95%
Bloomberg US TIPS Index	0.02%	(5.14%)	6.51%	8.28%	4.84%
BlackRock REIT Index Fund	(3.60%)	(6.41%)	39.95%	(17.64%)	9.81%
DJ US Select REIT Index	(3.51%)	(6.41%)	39.98%	(17.71%)	9.75%
Invesco Commodity Fund	(3.71%)	16.15%	49.69%	(13.42%)	(7.44%)
Bloomberg Commodity Index	(7.23%)	24.27%	45.61%	(17.38%)	(6.75%)
KBI Global Resources Fund	14.54%	(7.55%)	66.04%	(0.81%)	4.65%
S&P Global Natural Resources Index	11.98%	2.27%	48.36%	(17.36%)	(4.63%)
Opportunistic****	9.27%	(1.84%)	-	-	-
S&P/LSTA Leveraged Loans Index + 250	9.33%	(0.27%)	14.15%	0.66%	6.48%
Private Equity****	(3.04%)	0.56%	75.28%	11.53%	16.55%
Total Fund	4.33%	(9.60%)	32.69%	3.74%	6.39%
Total Fund - NOF	4.04%	(9.95%)	32.15%	3.26%	5.88%
Total Fund - IRR	4.36%	(9.41%)	32.67%	3.25%	6.05%
Total Fund Target	4.99%	(10.52%)	27.89%	3.29%	5.99%
Public Fund Sponsor Database	5.83%	(9.51%)	27.01%	3.02%	6.19%

The Total Fund/Plan IRR Calculation is based upon best available data.

(1) MCERA changed mandates from the S&P 500 Index to Russell 1000 Index on 7/31/2021.

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Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended June 30. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

	FY 2018	FY 2017	FY 2016	FY 2015	FY 2014
Domestic Equity	16.87%	19.56%	(0.59%)	7.52%	24.38%
Equity Benchmark	14.78%	18.51%	2.14%	7.29%	25.22%
SSGA Russell 1000 Index (1)	14.40%	17.97%	4.08%	7.42%	24.60%
Blended Benchmark*	14.37%	17.90%	3.99%	7.42%	24.61%
Russell 2000 Index	17.57%	24.60%	(6.73%)	6.49%	23.64%
DFA Value	15.64%	22.72%	(5.31%)	3.50%	25.92%
Russell 2000 Value Index	13.10%	24.86%	(2.58%)	0.78%	22.54%
Russell 2000 Growth Index	21.86%	24.40%	(10.75%)	12.34%	24.73%
International Equity	8.05%	18.41%	(6.92%)	(1.97%)	22.56%
International Benchmark	7.75%	20.43%	(9.61%)	(4.97%)	22.28%
Morgan Stanley Value	6.61%	17.87%	(7.41%)	(2.55%)	20.84%
Artisan Partners Growth	8.77%	14.74%	(10.76%)	0.60%	23.64%
MSCI EAFE Index	6.84%	20.27%	(10.16%)	(4.22%)	23.57%
MSCI EAFE Small Cap Index	12.45%	23.18%	(3.67%)	(0.77%)	29.08%
Parametric Emerging	4.27%	18.89%	(7.65%)	(9.22%)	17.38%
MSCI Emerging Markets Index	8.20%	23.75%	(12.05%)	(5.12%)	14.31%
FIAM International Small Cap	12.26%	23.14%	(2.74%)	1.65%	27.34%
S&P EPAC Sm Cp (Net)	11.27%	22.97%	(4.77%)	0.33%	29.15%
Fixed Income	0.31%	1.28%	6.68%	(0.57%)	6.02%
Fixed Income Benchmark	0.21%	(0.83%)	7.05%	(1.02%)	4.36%
Wellington Core Plus	0.34%	2.40%	6.05%	1.79%	6.31%
Bloomberg Aggregate Index	(0.40%)	(0.31%)	6.00%	1.86%	4.37%
Western Asset Core Plus	(0.02%)	3.11%	5.09%	1.44%	5.22%
Blended Benchmark**	(0.36%)	1.36%	4.97%	1.51%	4.18%
Colchester Global	1.47%	(0.81%)	8.29%	(7.61%)	-
FTSE World Govt Bond Index	1.90%	(4.14%)	11.26%	(9.02%)	6.85%
Real Assets	7.29%	4.10%	13.68%	22.79%	13.73%
Real Asset Benchmark	8.58%	4.30%	6.79%	13.15%	11.21%
Private Real Estate	7.60%	6.55%	19.84%	22.84%	13.73%
NFI-ODCE Equal Weight Net	7.68%	7.23%	11.24%	13.64%	11.37%
NCREIF Total Index	7.19%	6.97%	10.64%	12.98%	11.21%
UBS Trumbull Property Fund	7.70%	5.60%	10.71%	12.57%	10.39%
AEW Core Property Trust	8.16%	7.77%	11.61%	13.22%	11.85%
AEW Partners V Fund	163.23%	27.65%	35.97%	44.36%	27.76%
RREEF America REIT III	-	(15.40%)	(9.18%)	24.69%	27.46%
Public Real Assets	6.80%	0.39%	1.14%	-	-
Public Real Assets Benchmark	9.51%	1.01%	1.32%	-	-
BlackRock TIPS Index Fund	2.30%	(0.38%)	4.35%	-	-
Bloomberg US TIPS Index	2.11%	(0.63%)	4.35%	(1.73%)	4.44%
BlackRock REIT Index Fund	5.26%	(1.79%)	24.06%	-	-
DJ US Select REIT Index	4.23%	(2.43%)	22.85%	5.21%	13.27%
Invesco Commodity Fund	12.37%	(8.47%)	(12.99%)	-	-
Bloomberg Commodity Index	7.35%	(6.50%)	(13.32%)	(23.71%)	8.21%
KBI Global Resources Fund	7.54%	13.43%	(9.16%)	-	-
S&P Global Natural Resources Index	24.07%	14.70%	(9.47%)	(18.09%)	21.06%
Private Equity****	20.80%	20.43%	9.29%	10.45%	25.66%
Total Fund	10.29%	12.88%	2.68%	5.52%	19.22%
Total Fund - NOF	9.74%	12.34%	2.19%	5.02%	18.65%
Total Fund - IRR	10.18%	12.81%	2.56%	5.54%	19.19%
Total Fund Target	8.67%	12.20%	0.98%	2.91%	18.09%
Public Fund Sponsor Database	8.35%	12.41%	0.79%	3.28%	16.49%
6.75% Actuarial Assumption	6.75%	6.75%	6.75%	6.75%	6.75%

The Total Fund/Plan IRR Calculation is based upon best available data.

(1) MCERA changed mandates from the S&P 500 Index to Russell 1000 Index on 7/31/2021.

*Blended Benchmark = S&P 500 Index through 7/31/21 and Russell 1000 Index thereafter.

**Blended Benchmark = Bloomberg Aggregate through 2/10/14 and Bloomberg U.S. Intermediate Credit until 11/06/2022.

Currently the Bloomberg Aggregate.

****Current market values are those of the prior quarter, adjusted for capital calls and distributions of current quarter.

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

	12/2022- 3/2023	2022	2021	2020	2019
Domestic Equity	6.54%	(17.34%)	29.89%	17.98%	28.93%
Equity Benchmark	7.18%	(19.21%)	25.66%	20.89%	31.02%
SSGA Russell 1000 Index (1)	7.43%	(19.04%)	27.19%	18.36%	31.46%
Blended Benchmark*	7.46%	(19.13%)	27.15%	18.40%	31.49%
DFA Small Cap Core	3.38%	(12.68%)	29.64%	12.12%	22.19%
Russell 2000 Index	2.74%	(20.44%)	14.82%	19.96%	25.52%
International Equity	8.88%	(18.76%)	6.03%	11.57%	24.44%
International Benchmark	6.56%	(16.58%)	8.53%	11.12%	21.63%
Morgan Stanley Value	11.14%	(13.12%)	5.28%	12.65%	21.63%
Artisan Partners Growth	8.77%	(18.42%)	9.46%	8.96%	30.65%
MSCI EAFE Index	8.47%	(14.45%)	11.26%	7.82%	22.01%
TimesSquare Intl Small Cap	9.40%	(26.19%)	3.05%	14.84%	-
MSCI EAFE Small Cap Index	4.92%	(21.39%)	10.10%	12.34%	24.96%
FIAM Select Emerging Equity	5.38%	(23.44%)	-	-	-
MSCI Emerging Markets Index	3.96%	(20.09%)	(2.54%)	18.31%	18.44%
Parametric Emerging	-	-	-	4.84%	13.48%
MSCI Emerging Markets Index	3.96%	(20.09%)	(2.54%)	18.31%	18.44%
Fixed Income	3.36%	(15.39%)	(2.30%)	11.95%	8.87%
Fixed Income Benchmark	2.96%	(13.56%)	(2.79%)	8.10%	8.21%
Wellington Core Plus	3.44%	(13.52%)	(0.53%)	10.14%	10.16%
Bloomberg Aggregate Index	2.96%	(13.01%)	(1.54%)	7.51%	8.72%
Western Asset Core Plus	3.60%	(11.50%)	(0.19%)	10.28%	10.11%
Blended Benchmark**	2.96%	(11.01%)	(1.03%)	7.08%	9.52%
Colchester Global	-	-	(7.62%)	11.58%	8.02%
FTSE World Govt Bond Index	3.51%	(18.26%)	(6.97%)	10.11%	5.90%
Real Assets	(1.48%)	(0.91%)	20.34%	3.70%	7.26%
Real Asset Benchmark	(1.73%)	2.81%	23.70%	1.67%	9.32%
Private Real Estate	(5.18%)	6.93%	16.98%	(1.50%)	1.54%
NFI-ODCE Equal Weight Net	(3.50%)	7.56%	21.88%	0.75%	5.18%
UBS Trumbull Property Fund	(7.04%)	5.86%	16.14%	(4.03%)	(1.91%)
AEW Core Property Trust	(3.58%)	8.90%	22.10%	1.68%	6.24%
Public Real Assets	2.86%	(9.04%)	24.48%	11.56%	15.95%
Public Real Assets Benchmark	0.29%	(3.52%)	25.60%	0.57%	14.08%
BlackRock TIPS Index Fund	3.54%	(11.93%)	5.95%	11.20%	8.53%
Bloomberg US TIPS Index	3.34%	(11.85%)	5.96%	10.99%	8.43%
BlackRock REIT Index Fund	2.78%	(26.03%)	45.89%	(11.16%)	23.15%
DJ US Select REIT Index	2.77%	(25.96%)	45.91%	(11.20%)	23.10%
Invesco Commodity Fund	(1.51%)	9.71%	20.51%	8.33%	6.23%
Bloomberg Commodity Index	(5.36%)	16.09%	27.11%	(3.12%)	7.69%
KBI Global Resources Fund	6.51%	(7.06%)	25.13%	30.27%	25.87%
S&P Global Natural Resources Index	0.41%	9.59%	24.40%	(0.05%)	16.41%
Opportunistic****	3.76%	(0.04%)	14.20%	-	-
S&P/LSTA Leveraged Loans Index + 250	3.79%	1.91%	7.70%	5.79%	11.14%
Private Equity****	0.00%	(12.00%)	46.43%	38.01%	18.53%
Total Fund	4.19%	(13.75%)	17.47%	15.66%	18.73%
Total Fund - NOF	4.11%	(14.09%)	17.01%	15.16%	18.19%
Total Fund - IRR	4.23%	(13.79%)	17.28%	14.94%	18.66%
Total Fund Target	4.16%	(13.84%)	14.12%	13.68%	19.97%
Public Fund Sponsor Database	4.55%	(12.68%)	13.92%	12.13%	18.27%

The Total Fund/Plan IRR Calculation is based upon best available data.

(1) MCERA changed mandates from the S&P 500 Index to Russell 1000 Index on 7/31/2021.

*Blended Benchmark = S&P 500 Index through 7/31/21 and Russell 1000 Index thereafter.

**Blended Benchmark = Bloomberg Aggregate through 2/10/14 and Bloomberg U.S. Intermediate Credit until 11/06/2022.

Currently the Bloomberg Aggregate.

****Current market values are those of the prior quarter, adjusted for capital calls and distributions of current quarter.

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

	2018	2017	2016	2015	2014
Domestic Equity	(5.14%)	20.85%	13.35%	(0.72%)	11.02%
Equity Benchmark	(5.24%)	21.13%	12.74%	0.48%	12.56%
SSGA Russell 1000 Index (1)	(4.36%)	21.86%	12.03%	1.44%	13.69%
Blended Benchmark*	(4.38%)	21.83%	11.96%	1.38%	13.69%
Russell 2000 Index	(11.01%)	14.65%	21.31%	(4.41%)	4.89%
Columbus Circle Growth	-	29.80%	3.13%	(6.66%)	4.51%
Russell 2000 Growth Index	(9.31%)	22.17%	11.32%	(1.38%)	5.60%
DFA Value	-	7.68%	29.11%	(6.06%)	5.04%
Russell 2000 Value Index	(12.86%)	7.84%	31.74%	(7.47%)	4.22%
International Equity	(12.81%)	29.99%	0.23%	(0.66%)	(3.27%)
International Benchmark	(14.76%)	27.81%	4.41%	(4.60%)	(3.89%)
Morgan Stanley Value	(12.86%)	26.28%	(0.82%)	1.17%	(5.10%)
Artisan Partners Growth	(9.79%)	32.52%	(8.53%)	(2.61%)	0.24%
MSCI EAFE Index	(13.79%)	25.03%	1.00%	(0.81%)	(4.90%)
MSCI EAFE Small Cap	(17.89%)	33.01%	2.18%	9.59%	(4.95%)
Parametric Emerging	(12.89%)	28.61%	13.85%	(15.12%)	(3.00%)
MSCI Emerging Markets Index	(14.57%)	37.28%	11.19%	(14.92%)	(2.19%)
FIAM International Small Cap	(17.56%)	32.96%	1.13%	12.54%	(5.75%)
S&P EPAC Sm Cp (Nt)	(18.58%)	33.47%	1.34%	8.58%	(3.43%)
Fixed Income	(0.09%)	5.43%	4.55%	(0.61%)	4.46%
Fixed Income Benchmark	(0.17%)	4.55%	2.70%	(0.39%)	3.74%
Wellington Core Plus	(0.17%)	5.11%	4.93%	0.30%	6.40%
Bloomberg Aggregate Index	0.01%	3.54%	2.65%	0.55%	5.97%
Western Asset Core Plus	(0.07%)	4.43%	5.21%	1.25%	4.56%
Blended Benchmark**	0.01%	3.67%	3.68%	0.90%	4.45%
Colchester Global	(0.47%)	8.68%	4.33%	(5.52%)	-
FTSE World Govt Bond Index	(0.84%)	7.49%	1.60%	(3.57%)	(0.48%)
Real Assets	1.01%	7.91%	9.37%	18.37%	15.55%
Real Asset Benchmark	0.40%	7.42%	11.18%	5.44%	11.82%
Private Real Estate	7.30%	6.57%	8.11%	29.00%	15.55%
NFI-ODCE Equal Weight Net	7.30%	6.92%	8.36%	14.18%	11.42%
NCREIF Total Index	6.72%	6.96%	7.97%	13.33%	11.82%
UBS Trumbull Property Fund	6.97%	6.29%	7.21%	12.93%	11.56%
AEW Core Property Trust	7.73%	7.96%	8.49%	13.76%	11.31%
AEW Partners V Fund	9.77%	165.19%	31.70%	45.46%	46.59%
RREEF America REIT III	-	(5.95%)	(15.70%)	8.52%	27.93%
Public Real Assets	(7.59%)	10.03%	11.14%	-	-
Public Real Assets Benchmark	(7.27%)	7.95%	14.37%	-	-
BlackRock TIPS Index Fund	(1.12%)	3.24%	4.84%	-	-
Bloomberg US TIPS Index	(1.26%)	3.01%	4.68%	(1.44%)	3.64%
BlackRock REIT Index Fund	(4.16%)	6.10%	8.62%	-	-
DJ US Select REIT Index	(4.22%)	3.76%	6.68%	4.48%	32.00%
MSCI REIT Index	(4.57%)	5.07%	8.60%	2.52%	30.38%
Invesco Commodity Fund	(10.99%)	5.91%	11.05%	-	-
Bloomberg Commodity Index	(11.25%)	1.70%	11.77%	(24.66%)	(17.01%)
KBI Global Resources Fund	(13.86%)	25.66%	21.17%	-	-
S&P Global Natural Resources Index	(13.08%)	21.98%	31.45%	(24.50%)	(10.18%)
Private Equity****	16.44%	22.16%	13.53%	11.24%	14.19%
Total Fund	(2.68%)	17.41%	8.10%	2.73%	7.10%
Total Fund - NOF	(3.16%)	16.81%	7.61%	2.24%	6.59%
Total Fund -IRR	(2.90%)	17.29%	8.11%	2.70%	7.02%
Total Fund Target	(5.49%)	16.68%	8.13%	(0.34%)	6.28%
Public Fund Sponsor Database	(3.99%)	15.66%	7.62%	0.02%	6.19%

The Total Fund/Plan IRR Calculation is based upon best available data.

(1) MCERA changed mandates from the S&P 500 Index to Russell 1000 Index on 7/31/2021.

*Blended Benchmark = S&P 500 Index through 7/31/21 and Russell 1000 Index thereafter.

**Blended Benchmark = Bloomberg Aggregate through 2/10/14 and Bloomberg U.S. Intermediate Credit until 11/06/2022.

Currently the Bloomberg Aggregate.

****Current market values are those of the prior quarter, adjusted for capital calls and distributions of current quarter.

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended March 31, 2023. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Returns for Periods Ended March 31, 2023

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Net-of-Fees					
Domestic Equity	6.51%	(7.14%)	20.57%	10.33%	11.47%
Equity Benchmark	7.18%	(8.58%)	18.48%	10.45%	11.73%
SSGA Russell 1000 Index (1)	7.42%	(8.36%)	17.64%	10.63%	11.96%
Blended Benchmark*	7.46%	(8.39%)	17.62%	10.63%	11.96%
DFA Small Cap Core	3.30%	(5.26%)	24.49%	-	-
Russell 2000 Index	2.74%	(11.61%)	17.51%	4.71%	8.04%
International Equity	8.71%	(2.85%)	10.01%	1.74%	4.32%
International Benchmark	6.56%	(5.84%)	12.20%	2.35%	4.28%
Morgan Stanley Value	10.99%	2.45%	12.05%	3.58%	4.65%
Artisan Partners Growth	8.56%	(0.10%)	9.48%	3.61%	4.86%
MSCI EAFE Index	8.47%	(1.38%)	12.99%	3.52%	5.00%
TimesSquare Intl Small Cap	9.18%	(6.73%)	9.12%	-	-
MSCI EAFE Small Cap Index	4.92%	(9.83%)	12.07%	0.87%	5.86%
FIAM Select Emerging Equity	5.24%	(9.74%)	-	-	-
MSCI Emerging Markets Index	3.96%	(10.70%)	7.83%	(0.91%)	2.00%
Fixed Income	3.32%	(7.54%)	(1.63%)	0.58%	1.34%
Fixed Income Benchmark	2.96%	(5.47%)	(2.69%)	0.29%	0.95%
Wellington Core Plus	3.39%	(4.76%)	(1.19%)	1.59%	2.06%
Bloomberg Aggregate Index	2.96%	(4.78%)	(2.77%)	0.91%	1.36%
Western Asset Core Plus	3.55%	(3.51%)	1.38%	2.14%	2.16%
Blended Benchmark**	2.96%	(3.48%)	(0.18%)	1.52%	1.69%
Real Assets	(1.63%)	(7.41%)	9.16%	5.07%	8.25%
Real Assets Benchmark	(1.73%)	(6.69%)	11.90%	6.92%	7.83%
Private Real Estate	(5.37%)	(6.24%)	4.46%	3.75%	8.38%
NFI-ODCE Equal Weight Net	(3.50%)	(3.69%)	8.17%	7.13%	8.82%
UBS Trumbull Property Fund	(7.20%)	(8.92%)	2.33%	1.72%	5.15%
AEW Core Property Trust	(3.79%)	(4.04%)	8.49%	6.97%	8.31%
Public Real Assets	2.75%	(8.82%)	16.59%	7.06%	-
Public Real Assets Benchmark	0.29%	(11.10%)	15.55%	5.83%	-
BlackRock TIPS Index Fund	3.53%	(6.06%)	1.84%	3.01%	-
Bloomberg US TIPS Index	3.34%	(6.06%)	1.75%	2.94%	1.49%
BlackRock REIT Index Fund	2.76%	(21.08%)	11.21%	4.60%	-
DJ US Select REIT Index	2.77%	(20.98%)	11.32%	4.66%	5.31%
Invesco Commodity Fund	(1.68%)	(6.56%)	22.83%	5.28%	-
Bloomberg Commodity Index	(5.36%)	(12.49%)	20.82%	5.36%	(1.72%)
KBI Global Resources Fund	6.29%	(2.78%)	28.12%	11.72%	-
S&P Global Natural Resources Index	0.41%	(5.62%)	26.86%	7.11%	4.44%
Private Equity****	0.00%	(10.49%)	24.13%	17.77%	16.37%
Opportunistic****	3.39%	2.38%	-	-	-
S&P/LSTA Leveraged Loans Index + 250	3.79%	5.23%	11.10%	6.21%	6.31%
Total Fund	4.11%	(6.43%)	12.09%	6.54%	7.92%
Total Fund Target	4.16%	(7.04%)	10.98%	5.84%	7.01%
Public Fund Sponsor Database	4.55%	(4.78%)	11.15%	6.22%	7.22%

* Current Quarter Target = 32.0% Russell 3000 Index, 23.0% Blmbg Aggregate, 22.0% MSCI ACWI xUS IMI, 8.0% NCREIF NFI-ODCE Eq Wt Net, 4.8% Russell 3000 Index (Lagged), 3.2% MSCI ACWI ex US IMI (Lagged), 1.8% Blmbg Commodity TR Idx, 1.8% S&P DJ US Select REIT, 1.8% Blmbg TIPS, 1.8% S&P Global Nat Res and 0.0%.

(1) MCERA changed mandates from the S&P 500 Index to Russell 1000 Index on 7/31/2021.

**Blended Benchmark = S&P 500 Index through 7/31/21 and Russell 1000 Index thereafter.

***Blended Benchmark = Bloomberg Aggregate through 2/10/14 and Bloomberg U.S. Intermediate Credit until 11/06/2022.

Currently the Bloomberg Aggregate.

****Current market values are those of the prior quarter, adjusted for capital calls and distributions of current quarter.

Total Private Equity Period Ended December 31, 2022

Private Equity Allocation Overview

The MCERA private equity portfolio was initiated in 2008 and currently utilizes two gatekeepers, Abbott Capital ("Abbott") and Pathway Capital Management ("Pathway"), to help the plan reach its desired private equity allocation of 8%. MCERA is invested in fund-of-funds vehicles.

	December 31, 2022	Quarter Change	September 30, 2022
Summary			
Vintage Years	16 in 2008-2023		16 in 2008-2023
# Total Partnerships	533	3	530
# Active Partnerships	510	9	501
# Liquidated Partnerships	23	2	21
Changes in Value			
Capital Commitments	\$450,000,000	-	\$450,000,000
Paid-In Capital	\$409,665,531	\$3,582,686	\$406,082,845
Uncalled Capital	\$55,646,927	\$(3,238,623)	\$58,885,550
% Paid-In	91.04%	0.80%	90.24%
Distributed Capital	\$460,209,877	\$10,662,556	\$449,547,321
Net Asset Value	\$354,755,692	\$(10,104,916)	\$364,860,608
Total Realized and Unrealized Value	\$814,965,569	\$557,640	\$814,407,929
Ratios and Performance			
Distributions to Paid-In Capital (DPI)	1.12x	0.02x	1.11x
Residual Value to Paid-In Capital (RVPI)	0.87x	(0.03)x	0.90x
Total Value to Paid-In Capital (TVPI)	1.99x	(0.02)x	2.01x
Quartile Ranking	2 nd		2 nd
Net IRR	15.49%	(0.33%)	15.82%
Additional Performance Metrics			
Distribution Rate, as % of Beginning NAV		2.92%	
Unrealized Gain/(Loss), Dollars		\$(3,025,046)	
Unrealized Gain/(Loss), %		(0.83%)	

Quartile rankings against the All Private Equity, All Regions Refinitiv/Cambridge Database.

Uncalled capital above does not reflect currency fluctuations for Pathway's investments in foreign partnerships.

**Total Private Equity
Private Equity Investment Portfolio
Quarterly Changes in Market Value**

	Beg. of Period Market	+ Capital Contri- butions	+ Accounting Income	- Mgmt. Fees	+ Appre- ciation	- Dist. of Income & Real. Gains	- Return of Capital	- Dist. of Recallable Capital	= End of Period Market
03/2009	0	5,576,029	(301,039)	558,424	(601,309)	0	0	0	4,115,257
06/2009	4,115,257	225,000	10,022	331,250	(68,925)	0	0	0	3,950,104
09/2009	3,950,104	1,378,170	(15,473)	384,375	(17,463)	0	0	0	4,910,963
12/2009	4,910,963	2,035,317	(45,633)	384,375	310,671	0	0	0	6,826,943
03/2010	6,826,943	1,405,159	(55,406)	384,375	(106,094)	0	0	0	7,686,227
06/2010	7,686,227	1,225,000	(19,095)	384,375	(194,748)	0	0	0	8,313,009
09/2010	8,313,009	2,838,797	(50,285)	437,500	411,669	0	0	0	11,075,690
12/2010	11,075,690	3,963,461	(110,914)	437,500	702,011	0	0	0	15,192,748
03/2011	15,192,748	2,841,483	(127,842)	437,500	678,042	0	0	0	18,146,931
06/2011	18,146,931	3,960,774	(184,803)	437,500	996,942	133,755	69,654	0	22,278,935
09/2011	22,278,935	8,609,888	(265,645)	437,500	(195,435)	0	0	0	29,990,243
12/2011	29,990,243	5,617,948	(175,287)	437,500	529,487	0	0	0	35,524,891
03/2012	35,524,891	6,281,785	(173,125)	437,500	2,079,434	0	0	0	43,275,485
06/2012	43,275,485	7,874,800	(113,404)	437,500	692,927	331,545	120,080	0	50,840,683
09/2012	50,840,683	4,558,302	(303,027)	437,500	1,105,721	260,954	215,388	0	55,287,837
12/2012	55,287,837	11,334,284	(41,281)	437,500	2,708,758	288,586	275,607	0	68,287,905
03/2013	68,287,905	5,239,926	(120,123)	437,500	1,886,426	78,940	352,195	0	74,425,498
06/2013	74,425,498	5,359,974	(147,222)	562,625	2,651,531	514,376	515,820	0	80,696,960
09/2013	80,696,960	7,768,201	(226,298)	516,250	5,890,689	1,165,176	355,990	0	92,092,136
12/2013	92,092,136	12,666,640	(54,150)	516,250	6,253,270	2,563,309	3,688,605	0	104,189,733
03/2014	104,189,733	10,332,824	(204,331)	516,250	4,125,365	6,302,488	654,422	0	110,970,431
06/2014	110,970,431	10,513,534	75,076	516,250	7,884,217	746,471	2,533,431	0	125,647,106
09/2014	125,647,106	17,570,746	10,500	516,250	1,245,992	1,615,602	2,925,053	0	139,417,439
12/2014	139,417,439	10,833,803	(61,667)	558,750	3,052,494	1,112,031	4,049,723	0	147,521,565
03/2015	147,521,565	8,258,958	22,076	558,750	3,915,369	1,080,998	4,004,433	0	154,073,787
06/2015	154,073,787	12,520,450	(252,087)	558,750	7,392,432	2,171,067	5,209,351	0	165,795,414
09/2015	165,795,414	12,661,165	8,918	537,500	2,632,199	1,814,825	5,406,163	0	173,339,208
12/2015	173,339,208	10,950,390	(73,852)	636,937	3,903,312	5,200,032	3,213,356	0	179,068,733
03/2016	179,068,733	4,401,061	(299,677)	558,750	2,098,534	2,134,279	907,141	0	181,668,481
06/2016	181,668,481	10,147,317	56,802	609,194	7,769,013	384,668	1,481,019	0	197,166,732
09/2016	197,166,732	5,546,669	152,647	590,069	7,907,843	2,838,197	1,439,821	0	206,405,805
12/2016	206,405,805	9,423,568	(337,203)	609,852	7,772,643	2,210,046	6,703,806	0	213,741,108
03/2017	213,741,108	6,022,843	(48,597)	624,466	11,538,200	2,611,810	5,480,599	0	222,536,678
06/2017	222,536,678	5,942,110	39,415	654,116	13,245,307	4,835,151	9,091,365	59,349	227,123,528
09/2017	227,123,528	16,537,410	(30,778)	637,141	9,591,347	5,248,683	7,736,243	0	239,599,440
12/2017	239,599,440	13,884,994	21,740	635,673	11,666,611	4,382,265	16,309,746	0	243,845,101
03/2018	243,845,101	7,150,727	(163,332)	643,100	10,972,723	7,403,967	3,491,705	0	250,266,447
06/2018	250,266,447	11,444,547	(144,165)	672,751	14,602,061	4,351,051	7,785,725	0	263,359,363
09/2018	263,359,363	7,431,280	(238,296)	657,497	12,294,502	4,011,337	8,778,135	0	269,399,880
12/2018	269,399,880	14,191,664	3,385,950	656,029	(1,352,804)	9,915,706	9,598,228	0	265,454,727
03/2019	265,454,727	5,829,912	(283,332)	656,246	12,966,290	5,633,889	3,667,549	0	274,009,912
06/2019	274,009,912	7,676,263	82,950	663,197	15,115,571	5,061,949	6,031,822	0	285,127,728
09/2019	285,127,728	5,716,776	(98,346)	649,492	4,630,383	3,987,114	9,749,615	0	280,990,321
12/2019	280,990,321	9,453,814	(64,183)	648,025	15,541,711	4,095,571	8,559,460	0	292,618,608
03/2020	292,618,608	5,768,820	(253,673)	631,679	(25,000,599)	1,860,850	4,697,321	0	265,943,305
06/2020	265,943,305	6,096,856	(398,568)	638,630	37,419,176	4,788,106	2,210,521	0	301,423,511
09/2020	301,423,511	8,476,454	(283,955)	626,319	36,764,232	9,123,639	3,268,060	0	333,362,224

Total Private Equity Private Equity Investment Portfolio Quarterly Changes in Market Value

	Beg. of Period Market	+ Capital Contri- butions	+ Accounting Income	- Mgmt. Fees	+ Appre- ciation	- Dist. of Income & Real. Gains	- Return of Capital	- Dist. of Recallable Capital	= End of Period Market
12/2020	333,362,224	6,410,411	440,671	624,852	59,923,839	22,255,279	1,735,582	0	375,521,433
03/2021	375,888,469	6,293,006	(8,377)	618,149	62,111,231	15,524,819	5,639,753	0	422,501,608
06/2021	422,501,608	12,581,962	302,035	618,705	53,954,874	37,342,702	7,370,019	0	444,009,053
09/2021	444,009,053	5,860,537	527,097	678,287	32,248,941	23,721,423	5,612,936	0	452,632,983
12/2021	452,632,983	8,450,393	778,528	597,445	13,192,956	25,592,278	6,012,866	0	442,852,270
03/2022	442,852,270	3,859,756	253,740	598,111	(10,474,273)	17,366,511	3,033,784	0	415,493,087
06/2022	415,493,087	3,185,692	223,305	598,667	(30,261,655)	4,544,512	2,307,378	0	381,189,872
09/2022	381,189,872	3,895,196	262,663	588,503	(9,306,076)	8,185,975	2,406,569	0	364,860,608
12/2022	364,860,608	3,582,686	308,071	579,388	(2,753,729)	3,402,515	7,260,041	0	354,755,692
	0	409,665,531	1,187,736	30,798,568	434,410,870	268,194,448	191,956,080	59,349	354,755,692

Returns

Net Since Inception IRR = 15.49%

Ratios

Capital Account = \$354,755,692

Total Value = \$814,965,569

Committed Capital = \$450,000,000

Paid In Capital = \$409,665,531

Remaining Commitment = \$55,646,927

PIC Multiple (Paid In Capital/Committed Capital) = 91.04%

Total Economic Exposure (Capital Account + Remaining Commitment) = \$410,402,619

TVPI Investment Multiple (Total Value/Paid In Capital) = 1.99x

DPI Realization Multiple (Distributions/Paid In Capital) = 1.12x

RVPI Residual Multiple (Capital Account/Paid In Capital) = 0.87x

Uncalled capital above does not reflect currency fluctuations for Pathway's investments in foreign partnerships.

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended March 31, 2023. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Returns for Periods Ended March 31, 2023

	Last Quarter	Last Year	Last 2-1/4 Years
Opportunistic**	3.39%	2.38%	6.19%
S&P/LSTA Leveraged Loans Index + 250	3.79%	5.23%	5.96%
CarVal Credit Value V	2.13%	2.18%	6.20%
Fortress Credit Opps Fund V	2.05%	1.34%	15.08%
Varde Dislocation Fund	5.11%	3.37%	4.13%

** Estimate

Performance shown is Net-of-Fee

Opportunistic Period Ended March 31, 2023

Private Equity Allocation Overview

Marin County's Private Credit portfolio started in 4Q20.

	March 31, 2023	Quarter Change	December 31, 2022
Summary			
Vintage Year	2020		2020
# Total Partnerships	193	-	193
# Active Partnerships	193	-	193
# Liquidated Partnerships	0	-	0
Changes in Value			
Capital Commitments	\$100,000,000	-	\$100,000,000
Paid-In Capital	\$62,071,145	-	\$62,071,145
Uncalled Capital	\$39,757,764	-	\$39,757,764
% Paid-In	62.07%	-	62.07%
Distributed Capital	\$9,788,256	\$6,303,946	\$3,484,310
Net Asset Value	\$58,158,129	\$(4,293,833)	\$62,451,963
Total Realized and Unrealized Value	\$67,946,385	\$2,010,113	\$65,936,273
Ratios and Performance			
Distributions to Paid-In Capital (DPI)	0.16x	0.10x	0.06x
Residual Value to Paid-In Capital (RVPI)	0.94x	(0.07)x	1.01x
Total Value to Paid-In Capital (TVPI)	1.09x	0.03x	1.06x
Quartile Ranking	3 rd		3 rd
Net IRR	6.52%	1.39%	5.14%
Additional Performance Metrics			
Distribution Rate, as % of Beginning NAV		10.09%	
Unrealized Gain/(Loss), Dollars		\$2,010,113	
Unrealized Gain/(Loss), %		3.22%	

Quartile rankings against the 2020 vintage Control Oriented Distressed and Credit Opportunities Refinitiv/Cambridge Database.

Opportunistic Private Equity Investment Portfolio Quarterly Changes in Market Value

	Beg. of Period Market	+ Capital Contri- butions	+ Accounting Income	- Mgmt. Fees	+ Appre- ciation	- Dist. of Income & Real. Gains	- Return of Capital	- Dist. of Recallable Capital	= End of Period Market
12/2020	0	10,097,955	1,856,820	53,206	(432,759)	0	0	0	11,468,811
03/2021	11,468,811	10,050,000	646,023	63,920	(25,696)	0	0	0	22,075,219
06/2021	22,075,219	6,650,000	1,596,358	169,489	96,848	0	0	0	30,248,936
09/2021	30,248,936	1,675,000	158,997	123,700	301,176	0	0	0	32,260,409
12/2021	32,260,409	6,520,495	127,546	125,634	564,673	0	386,587	0	38,960,902
03/2022	38,960,902	8,375,000	(511,420)	96,137	453,329	0	0	0	47,181,674
06/2022	47,181,674	9,790,677	(3,302,882)	186,982	696,775	0	0	1,755,954	52,423,308
09/2022	52,423,308	0	1,453,517	186,965	32,377	0	0	0	53,722,238
12/2022	53,722,238	8,912,018	1,390,869	212,303	(19,091)	0	1,341,769	0	62,451,963
03/2023	62,451,963	0	1,940,359	217,329	287,082	0	6,303,946	0	58,158,129
	0	62,071,145	5,356,189	1,435,663	1,954,714	0	8,032,302	1,755,954	58,158,129

Returns

Net Since Inception IRR = 6.52%

Ratios

Capital Account = \$58,158,129

Total Value = \$67,946,385

Committed Capital = \$100,000,000

Paid In Capital = \$62,071,145

Remaining Commitment = \$39,757,764

PIC Multiple (Paid In Capital/Committed Capital) = 62.07%

Total Economic Exposure (Capital Account + Remaining Commitment) = \$97,915,893

TVPI Investment Multiple (Total Value/Paid In Capital) = 1.09x

DPI Realization Multiple (Distributions/Paid In Capital) = 0.16x

RVPI Residual Multiple (Capital Account/Paid In Capital) = 0.94x

Based on estimated values

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