Callan



March 20, 2023

Fourth Quarter 2023 Summary Investment Presentation

Important Disclosures regarding the use of this document are included at the end of this document. These disclosures are an integral part of this document and should be considered by the user.

Jim Callahan, CFA

President

Anne Heaphy

Senior Vice President

Callan

Economic and Capital Markets Review

Equity Markets Surge in 4Q, Following Decline in 3Q

Stocks have recovered losses of 2022, bonds still have ground to make up

S&P 500 surged 11.7% in 4Q23

 Loss through first three quarters of 2022 was 23.9%; the rebound in the following five quarters brought the index back to a positive return of 1.7% over the past two years.

Fixed income recovered in 4Q

- The Bloomberg Aggregate surged 6.8% after suffering a sharp loss of 3.2% in 3Q.
- The Aggregate was on track for another negative year through 3Q; softening Fed language on rates in 4Q turned the market around.
- CPI-U: declined in 4Q compared to 3Q but is still up 3.4% year-over-year, and the index is 10% higher than it was at the start of 2022

Economy defied recession fears

GDP growth came in at 2.1% in 1Q,
 2.2% in 2Q, 4.9% in 3Q, and a very healthy 3.3% in 4Q.

Returns for Periods ended 12/31/23

	Quarter	1 Year	2 Years	5 Years	10 Years	25 Years
U.S. Equity						
Russell 3000	12.07	25.96	0.88	15.16	11.48	7.74
S&P 500	11.69	26.29	1.69	15.69	12.03	7.56
Russell 2000	14.03	16.93	-3.55	9.97	7.16	7.91
Global ex-U.S. Equity						
MSCI World ex USA	10.51	17.94	0.54	8.45	4.32	4.62
MSCI Emerging Markets	7.86	9.83	-6.32	3.69	2.66	
MSCI ACWI ex USA Small Cap	10.12	15.66	-3.79	7.89	4.88	7.28
Fixed Income						
Bloomberg Aggregate	6.82	5.53	-4.19	1.10	1.81	3.85
90-day T-Bill	1.37	5.01	3.22	1.88	1.25	1.90
Bloomberg Long Gov/Credit	13.24	7.13	-11.62	1.12	3.22	5.21
Bloomberg Global Agg ex-US	9.21	5.72	-7.29	-1.56	-0.79	2.25
Real Estate						
NCREIF Property Index	-3.02	-7.94	-1.44	4.33	6.80	8.03
FTSE Nareit Equity	16.22	13.73	-7.25	7.39	7.65	9.27
Alternatives						
HFRI Fund Weighted	3.64	7.57	1.55	7.01	4.54	6.31
Cambridge Private Equity*	-0.42	4.17	0.19	14.59	14.27	13.87
Bloomberg Commodity	-4.63	-7.91	3.40	7.23	-1.11	2.83
Gold Spot Price	11.02	13.45	6.44	10.09	5.59	8.19
Inflation - CPI-U	-0.34	3.35	4.89	4.07	2.79	2.54

^{*}Cambridge PE data as of 9/30/23.
Sources: Bloomberg, Callan, Cambridge, FTSE Russell, HFRI, MSCI, NCREIF, S&P Dow Jones Indices



U.S. Equity

Callan style group median and index returns*

Periods Ended 12/31/23

		Year		Last	Last	Last	Last	Last	Last
	Last	to	Last	3	5	10	15	20	25
Large Cap Equity	Quarter	Date	Year	Years	Years	Years	Years	Years	Years
Large Cap Core Style	11.9	26.2	26.2	10.3	15.7	11.9	14.0	10.1	8.4
Russell 3000	12.1	26.0	26.0	8.5	15.2	11.5	13.8	9.7	7.7
Russell 1000	12.0	26.5	26.5	9.0	15.5	11.8	14.0	9.8	7.7
S&P 500	11.7	26.3	26.3	10.0	15.7	12.0	14.0	9.7	7.6
Large Cap Growth Style	14.2	40.5	40.5	6.7	17.1	13.5	16.0	11.2	8.7
Russell 1000 Growth	14.2	42.7	42.7	8.9	19.5	14.9	16.7	11.3	7.8
Large Cap Value Style	10.0	13.0	13.0	11.1	12.6	9.1	12.0	9.0	8.4
Russell 1000 Value	9.5	11.5	11.5	8.9	10.9	8.4	11.1	8.0	7.1
Mid Cap Equity									
Mid Cap Core Style	11.5	15.3	15.3	7.8	13.1	9.7	14.2	10.7	11.2
Russell Midcap	12.8	17.2	17.2	5.9	12.7	9.4	13.6	9.8	9.3
Mid Cap Growth Style	11.8	20.9	20.9	0.0	13.7	10.3	14.1	10.6	10.2
Russell Midcap Growth	14.5	25.9	25.9	1.3	13.8	10.6	14.7	10.2	8.5
Mid Cap Value Style	11.4	13.5	13.5	10.9	13.5	8.8	12.9	10.0	10.8
Russell Midcap Value	12.1	12.7	12.7	8.4	11.2	8.3	12.4	9.3	9.1
Small Cap Equity									
Small Cap Core Style	12.8	17.6	17.6	6.8	12.3	8.7	13.3	9.9	11.2
Russell 2000	14.0	16.9	16.9	2.2	10.0	7.2	11.3	8.1	7.9
Small Cap Growth Style	11.1	17.9	17.9	-1.5	12.2	9.5	14.8	10.5	10.5
Russell 2000 Growth	12.7	18.7	18.7	-3.5	9.2	7.2	12.1	8.3	6.8
Small Cap Value Style	13.5	16.6	16.6	11.1	12.3	8.2	12.7	9.5	10.7
Russell 2000 Value	15.3	14.6	14.6	7.9	10.0	6.8	10.3	7.7	8.6

Periods Ended 12/31/23

	Last	Year to	Last	Last 3	Last 5	Last 10	Last 15
Smid Cap Equity	Quarter	Date	Year	Years	Years	Years	Years
Smid Cap Core Style	12.0	18.8	18.8	7.7	13.0	9.4	13.7
Russell 2500	13.4	17.4	17.4	4.2	11.7	8.4	12.7
Smid Cap Growth Style	11.8	18.5	18.5	-1.9	12.5	9.9	15.0
Russell 2500 Growth	12.6	18.9	18.9	-2.7	11.4	8.8	13.6
Smid Cap Value Style	12.7	18.5	18.5	10.8	13.3	8.4	13.1
Russell 2500 Value	13.8	16.0	16.0	8.8	10.8	7.4	11.3
S&P 500 Sectors							
Communication Svcs**	11.0	55.8	55.8	4.4	13.3	7.8	9.4
Consumer Discretionary	12.4	42.4	42.4	3.7	13.7	11.7	16.8
Consumer Staples	5.5	0.5	0.5	5.8	10.9	8.5	10.9
Energy	-6.9	-1.3	-1.3	36.2	13.4	3.5	6.7
Financials	14.0	12.1	12.1	10.7	12.0	10.0	11.3
Health Care	6.4	2.1	2.1	8.1	11.6	11.3	13.6
Industrials	13.1	18.1	18.1	10.6	14.2	10.0	13.2
Information Technology	17.2	57.8	57.8	15.1	26.9	20.8	21.2
Materials	9.7	12.5	12.5	7.9	13.6	8.6	11.9
Real Estate**	18.8	12.4	12.4	6.7	8.9		
Utilities	8.6	-7.1	-7.1	3.6	7.1	8.9	9.3

^{**}The Communication Services sector, which replaced and expanded the Telecommunication Services sector, was created in September 2018. The Real Estate sector was carved out from the Financials sector in September 2016, due to a change in the Global Industry Classification Standard taxonomy.

Sources: Callan, FTSE Russell, S&P Dow Jones Indices. All style group returns presented gross of fees.

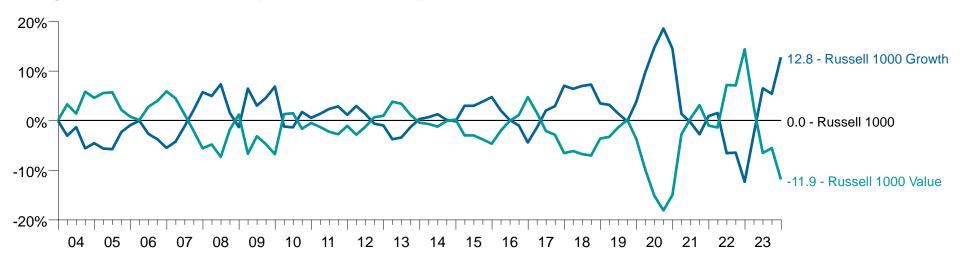


^{*}Returns less than one year are not annualized.

U.S. Equity

Index relative returns and characteristics

Rolling One-Year Relative Returns (vs. Russell 1000 Index)



Index Characteristics as of 12/31/23

		Wtd. Average				5-Year
	Number of Issues	Market Cap (\$bn)	Price/Book Ratio	Forward P/E Ratio	Dividend Yield	Earnings Forecast
Russell 3000	2,974	590	3.7	19.6	1.4%	14.5%
Russell 1000	1,010	623	3.9	19.7	1.4%	14.5%
Russell 1000 Value	849	128	2.2	15.1	2.3%	10.0%
Russell 1000 Growth	443	1,040	10.8	26.4	0.7%	18.3%
S&P 500	503	680	4.1	19.7	1.5%	14.3%
Russell Midcap	814	24	2.6	17.6	1.6%	14.0%
Russell 2500	2,466	7	2.2	16.6	1.5%	14.0%
Russell 2000	1,964	3	1.9	17.3	1.4%	14.0%

Sources: FTSE Russell, S&P Dow Jones Indices



Global Equity

Callan style group median and index returns*

Periods Ended 12/31/23

01115 "	Last	Year to	Last	Last 3	Last 5	Last 10	Last 15
Global Equity	Quarter	Date	Year	Years	Years	Years	Years
Global Style	11.3	21.7	21.7	6.3	12.6	8.7	11.5
MSCI World	11.4	23.8	23.8	7.3	12.8	8.6	10.7
MSCI ACWI	11.0	22.2	22.2	5.7	11.7	7.9	10.2
Global ex-U.S. Equity							
Global ex-U.S. Style	10.1	18.1	18.1	3.4	8.9	5.2	8.2
MSCI EAFE	10.4	18.2	18.2	4.0	8.2	4.3	6.9
MSCI World ex USA	10.5	17.9	17.9	4.4	8.5	4.3	7.0
MSCI ACWI ex USA	9.8	15.6	15.6	1.5	7.1	3.8	6.7
Regional Equity							
MSCI China	-4.2	-11.2	-11.2	-18.4	-2.8	0.9	4.4
MSCI Europe ex UK	12.3	21.7	21.7	4.9	9.8	4.7	7.1
MSCI Japan	8.2	20.3	20.3	0.7	6.9	5.0	5.9
MSCI Japan (local)	2.2	28.6	28.6	11.7	12.4	8.1	9.0
MSCI Pacific	9.3	15.3	15.3	1.0	6.5	4.6	6.7
MSCI Pacific (local)	3.7	20.1	20.1	9.0	10.3	7.3	8.6
MSCI Pacific ex Japan	11.4	6.4	6.4	1.6	5.7	3.9	8.5
MSCI Pacific ex Japan (local)	6.8	5.8	5.8	4.2	6.0	5.7	8.3
MSCI United Kingdom	6.9	14.1	14.1	8.8	6.9	2.5	6.8
MSCI United Kingdom (local)	2.3	7.7	7.7	11.3	6.9	5.2	7.7

Periods Ended 12/31/23

		Year				Last	Last
	Last	to	Last	Last 3	Last 5	10	15
Emerging/Frontier Markets	Quarter	Date	Year	Years	Years	Years	Years
Emerging Market Style	8.2	11.9	11.9	-4.8	5.4	4.0	8.1
MSCI Emerging Markets	7.9	9.8	9.8	-5.1	3.7	2.7	6.6
MSCI Emerging Markets (local)	5.6	9.9	9.9	-2.5	5.4	5.2	8.2
MSCI Frontier Markets	4.0	11.6	11.6	-0.5	3.3	2.0	4.3
Global/Global ex-U.S. Small Cap							
Global ex-U.S. Small Cap Style	10.9	15.1	15.1	0.0	7.8	5.6	10.7
MSCI World Small Cap	12.5	15.8	15.8	2.9	9.8	6.8	11.3
MSCI ACWI Small Cap	12.0	16.8	16.8	3.3	9.9	6.7	11.2
MSCI World ex USA Small Cap	10.6	12.6	12.6	-0.2	7.1	4.6	9.0
MSCI ACWI ex USA Small Cap	10.1	15.7	15.7	1.5	7.9	4.9	9.3
MSCI Emerging Markets Small Cap	8.9	23.9	23.9	6.5	9.9	5.3	9.9

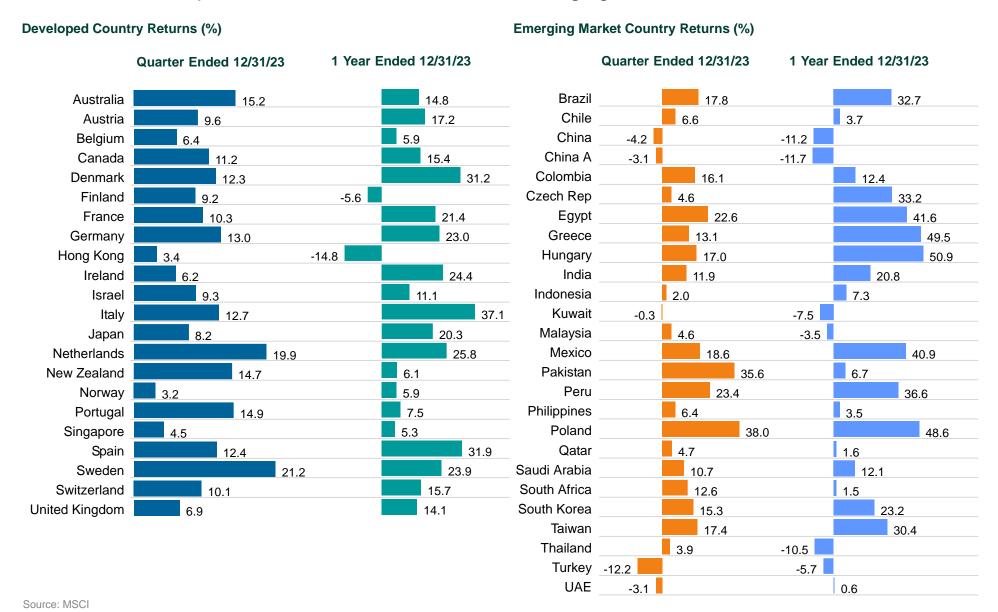
Sources: Callan, MSCI. All style group returns presented gross of fees.



^{*}Returns less than one year are not annualized.

Global ex-U.S. Equity

Returns for developed ex-U.S. market countries and emerging market countries





Global ex-U.S. Equity

Quarterly returns in dollars and local currencies

Developed Market Countries

	Equity Index	Equity Index	Currency	
Country	(\$)	(Local Currency)	Returns	Weight*
Australia	15.2%	9.0%	5.7%	4.9%
Austria	9.6%	5.0%	4.3%	0.1%
Belgium	6.4%	2.0%	4.3%	0.6%
Canada	11.2%	8.5%	2.5%	7.7%
Denmark	12.3%	7.6%	4.4%	2.1%
Finland	9.2%	4.7%	4.3%	0.7%
France	10.3%	5.7%	4.3%	7.7%
Germany	13.0%	8.3%	4.3%	5.5%
Hong Kong	3.4%	3.1%	0.3%	1.4%
Ireland	6.2%	1.8%	4.3%	0.3%
Israel	9.3%	6.0%	5.7%	0.4%
Italy	12.7%	8.1%	4.3%	1.7%
Japan	8.2%	2.2%	5.8%	14.4%
Netherlands	19.9%	15.1%	4.3%	3.0%
New Zealand	14.7%	8.8%	5.4%	0.1%
Norway	3.2%	-1.5%	4.8%	0.4%
Portugal	14.9%	10.2%	4.3%	0.1%
Singapore	4.5%	1.3%	3.5%	0.9%
Spain	12.4%	7.7%	4.3%	1.7%
Sweden	21.2%	12.4%	7.8%	2.1%
Switzerland	10.1%	1.3%	8.7%	6.4%
U.K.	6.9%	2.3%	4.4%	9.5%

Emerging Market Countries

	Equity Index	Equity Index	Currency	
Country	(\$)	(Local Currency)	Returns	Weight*
Brazil	17.8%	14.4%	3.0%	1.6%
Chile	6.6%	4.2%	2.3%	0.1%
China	-4.2%	-4.8%	2.3%	7.4%
Colombia	16.1%	11.2%	4.4%	0.0%
Czech Republic	4.6%	1.6%	2.9%	0.0%
Egypt	22.6%	22.7%	-0.1%	0.0%
	13.1%	8.4%	4.3%	0.0%
Greece				
Hungary	17.0%	10.3%	6.0%	0.1%
India 	11.9%	12.1%	-0.2%	4.7%
Indonesia	2.0%	1.6%	0.4%	0.5%
Kuwait	-0.2%	-0.2%	**	0.2%
Malaysia	4.6%	2.3%	**	0.4%
Mexico	18.6%	15.6%	2.6%	0.8%
Pakistan	35.6%	32.0%	2.7%	0.0%
Peru	23.4%	23.4%	2.4%	0.1%
Philippines	6.4%	4.1%	2.2%	0.2%
Poland	38.0%	24.3%	11.0%	0.3%
Qatar	4.7%	4.7%	0.0%	0.2%
Saudi Arabia	10.7%	9.3%	**	1.2%
South Africa	12.6%	10.0%	3.0%	0.9%
South Korea	15.3%	11.6%	4.8%	3.6%
Taiwan	17.4%	-2.6%	5.2%	4.5%
Thailand	3.9%	-5.4%	6.7%	0.5%
Turkey	-12.2%	-3.1%	-7.2%	0.2%
United Arab Emirates	-3.1%	10.7%	0.0%	0.4%

Source: MSCI



^{*}Weight in the MSCI ACWI ex USA Index

^{**}Data not available at time of publication

U.S. Fixed Income

Callan style group median and index returns*

Periods Ended 12/31/23

		Year				Last	Last
	Last	to	Last	Last 3	Last 5	10	15
Fixed Income	Quarter	Date	Year	Years	Years	Years	Years
Core Bond Style	7.0	6.2	6.2	-2.9	1.7	2.3	3.6
Core Bond Plus Style	7.2	6.9	6.9	-2.5	2.2	2.7	4.6
Bloomberg Aggregate	6.8	5.5	5.5	-3.3	1.1	1.8	2.7
Bloomberg Universal	6.8	6.2	6.2	-3.0	1.4	2.1	3.2
Long-Term							
Extended Maturity Credit Style	13.9	11.2	11.2	-6.3	3.5	4.5	6.6
Bloomberg Long Credit	13.7	10.7	10.7	-6.5	2.7	3.9	5.8
Extended Maturity Gov/Credit Style	13.4	7.8	7.8	-8.3	1.8	3.7	5.3
Bloomberg Long Gov/Credit	13.2	7.1	7.1	-8.7	1.1	3.2	4.3
Intermediate-Term							
Intermediate Fixed Income Style	4.8	5.7	5.7	-1.3	2.0	2.1	3.1
Bloomberg Interm Gov/Credit	4.6	5.2	5.2	-1.6	1.6	1.7	2.5
Short-Term							
Short Fixed Income Style	2.9	5.4	5.4	0.6	2.0	1.7	2.3
Bloomberg Gov/Credit 1-3 Yr	2.7	4.6	4.6	0.1	1.5	1.3	1.5
Bank Loans							
Bank Loan Style	3.0	12.8	12.8	5.5	5.5	4.4	7.4
Credit Suisse Leveraged Loan	2.9	13.0	13.0	5.6	5.6	4.4	7.3

Periods Ended 12/31/23

High Yield Style 6.9 13.1 13.1 2.3 5.7 4.8 8.8 Bloomberg Corp High Yield 7.2 13.4 13.4 2.0 5.4 4.6 9.2 Unconstrained Unconstrained Fixed Style 5.0 8.3 8.3 1.5 3.7 3.1 5.0 90-Day T-Bill + 3% 2.1 8.0 8.0 5.2 4.9 4.3 3.9	High Yield	Last Quarter	Year to Date	Last Year	Last 3 Years	Last 5 Years	Last 10 Years	Last 15 Years
Unconstrained Unconstrained Fixed Style 5.0 8.3 8.3 1.5 3.7 3.1 5.0	High Yield Style	6.9	13.1	13.1	2.3	5.7	4.8	8.8
Unconstrained Fixed Style 5.0 8.3 8.3 1.5 3.7 3.1 5.0	Bloomberg Corp High Yield	7.2	13.4	13.4	2.0	5.4	4.6	9.2
	Unconstrained							
90-Day T-Bill + 3% 2.1 8.0 8.0 5.2 4.9 4.3 3.9	Unconstrained Fixed Style	5.0	8.3	8.3	1.5	3.7	3.1	5.0
	90-Day T-Bill + 3%	2.1	8.0	8.0	5.2	4.9	4.3	3.9
Stable Value	Stable Value							
Stable Value Style 0.7 2.7 2.7 2.2 2.3 2.2 2.5	Stable Value Style	0.7	2.7	2.7	2.2	2.3	2.2	2.5
iMoneyNet Mutual Fund Avg 1.3 4.8 4.8 2.0 1.7 1.0 0.7	iMoneyNet Mutual Fund Avg	1.3	4.8	4.8	2.0	1.7	1.0	0.7
TIPS	TIPS							
Inflation-Linked Style 4.7 4.0 4.0 -0.9 3.2 2.5 3.6	Inflation-Linked Style	4.7	4.0	4.0	-0.9	3.2	2.5	3.6
Bloomberg US TIPS 4.7 3.9 3.9 -1.0 3.2 2.4 3.5	Bloomberg US TIPS	4.7	3.9	3.9	-1.0	3.2	2.4	3.5
Municipal	Municipal							
Short Municipal Style 3.8 3.9 3.9 0.6 1.5 1.5 2.1	Short Municipal Style	3.8	3.9	3.9	0.6	1.5	1.5	2.1
Bloomberg Municipal 1-5 Yr 3.9 3.8 3.8 0.1 1.5 1.4 2.0	Bloomberg Municipal 1-5 Yr	3.9	3.8	3.8	0.1	1.5	1.4	2.0
Intermediate Municipal Style 5.9 4.9 4.9 -0.1 2.0 2.3 3.0	Intermediate Municipal Style	5.9	4.9	4.9	-0.1	2.0	2.3	3.0
Bloomberg Municipal 1-10 Yr 5.5 4.6 4.6 0.0 2.0 2.2 2.9	Bloomberg Municipal 1-10 Yr	5.5	4.6	4.6	0.0	2.0	2.2	2.9
Long Municipal Style 7.2 6.3 6.3 -0.4 2.4 3.1 4.0	Long Municipal Style	7.2	6.3	6.3	-0.4	2.4	3.1	4.0
Bloomberg Municipal 7.9 6.4 6.4 -0.4 2.3 3.0 4.0	Bloomberg Municipal	7.9	6.4	6.4	-0.4	2.3	3.0	4.0

Sources: Bloomberg, Callan, Credit Suisse, iMoneyNet. All style group returns presented gross of fees.



^{*}Returns less than one year are not annualized.

U.S. Fixed Income Index Characteristics

Statistics as of 12/31/23

	Yield to Worst	Modified Adjusted Duration	Average Maturity
Bloomberg Aggregate	4.5	6.2	8.5
Bloomberg Universal	4.8	6.0	8.2
Bloomberg Long Credit	5.2	13.0	22.8
Bloomberg Long Gov/Credit	4.7	14.3	22.7
Bloomberg Intermediate Gov/Credit	4.4	3.8	4.3
Bloomberg Gov/Credit 1-3 Year	4.5	1.8	1.9
Credit Suisse Leveraged Loan	9.1	0.3	4.1
Bloomberg Gov/Credit	4.5	6.4	9.0
Bloomberg Corp High Yield	7.6	3.2	4.9
Bloomberg US TIPS	4.2	5.9	7.1
Bloomberg Municipal	3.2	6.0	13.3
Bloomberg Muni Bond 1-5 Year	2.8	2.6	3.4
Bloomberg Muni 1-10 Year	2.8	3.8	6.1

Yield to Worst: The lowest yield an investor can expect if a bond is held to maturity, and it does not default. Yield to maturity, yield to call, or yield to put are alternative measures of yield.

Modified Adjusted Duration: A measure of the percentage price change of a bond given a change in its yield-to-maturity, adjusted for the presence of embedded options.

Average Maturity: The market value-weighted average time to stated maturity for all securities in a portfolio.

Sources: Bloomberg, Credit Suisse



Real Assets

Callan style group median and index returns and risk*

Periods Ended 12/31/23 10 Years

U.S. Private Real Assets	Last Quarter	Year to Date	Last Year	Last 3 Years	Last 5 Years	Last 10 Years	Last 20 Years	Standard Deviation	Sharpe Ratio
Real Estate ODCE Style	-0.4	-10.0	-10.0	4.9	4.7	7.0	6.5	7.6	0.4
NFI-ODCE (value-weighted net)	-5.0	-12.7	-12.7	4.0	3.3	6.3	6.2	7.4	0.2
NCREIF Property	-3.0	-7.9	-7.9	4.6	4.3	6.8	7.7	5.4	0.5
NCREIF Farmland	2.3	5.0	5.0	7.4	6.0	7.3	12.3	2.1	2.0
NCREIF Timberland	4.3	9.5	9.5	10.5	6.6	5.8	7.1	3.1	1.5
Public Real Estate									
Global Real Estate Style	15.4	12.2	12.2	2.6	5.6	6.0	7.6	21.1	0.2
FTSE EPRA Dev Core Infra 50/50	11.3	2.2	2.2	3.5	5.9	6.0		22.0	0.0
Global ex-U.S. Real Estate Style	15.4	9.0	9.0	-3.7	3.2	4.8		22.0	0.1
FTSE EPRA Nareit Developed ex US	14.9	6.3	6.3	-4.5	-0.5	1.0		21.5	-0.1
U.S. REIT Style	16.5	14.0	14.0	6.8	8.8	8.6	8.9	21.8	0.3
FTSE Nareit Equity REITs	16.2	13.7	13.7	7.2	7.4	7.6	8.0	22.8	0.2
Other Public Real Assets									
Alerian MLP	5.0	26.6	26.6	32.4	12.0	1.9	8.3	42.4	0.2
Bloomberg Commodity	-4.6	-7.9	-7.9	10.8	7.2	-1.1	-0.1	19.3	0.3
DJB Global Infrastructure	12.1	4.5	4.5	5.4	7.0	5.3	9.2	2.1	1.1
Consumer Price Index (CPI-U)	-0.3	3.4	3.4	5.6	4.1	2.8	2.6	17.5	0.3

^{*} Returns less than one year are not annualized.

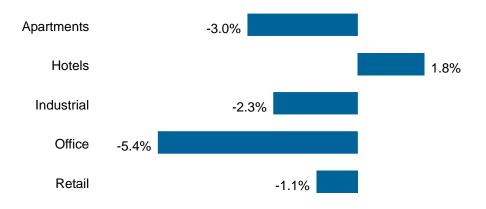
Sources: Alerian Capital Management, Bloomberg, Bureau of Economic Analysis, Callan, Dow Jones Brookfield, FTSE Russell, NCREIF



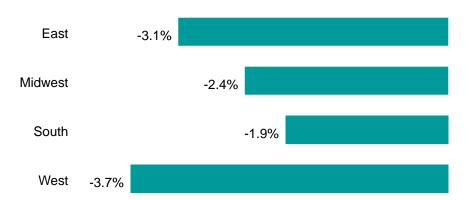
Real Estate Quarterly Performance and Capitalization Rates

NCREIF Property Index

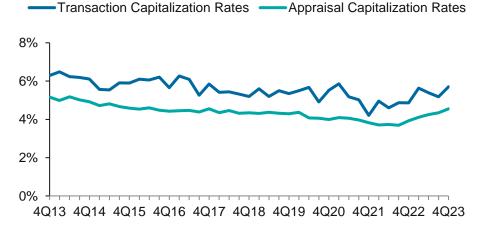
Quarterly Returns by Property Type (12/31/23)



Quarterly Returns by Region (12/31/23)

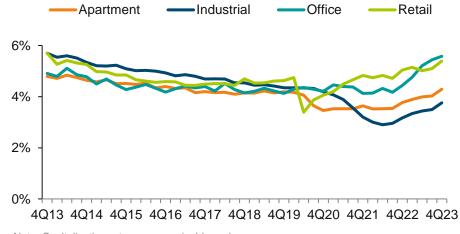


NCREIF Transaction and Appraisal Capitalization Rates



Note: Transaction capitalization rate is equal-weighted. Capitalization rate = net operating income / current market value (or sale price)
Source: NCREIF

NCREIF Capitalization Rates by Property Type



Note: Capitalization rates are appraisal-based.



U.S. Private Real Estate Performance: 4Q23

Income returns positive but appreciation returns negative once again

Valuations reflect higher interest rates

- Income returns were positive across sectors and regions.
- All property sectors and regions 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	-5.0%	-12.7%	4.0%	3.3%	6.3%
Income	0.7%	2.8%	2.8%	2.9%	3.3%
Appreciation	-5.7%	-15.2%	1.2%	0.4%	3.0%
NCREIF Property Index	-3.0%	-7.9%	4.6%	4.3%	6.8%
Income	1.1%	4.3%	4.1%	4.2%	4.6%
Appreciation	-4.1%	-11.8%	0.4%	0.1%	2.2%

Returns are geometrically linked

NCREIF Property Index Quarterly Returns by Region and Property Type



Source: NCREIF, ODCE return is net



Private Equity Market Trends

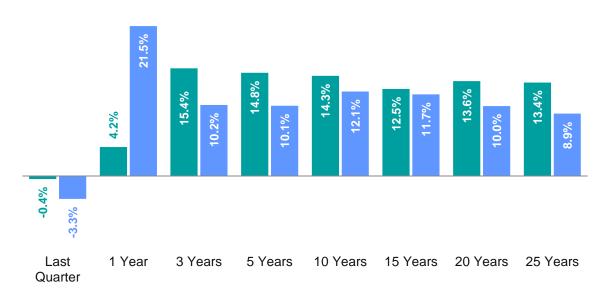
Gains for stocks not shared by private equity

Smoothing effect in performance

- Public equity's strong recovery in 2023 (led by the "Magnificent Seven" technology stocks) has left private equity in its wake.
- Private equity doesn't recover as quickly as the public markets, because the smoothing effect dampens private equity returns in both up and down markets.
- Private equity only saw about a fifth of the gains of the public markets over the last year, on a PME basis.
- While buyouts saw solid performance for the year, venture capital and growth equity continued to struggle. These strategies have seen the largest valuation adjustments from the highs of 2021.

Net IRRs as of 09/30/23

■ Global Private Equity & Energy ■ Russell 3000 PME



Net IRRs by Strategy as of 09/30/23

Strategy	Last Quarter	1 Year	3 Years	5 Years	10 Years	15 Years
Venture Capital	-2.4%	-8.9%	14.8%	17.2%	17.2%	13.4%
Growth Equity	-0.6%	0.8%	12.3%	14.8%	14.3%	13.1%
Buyouts	0.1%	10.2%	16.8%	15.0%	14.6%	12.4%
Mezzanine	1.8%	13.0%	13.5%	11.0%	11.1%	10.7%
Credit Opportunities	1.2%	8.2%	11.1%	7.1%	7.5%	10.1%
Control-Oriented Distressed	0.4%	5.6%	19.4%	13.6%	11.7%	11.5%





Private Equity Market Trends

Another down year for fundraising

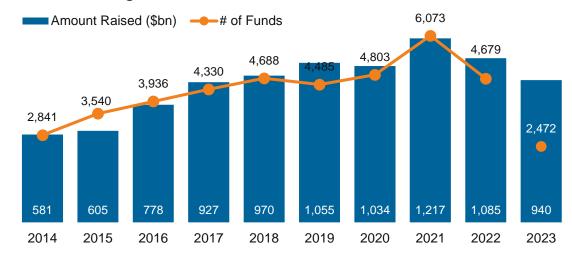
Back to 2022 levels

- Fundraising declined back closer to historical levels in 2022 after its frenzied peak in 2021.
- So far, 2023 has been another down year, with LPs being more selective with their commitments.
- With significantly fewer funds closing this year and constrained LP commitment budgets, many GPs are reluctant to come back to market in the near term.

Deal activity slowdown continues

 Both new investment activity and exit activity slowed markedly in 2023, following rising interest rates, declines in the public markets, and continued price uncertainty.

Annual Fundraising



Annual Deal Activity



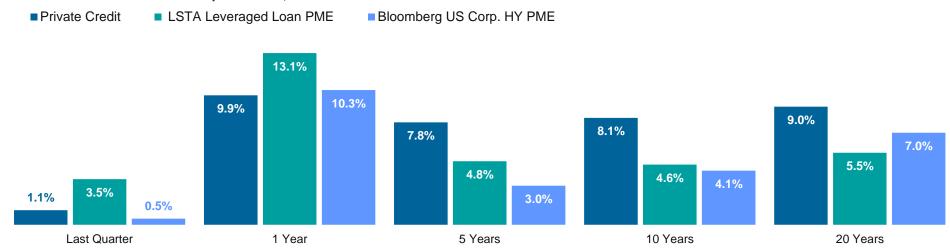
Source: PitchBook



Private Credit Market Overview

Has outperformed leveraged loans over three years ended 3Q23

Pooled Horizon Net IRRs as of September 30, 2023



Pooled Horizon Net IRRs by Strategy as of September 30, 2023

Strategy	Last Quarter	1 Year	5 Years	10 Years	20 Years
Senior Debt	0.1	11.4	5.9	6.6	6.8
Mezzanine	1.8	13.0	11.0	11.1	10.5
Credit Opportunities	1.2	8.2	7.1	7.6	8.9

Private credit performance varies across sub-asset class and underlying return drivers. Over the past ten years the asset class has generated a net IRR of nearly 8.1%, outperforming leveraged loans as of September 30, 2023. Higher-risk strategies have performed better than lower-risk strategies.

Source: LSEG/Cambridge

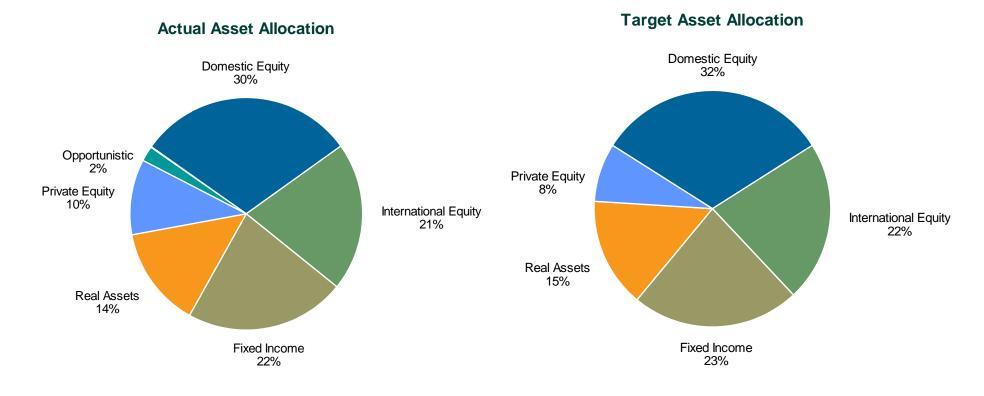


Callan

MCERA Total Fund Review

Total Fund Asset Allocation

As of December 31, 2023



	\$000s	Weight	Min		Max	Percent	\$000s
Asset Class	Actual	Actual	Target	Target	Target	Difference	Difference
Domestic Equity	973,280	30.3%	28.0%	32.0%	36.0%	(1.7%)	(54,817)
International Equity	665,596	20.7%	19.0%	22.0%	25.0%	(1.3%)	(41,221)
Fixed Income	718,073	22.4%	20.0%	23.0%	26.0%	(0.6%)	(20,871)
Real Assets	450,788	14.0%	12.0%	15.0%	18.0%	(1.0%)	(31,132)
Private Equity	336,549	10.5%	0.0%	8.0%	12.0%	2.5%	79,525
Opportunistic	68,517	2.1%	0.0%	0.0%	5.0%	2.1%	68,517
Total	3,212,803	100.0%		100.0%			



Total Fund Asset Distribution

	December 3	1, 2023		September		r 30, 2023	
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight	
Domestic Equity	\$973,280,051	30.29%	\$(17,008,571)	\$112,138,249	\$878,150,373	29.22%	
Parametric Domestic Equity Futures (1)	-90,704,033	(2.82%)	(13,095,726)	(5,381,892)	-72,226,415	(2.40%)	
SSGA Russell 1000 Index (2)	803,579,710	25.01%	(2,989,946)	86,120,026	720,449,629	23.97%	
DFA Small Cap Core	260,404,374	8.11%	(922,900)	31,400,115	229,927,159	7.65%	
International Equity	\$665,595,866	20.72%	\$2,035,176	\$59,883,311	\$603,677,379	20.09%	
Morgan Stanley Value	214,291,564	6.67%	0	21,093,639	193,197,925	6.43%	
Artisan Partners Growth	203,914,114	6.35%	0	17,696,422	186,217,692	6.20%	
TimesSquare Intl Small Cap	106,250,197	3.31%	(204,774)	9,273,363	97,181,608	3.23%	
FIAM Select Emerging Equity	107,158,439	3.34%	Ó	8,921,700	98,236,740	3.27%	
Parametric International Equity Futures	33,981,551	1.06%	2,239,950	2,898,187	28,843,414	0.96%	
Fixed Income	\$718,073,264	22.35%	\$(7,422,308)	\$49,235,602	\$676,259,970	22.50%	
Wellington Core Plus	287,808,713	8.96%	(2,939,788)	20,480,975	270,267,526	8.99%	
Western Core Plus	306,114,370	9.53%	(2,718,503)	23,937,408	284,895,465	9.48%	
Parametric Fixed Income Futures	124,150,181	3.86%	(1,764,017)	4,817,219	121,096,979	4.03%	
Real Assets	\$450,788,093	14.03%	\$(2,274,571)	\$9,525,264	\$443,537,399	14.76%	
Real Estate	\$219,351,216	6.83%	\$(2,177,730)	\$(5,738,653)	\$227,267,599	7.56%	
Woodmont	17,099,992	0.53%	Ó	0	17,099,992	0.57%	
UBS Trumbull Property Fund	90,199,649	2.81%	(885,277)	(3,753,711)	94,838,637	3.16%	
AEW Core Property Trust	112,051,575	3.49%	(1,292,453)	(1,984,942)	115,328,970	3.84%	
Public Real Assets	\$231,436,877	7.20%	\$(96,840)	\$15,263,917	\$216,269,800	7.20%	
INVESCO Commodities Fund	53,841,291	1.68%	(96,840)	(1,960,943)	55,899,074	1.86%	
BlackRock TIPS Index Fund	57,988,225	1.80%	0	2,528,728	55,459,496	1.85%	
KBI Global Resources Fund	61,075,467	1.90%	0	6,483,182	54,592,286	1.82%	
Blackrock REIT Index Fund	58,531,894	1.82%	0	8,212,950	50,318,944	1.67%	



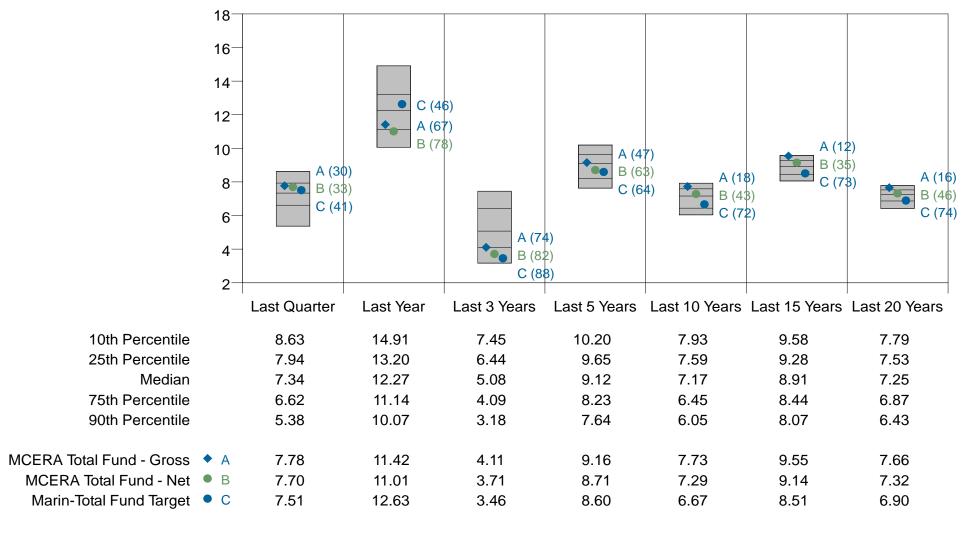
Total Fund Asset Distribution

	December 3	1, 2023			September 3	tember 30, 2023	
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight	
Opportunistic (3)	\$68,516,700	2.13%	\$5,644,102	\$1,449,835	\$61,422,763	2.04%	
CarVal Credit Value V	26,258,655	0.82%	1,587,062	800,091	23,871,502	0.79%	
Fortress Credit Opps Fund V	18,366,579	0.57%	4,125,000	0	14,241,579	0.47%	
Varde Dislocation Fund	23,891,466	0.74%	(67,960)	649,744	23,309,682	0.78%	
Private Equity (4)	\$336,548,884	10.48%	\$(5,996,053)	\$(0)	\$342,544,937	11.40%	
Abbott ACE VI	33,131,866	1.03%	(978,260)	Ó	34,110,126	1.13%	
Abbott ACE VII	36,421,138	1.13%	(1,565,821)	(0)	37,986,959	1.26%	
Abbott 2016	68,068,131	2.12%	(1,975,000)	0	70,043,131	2.33%	
Abbott 2017	20,222,286	0.63%	Ó	0	20,222,286	0.67%	
Abbott 2021	11,502,725	0.36%	1,493,750	0	10,008,975	0.33%	
Abbott 2023	1,620,416	0.05%	0	0	1,620,416	0.05%	
Pathway PPEF 2008	35,917,899	1.12%	(888,481)	(0)	36,806,380	1.22%	
Pathway PE I-7	30,241,356	0.94%	(1,677,244)	0	31,918,600	1.06%	
Pathway PE I-8	57,227,321	1.78%	(1,508,034)	0	58,735,355	1.95%	
Pathway PE I-9	16,720,091	0.52%	(415,790)	0	17,135,881	0.57%	
Pathway PE I-10	23,186,292	0.72%	523,445	(0)	22,662,847	0.75%	
Pathway PE I-11	2,289,362	0.07%	995,381	(0)	1,293,981	0.04%	
Total Fund	\$3,212,802,857	100.0%	\$(25,022,225)	\$232,232,262	\$3,005,592,821	100.0%	



Total Fund Performance – Annualized

Returns for Periods Ended December 31, 2023 Group: Callan Public Fund Sponsor - Large (>1B)

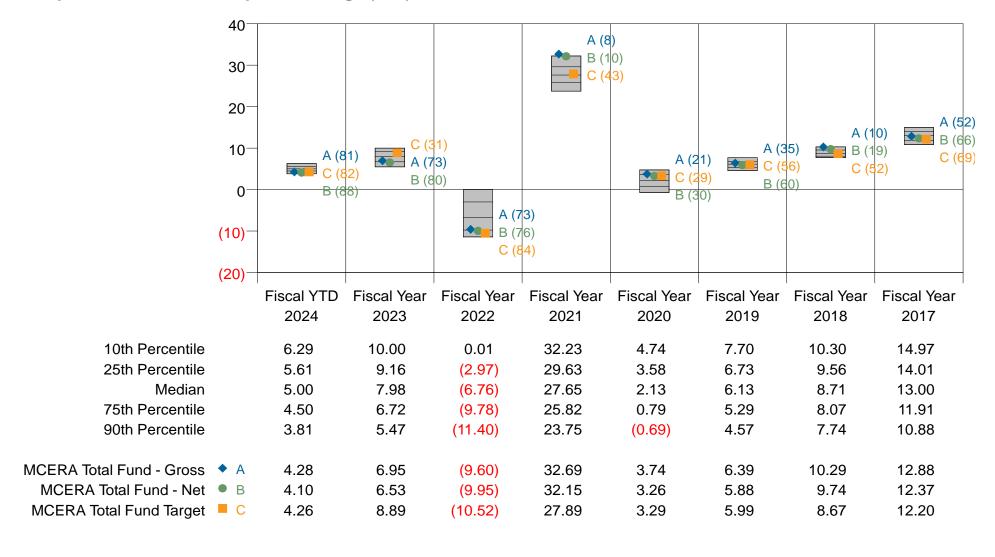


Current Quarter Target = 32.0% Russell 3000 Index, 22.0% MSCI ACWI ex US IMI Index, 23% Bloomberg Aggregate Index, 8.0% NCREIF NFI-ODCE Equal Weight Net, 1.8% Bloomberg Commodity Price Index, 1.8% S&P Global Natural Resources Index, 1.8% S&P DJ US Select REIT Index, 1.8% Bloomberg US TIPS Index, 4.8% Russell 3000 Index (Lagged) and 3.2% MSCI ACWI ex US IMI Index (Lagged).



Total Fund Performance – Fiscal Year

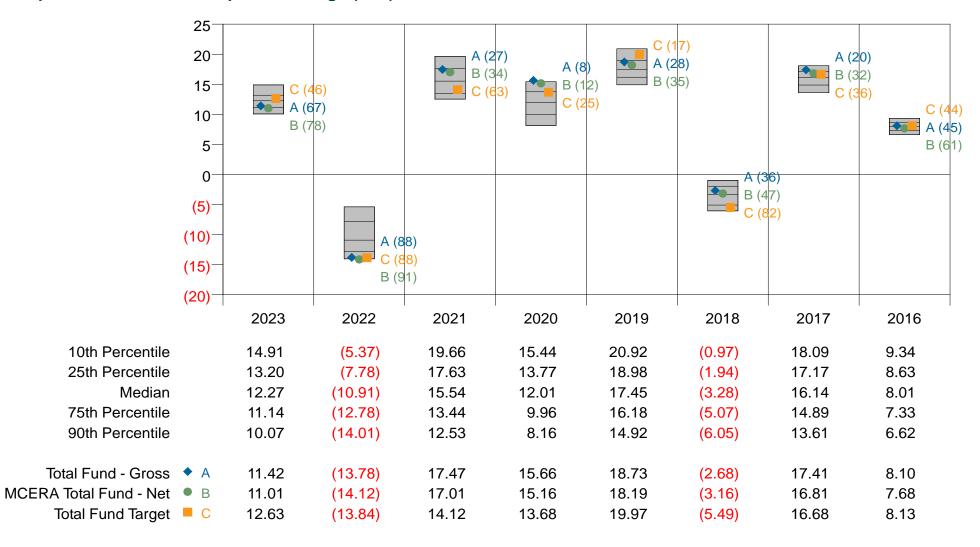
Fiscal Year Returns
Group: Callan Public Fund Sponsor - Large (>1B)





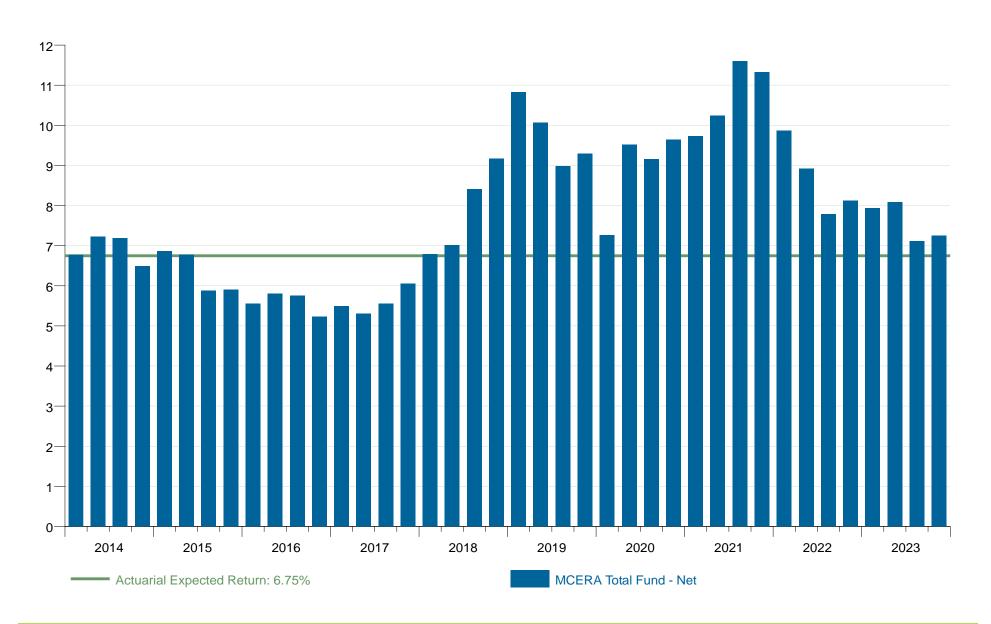
Total Fund Performance – Calendar Years

Returns for Periods Ended December 31, 2023 Group: Callan Public Fund Sponsor - Large (>1B)





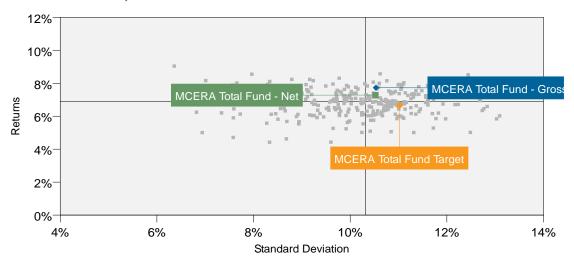
Annualized 10 Year Total Fund Net Returns (Quarterly Roll)



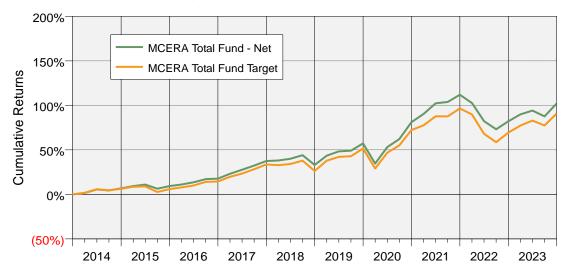


Total Fund – Cumulative Returns Relative to Target

Ten Year Annualized Risk vs. Return As of December 31, 2023



Total Fund Cumulative Returns vs. Target 10 Years Ended December 31, 2023





Watchlist

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

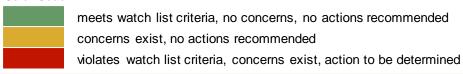
		3 Year	3 Year	5 Year	5 Year		
	Organization/	Performance	Performance	Performance	Performance	Qualify for	
Investment Manager	Team	vs Benchmark	vs Peers	vs Benchmark	vs Peers	Watchlist?	Date Added
DFA Small Cap Core Equity						No	
Russell 2000 Index						140	
Morgan Stanley International Value Equity						Yes	4Q17
MSCI EAFE Index						163	(Terminated 1Q24)
Artisan International Growth Equity						Yes	4Q17
MSCI EAFE Index						163	(Terminated 1Q24)
TimesSquare International Small Cap Equity				N/A	N/A		
MSCI EAFE Small Cap Index				IVA	IVA		
Fidelity Emerging Markets Equity		N/A	N/A	N/A	N/A		
MSCI Emerging Markets Index		IVA	IVA	IVA	IVA		
Wellington Core Plus Fixed Income						Yes	4Q23
Bloomberg U.S Aggregate Index						103	TQ20
Western Asset Core Plus Fixed Income		N/A	N/A	N/A	N/A		
Bloomberg U.S Aggregate Index		IVA		IVA			
Invesco Balanced Risk Commodity Fund						Yes	
Bloomberg Commodity Index						103	
KBI Global Natural Resources Fund			N/A		N/A		
S&P Global Natural Resource Index			IVA		14/4		
UBS Trumbull Property Fund*		N/A	N/A	N/A	N/A		4Q19
NFI-ODCE Index		IVA	IVA	14/7	14/7		TQ13

^{*}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





Watchlist

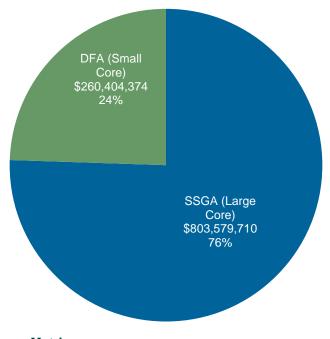
Investment Manager	3 Year Net Return Trails Benchmark by more than 100 bps (relative return shown in bps)	AND	3 Year Gross Return Ranks 75th - 100th%	<u>OR</u>	5 Year Net Return Trails Benchmark (relative return shown in bps)	<u>OR</u>	5 Year Gross Return Ranks 50th - 100th%	Qualify for Watchlist (Quantitative)
DFA Small Cap Core Equity	772		16th		260		36th	No
Russell 2000 Index	112		ושטו		200		30111	INO
Morgan Stanley International Value Equity	-214		99th		-71		83rd	Yes (Terminated
MSCI EAFE Index	-214		99111		-7 1		osiu	(Tellillialed 1Q24)
Artisan International Growth Equity	-373		52nd		-100		81st	Yes (Terminated
MSCI EAFE Index	-575		JZIIU		-100		0151	1Q24)
TimesSquare International Small Cap Equity	-496		85th		N/A		N/A	No
MSCI EAFE Small Cap Index	-490		OSui		IN/A		IN/A	NO
Fidelity Emerging Markets Equity	NI/A	N/A	N/A		N/A		N/A	No
MSCI Emerging Markets Index	IV/A		14/75		14//5		14// (140
Wellington Core Plus Fixed Income	36		65th		91		52nd	Yes
Bloomberg U.S Aggregate Index	50		OSui		Ji		JZIIU	163
Western Asset Core Plus Fixed Income	N/A		N/A		N/A		N/A	No
Bloomberg U.S Aggregate Index	IV/A		14/7		14//5		14/74	140
Invesco Balanced Risk Commodity Fund	-225		99th		48		56th	Yes
Bloomberg Commodity Index	-225		99111		40		30111	162
KBI Global Natural Resources Fund	-504		N/A		422		N/A	No
S&P Global Natural Resource Index	-304		IN/A		423		IN/A	No
UBS Trumbull Property Fund	Quantitative criteria	for priva	ate markets portfol	ios unc	ler review by Gove	rnance	Committee. On	Under
NCREIF NFI-ODCE Index			watch due to orga	anizatio	nal changes.			Review



Callan

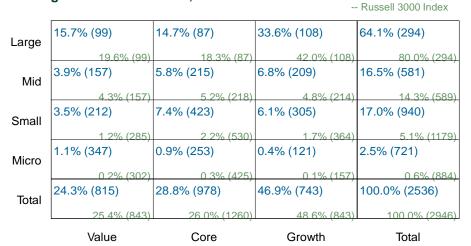
MCERA Asset Class Review

Domestic Equity Composite

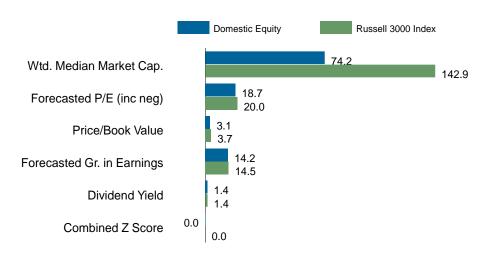


Style Exposure Matrix Holdings as of December 31, 2023

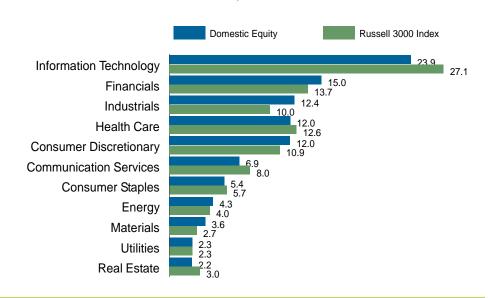




Portfolio Characteristics as of December 31, 2023



Sector Allocation as of December 31, 2023





Domestic Equity Composite

Returns and Rankings for Periods Ended December 31, 2023

27

Last Last 3 Last 10 Last Last 5 Quarter Year **Years** Years Years **Domestic Equity - Net** 12.75 25.01 10.22 15.24 11.22 **Domestic Equity Target** 12.07 25.96 8.54 15.16 11.48 SSGA - Net 11.98 26.50 9.20 15.15 11.79 Large Cap Blended Benchmark 11.96 26.53 9.17 15.16 11.78 Ranking vs. Large Cap Equity 53 50 55 50 50 **DFA Small Core - Net** 9.94 12.57 13.61 18.16 Russell 2000 Index 14.03 16.93 2.22 9.97

36

16

36

Returns and Rankings for Calendar Years

	2023	2022	2021	2020	2019
Domestic Equity - Net	25.01	(17.43)	29.74	17.85	28.77
Domestic Equity Target	25.96	(19.21)	25.66	20.89	31.02
SSGA - Net	26.50	(19.06)	27.16	18.33	31.43
Large Cap Blended Benchmark	26.53	(19.13)	27.15	18.40	31.49
Ranking vs. Large Cap Equity	50	55	49	53	43
DFA Small Core - Net	18.16	(12.97)	29.22	11.74	21.77
Russell 2000 Index	16.93	(20.44)	14.82	19.96	25.52
Ranking vs. Small Cap Equity	36	21	19	54	71

• The domestic equity composite outperformed the benchmark over the quarter, but modestly underperformed the benchmark over the last year.

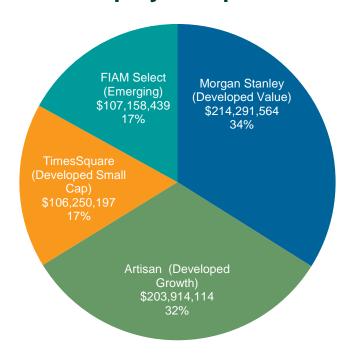
7.16

- Although small cap has underperformed large cap over intermediate and long time periods, DFA's relative outperformance has been very beneficial over the last one, three, and five years.
 - They exclude stocks with the lowest profitability and highest relative prices (high growth). At times, the market has favored the relative safety of value-oriented stocks, which has greatly benefitted returns in 2021 and 2022.



Ranking vs. Small Cap Equity

International Equity Composite



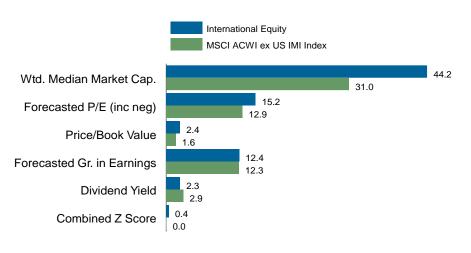
Region & Style Exposure Matrix Holdings as of December 31, 2023

-- International Equity

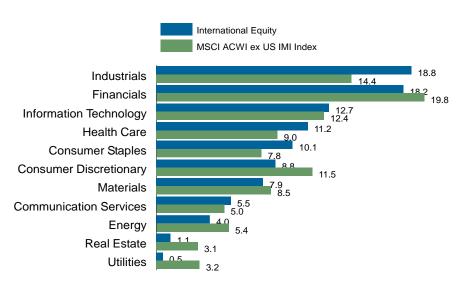
-- MSCI ACWI ex US IMI Index

Europe	7.3% (17)	23.7% (42)	27.7% (56)	58.7% (115)
_0.0p0	12.0%	13.4%	15.7%	41.1%
N. America		1.9% (6)	6.0% (7)	7.8% (13)
N. America	1.5%	1.6%	1.5%	4.6%
Danifia	0.2% (1)	3.6% (10)	8.3% (29)	12.1% (40)
Pacific	7.7%	9.7%	7.3%	24.6%
	2.9% (29)	8.1% (46)	1.070	21.4% (129)
Emerging	7 7%	10.1%	11 9%	29.7%
	10.3% (47)	37.3% (104)		100.0% (297)
Total	28.8%	34.8%	36.3%	100.0%
	Value	Core	Growth	Total

Portfolio Characteristics as of December 31, 2023



Sector Allocation as of December 31, 2023





International Equity Composite

Returns and Rankings for Periods Ended December 31, 2023

					Last
	Last	Last	Last 3	Last 5	10
	Quarter	Year	Years	Years	Years
International Equity - Net	9.81	14.35	(0.95)	5.87	3.42
International Equity - Target	9.81	15.62	1.53	7.19	3.97
MSIM - Net	10.76	16.92	1.88	7.45	3.80
MSCI EAFE Index	10.42	18.24	4.02	8.16	4.28
Ranking vs. Non-US Developed Value Equity	1	80	99	83	63
Artisan - Net	9.50	14.79	0.29	7.16	3.70
MSCI EAFE Index	10.42	18.24	4.02	8.16	4.28
Ranking vs. Non-US Developed Growth Equity	85	69	52	81	85
TimesSquare - Net	9.56	12.32	(5.65)		
MSCI EAFE Small Cap	11.14	13.16	(0.69)	6.58	4.80
Ranking vs. International Small Cap Equity	79	67	85		
FIAM Select EM - Net	9.08	12.22			
MSCI Emerging Markets Index	7.86	9.83	(5.08)	3.69	2.66
Ranking vs. Emerging Markets Equity	26	45			

Returns and Rankings for Periods Ended December 31, 2023

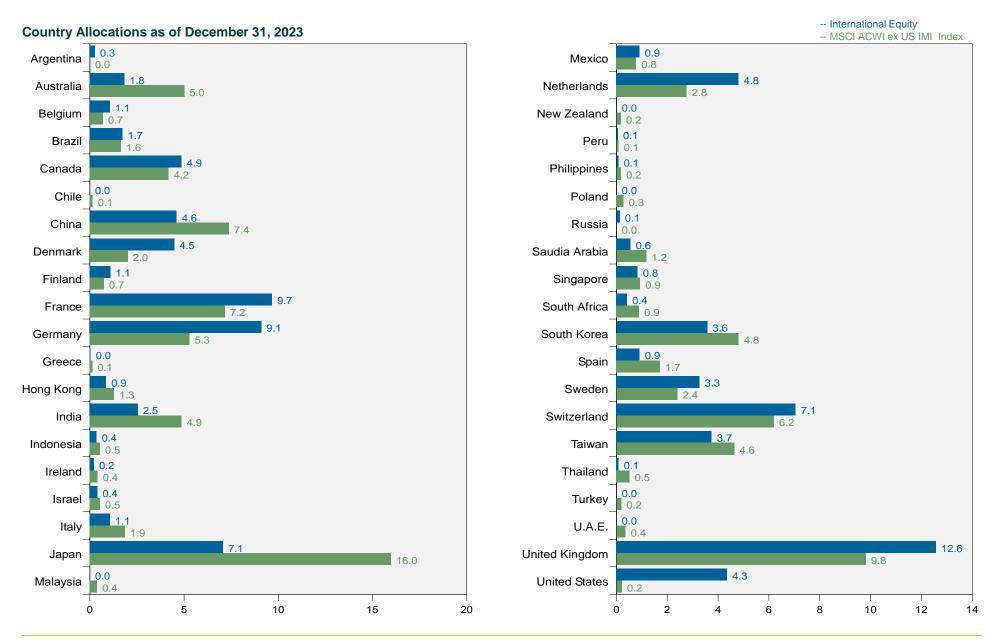
	2023	2022	2021	2020	2019
International Equity - Net	14.35	(19.28)	5.28	10.79	23.52
International Equity - Target	15.62	(16.58)	8.53	11.12	21.63
MSIM - Net	16.92	(13.62)	4.70	12.00	20.93
MSCI EAFE Index	18.24	(14.45)	11.26	7.82	22.01
Ranking vs. Non-US Developed Value Equity	80	92	99	1	35
Artisan - Net	14.79	(19.08)	8.59	8.09	29.62
MSCI EAFE Index	18.24	(14.45)	11.26	7.82	22.01
Ranking vs. Non-US Developed Growth Equity	69	30	60	96	26
TimesSquare - Net	12.32	(26.82)	2.18	13.87	
MSCI EAFE Small Cap	13.16	(21.39)	10.10	12.34	24.96
Ranking vs. International Small Cap Equity	67	74	93	40	
FIAM Select EM - Net	12.22	(23.89)			
MSCI Emerging Markets Index	9.83	(20.09)	(2.54)	18.31	18.44
Ranking vs. Emerging Markets Equity	45	70			

- The International Equity composite was in line with the benchmark during the quarter and fell short over the trailing year.
- Morgan Stanley: a more than 2x overweight to IT, the strongest performer in the index, enhanced relative returns in the quarter.
- Artisan: a large underweight to IT and Japan dampened relative returns.
- TimesSquare: underperformance was driven by relative weakness in Europe and Japan.
- FIAM: stock selection within Consumer Discretionary and Industrials drove relative outperformance.



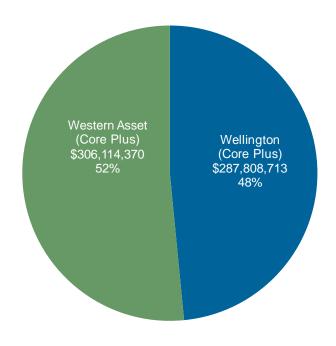


International Equity Composite

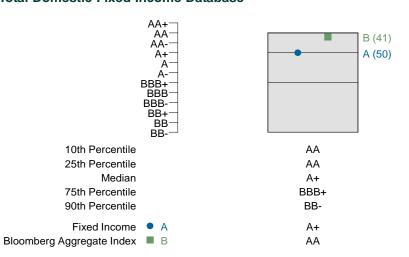




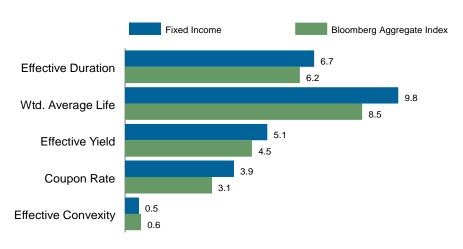
Fixed Income Composite



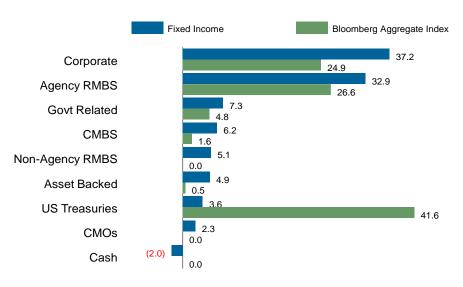
Quality Rating as of December 31, 2023 Total Domestic Fixed Income Database



Portfolio Characteristics as of December 31, 2023



Sector Allocation as of December 31, 2023





Fixed Income Composite

Returns and Rankings for Periods Ended December 31, 2023

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Fixed Income - Net	7.37	5.74	(4.51)	1.06	1.80
Fixed Income Target	6.82	5.53	(3.93)	0.73	1.39
Wellington - Net	7.59	6.66	(2.95)	2.01	2.59
Bloomberg Aggregate Index	6.82	5.53	(3.31)	1.10	1.81
Ranking vs. Core Plus Fixed Income	5	55	65	52	48
Western Asset - Net	8.40	7.32	(1.92)	2.65	2.79
Western Asset Blended Benchmark	6.82	5.53	(2.41)	1.74	2.13
Ranking vs. Core Plus Fixed Income	2				

Returns and Rankings for Calendar Years

	2023	2022	2021	2020	2019
Fixed Income - Net	5.74	(15.56)	(2.50)	11.47	8.60
Fixed Income Target	5.53	(13.58)	(2.79)	8.08	8.21
Wellington - Net	6.66	(13.68)	(0.71)	9.93	9.95
Bloomberg Aggregate Index	5.53	(13.01)	(1.54)	7.51	8.72
Ranking vs. Core Plus Fixed Income	55	62	64	26	43
Western Asset - Net	7.32	(11.71)	(0.43)	10.03	9.82
Western Asset Blended Benchmark	5.53	(11.01)	(1.03)	7.08	9.52
Ranking vs. Core Plus Fixed Income	26				

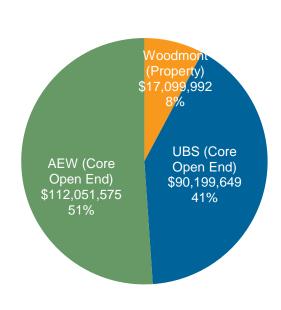
- The Fixed Income composite outpaced the benchmark during the quarter and over the trailing year. Performance for periods longer than one year includes the Colchester Global and Western Asset Intermediate Credit portfolios (transitioned in 4Q22).
- Relative returns for both managers benefitted from selection within investment grade credit, allocations to high yield, and above index duration positioning as yields declined.

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

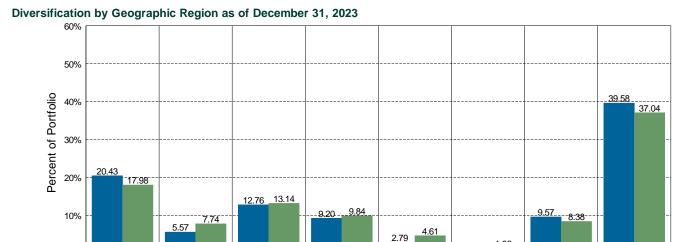


0%

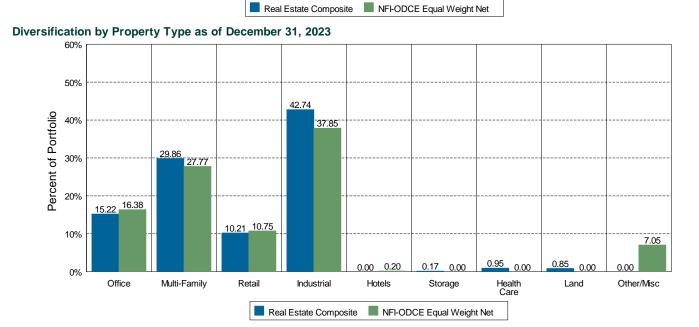
Northeast

Mideast

Southeast



Southwest



EN Central WN Central

Mountain

Pacific

Real Estate Composite

Returns and Rankings for Periods Ended December 31, 2023

	Last	Last	Last 3	Last 5	Last 10
	Quarter	Year	Years	Years	Years
Real Estate - Net	(2.71)	(12.04)	2.76	1.31	6.59
Real Estate Target	(5.37)	(13.33)	4.35	3.78	6.69
AEW Core Property Trust - Net	(1.94)	(10.00)	5.54	4.48	6.63
NFI-ODCE Equal Wt Net Index	(5.37)	(13.33)	4.35	3.78	6.65
Ranking vs. Core Open End Funds	66	50	48	52	66
UBS Trumbull Property Fund - Net	(4.15)	(15.53)	0.85	(1.03)	3.37
NFI-ODCE Equal Wt Net Index	(5.37)	(13.33)	4.35	3.78	6.65
Ranking vs. Core Open End Funds	70	88	99	97	96

Returns and Rankings for Calendar Years

	2023	2022	2021	2020	2019
Real Estate - Net	(12.04)	6.20	16.16	(2.29)	0.64
Real Estate Target	(13.33)	7.56	21.88	0.75	5.18
AEW Core Property Trust - Net	(10.00)	7.95	21.00	0.57	5.29
NFI-ODCE Equal Wt Net Index	(13.33)	7.56	21.88	0.75	5.18
Ranking vs. Core Open End Funds	50	54	56	66	71
UBS Trumbull Property Fund - Net	(15.53)	5.21	15.41	(4.68)	(2.88)
NFI-ODCE Equal Wt Net Index	(13.33)	7.56	21.88	0.75	5.18
Ranking vs. Core Open End Funds	88	82	89	96	96

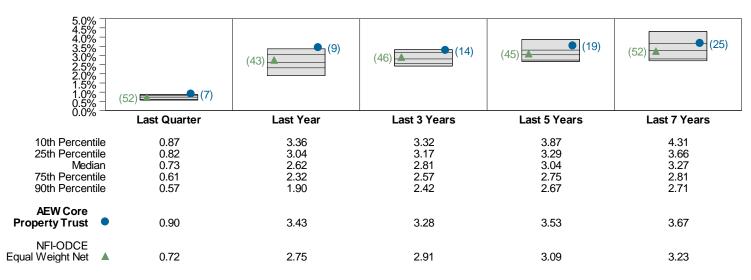
- The AEW Core Property Trust's current leverage is 29% (NFI-ODCE leverage: 26%).
- The UBS Trumbull Property Fund's current leverage is 21%.
- The office sector continued to face headwinds, while residential also detracted to a lesser extent. Retail was modestly positive in both funds.

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.

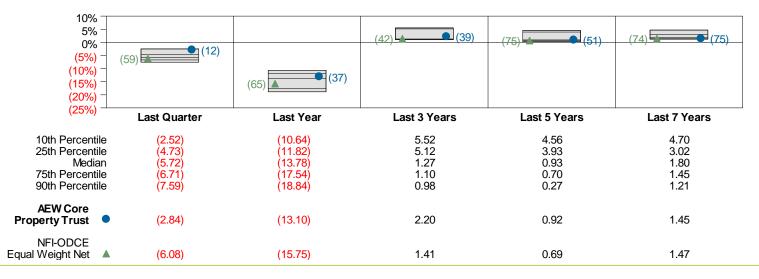


AEW Income and Appreciation Returns

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



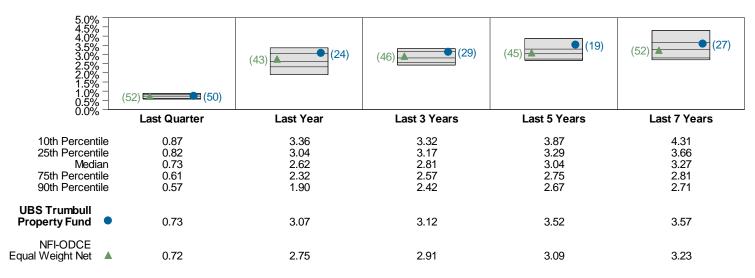
Appreciation Rankings vs Callan Real Estate ODCE Periods ended December 31, 2023



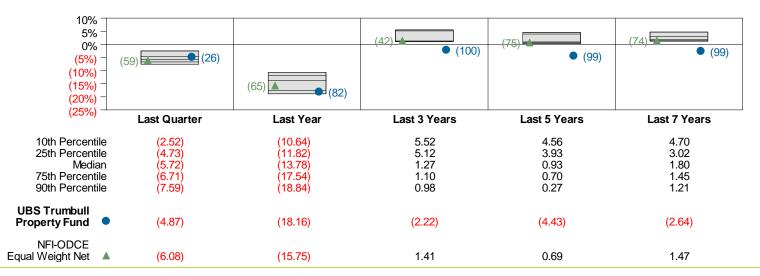


UBS Income and Appreciation Returns

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



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

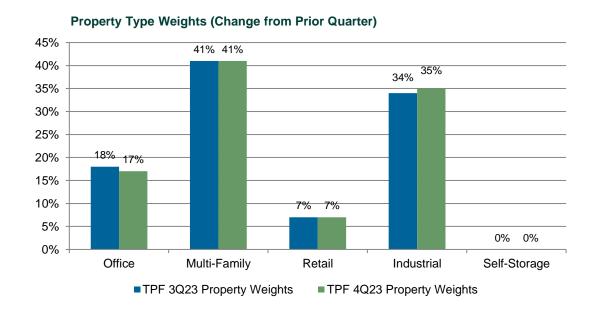




UBS Trumbull Property Fund Snapshot

As of December 31, 2023

As of 4Q 2023	
Gross Asset Value	\$14.0B
Net Asset Value	\$10.8B
Leverage	21.4%
Number of Investments	130
Number of Investors	435
Redemption Queue	\$6.5 billion
4Q23 Redemption Queue Payout	\$0 million
Contribution Queue	\$0 million



- The Fund has a current redemption pool of \$6.5 billion. The Fund made a 3Q 2023 redemption payment in October 2023 of \$100 million but did not make a 4Q 2023 redemption payment in January 2024. UBS estimates, based on current capital flows and the fund's disposition program, that the fund's redemption queue will be brought into balance in 2026.
- In September 2019, UBS announced a Loyalty Fee Program, which MCERA in 2019 elected to participate in the four-year option for a management fee discount of 25% on approximately \$100 million NAV (effective January 1, 2020). In 2023, MCERA again elected for the four-year option for a 25% discount on the total NAV, effective January 1, 2024.
- In February 2024, UBS announced significant changes to the Loyalty Fee Program, including no lock-up required and no management fee clawback should MCERA opt to enter the redemption queue. These changes provide greater flexibility for MCERA in managing its position in the fund.



NFI-ODCE Funds – Key Fund Metrics

As of December 31, 2023

Fund Name	Last Quarter	Net Asset Value (\$ millions)	Contribution Queue (\$ millions)	Redemption Queue (\$ millions)	Redemption Queue % of NAV
AEW Core Property Trust	-1.92%	\$6,938.7	\$0.0	\$890.0	12.83%
ARA Core Property Fund	-6.21%	\$5,547.0	\$22.0	\$752.9	13.57%
ASB Allegiance Real Estate Fund	-7.98%	\$5,146.3	\$0.0	\$885.0	17.20%
Bailard Real Estate Fund	-4.98%	\$1,008.5	\$0.0	\$11.0	1.09%
Barings Core Property Fund	-11.20%	\$2,094.7	\$0.0	\$711.6	33.97%
BentallGreenOak BGO Diversified	-5.91%	\$7,411.1	\$0.0	\$1,540.0	20.78%
BlackRock U.S. Core Property Fund	-7.66%	\$2,227.6	\$0.0	\$353.0	15.85%
CBRE U.S. Core Partners LP	-6.67%	\$7,622.7	\$0.0	\$690.0	9.05%
CIM Urban Income Investments	-5.34%	\$1,340.1	\$25.0	\$483.0	36.04%
Clarion Lion Property Fund	-4.59%	\$13,943.7	\$0.0	\$3,300.0	23.67%
DWS RREEF America REIT II	-6.17%	\$12,782.5	\$0.0	\$1,488.2	11.64%
Heitman America Real Estate Trust	-4.38%	\$8,953.0	\$60.1	\$1,680.0	18.76%
Intercontinental U.S. Real Estate Investment Fund	-5.80%	\$8,803.5	\$0.0	\$1,000.0	11.36%
Invesco Core Real Estate USA	-4.83%	\$10,861.3	\$0.0	\$2,500.0	23.02%
J.P. Morgan Strategic Property Fund	-7.64%	\$27,383.7	\$830.6	\$6,200.0	22.64%
LaSalle US Property Fund	-4.87%	\$6,203.7	\$7.8	\$57.1	0.92%
MetLife Core Property Fund	-7.22%	\$4,447.6	\$213.0	\$626.0	14.08%
Morgan Stanley Prime Property Fund	-2.21%	\$31,941.1	\$0.9	\$5,300.0	16.59%
NYL Madison Core Property Fund	-5.07%	\$1,522.6	\$0.0	\$83.7	5.50%
PGIM PRISA	-4.62%	\$24,029.3	\$0.0	\$3,159.8	13.15%
Principal U.S. Core Property Account	-2.29%	\$8,733.0	\$597.0	\$1,400.0	16.03%
Sagard Real Estate U.S. Property Fund	-4.30%	\$933.5	\$0.0	\$199.0	21.32%
Stockbridge Smart Markets Fund	-2.97%	\$3,427.9	\$68.5	\$374.4	10.92%
TA Realty	-5.38%	\$5,583.1	\$346.7	\$352.1	6.31%
UBS Trumbull Property Fund	-4.17%	\$10,843.1	\$0.0	\$6,500.0	59.95%



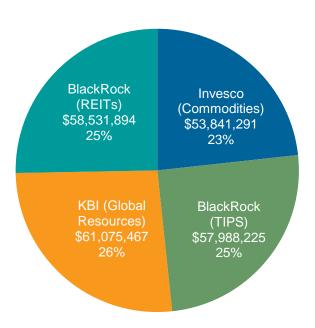
NFI-ODCE Funds - Gross of Fee All Sector Returns

As of December 31, 2023

Fund	Retail 4Q 2023	Apartment 4Q 2023	Industrial 4Q 2023	Office 4Q 2023
AEW	0.71%	-2.34%	1.44%	-3.35%
ARA	-0.74%	-8.40%	-0.81%	-6.86%
ASB	-7.29%	-6.28%	-2.94%	-5.66%
Bailard	0.09%	-2.76%	-4.13%	-4.93%
Barings	0.43%	-7.39%	-6.79%	-14.98%
3GO	-2.02%	-3.54%	-2.74%	-9.67%
BlackRock	-0.79%	-5.97%	-2.54%	-8.96%
CBRE	-0.21%	-4.95%	-2.63%	-5.96%
CIM Group	2.79%	-5.51%	-3.49%	-3.62%
Clarion	-1.51%	-4.26%	-1.61%	-4.39%
OWS	-1.21%	-5.49%	-4.71%	-5.32%
Heitman	-1.16%	-3.76%	-1.69%	-6.22%
ntercontinental	0.07%	-3.58%	-5.32%	-6.01%
nvesco	0.21%	-3.40%	-1.88%	-5.88%
IP Morgan	-2.21%	-6.41%	-3.18%	-7.32%
_aSalle	-0.21%	-4.13%	-1.12%	-6.97%
MetLife	0.00%	-7.25%	-3.04%	-4.33%
MSIM	-1.67%	-0.74%	-0.10%	-4.85%
NYLIM	-2.99%	-4.47%	-3.96%	-2.08%
PGIM	-1.54%	-2.64%	-1.87%	-8.67%
Principal	-0.60%	-1.59%	-0.60%	-3.84%
Sagard	0.09%	-3.32%	-2.24%	-5.36%
Stockbridge	0.60%	-1.15%	-3.31%	-5.17%
TA Realty	-1.59%	-4.08%	-3.50%	-1.81%
JBS	1.18%	-2.45%	-1.31%	-6.76%



Real Assets Composite



- The BlackRock TIPS and REITs Funds are passive.
- Invesco outperformed with energy being the largest contributor. In a difficult period for commodities broadly, the fund's underweight to oil, natural gas, and nickel offered downside protection.
- KBI sharply outperformed the index. The index contains traditional energy names which KBI does not own as the fund focuses on renewable energy sources. Water and Energy Transition segments bolstered relative returns, while traditional energy was challenged in the quarter.

Returns and Rankings for Periods Ended December 31, 2023

	Last Quarter	Last Year	Last 3 Years	Last 5 Years
Real Assets - Net	6.95	5.69	5.88	8.78
Real Assets Target	4.97	3.52	7.85	7.55
BlackRock TIPS Index Fund - Net	4.55	3.98	(1.02)	3.18
Bloomberg US TIPS Index	4.71	3.90	(1.00)	3.15
Ranking vs. Real Returns Database	55	41	61	48
BlackRock REIT Index Fund - Net	16.30	13.99	7.10	6.07
S&P Dow Jones US Select REIT	16.35	13.96	7.18	6.12
Ranking vs. Real Estate Mutual Funds	49	15	12	79
Invesco Commodity Fund - Net	(3.68)	(2.05)	8.51	7.71
Bloomberg Commodity Index	(4.63)	(7.91)	10.76	7.23
Ranking vs. Commodities Funds	52	1	99	56
KBI Global Resources Fund - Net	11.64	7.37	7.08	14.63
S&P Global Natural Resources Index	3.44	3.38	12.12	10.40
Returns and Rankings Calendar Ye	aare			
Returns and Rankings Calendar R	Juis			
	2023	2022	2021	2020
Real Assets - Net	5.69	(9.41)	23.96	11.08
Real Assets Target	3.52	(3.52)	25.60	0.57
BlackRock TIPS Index Fund - Net	3.98	(11.96)	5.92	11.17
Bloomberg US TIPS Index	3.90	(11.85)	5.96	10.99
Ranking vs. Real Returns Database	41	78	36	23
BlackRock REIT Index Fund - Net	13.99	(26.08)	45.80	(11.21)
S&P Dow Jones US Select REIT Inde		(2 6.06) (25.96)	45.80 45.91	(11.21)
Ranking vs. Real Estate Mutual Fund		(25.96) 51	45.91 17	96
Ranking vs. Real Estate Mutual Fund	5 15	31	17	96
Invesco Commodity Fund - Net	(2.05)	9.00	19.68	7.58
Bloomberg Commodity Index	(7.91)	16.09	27.11	(3.12)
Ranking vs. Commodities Funds	1	83	87	1
KBI Global Resources Fund - Net	7.37	(7.85)	24.08	29.17
S&P Global Natural Resources Index	-	9.59	24.40	(0.05)
Ca. Ciosai Hatarai Nosouroos iridex	J.50	0.00	21.70	(0.00)



Private Equity Portfolio (as of 9/30/23)

- 84% Paid-In through 9/30/22.
- 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.

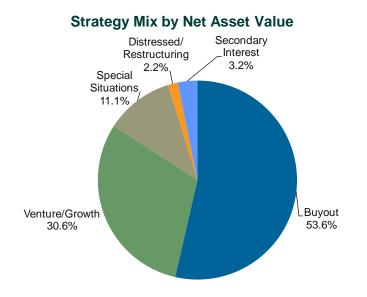
	September 30, 2023	Quarter Change	June 30, 2023
Summary			
Vintage Years	17 in 2008-2024		16 in 2008-2023
# Total Partnerships	577	10	567
# Active Partnerships	552	9	543
# Liquidated Partnerships	25	1	24
Changes in Value			
Capital Commitments	\$500,000,000	-	\$500,000,000
Paid-In Capital	\$421,227,453	\$4,595,472	\$416,631,981
Uncalled Capital	\$94,979,292	\$(4,285,100)	\$99,264,392
% Paid-In	84.25%	0.92%	83.33%
Distributed Capital	\$489,894,526	\$12,404,656	\$477,489,870
Net Asset Value	\$342,544,937	\$(12,266,017)	\$354,810,954
Total Realized and Unrealized Value	\$832,439,463	\$138,639	\$832,300,824
Ratios and Performance			
Distributions to Paid-In Capital (DPI)	1.16x	0.02x	1.15x
Residual Value to Paid-In Capital (RVPI)	0.81x	(0.04)x	0.85x
Total Value to Paid-In Capital (TVPI)	1.98x	(0.02)x	2.00x
Quartile Ranking	2nd		2nd
Net IRR	14.90%	(0.31%)	15.21%
Additional Performance Metrics			
Distribution Rate, as % of Beginning NAV		3.50%	
Unrealized Gain/(Loss), Dollars		\$(4,456,833)	
Unrealized Gain/(Loss), %		(1.26%)	

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

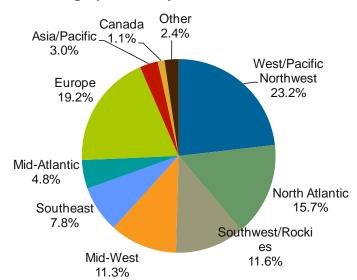
Pathway does not include capital called for fees towards the commitment. Paid-in may exceed the total commitment due to fees and/or currency effects.



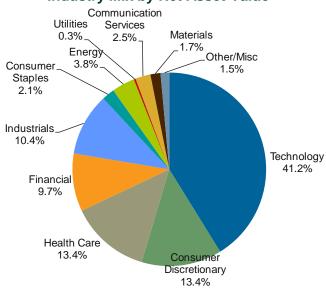
Private Equity Portfolio Exposure



Geographic Mix by Net Asset Value

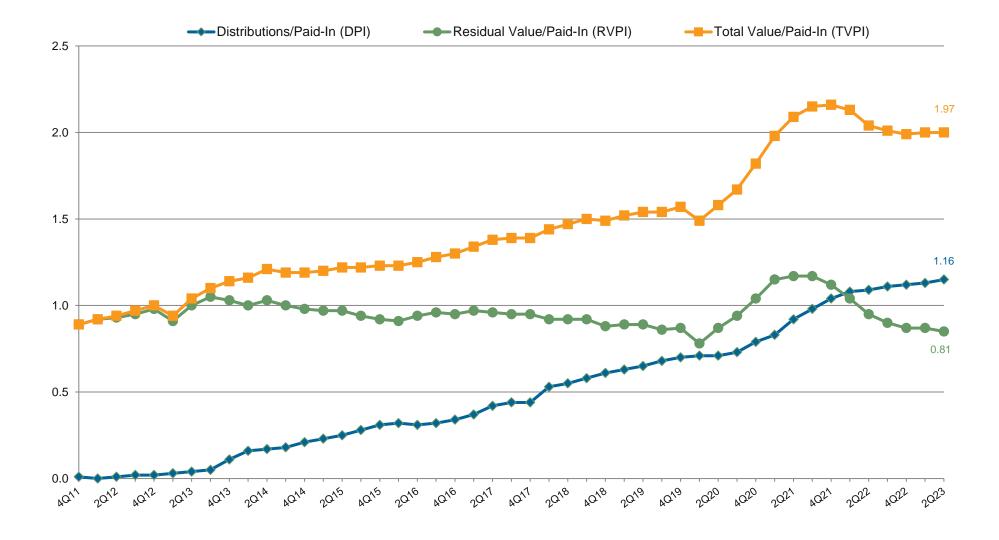


Industry Mix by Net Asset Value





Private Equity Ratios – Changes Over Time





Opportunistic Portfolio

- 71% Paid-In through 12/31/23.
- The total portfolio is diversified by industry type and geographic location.

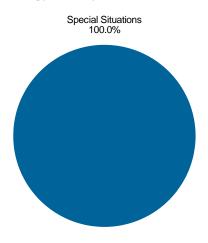
	December 31, 2023	Quarter Change	September 30, 2023
Summary			
Vintage Year	2020		2020
# Total Partnerships	193	-	193
# Active Partnerships	193	-	193
# Liquidated Partnerships	0	-	0
Changes in Value			
Capital Commitments	\$100,000,000	-	\$100,000,000
Paid-In Capital	\$71,179,923	\$5,800,000	\$65,379,923
Uncalled Capital	\$31,930,938	\$(5,800,000)	\$37,730,938
% Paid-In	71.18%	5.80%	65.38%
Distributed Capital	\$13,086,308	-	\$13,086,308
Net Asset Value	\$68,516,700	\$7,093,937	\$61,422,763
Total Realized and Unrealized Value	\$81,603,008	\$7,093,937	\$74,509,071
Ratios and Performance			
Distributions to Paid-In Capital (DPI)	0.18x	(0.02)x	0.20x
Residual Value to Paid-In Capital (RVPI)	0.96x	0.02x	0.94x
Total Value to Paid-In Capital (TVPI)	1.15x	0.01x	1.14x
Quartile Ranking	3rd		3rd
Net IRR	7.70%	0.06%	7.65%
Additional Performance Metrics			
Distribution Rate, as % of Beginning NAV		0.00%	
Unrealized Gain/(Loss), Dollars		\$1,293,937	
Unrealized Gain/(Loss), %		2.11%	

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

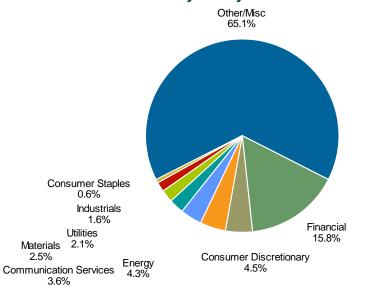


Opportunistic Portfolio Exposure

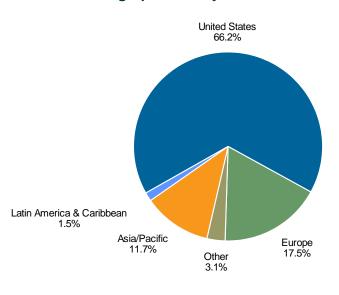
Strategy Mix by Net Asset Value



Industry Mix by Net Asset Value



Geographic Mix by Net Asset Value



CarVal and Fortress do not categorize their assets by industry and therefore classify their investments as Other.

CarVal portfolio by asset class: corporate securities, loan portfolios, structured credit, and special opportunities/hard assets.

Fortress portfolio by asset class: asset backed securities, commercial real estate and debt securities, consumer loans, corporate debt and securities (distressed), corporate debt and securities (stressed), corporate loan originations, diversified credit, legal assets, preferred and common equity corporate securities, residential, and transportation assets.



Important Disclosures

Information contained in this document may include confidential, trade secret and/or proprietary information of Callan and the client. It is incumbent upon the user to maintain such information in strict confidence. Neither this document nor any specific information contained herein is to be used other than by the intended recipient for its intended purpose.

The content of this document is particular to the client and should not be relied upon by any other individual or entity. There can be no assurance that the performance of any account or investment will be comparable to the performance information presented in this document.

Certain information herein has been compiled by Callan from a variety of sources believed to be reliable but for which Callan has not necessarily verified for accuracy or completeness. Information contained herein may not be current. Callan has no obligation to bring current the information contained herein.

Callan's performance measurement service reports returns for a portfolio and compares them against relevant benchmarks and peer groups, as appropriate; such service may also report on historical portfolio holdings, comparing them to holdings of relevant benchmarks and peer groups, as appropriate ("portfolio holdings analysis"). To the extent that Callan's performance measurement service includes portfolio holdings analysis, Callan relies entirely on holdings data provided by third parties including custodian banks, record keepers and investment managers. Callan reports the performance and holdings data as received and does not attempt to audit or verify the holdings data. Callan is not responsible for the accuracy or completeness of the performance or holdings data received from third parties and such data may not have been verified for accuracy or completeness. Callan does not perform forward-looking risk analysis or guideline compliance analysis based on the performance or portfolio holdings data.

In no event should performance measurement service provided by Callan be used in the calculation, deliberation, policy determination, or any other action of the client as it pertains to determining contribution or funding amounts, timing or activity, benefit payments or distribution amounts, timing or activity, or performance-based fee amounts, timing or activity.

The content of this document may consist of statements of opinion, which are made as of the date they are expressed and are not statements of fact. The opinions expressed herein may change based upon changes in economic, market, financial and political conditions and other factors. Callan has no obligation to bring current the opinions expressed herein.

The information contained herein may include forward-looking statements regarding future results. The forward-looking statements herein: (i) are best estimations consistent with the information available as of the date hereof and (ii) involve known and unknown risks and uncertainties. Actual results may vary, perhaps materially, from the future results projected in this document. Undue reliance should not be placed on forward-looking statements.

Callan is not responsible for reviewing the risks of individual securities or the compliance/non-compliance of individual security holdings with a client's investment policy guidelines.

This document should not be construed as legal or tax advice on any matter. You should consult with legal and tax advisers before applying any of this information to your particular situation.

Reference to, or inclusion in this document of, any product, service or entity should not necessarily be construed as recommendation, approval, or endorsement or such product, service or entity by Callan. This document is provided in connection with Callan's consulting services and should not be viewed as an advertisement of Callan, or of the strategies or products discussed or referenced herein.

The issues considered and risks highlighted herein are not comprehensive and other risks may exist that the user of this document may deem material regarding the enclosed information. Please see any applicable full performance report or annual communication for other important disclosures.

Unless Callan has been specifically engaged to do so, Callan does not conduct background checks or in-depth due diligence of the operations of any investment manager search candidate or investment vehicle, as may be typically performed in an operational due diligence evaluation assignment and in no event does Callan conduct due diligence beyond what is described in its report to the client.

Any decision made on the basis of this document is sole responsibility of the client, as the intended recipient, and it is incumbent upon the client to make an independent determination of the suitability and consequences of such a decision.

Callan undertakes no obligation to update the information contained herein except as specifically requested by the client.

Past performance is no guarantee of future results.

