

Callan



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Second Quarter 2022 Summary Investment Presentation

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Callan

Economic and Capital Markets Review

Equity and Fixed Income Markets Both Fell in 2Q22

Negative returns for stocks and bonds at the same time are unusual

Global equity markets down sharply following the invasion of Ukraine

- Similar impact across developed markets
- Greater impact on small cap and emerging markets

Fixed income down with sharply higher inflation and interest rates

- Bloomberg Aggregate: -10.4% year-to-date
- CPI-U: +9.1% for the year ended 2Q22

Number of times stocks and bonds have been down together

- 37 quarters in almost 100 years, about 10% of the quarters
- But just twice on annual basis

Inflation spiked to highest rate in decades

Economic data show growth hit “pause”

- GDP fell 0.9% in 2Q22, after dropping 1.6% in 1Q22
- Forecasters have cut growth estimates for 2022 to 0%, or lower, and to 1.5% for 2023.

Returns for Periods ended 6/30/22

	1 Quarter	Year to Date	1 Year	5 Years	10 Years	25 Years
U.S. Equity						
Russell 3000	-16.70	-21.10	-13.87	10.60	12.57	8.06
S&P 500	-16.10	-19.96	-10.62	11.31	12.96	7.97
Russell 2000	-17.20	-23.43	-25.20	5.17	9.35	7.41
Global ex-U.S. Equity						
MSCI World ex USA	-14.66	-18.76	-16.76	2.66	5.37	4.07
MSCI Emerging Markets	-11.45	-17.63	-25.28	2.18	3.07	--
MSCI ACWI ex USA Small Cap	-17.55	-22.92	-22.45	2.55	6.22	5.68
Fixed Income						
Bloomberg Aggregate	-4.69	-10.35	-10.29	0.88	1.54	4.36
90-day T-Bill	0.10	0.14	0.17	1.11	0.64	1.96
Bloomberg Long Gov/Credit	-12.27	-21.88	-20.14	1.03	2.63	6.14
Bloomberg Global Agg ex-US	-11.01	-16.49	-18.78	-1.75	-1.06	2.83
Real Estate						
NCREIF Property	5.33	10.94	23.91	9.30	9.89	9.61
FTSE Nareit Equity	-17.00	-20.20	-6.27	5.30	7.39	8.67
Alternatives						
CS Hedge Fund	-2.30	-0.21	1.92	4.83	4.65	6.26
Cambridge Private Equity*	-1.51	3.61	22.01	20.68	16.50	15.43
Bloomberg Commodity	-5.66	18.44	24.27	8.39	-0.82	1.81
Gold Spot Price	-7.51	-1.16	2.02	7.79	1.20	6.97
Inflation - CPI-U	3.06	6.28	9.06	3.88	2.59	2.49

*Cambridge PE data through 03/31/22.

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

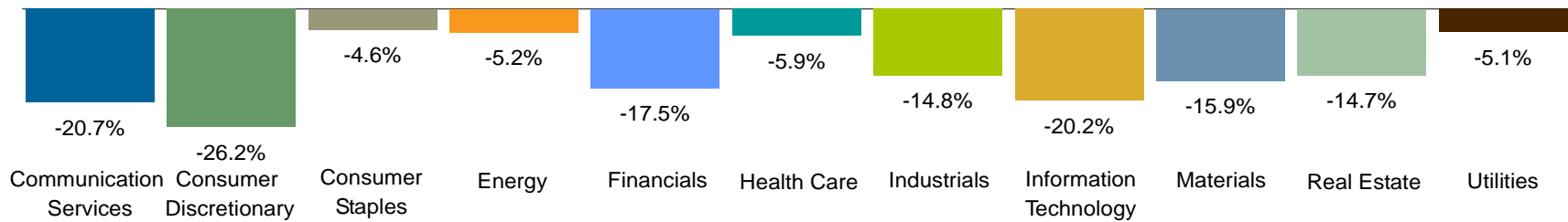
U.S. Equity Performance: 2Q22

Worst first half since 1970

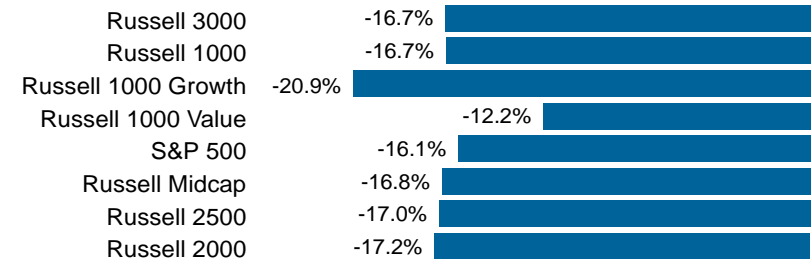
Rising interest rates and inflation along with geopolitical headlines all contributed to a volatile and risk-averse environment

- The S&P 500 dropped by 16.1% in 2Q22; all major U.S. indices across styles and market cap ranges were negative in the quarter.
- All sectors posted negative returns over the quarter. Energy continues to be the best-performing sector, and it is the only sector that has posted positive returns YTD 2022.
- Large cap stocks nominally outpaced smaller cap stocks in the quarter. The performance spread between the Russell 1000 and the Russell 2000 Index was around 50 basis points.
- Value stocks have outperformed growth stocks across the market capitalization spectrum.
- Consumer Discretionary (-26%), Communication Services (-21%), and Information Technology (-20%) were the worst-performing sectors.

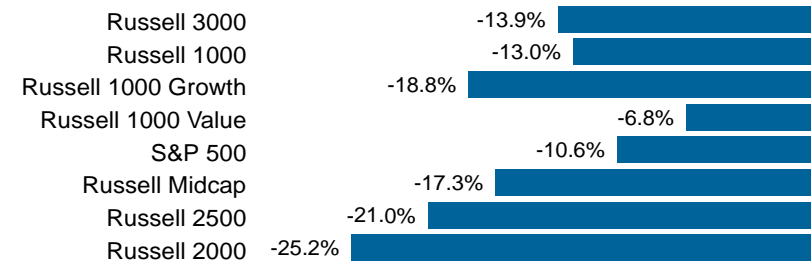
Industry Sector Quarterly Performance (S&P 500)



U.S. Equity: Quarterly Returns



U.S. Equity: One-Year Returns



Sources: FTSE Russell, S&P Dow Jones Indices

Global/Global ex-U.S. Equity Performance: 2Q22

Fears of recession

- The war in Ukraine pushed an already fragile supply chain, energy demand/supply imbalances, and inflationary environment into fears of a recession.
- Slowing global growth and recession risk became clearer toward quarter-end, leading investors toward higher-quality and lower-volatility areas of the market to offer protection.

Wide divergence in country returns

- Optimism that the worst is behind China's COVID-19 lockdown buoyed the country to the only positive return in the quarter.
- Meanwhile Japan suffered from a weak yen, slowing growth, and continued supply chain disruptions.

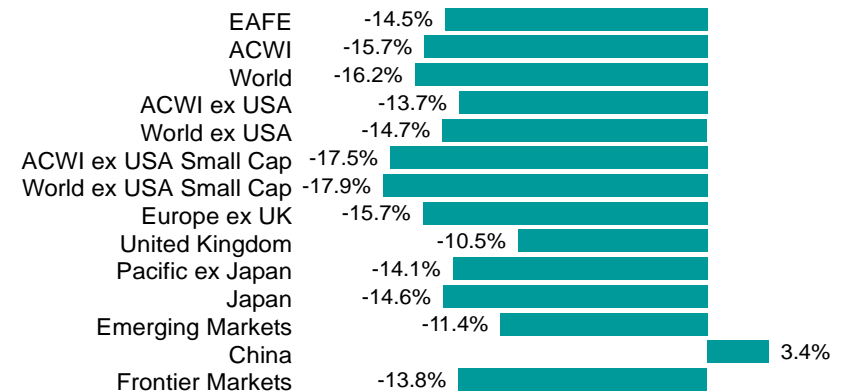
Growth vs. value

- Value continues to outperform growth as most monetary policies focus on tightening.
 - Energy was the only sector with positive year-to-date results.
- Information Technology had the worst sector return as interest rate increases dampened long duration growth attractiveness.

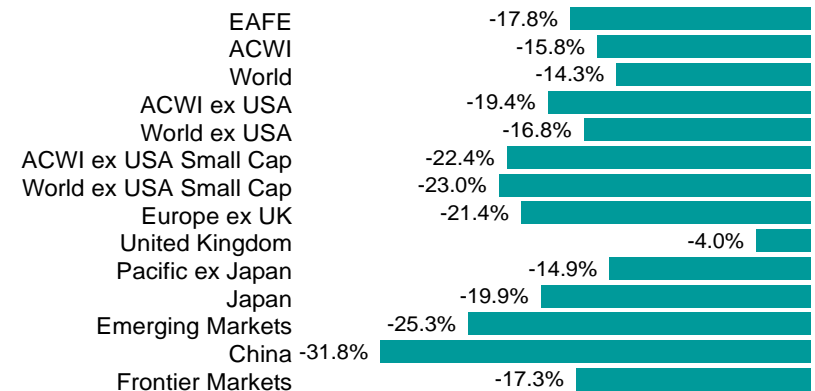
U.S. dollar vs. other currencies

- The U.S. dollar strengthened further against other major currencies given its global dominance and perceived safety.

Global Equity: Quarterly Returns



Global Equity: One-Year Returns



Source: MSCI

U.S. Fixed Income Performance: 2Q22

Bonds hit hard as rates rose sharply (again)

- Worst six-month return for Bloomberg US Aggregate in history
- Yield curve flirted with inversion but 2-year/10-year yield spread was slightly positive at quarter-end.
- TIPS underperformed nominal Treasuries, and 10-year breakeven spreads fell to 2.33% from 2.84% at 3/31/22.
- Fed raised rates by 75 bps, the largest increase since 1994, with further hikes expected.
 - Market pricing reflects Fed Funds rate of 3.4% at year-end.

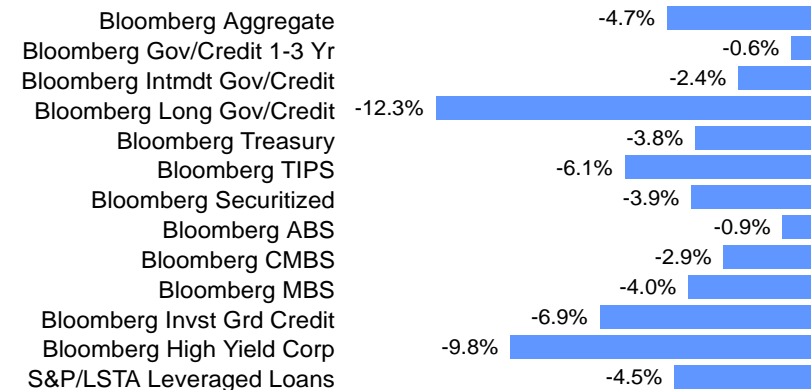
Spread sectors underperformed

- Investment grade corporates underperformed like-duration U.S. Treasuries by 205 bps, RMBS by 98 bps.
- High yield underperformed as spreads widened; excess return vs. U.S. Treasuries was -792 bps.
 - Hurt by equity market performance and worries over the impact of higher rates on the economy
 - Yield-to-worst 8.9%
- Leveraged loans held up relatively well with lower-quality credits generally underperforming.

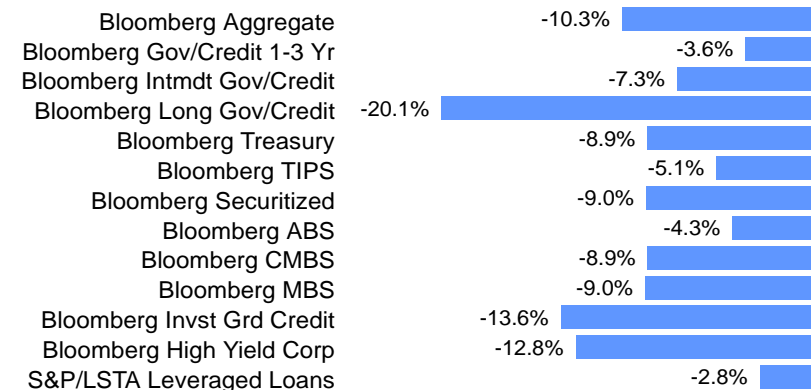
Securitized sectors continue to hang in

- Agency RMBS spreads widened in response to increased rate volatility.
- ABS spreads tightened, led by credit cards.

U.S. Fixed Income: Quarterly Returns



U.S. Fixed Income: One-Year Returns



Sources: Bloomberg, S&P Dow Jones Indices

Global Fixed Income Performance: 2Q22

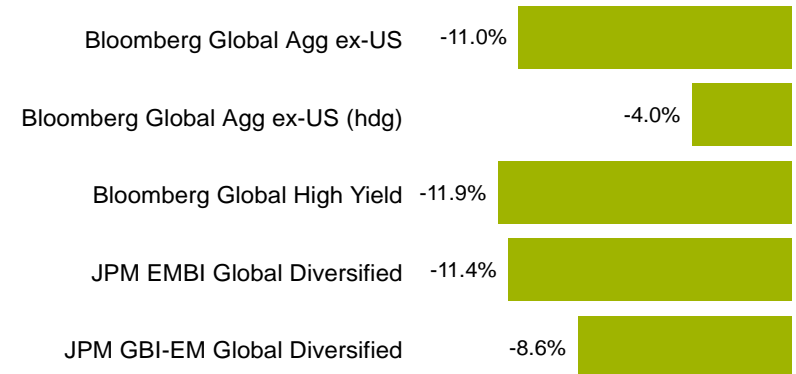
Negative returns driven by broad interest rate increases

- U.S. dollar continued to appreciate vs. yen, euro, and pound.
- Double-digit negative returns were widespread across developed markets.

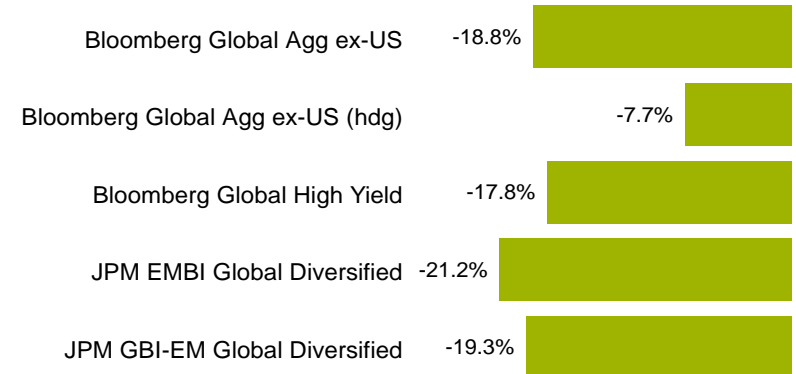
Inflation and global recession fears drag on EMD

- All countries in the USD-denominated JPM EMBI Global Diversified Index posted negative returns, hurt by rising rates in the U.S.
- Local currency markets across the JPM GBI-EM Global Diversified were down only slightly, but USD strength eroded returns for U.S. investors.

Global Fixed Income: Quarterly Returns



Global Fixed Income: One-Year Returns



Sources: Bloomberg, JP Morgan

U.S. Private Real Estate Performance: 2Q22

Positive returns across sectors

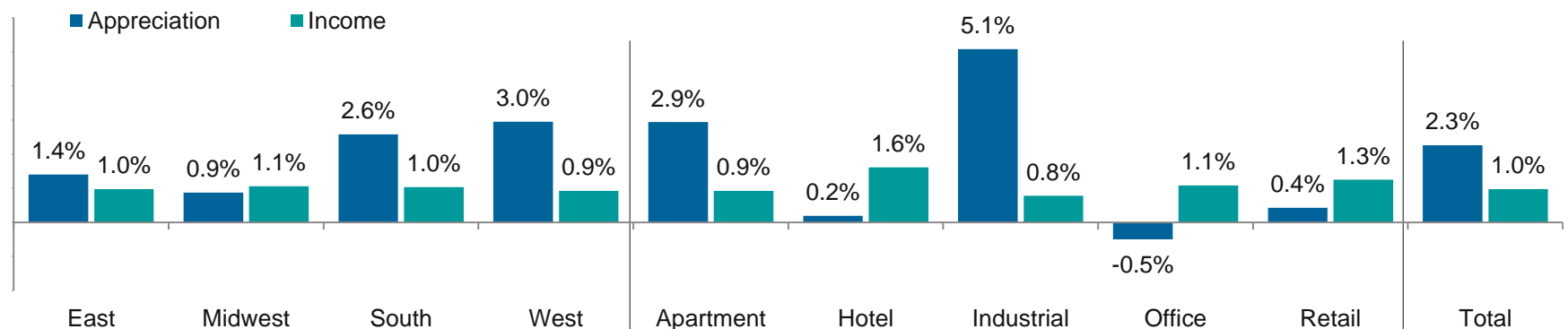
Another strong quarter for real estate

- Income returns were positive across sectors.
- Valuations are reflective of strong fundamentals in Industrial and Apartment and continued uncertainty despite a modest recovery in Office and Retail.
- Return dispersion by manager within the ODCE Index was due to the composition of underlying portfolios, and increased borrowing costs are impacting values.
- Niche sectors such as self-storage and life sciences continued to be accretive.

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
NCREIF ODCE	4.5%	28.3%	11.7%	9.6%	10.2%
Income	0.6%	2.9%	3.0%	3.1%	3.5%
Appreciation	3.9%	25.0%	8.4%	6.3%	6.5%
NCREIF Property Index	3.2%	21.5%	10.2%	8.9%	9.7%
Income	1.0%	4.1%	4.2%	4.4%	4.8%
Appreciation	2.3%	16.9%	5.8%	4.4%	4.7%

Returns are geometrically linked

NCREIF Property Index Quarterly Returns by Region and Property Type



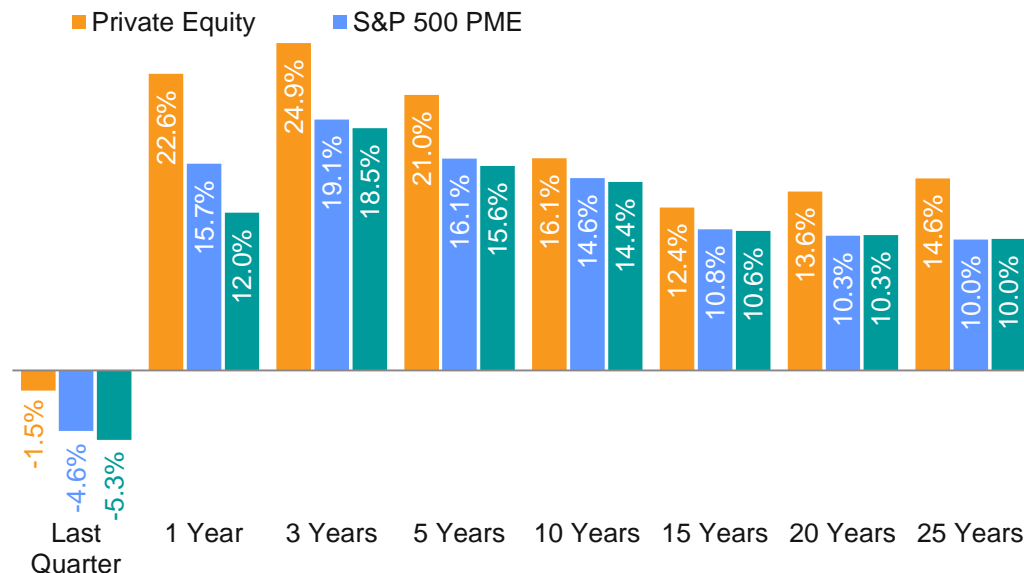
Source: NCREIF, ODCE return is net

Private Equity Performance

Smoothing effect in 1Q22 private equity returns

- After experiencing severe declines in public equity performance, investors were bracing for 1Q22 private equity returns. While private equity was down by 1.5%, the decline was muted compared to the public markets.
- Private equity returns often exhibit a smoothing effect, where declines are not as sharp as those experienced in the public markets.
- Venture capital and growth equity experienced the sharpest drops this quarter, given their technology focus as well as post-IPO public equity holdings.
- Buyouts were nearly flat for the quarter, while credit-oriented strategies saw modest gains.

Net IRRs as of 03/31/22

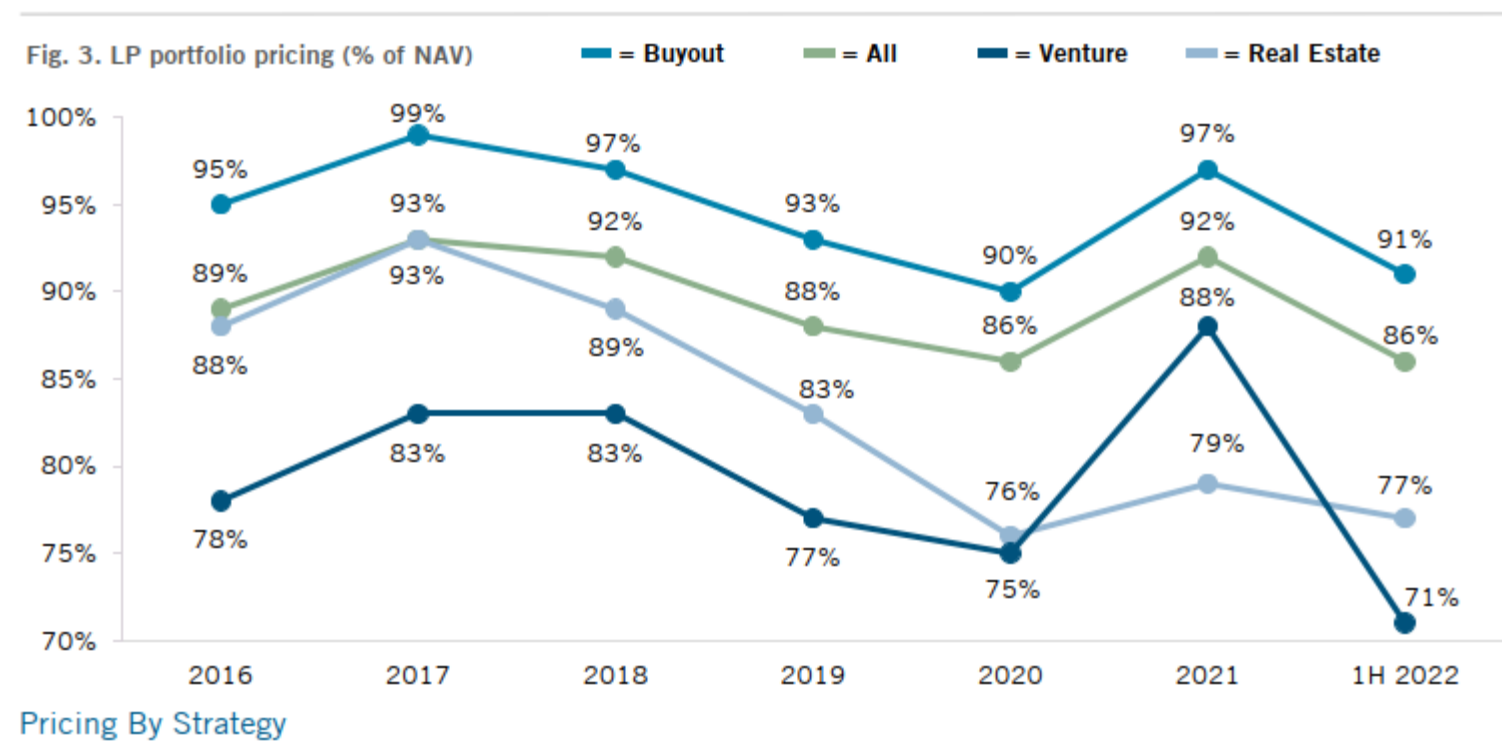


1Q22 Returns by Strategy Type

Venture Capital	-3.6%
Growth Equity	-3.9%
Buyout	-0.5%
Control-oriented Distressed	1.5%
Subordinated Capital	2.0%
Credit Opportunities	3.0%

Source: Refinitiv/Cambridge

Changes in Private Equity Pricing by Strategy



Source: Jeffries

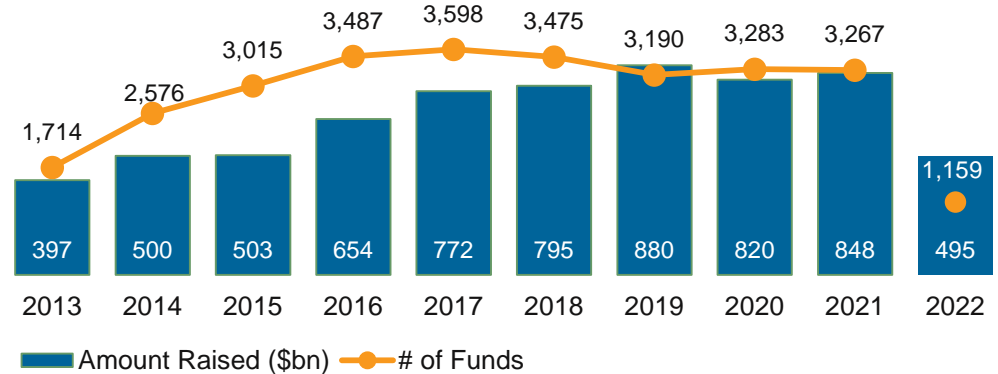
Private Equity Overview

Fundraising slows and timelines become extended

Fundraising

- Despite the pandemic, annual fundraising consistent from 2019-2021
- 1H22 fundraising behind 1H21 by 13%, but may catch up in the second half of the year
- Fundraising timelines extending due to so many funds in the market and constrained LP commitment budgets because of the “denominator effect,” delaying many final closes

Annual Fundraising

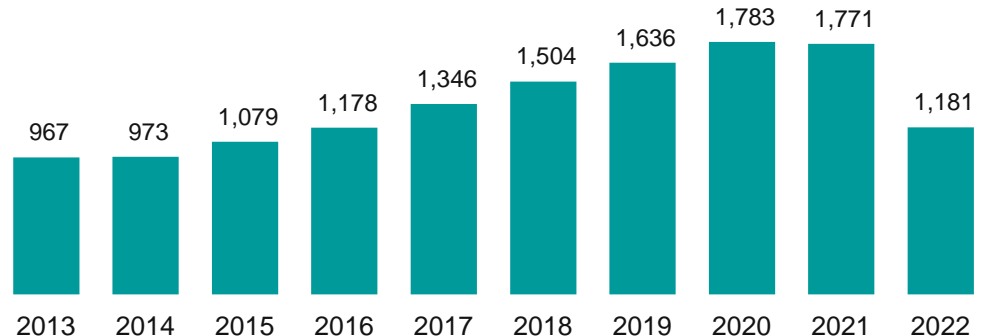


Dry powder

- Level of dry powder influenced by two factors: fundraising and capital deployment
- Dry powder around \$1.8 trillion in 2020 and 2021 due to consistent annual fundraising levels
- Dry powder not yet finalized for 2022, but may drop due to the slower fundraising environment

Dry Powder (\$bn)

Cumulative as of Year-end



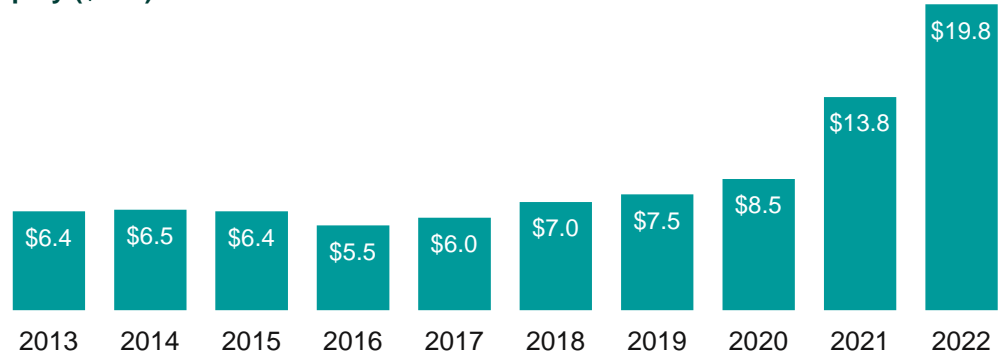
Private Equity Key Themes

Investors grappling with 'denominator effect'

Decline of the venture-backed unicorn

- 2022 a tough year for high-profile unicorns and many recent IPOs, in marked contrast to the technology boom of the last few years
- Late-stage valuations beginning to be impacted in 2022
 - Many venture-backed companies delaying their next financing round to avoid markdowns in valuations

Median Pre-Money Valuation – Global Venture Capital/Growth Equity (\$mm)



Denominator effect

- Due to the smoothing effect in short-term private equity performance
- Occurs when public equity allocations drop (pulling down the denominator), but PE allocations do not drop as far (the numerator)
 - Private equity now a larger percentage of a portfolio
- Investors unable to rebalance these illiquid exposures; now overallocated to private equity

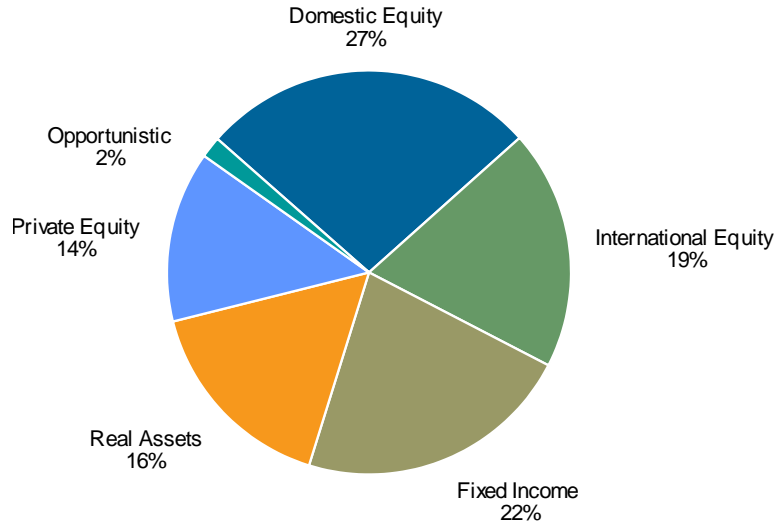
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MCERA Total Fund Review

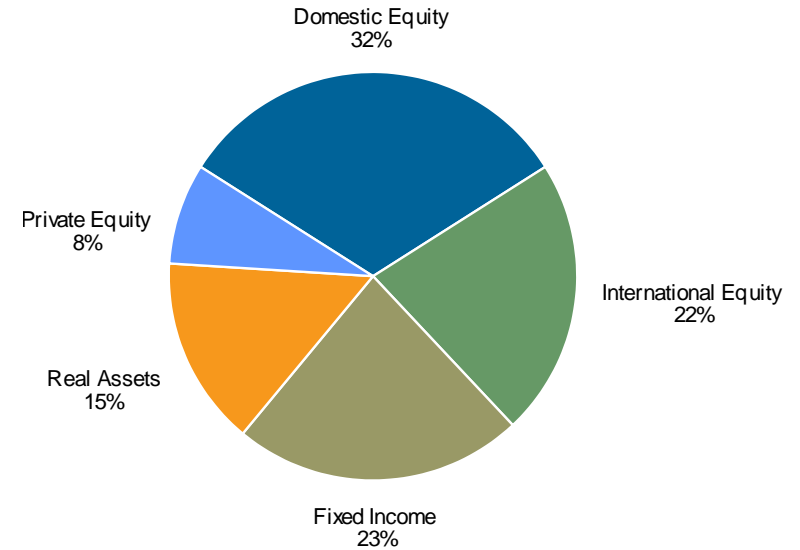
Total Fund Asset Allocation

As of June 30, 2022

Actual Asset Allocation



Target Asset Allocation

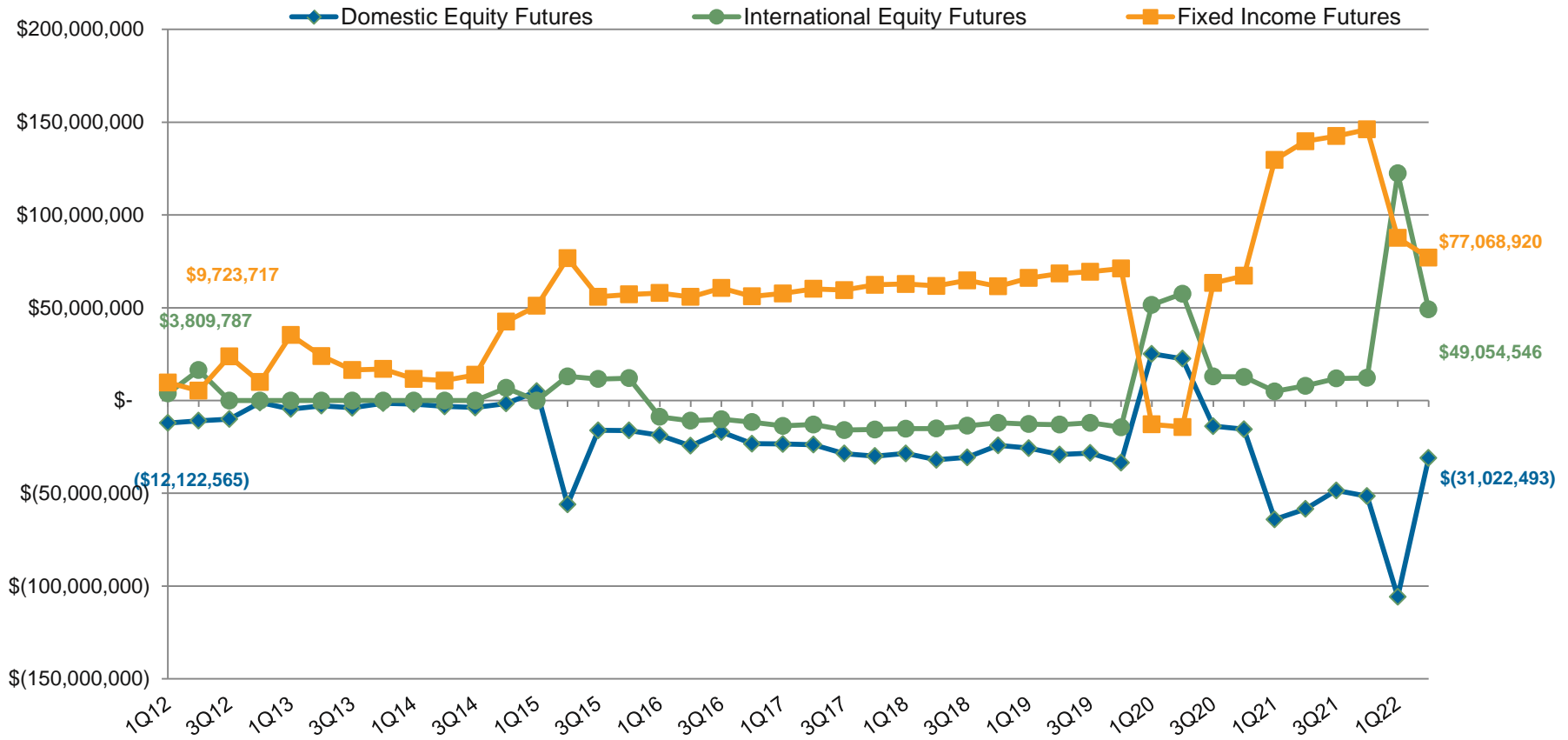


Asset Class	\$000s Actual	Weight Actual	Min Target	Target	Max Target	Percent Difference	\$000s Difference
Domestic Equity	815,520	26.9%	28.0%	32.0%	36.0%	(5.1%)	(153,314)
International Equity	580,425	19.2%	19.0%	22.0%	25.0%	(2.8%)	(85,649)
Fixed Income	673,019	22.2%	20.0%	23.0%	26.0%	(0.8%)	(23,331)
Real Assets	492,436	16.3%	12.0%	15.0%	18.0%	1.3%	38,295
Private Equity	413,784	13.7%	0.0%	8.0%	12.0%	5.7%	171,575
Opportunistic	52,423	1.7%	0.0%	0.0%	5.0%	1.7%	52,423
Total	3,027,607	100.0%		100.0%			

Total Fund Asset Distribution

	June 30, 2022				March 31, 2022	
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
Domestic Equity	\$815,519,851	26.94%	\$62,341,102	\$(152,292,006)	\$905,470,754	27.09%
(1) Parametric Domestic Equity Futures	-31,022,493	(1.02%)	65,861,421	8,851,435	-105,735,349	(3.16%)
Large Cap Equity	\$599,739,662	19.81%	\$33,799,145	\$(117,780,177)	\$683,720,695	20.45%
(2) SSGA Russell 1000 Index	635,993,719	21.01%	(2,739,375)	(127,154,244)	765,887,339	22.91%
Small Cap Equity	\$215,780,189	7.13%	\$28,541,958	\$(34,511,829)	\$221,750,060	6.63%
DFA Small Cap Core	210,548,625	6.95%	(780,943)	(33,989,197)	245,318,765	7.34%
International Equity	\$580,424,828	19.17%	\$(66,095,608)	\$(89,261,813)	\$735,782,250	22.01%
Morgan Stanley Value	174,429,702	5.76%	0	(22,199,836)	196,629,539	5.88%
Artisan Partners Growth	166,022,157	5.48%	0	(27,017,438)	193,039,595	5.77%
TimesSquare Intl Small Cap	92,126,119	3.04%	(225,734)	(20,042,788)	112,394,642	3.36%
FIAM Select Emerging Equity	98,792,303	3.26%	0	(12,549,204)	111,341,508	3.33%
Parametric International Equity Futures	49,054,546	1.62%	(65,869,874)	(7,452,547)	122,376,967	3.66%
Fixed Income	\$673,018,820	22.23%	\$(10,690,801)	\$(44,284,378)	\$727,994,000	21.78%
Wellington Core Plus	290,732,898	9.60%	(2,217,442)	(18,693,646)	311,643,986	9.32%
Western Intermediate Credit	157,518,401	5.20%	(1,282,563)	(7,213,834)	166,014,799	4.97%
Colchester Global	147,698,601	4.88%	(156,895)	(14,865,752)	162,721,248	4.87%
Parametric Fixed Income Futures	77,068,920	2.55%	(7,033,901)	(3,511,146)	87,613,967	2.62%
(3) Private Equity	\$413,783,951	13.67%	\$(2,533,649)	\$0	\$416,317,600	12.45%
Abbott ACE VI	46,993,410	1.55%	0	0	46,993,410	1.41%
Abbott ACE VII	52,814,849	1.74%	0	0	52,814,849	1.58%
Abbott 2016	74,093,518	2.45%	0	0	74,093,518	2.22%
Abbott 2017	21,044,572	0.70%	168,750	0	20,875,822	0.62%
Abbott 2021	6,057,197	0.20%	0	0	6,057,197	0.18%
Pathway PPEF 2008	64,550,610	2.13%	(2,798,448)	0	67,349,058	2.01%
Pathway PE I-7	42,695,315	1.41%	(687,156)	(0)	43,382,471	1.30%
Pathway PE I-8	73,064,022	2.41%	(1,252,931)	(0)	74,316,953	2.22%
Pathway PE I-9	17,740,217	0.59%	187,868	0	17,552,349	0.53%
Pathway PE I-10	14,730,241	0.49%	1,848,268	(0)	12,881,973	0.39%
Real Assets	\$492,436,302	16.26%	\$(3,705,912)	\$(14,066,774)	\$510,208,987	15.26%
Real Estate	\$271,197,774	8.96%	\$(3,585,896)	\$10,290,348	\$264,493,323	7.91%
Woodmont	18,099,990	0.60%	0	0	18,099,990	0.54%
UBS Trumbull Property Fund	117,824,282	3.89%	(933,919)	4,558,749	114,199,452	3.42%
AEW Core Property Trust	135,273,503	4.47%	(1,325,800)	4,405,421	132,193,882	3.95%
Public Real Assets	\$221,238,527	7.31%	\$(120,016)	\$(24,357,121)	\$245,715,665	7.35%
INVESCO Commodities Fund	56,390,659	1.86%	(10,120,016)	(1,019,003)	67,529,678	2.02%
BlackRock TIPS Index Fund	57,683,410	1.91%	6,000,000	(3,420,331)	55,103,741	1.65%
KBI Global Resources Fund	52,449,775	1.73%	0	(8,820,466)	61,270,241	1.83%
Blackrock REIT Index Fund	54,714,683	1.81%	4,000,000	(11,097,321)	61,812,004	1.85%
(4) Opportunistic	\$52,423,308	1.73%	\$7,847,741	\$(2,606,107)	\$47,181,674	1.41%
CarVal Credit Value V	15,138,327	0.50%	(55,612)	(442,000)	15,635,939	0.47%
Fortress Credit Opps Fund V	10,721,890	0.35%	632,411	39,751	10,049,728	0.30%
Varde Dislocation Fund	26,563,091	0.88%	7,270,942	(2,203,858)	21,496,007	0.64%
Total Fund	\$3,027,607,060	100.0%	\$(12,837,127)	\$(302,511,078)	\$3,342,955,266	100.0%

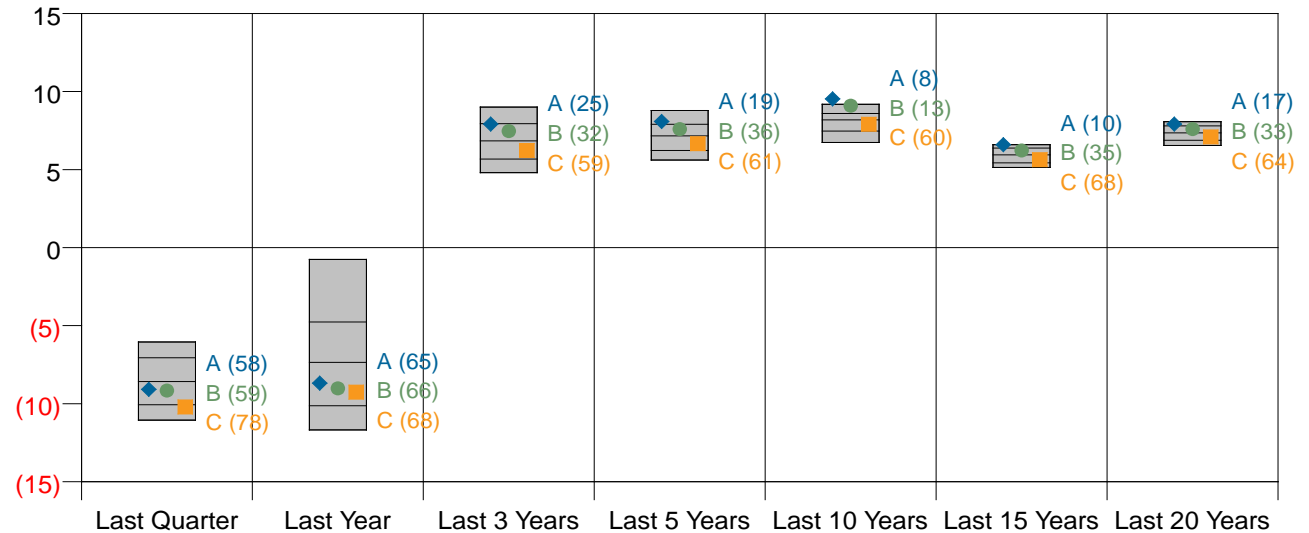
Parametric Overlay Positions – Changes Over Time



Total Fund Performance – Annualized*

Returns for Periods Ended June 30, 2022

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



10th Percentile	(6.05)	(0.74)	9.01	8.79	9.19	6.61	8.07
25th Percentile	(7.05)	(4.75)	7.95	7.92	8.61	6.38	7.80
Median	(8.57)	(7.34)	6.85	7.16	8.19	5.95	7.36
75th Percentile	(10.06)	(10.12)	5.68	6.23	7.48	5.44	6.89
90th Percentile	(11.04)	(11.68)	4.80	5.62	6.74	5.14	6.55

MCERA Total Fund - Gross	◆ A	(9.07)	(8.67)	7.93	8.08	9.54	6.60	7.92
MCERA Total Fund - Net	● B	(9.15)	(9.01)	7.48	7.61	9.10	6.23	7.60
MCERA Total Fund Target	■ C	(10.20)	(9.25)	6.23	6.67	7.92	5.64	7.10

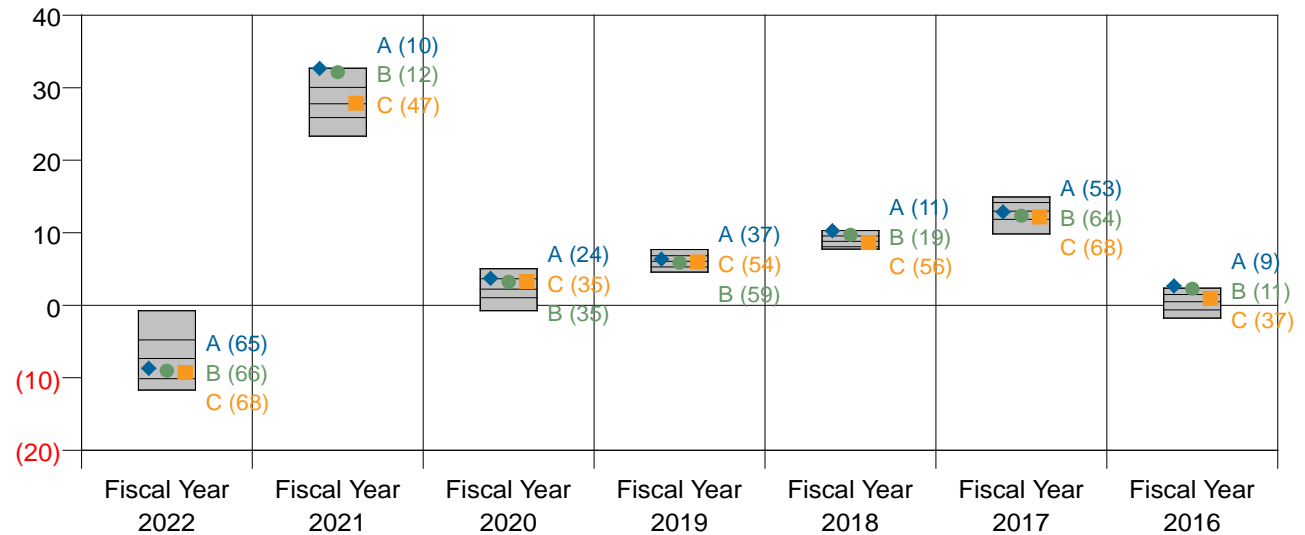
*Performance is preliminary.

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)

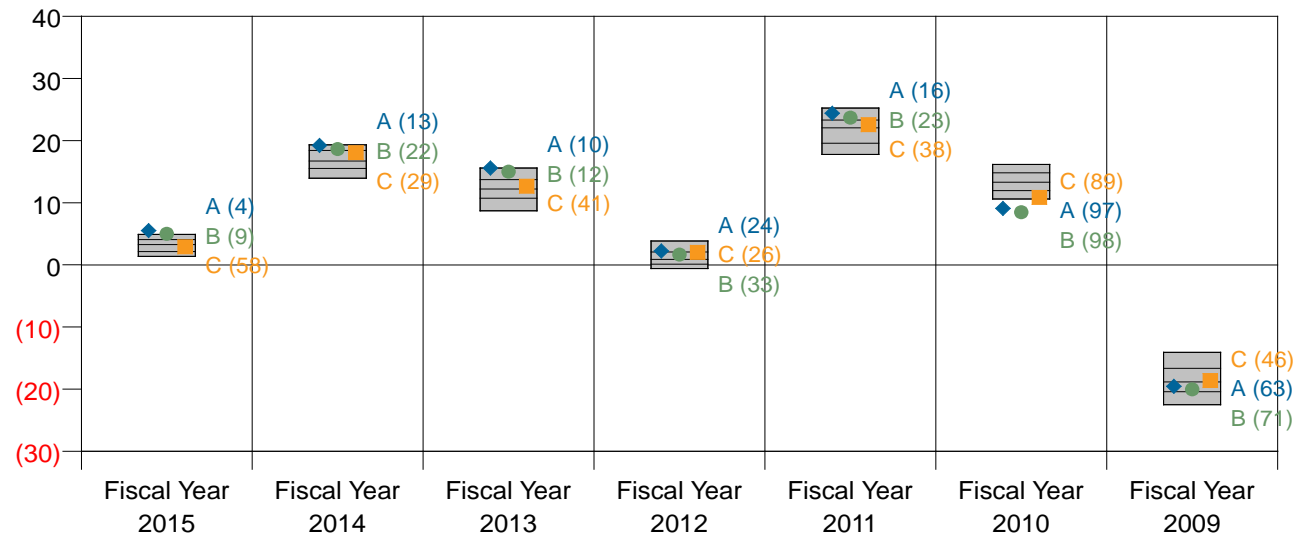


10th Percentile	(0.74)	32.69	5.06	7.70	10.32	14.95	2.37
25th Percentile	(4.75)	30.05	3.68	6.86	9.57	14.17	1.51
Median	(7.34)	27.80	2.25	6.08	8.81	12.99	0.50
75th Percentile	(10.12)	25.89	1.05	5.29	8.09	11.87	(0.62)
90th Percentile	(11.68)	23.33	(0.75)	4.57	7.74	9.86	(1.77)
MCERA Total Fund - Gross	◆ A (8.67)	32.69	3.74	6.39	10.29	12.88	2.68
MCERA Total Fund - Net	● B (9.01)	32.15	3.26	5.88	9.74	12.37	2.30
MCERA Total Fund Target	■ C (9.25)	27.89	3.29	5.99	8.67	12.20	0.98

Total Fund Performance – Fiscal Year

Fiscal Year Returns

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

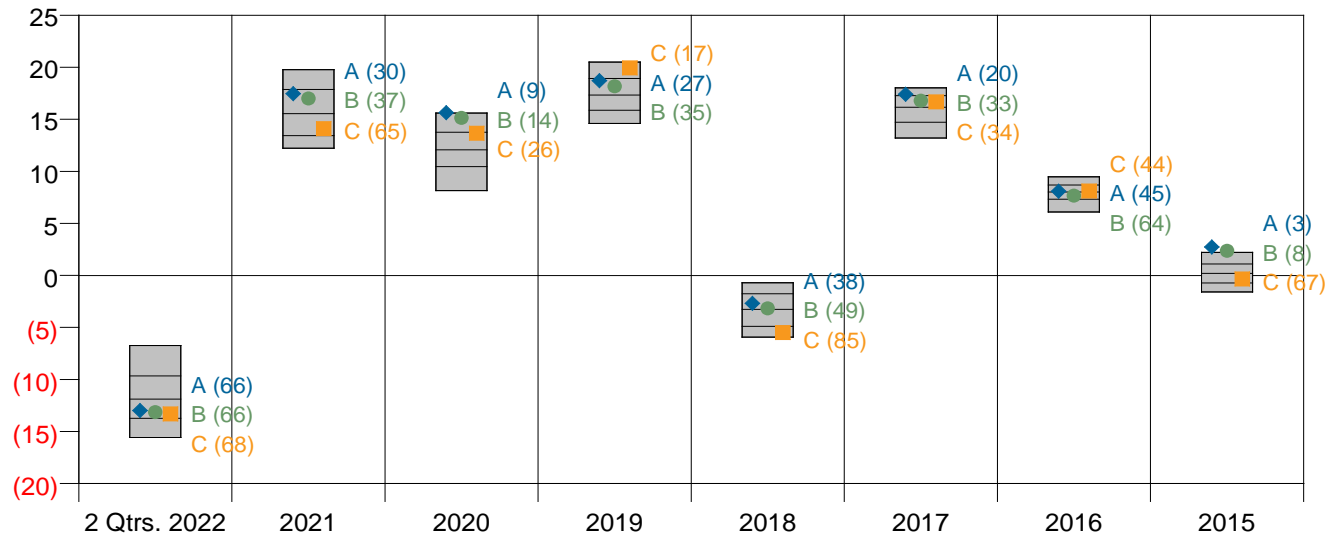


MCERA Total Fund - Gross	◆ A	5.52	19.22	15.60	2.26	24.42	9.11	(19.54)
MCERA Total Fund - Net	● B	5.02	18.65	15.01	1.67	23.71	8.49	(20.02)
MCERA Total Fund Target	■ C	2.91	18.09	12.68	2.02	22.58	10.87	(18.58)

Total Fund Performance – Calendar Years

Returns for Periods Ended June 30, 2022

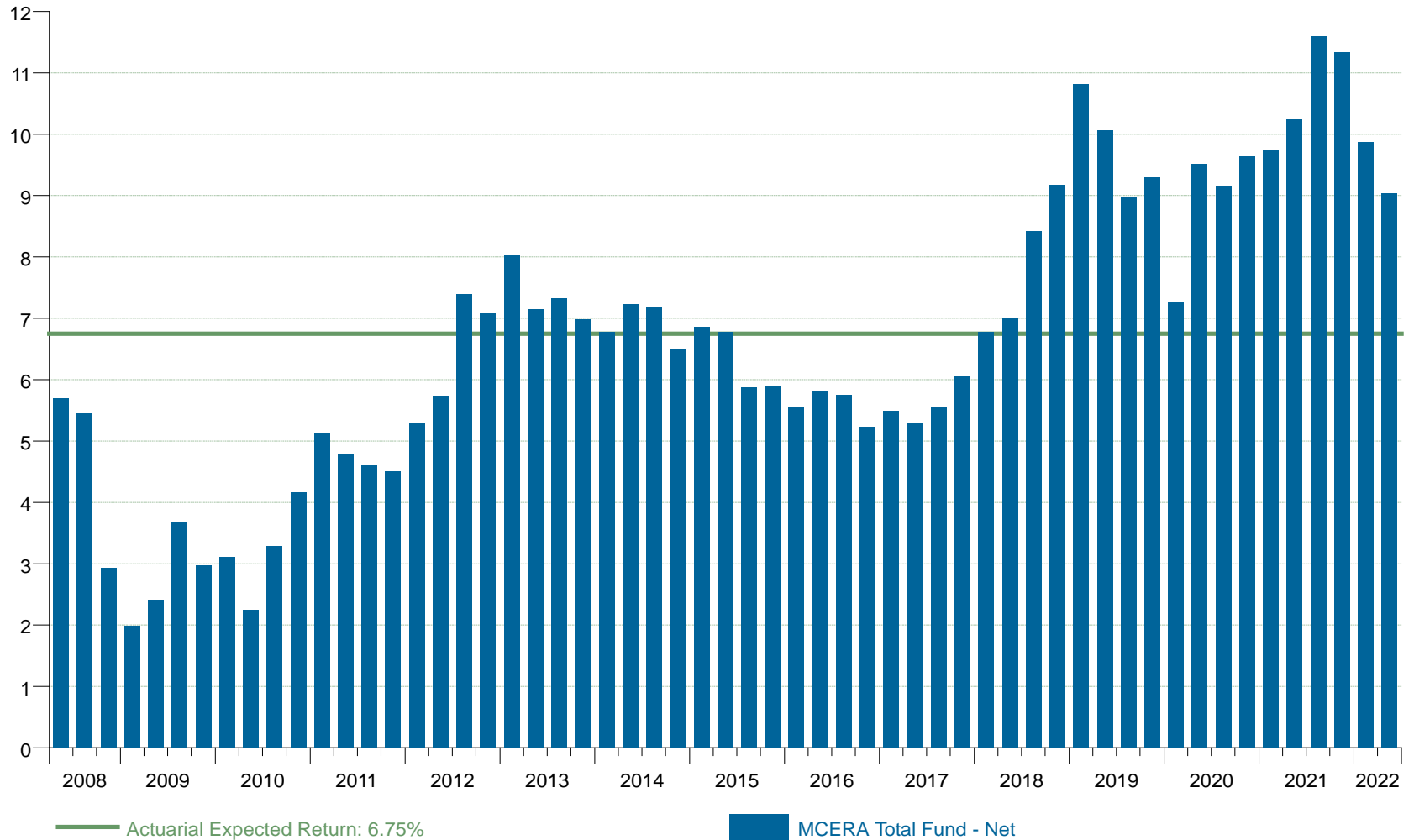
Group: Callan Public Fund Sponsor - Large (>1B)



10th Percentile	(6.73)	19.79	15.61	20.52	(0.71)	18.03	9.48	2.22
25th Percentile	(9.65)	17.88	13.77	18.94	(1.75)	17.28	8.70	1.10
Median	(11.87)	15.56	12.08	17.34	(3.26)	16.18	8.02	0.20
75th Percentile	(13.72)	13.44	10.47	15.88	(4.88)	14.73	7.33	(0.71)
90th Percentile	(15.58)	12.24	8.15	14.62	(5.92)	13.22	6.10	(1.59)

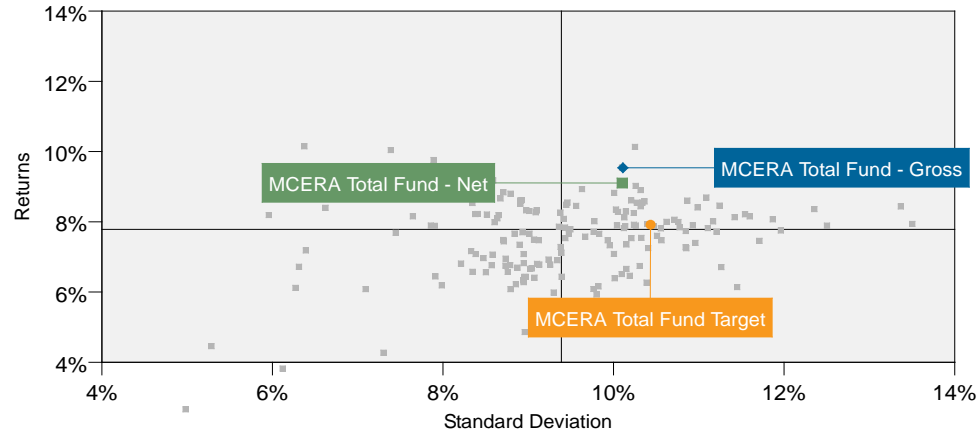
Total Fund - Gross	◆ A	(12.98)	17.47	15.66	18.73	(2.68)	17.41	8.10	2.73
MCERA Total Fund - Net	● B	(13.14)	17.01	15.16	18.19	(3.16)	16.81	7.68	2.37
Total Fund Target	■ C	(13.30)	14.12	13.68	19.97	(5.49)	16.68	8.13	(0.34)

Annualized 10 Year Total Fund Net Returns (Quarterly Roll)

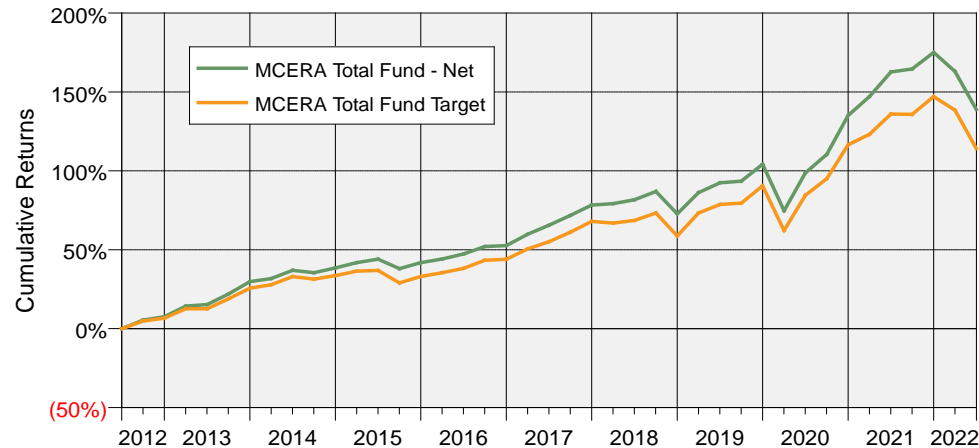


Total Fund – Cumulative Returns Relative to Target

Ten Year Annualized Risk vs. Return
As of June 30, 2022



Total Fund Cumulative Returns vs. Target
10 Years Ended June 30, 2022



Watchlist

Investment Manager Monitoring Summary Report Active Managers as of June 30, 2022

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>						Yes	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 Barclays Aggregate Index</i>						No	
Western Asset Intermediate Credit Fixed Income <i>Bloomberg Barclays Intermediate Credit Index</i>						No	
Colchester Global Fixed Income <i>FTSE World Government Bond Index</i>						Yes	4Q20
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	Under Review	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

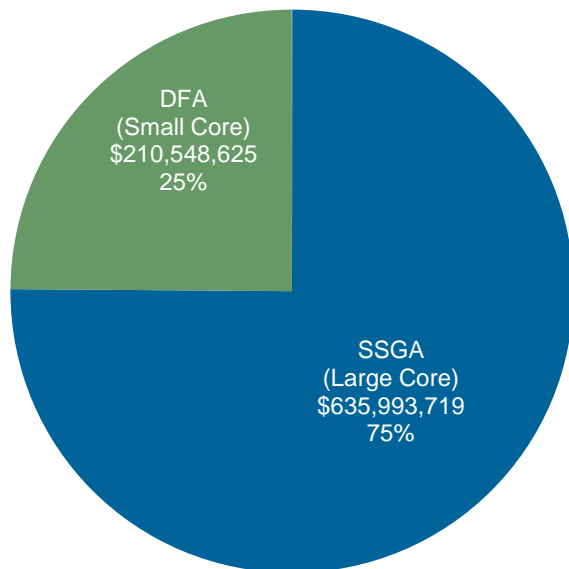
Watchlist

Investment Manager	3 Year Net Return Trails Benchmark by more than 100 bps (relative return shown in bps)	AND	3 Year Gross Return Ranks 75th - 100th%	OR	5 Year Net Return Trails Benchmark (relative return shown in bps)	OR	5 Year Gross Return Ranks 50th - 100th%	Qualify for Watchlist (Quantitative)
DFA Small Cap Core Equity <i>Russell 2000 Index</i>	363		22nd		N/A		N/A	No
Morgan Stanley International Value Equity <i>MSCI EAFE Index</i>	-13		71st		-42		46th	Yes
Artisan International Growth Equity <i>MSCI EAFE Index</i>	-238		96th		29		67th	Yes
TimesSquare International Small Cap Equity <i>MSCI EAFE Small Cap Index</i>	-440		92nd		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 Barclays Aggregate Index</i>	52		47th		47		47th	No
Western Asset Intermediate Credit Fixed Income <i>Bloomberg Barclays Intermediate Credit Index</i>	61		4th		46		2nd	No
Colchester Global Fixed Income <i>FTSE World Government Bond Index</i>	76		60th		29		71st	Yes
Invesco Balanced Risk Commodity Fund <i>Bloomberg Commodity Index</i>	-54		82nd		26		64th	Yes
KBI Global Natural Resources Fund <i>S&P Global Natural Resource Index</i>	624		N/A		222		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

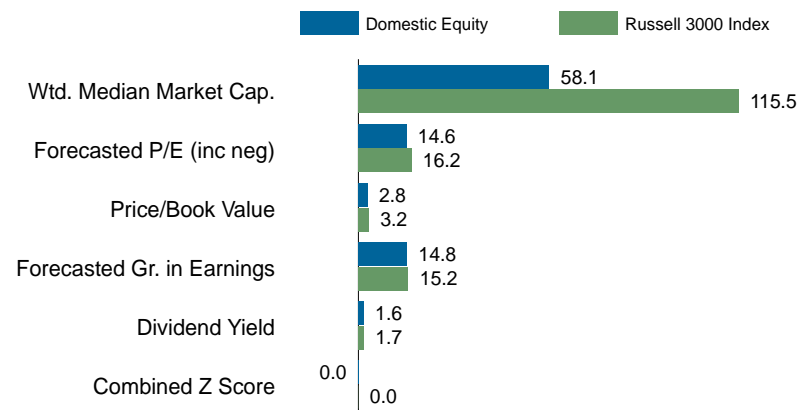
Callan

MCERA Asset Class Review

Domestic Equity Composite



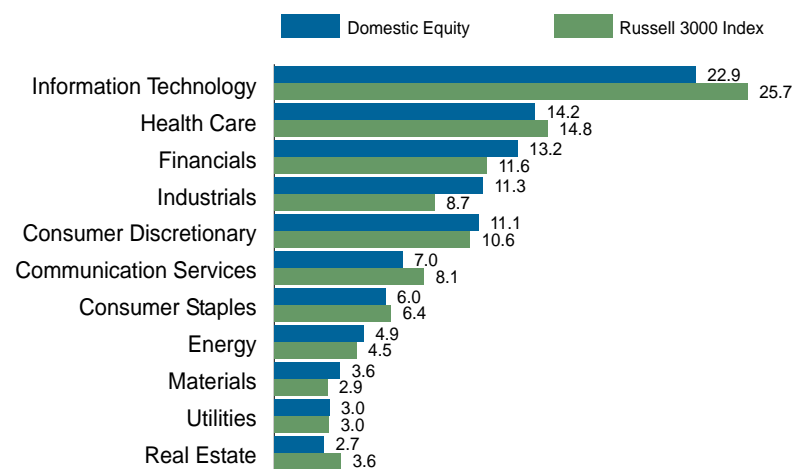
Portfolio Characteristics as of June 30, 2022



Style Exposure Matrix Holdings as of June 30, 2022

	-- Domestic Equity				-- Russell 3000 Index			
	Value	Core	Growth	Total	Value	Core	Growth	Total
Large	17.4% (105)	15.4% (97)	30.4% (98)	63.3% (300)	21.6% (105)	19.1% (97)	37.7% (98)	78.4% (300)
Mid	4.5% (170)	5.8% (214)	5.6% (203)	15.9% (587)	4.8% (170)	5.4% (222)	5.1% (209)	15.3% (601)
Small	4.8% (251)	6.5% (377)	6.6% (318)	17.9% (946)	1.6% (313)	2.1% (489)	2.1% (400)	5.7% (1202)
Micro	1.4% (387)	1.0% (248)	0.5% (113)	2.9% (748)	0.2% (281)	0.3% (461)	0.1% (160)	0.6% (902)
Total	28.1% (913)	28.8% (936)	43.1% (732)	100.0% (2581)	28.2% (869)	26.8% (1269)	45.0% (867)	100.0% (3005)

Sector Allocation as of June 30, 2022



Domestic Equity Composite

Returns and Rankings for Periods Ended June 30, 2022

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Domestic Equity - Net	(15.97)	(13.43)	10.09	10.58	12.39
Domestic Equity Target	(16.70)	(13.87)	9.77	10.60	12.57
Large Cap Equity - Net	(16.68)	(12.99)	9.72	10.74	12.76
SSGA - Net	(16.64)	(12.73)	9.69	10.76	12.69
Large Cap Blended Benchmark	(16.67)	(12.78)	9.70	10.76	12.68
Ranking vs. Large Cap Equity	57	52	43	50	56
Small Cap Equity - Net	(13.97)	(13.91)	10.38	9.40	10.98
DFA Small Core - Net	(13.95)	(14.91)	7.84	--	--
Russell 2000 Index	(17.20)	(25.20)	4.21	5.17	9.35
Ranking vs. Small Cap Equity	29	30	22	--	--

Returns and Rankings for Calendar Years

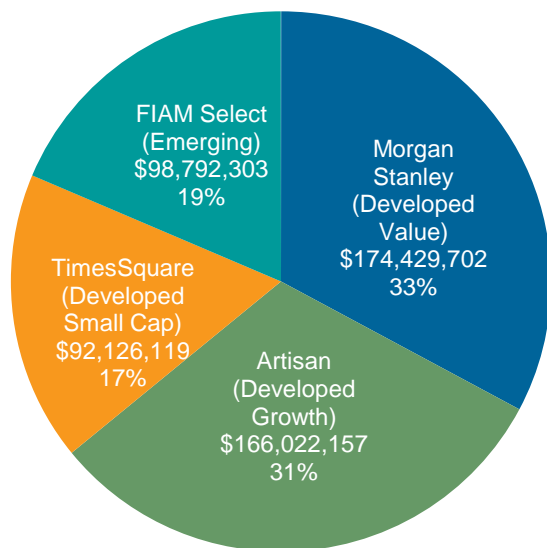
	2 Qtrs. 2022	2021	2020	2019	2018	2017
Domestic Equity - Net	(20.42)	29.74	17.85	28.77	(5.34)	20.61
Domestic Equity Target	(21.10)	25.66	20.89	31.02	(5.24)	21.13
Large Cap Equity - Net	(21.18)	27.29	18.64	31.64	(4.59)	21.86
SSGA - Net	(20.90)	27.16	18.33	31.43	(4.38)	21.83
Large Cap Blended Benchmark	(20.94)	27.15	18.40	31.49	(4.38)	21.83
Ranking vs. Large Cap Equity	53	49	53	43	46	51
Small Cap Equity - Net	(18.05)	34.91	14.26	21.89	(8.76)	17.46
DFA Small Core - Net	(18.35)	29.22	11.74	21.77	--	--
Russell 2000 Index	(23.43)	14.82	19.96	25.52	(11.01)	14.65
Ranking vs. Small Cap Equity	24	21	54	71	--	--

- The domestic equity composite outperformed the benchmark.
- DFA has handily outperformed its index over the last quarter and last year. Its exclusion of stocks with the lowest profitability and highest relative prices contributed to performance.

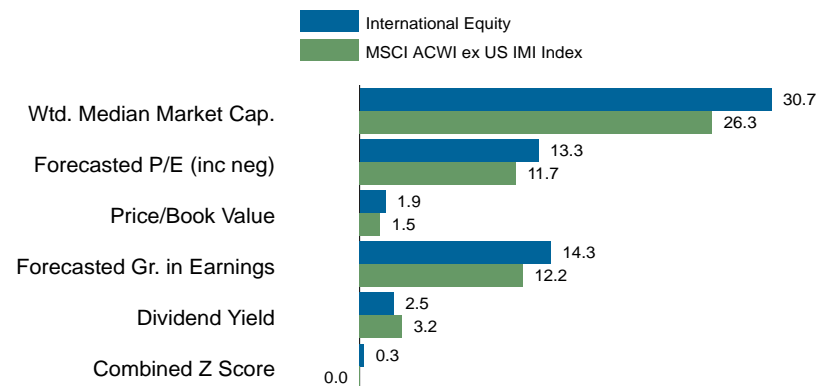
The Domestic Equity Target is comprised of 51.1% S&P/BARRA Value, 22.2% S&P 500, 15.6% Russell 2000 and 11.1% S&P/BARRA Growth through 12/31/1999, 80% S&P 500 and 20% Russell 2000 from 12/31/1999 to 06/30/2010, and 100% Russell 3000 from 06/30/2010 to present.

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 June 30, 2022

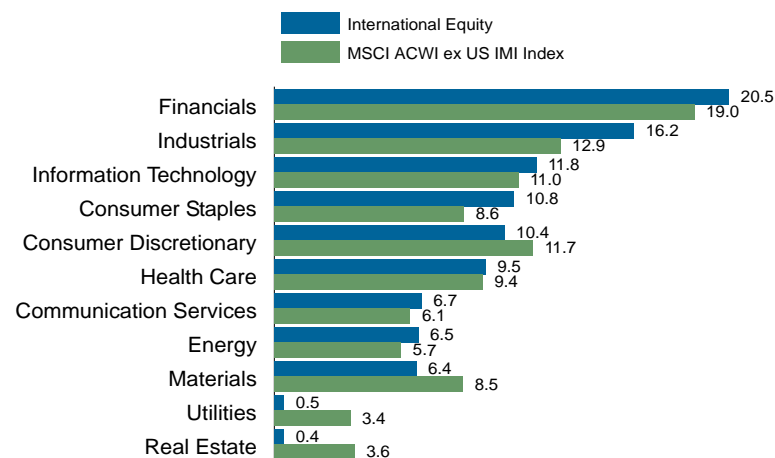


Region & Style Exposure Matrix Holdings as of June 30, 2022

-- International Equity
-- MSCI ACWI ex US IMI Index

	Value	Core	Growth	Total
Europe	13.4% (27) 13.1%	16.9% (36) 11.8%	28.4% (54) 16.3%	58.7% (117) 41.2%
N. America	-- 1.4%	2.2% (4) 2.1%	6.4% (8) 1.4%	8.6% (12) 4.8%
Pacific	1.1% (3) 7.7%	1.8% (7) 8.0%	7.4% (25) 8.5%	10.3% (35) 24.2%
Emerging	3.1% (23) 7.5%	8.2% (43) 10.9%	11.1% (50) 11.4%	22.4% (116) 29.8%
Total	17.6% (53) 29.7%	29.1% (90) 32.8%	53.3% (137) 37.5%	100.0% (280) 100.0%

Sector Allocation as of June 30, 2022



International Equity Composite

Returns and Rankings for Periods Ended June 30, 2022

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
International Equity - Net	(13.44)	(22.97)	(0.81)	1.37	5.07
International Equity - Target	(14.28)	(19.86)	1.55	2.50	5.01
MSIM - Net	(11.42)	(19.28)	0.94	1.78	4.99
MSCI EAFE Index	(14.51)	(17.77)	1.07	2.20	5.40
Ranking vs. Non-US Developed Value Equity	31	98	71	46	58
Artisan - Net	(14.00)	(22.49)	(1.31)	2.49	5.26
MSCI EAFE Index	(14.51)	(17.77)	1.07	2.20	5.40
Ranking vs. Non-US Developed Growth Equity	25	41	96	67	75
TimesSquare - Net	(17.85)	(31.57)	(3.28)	--	--
MSCI EAFE Small Cap	(17.69)	(23.98)	1.12	1.72	7.18
Ranking vs. International Small Cap Equity	73	87	92	--	--
FIAM Select EM - Net	(11.27)	--	--	--	--
MSCI Emerging Markets Index	(11.45)	(25.28)	0.57	2.18	3.07
Ranking vs. Emerging Markets Equity	41	--	--	--	--

Returns and Rankings for Periods Ended June 30, 2022

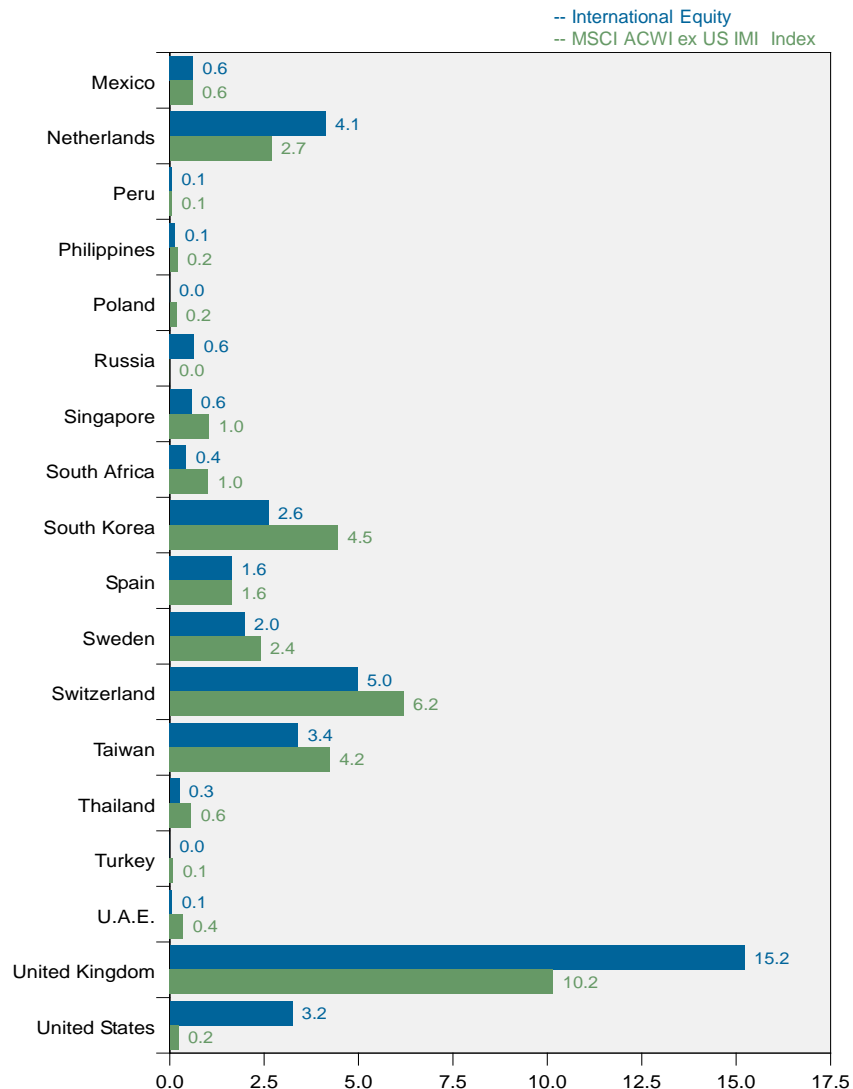
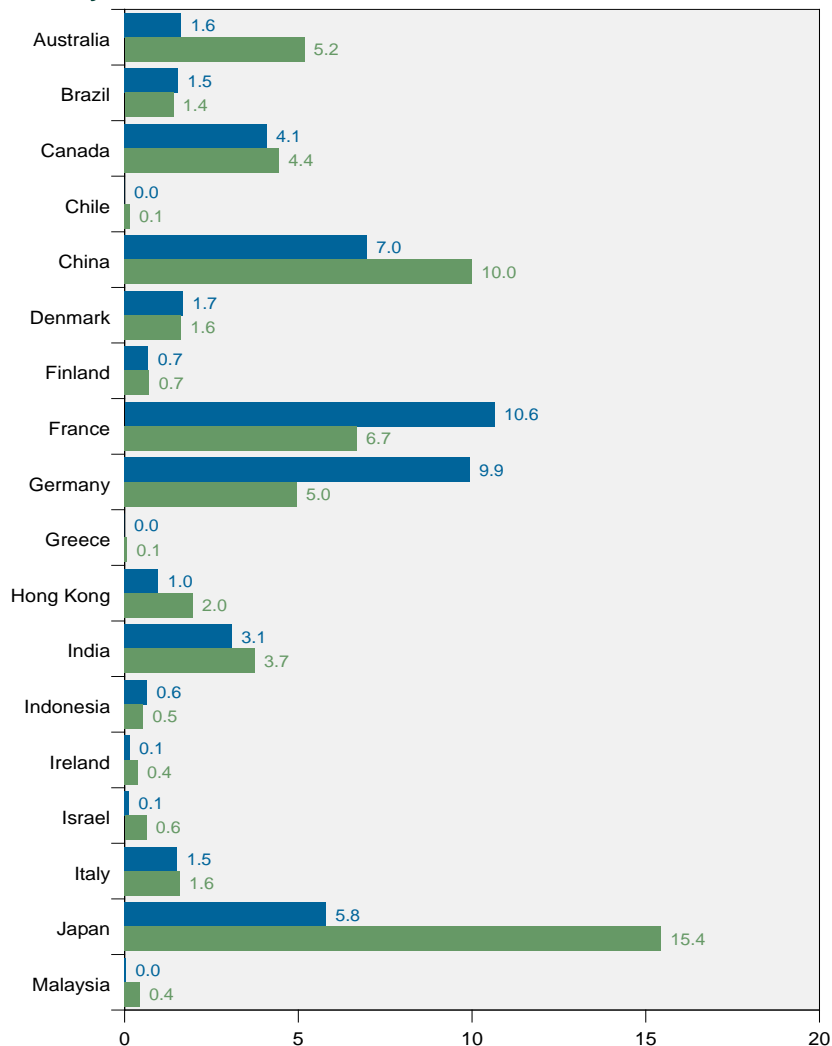
	2 Qtrs. 2022	2021	2020	2019	2018
International Equity - Net	(21.81)	5.28	10.79	23.52	(13.50)
International Equity - Target	(19.08)	8.53	11.12	21.63	(14.76)
MSIM - Net	(17.10)	4.70	12.00	20.93	(13.46)
MSCI EAFE Index	(19.57)	11.26	7.82	22.01	(13.79)
Ranking vs. Non-US Developed Value Equity	79	98	1	34	14
Artisan - Net	(24.37)	8.59	8.09	29.62	(10.53)
MSCI EAFE Index	(19.57)	11.26	7.82	22.01	(13.79)
Ranking vs. Non-US Developed Growth Equity	44	60	96	26	13
TimesSquare - Net	(29.63)	2.18	13.87	--	--
MSCI EAFE Small Cap	(24.71)	10.10	12.34	24.96	(17.89)
Ranking vs. International Small Cap Equity	75	93	39	--	--
FIAM Select EM - Net	(21.26)	--	--	--	--
MSCI Emerging Markets Index	(17.63)	(2.54)	18.31	18.44	(14.57)
Ranking vs. Emerging Markets Equity	74	--	--	--	--

- The International Equity composite outperformed on a relative basis during the last quarter but trailed over the last year.
 - Morgan Stanley: stock selection in consumer staples helped during the quarter as defensive sectors came into favor, but underweights to energy and materials and an overweight to IT detracted from relative returns over the year.
 - Artisan: modest outperformance in the second quarter was helped by stock selection in financials. Artisan's underperformance over the last year primarily stems from 1Q22 with the outbreak of the Russia-Ukraine war. The market swung swiftly from growth to value stocks, and Artisan also owned two Russian names.
 - TimesSquare: slightly trailed over the quarter. For the year, their quality growth style along with stock selection in materials and industrials has weighed on performance.
 - FIAM: Chinese stock selection contributed to positive relative returns.

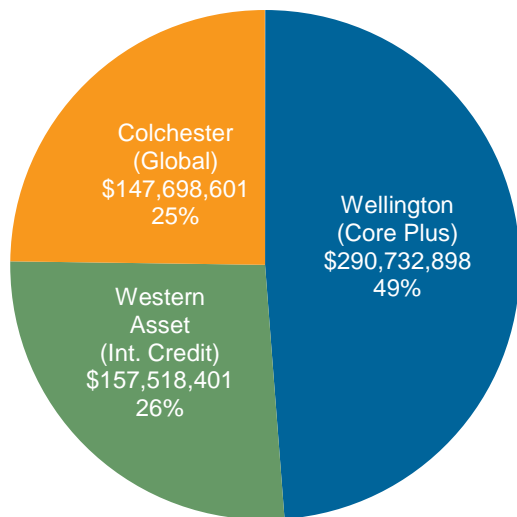
The International Equity Target is comprised of 100% MSCI EAFE Index through 06/30/2010, and 100% MSCI ACWI ex-US IMI Index thereafter.

International Equity Composite

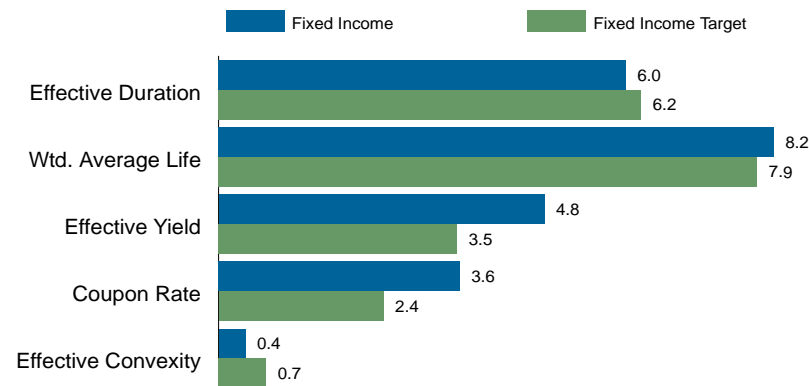
Country Allocations as of June 30, 2022



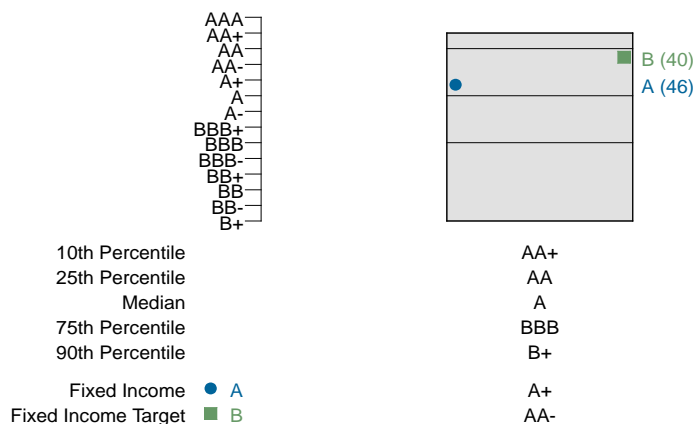
Fixed Income Composite



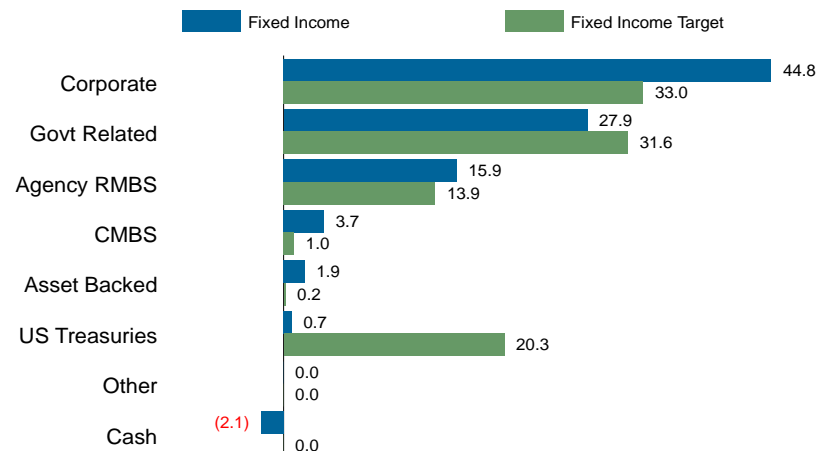
Portfolio Characteristics as of June 30, 2022



Quality Rating as of June 30, 2022 Total Domestic Fixed Income Database



Sector Allocation as of June 30, 2022



Fixed Income Composite

Returns and Rankings for Periods Ended June 30, 2022

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Fixed Income - Net	(6.03)	(11.91)	(0.50)	1.15	2.03
Fixed Income Target	(5.48)	(11.61)	(1.56)	0.52	1.12
Wellington - Net	(6.06)	(11.68)	(0.41)	1.35	2.47
Bloomberg Aggregate Index	(4.69)	(10.29)	(0.93)	0.88	1.54
Ranking vs. Core Plus Fixed Income	71	76	47	47	49
Western Asset - Net	(4.42)	(10.01)	0.53	1.93	2.72
Bloomberg Intermediate Credit Index	(3.63)	(8.96)	(0.14)	1.43	2.21
Ranking vs. Intermediate Fixed Income	99	98	4	2	1
Colchester - Net	(9.23)	(16.75)	(3.51)	(0.88)	--
FTSE World Government Bond Index	(8.91)	(16.77)	(4.27)	(1.17)	(0.69)
Ranking vs. Global Fixed Income (Uhedged)	65	64	60	71	--

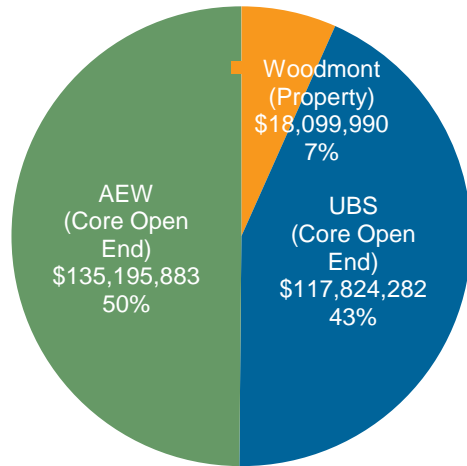
Returns and Rankings for Calendar Years

	2 Qtrs.					
	2022	2021	2020	2019	2018	2017
Fixed Income - Net	(11.33)	(2.50)	11.47	8.60	(0.34)	5.15
Fixed Income Target	(11.01)	(2.79)	8.10	8.21	(0.17)	4.55
Wellington - Net	(11.97)	(0.71)	9.93	9.95	(0.39)	4.87
Bloomberg Aggregate Index	(10.35)	(1.54)	7.51	8.72	0.01	3.54
Ranking vs. Core Plus Fixed Income	77	63	26	44	42	41
Western Asset - Net	(9.43)	(0.43)	10.03	9.82	(0.35)	4.13
Bloomberg Intermediate Credit Index	(8.52)	(1.03)	7.08	9.52	0.01	3.67
Ranking vs. Intermediate Fixed Income	98	2	2	1	99	2
Colchester - Net	(13.97)	(8.01)	11.12	7.55	(0.90)	8.20
FTSE World Government Bond Index	(14.79)	(6.97)	10.11	5.90	(0.84)	7.49
Ranking vs. Global Fixed Income (Uhedged)	39	97	26	59	19	35

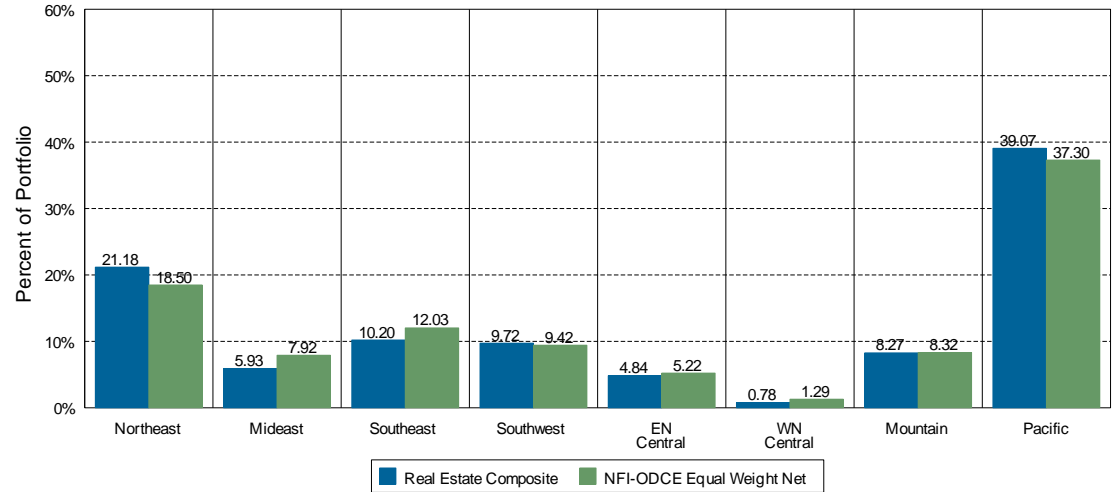
- The Fixed Income composite underperformed its target over the last quarter and year.
 - Wellington: underperformed due to allocations to high yield and emerging markets debt plus issue selection within investment grade credit detracted.
 - Western Asset: issue selection within the consumer and energy sectors detracted as well as an overweight to lower quality.
 - Colchester: several central banks around the world have implemented tighter monetary policies leading to large declines in global bond returns. The strength of the U.S. dollar has further weakened Colchester's returns which are reported in unhedged terms (2Q22 index hedged: -3.1%). Although global fixed income returns have generated steep losses on a whole, Colchester slightly outperformed the benchmark over the last year.

Fixed Income Target is comprised of 100% Bloomberg Aggregate Index until 03/31/2014 and 50% Bloomberg Aggregate Index, 25% Bloomberg Intermediate Credit Index, and 25% FTSE World Government Bond Index thereafter.

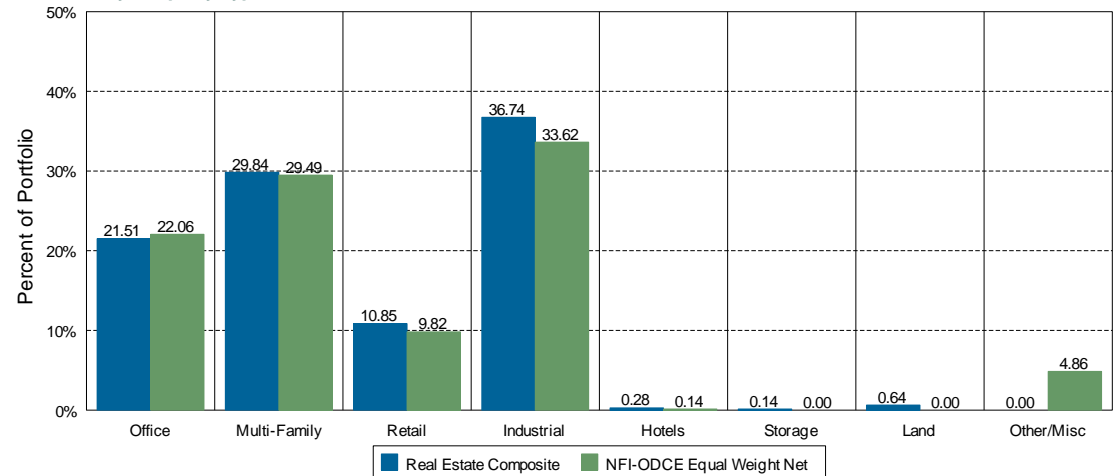
Real Estate Composite



Diversification by Geographic Region as of June 30, 2022



Diversification by Property Type as of June 30, 2022



Real Estate Composite

Returns and Rankings for Periods Ended June 30, 2022

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Real Estate - Net	3.21	22.93	8.36	6.79	10.54
Real Estate Target	4.35	28.90	12.28	10.07	10.42
AEW Core Property Trust - Net	3.11	27.27	11.64	9.59	--
NFI-ODCE Equal Wt Net Index	4.35	28.90	12.28	10.07	10.45
Ranking vs. Core Open End Funds	89	65	67	68	--
UBS Trumbull Property Fund - Net	3.84	23.75	7.19	5.48	--
NFI-ODCE Equal Wt Net Index	4.35	28.90	12.28	10.07	10.45
Ranking vs. Core Open End Funds	84	90	95	95	--

Returns and Rankings for Calendar Years

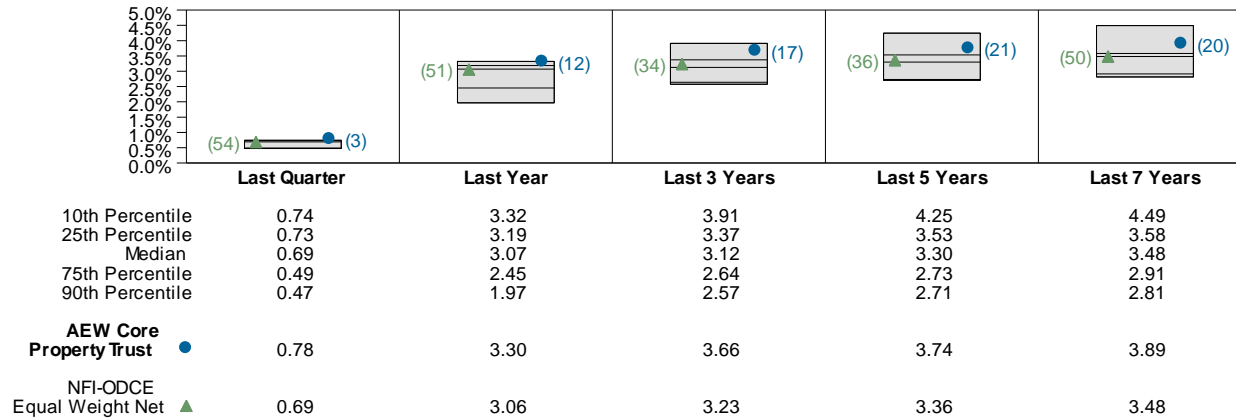
	2 Qtrs.					
	2022	2021	2020	2019	2018	2017
Real Estate - Net	10.63	16.16	(2.29)	0.64	6.46	5.66
Real Estate Target	12.45	21.88	0.75	5.18	7.30	6.92
AEW Core Property Trust - Net	11.59	21.00	0.57	5.29	6.77	6.99
NFI-ODCE Equal Wt Net Index	12.45	21.88	0.75	5.18	7.30	6.92
Ranking vs. Core Open End Funds	63	59	66	71	76	43
UBS Trumbull Property Fund - Net	11.33	15.41	(4.68)	(2.88)	6.12	5.32
NFI-ODCE Equal Wt Net Index	12.45	21.88	0.75	5.18	7.30	6.92
Ranking vs. Core Open End Funds	74	89	96	96	89	85

- The AEW Core Property Trust's current leverage is 24.3% (NFI-ODCE leverage: 21.5%).
 - All sectors produced positive returns for the quarter. The industrial sector continues to lead performance for AEW.
- The UBS Trumbull Property Fund's current leverage is 18.6%.
 - During the quarter, the industrial sector was the largest contributor to returns.

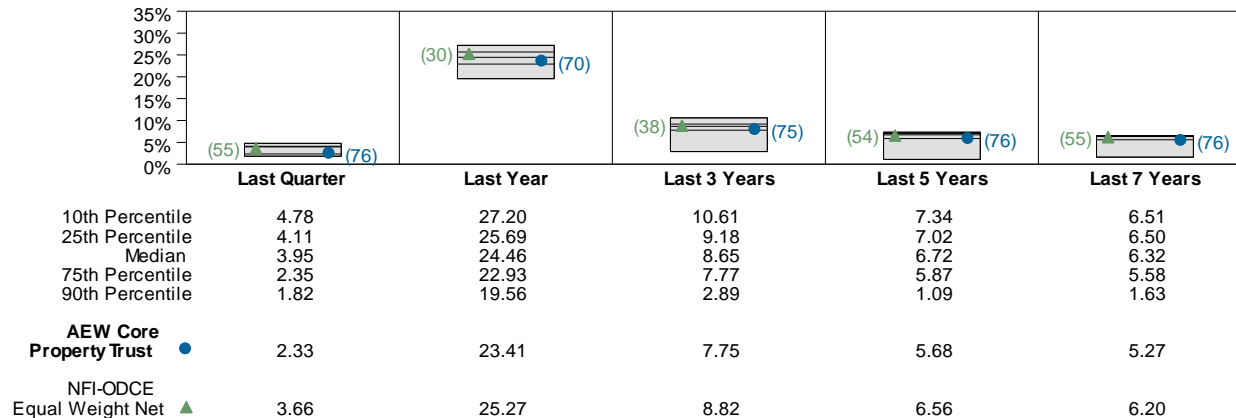
The Real Estate Target is comprised of the NCREIF Classic Index through 12/31/2004, NCREIF Total Property Index through 12/31/2014, and the NFI-ODCE Equal Weight Net thereafter.

AEW Income and Appreciation Returns

Income Rankings vs Callan Real Estate ODCE Periods ended June 30, 2022

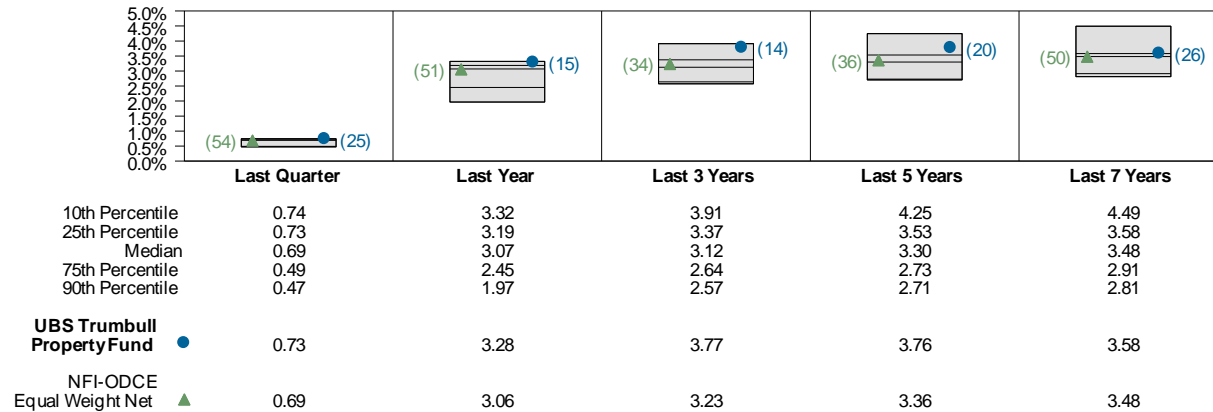


Appreciation Rankings vs Callan Real Estate ODCE Periods ended June 30, 2022

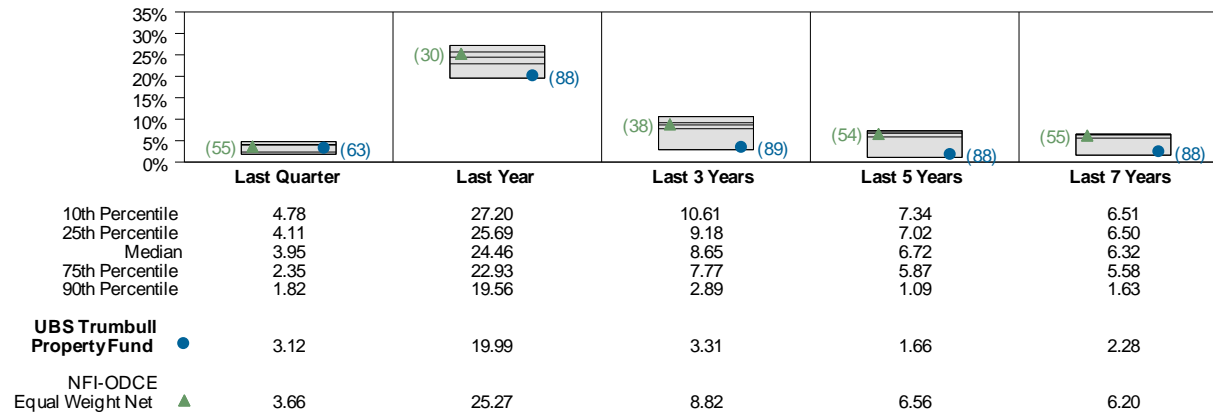


UBS Income and Appreciation Returns

Income Rankings vs Callan Real Estate ODCE Periods ended June 30, 2022



Appreciation Rankings vs Callan Real Estate ODCE Periods ended June 30, 2022

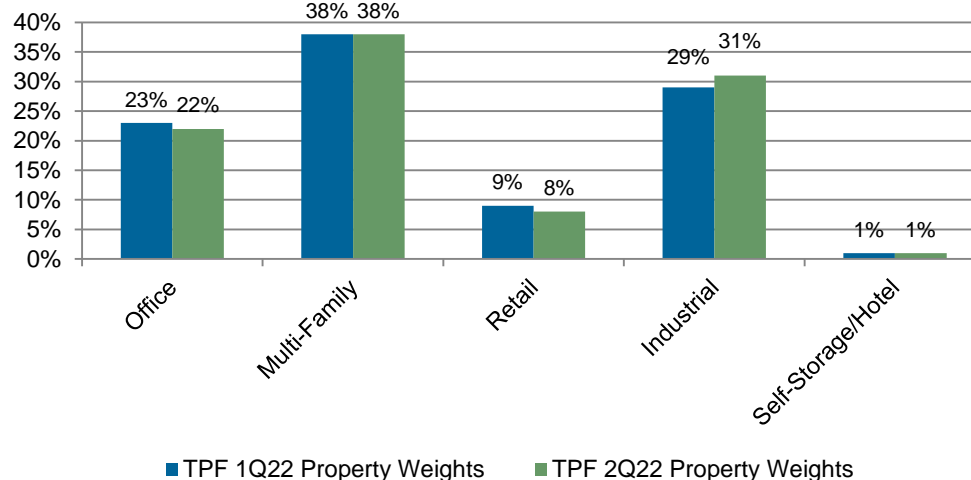


UBS Trumbull Property Fund Snapshot

As of June 30, 2022

As of 2Q 2022	
Gross Asset Value	\$18.4B
Net Asset Value	\$14.8B
Leverage	18.6%
Number of Investments	155
Number of Investors	439
Redemption Queue	\$7.1 billion
2Q22 Redemption Queue Payout	\$250 million
Contribution Queue	\$0 million

Property Type Weights (Change from Prior Quarter)



- The Fund has a current redemption pool of \$7.1 billion. The Fund made a 2Q 2022 redemption payment of \$250 million. The Fund's initial target for 2022 redemption payments was \$2.5 billion; through the first three payments of the year, \$1.65 billion has been paid out. The Fund has successfully sold 61% and transferred 13% of the Non-Strategic Asset pool to date. Including the targeted dispositions in 2022, the Non-Strategic Asset pool is expected to be 87% divested by year-end 2022, with the final dispositions occurring in 2023.
- MCERA submitted a partial redemption request for \$20 million in January 2020 and has now received the full amount.
- Callan does not recommend submitting further redemption requests at this time. We want to discuss the overall real assets structure first and will do so at an upcoming meeting.
- For now, we are comfortable with UBS as they carry out the fund restructuring and sell off their non-strategic assets and would like to continue to monitor that progress.

NFI-ODCE Funds - Net of Fee Returns

As of June 30, 2022

Fund Name	Last Quarter	Last Year	Last 3 Years	Last 5 Years
AEW Core Property Trust	3.12%	27.40%	11.72%	9.67%
AFL-CIO Building Investment Trust	0.70%	14.12%	5.53%	5.77%
ARA Core Property Fund	4.58%	29.41%	12.02%	9.91%
ASB Allegiance Real Estate Fund	4.31%	22.40%	9.20%	7.92%
Bailard Real Estate Fund	4.50%	26.93%	14.33%	13.01%
Barings Core Property Fund	2.92%	24.37%	10.25%	8.95%
BentallGreenOak BGO Diversified	6.69%	28.91%	12.12%	9.93%
BlackRock U.S. Core Property Fund	4.03%	26.10%	11.89%	10.16%
CBRE U.S. Core Partners LP	4.69%	42.61%	18.24%	14.46%
CIM Urban Income Investments	4.05%	33.34%	12.69%	11.11%
Clarion Lion Property Fund	7.14%	30.45%	13.67%	11.31%
DWS RREEF America REIT II	6.18%	32.08%	13.29%	10.78%
GWL U.S. Property Fund L.P.	4.39%	33.96%	13.99%	10.64%
Heitman America Real Estate Trust	4.20%	32.05%	11.90%	9.36%
Intercontinental U.S. Real Estate Investment Fund	7.09%	27.43%	12.98%	11.21%
Invesco Core Real Estate USA	4.68%	26.26%	10.75%	9.17%
J.P. Morgan Strategic Property Fund	4.45%	27.45%	10.93%	8.73%
LaSalle US Property Fund	3.05%	29.10%	12.40%	10.27%
MetLife Core Property Fund	4.37%	30.81%	13.94%	11.78%
Morgan Stanley Prime Property Fund	3.04%	27.87%	11.77%	10.16%
NYL Madison Core Property Fund	4.79%	35.58%	14.35%	11.69%
PGIM PRISA	5.40%	28.28%	12.23%	10.22%
Principal U.S. Core Property	3.01%	27.77%	12.04%	10.25%
Stockbridge Smart Markets Fund	2.65%	29.54%	14.47%	11.63%
TA Realty	5.09%	36.65%	17.44%	--
UBS Trumbull Property Fund	3.84%	23.78%	7.17%	5.48%

NFI-ODCE Funds - Gross of Fee All Sector Returns

As of June 30, 2022

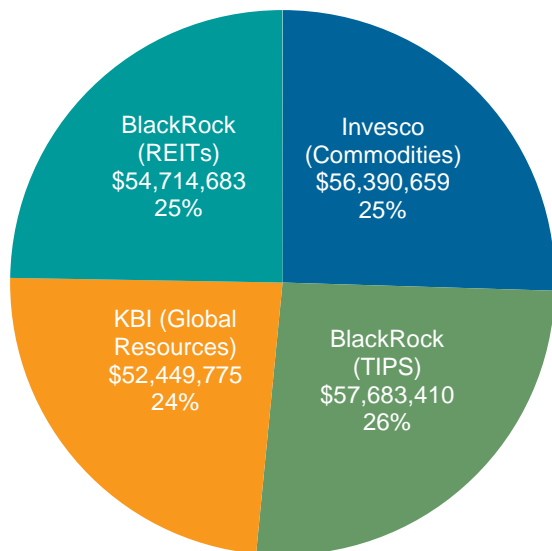
Fund	Retail 2Q 2022	Apartment 2Q 2022	Industrial 2Q 2022	Office 2Q 2022
AEW	0.85%	0.79%	4.04%	-0.84%
AFL-CIO	-5.42%	2.65%	3.22%	-0.19%
ARA	2.09%	8.38%	5.71%	-1.96%
ASB	1.06%	4.01%	4.14%	0.90%
Bailard	3.21%	5.23%	5.85%	0.24%
BGO	0.61%	3.56%	8.82%	0.69%
BlackRock	1.50%	2.34%	6.05%	1.07%
CBRE	1.31%	4.73%	2.68%	0.97%
CIM Group	3.38%	3.77%	5.16%	0.80%
Clarion	2.96%	3.39%	10.76%	2.25%
DWS	1.78%	7.29%	7.36%	1.00%
Everwest	2.42%	2.68%	6.61%	0.45%
Heitman	1.40%	3.12%	5.00%	0.43%
Intercontinental	6.00%	9.02%	8.29%	1.63%
Invesco	4.19%	3.73%	4.51%	1.65%
JP Morgan	4.18%	4.18%	4.18%	4.18%
LaSalle	1.27%	2.95%	1.61%	1.11%
MSIM	-0.48%	2.31%	4.57%	-1.01%
NYLIM	1.31%	2.35%	7.14%	1.88%
PGIM	2.93%	4.72%	7.61%	0.50%
Principal	2.35%	4.05%	2.04%	-0.37%
Stockbridge	2.01%	2.34%	2.81%	-0.21%
TA Realty	1.79%	5.36%	4.13%	0.57%
UBS	3.92%	3.89%	6.67%	0.06%

NFI-ODCE Funds - Gross of Fee Retail Returns (trailing 4 quarters)

As of June 30, 2022

Fund	Fund Allocation Weight	Retail 2Q 2022	Retail 1Q 2022	Retail 4Q 2021	Retail 3Q 2021
AEW	13.32%	0.85%	3.95%	3.00%	2.17%
AFL-CIO	10.46%	-5.42%	-0.26%	2.11%	2.57%
ARA	13.10%	2.09%	2.41%	2.26%	2.01%
ASB	10.21%	1.06%	0.66%	-5.77%	1.35%
Bailard	9.51%	3.21%	2.90%	3.26%	3.51%
BGO	1.88%	0.61%	1.18%	2.93%	3.14%
BlackRock	13.25%	1.50%	1.49%	1.73%	1.55%
CBRE	6.00%	1.31%	1.30%	3.26%	1.69%
CIM Group	8.70%	3.38%	2.59%	3.89%	5.38%
Clarion	5.66%	2.96%	0.73%	2.26%	-0.91%
DWS	11.45%	1.78%	1.71%	1.54%	0.23%
Everwest	10.24%	2.42%	2.20%	1.05%	1.66%
Heitman	14.39%	1.40%	1.97%	2.50%	0.91%
Intercontinental	1.50%	6.00%	2.16%	3.23%	3.25%
Invesco	12.70%	4.19%	2.56%	2.15%	2.28%
JP Morgan	16.08%	4.18%	3.02%	2.73%	3.30%
LaSalle	11.02%	1.27%	3.14%	2.14%	1.46%
MSIM	8.50%	-0.48%	1.05%	0.65%	0.83%
NYLIM	2.51%	1.31%	1.33%	9.38%	3.28%
PGIM	9.58%	2.93%	2.21%	1.33%	2.04%
Principal	10.07%	2.35%	2.64%	1.70%	1.71%
Stockbridge	16.51%	2.01%	3.97%	3.42%	3.02%
TA Realty	11.27%	1.79%	2.46%	0.94%	4.97%
UBS	8.00%	3.92%	0.61%	-1.46%	2.44%

Real Assets Composite



- The BlackRock TIPS and REITs Funds are passive.
- The Invesco Balanced Risk Commodities Fund outperformed during the quarter due to its defensive tactical positioning. Underperformance for the year is due to its strategic underweight to energy, including natural gas and oil whose prices had soared.
- KBI outperformed the index in 2Q22 as commodities sold off. Performance versus the index over the last year has detracted due to the lack of traditional energy exposure that dominates the index.

Returns and Rankings for Periods Ended June 30, 2022

	Last Quarter	Last Year	Last 3 Years	Last 5 Years
Real Assets - Net	(10.02)	(0.71)	9.75	7.63
Real Assets Target	(11.39)	4.24	8.00	6.84
BlackRock TIPS Index Fund - Net	(6.10)	(5.15)	3.10	3.30
Bloomberg US TIPS Index	(6.08)	(5.14)	3.04	3.21
Ranking vs. Real Returns Database	38	50	42	24
BlackRock REIT Index Fund - Net	(18.10)	(6.47)	2.50	4.45
S&P Dow Jones US Select REIT	(18.10)	(6.41)	2.54	4.28
MSCI US REIT Index	(16.95)	(6.41)	4.03	5.30
Ranking vs. Real Estate Mutual Funds	80	44	88	77
Invesco Commodity Fund - Net	(2.51)	15.33	13.80	8.65
Bloomberg Commodity Index	(5.66)	24.27	14.34	8.39
Ranking vs. Commodities Funds	19	78	82	65
KBI Global Resources Fund - Net	(14.58)	(8.34)	14.07	10.43
S&P Global Natural Resources Index	(15.71)	2.27	7.83	8.21
KBI Custom Benchmark	(17.12)	(17.31)	12.20	9.92

Returns and Rankings Calendar Years

	2 Qtrs. 2022	2021	2020	2019
Real Assets - Net	(8.14)	23.96	11.08	15.51
Real Assets Target	(3.55)	25.60	0.57	14.08
BlackRock TIPS Index Fund - Net	(8.89)	5.92	11.17	8.49
Bloomberg US TIPS Index	(8.92)	5.96	10.99	8.43
Ranking vs. Real Returns Database	56	41	18	32
BlackRock REIT Index Fund - Net	(21.16)	45.80	(11.21)	23.08
S&P Dow Jones US Select REIT Index	(21.14)	45.91	(11.20)	23.10
MSCI US REIT Index	(20.32)	43.06	(7.57)	25.84
Ranking vs. Real Estate Mutual Funds	64	17	96	89
Invesco Commodity Fund - Net	11.82	19.68	7.58	5.49
Bloomberg Commodity Index	18.44	27.11	(3.12)	7.69
Ranking vs. Commodities Funds	76	87	1	81
KBI Global Resources Fund - Net	(13.94)	24.08	29.17	24.81
S&P Global Natural Resources Index	(1.73)	24.40	(0.05)	16.41
KBI Custom Benchmark	(18.41)	7.22	46.83	28.74

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 3/31/22)

- 86% Paid-In through 3/31/21.
- 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.

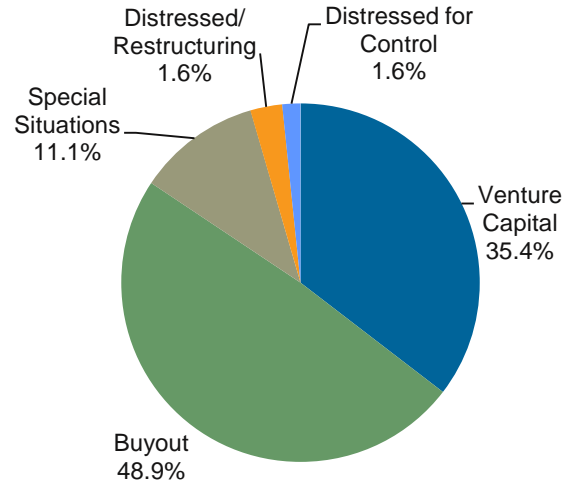
	March 31, 2022	Quarter Change	December 31, 2021
Summary			
Vintage Years	15 in 2008-2022		14 in 2008-2021
# Total Partnerships	499	20	479
# Active Partnerships	480	17	463
# Liquidated Partnerships	19	(12)	31
Changes in Value			
Capital Commitments	\$450,000,000	-	\$450,000,000
Paid-In Capital	\$399,001,957	\$3,859,756	\$395,142,201
Uncalled Capital	\$65,361,631	\$(3,543,533)	\$68,905,164
% Paid-In	88.67%	0.86%	87.81%
Distributed Capital	\$432,102,886	\$20,400,294	\$411,702,592
Net Asset Value	\$416,317,600	\$(26,534,670)	\$442,852,270
Total Realized and Unrealized Value	\$848,420,486	\$(6,134,376)	\$854,554,862
Ratios and Performance			
Distributions to Paid-In Capital (DPI)	1.08x	0.04x	1.04x
Residual Value to Paid-In Capital (RVPI)	1.04x	(0.08)x	1.12x
Total Value to Paid-In Capital (TVPI)	2.13x	(0.04)x	2.16x
Quartile Ranking	2nd		2nd
Net IRR	17.26%	(0.55%)	17.81%
Additional Performance Metrics			
Distribution Rate, as % of Beginning NAV		4.61%	
Unrealized Gain/(Loss), Dollars		\$(9,994,132)	
Unrealized Gain/(Loss), %		(2.26%)	

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

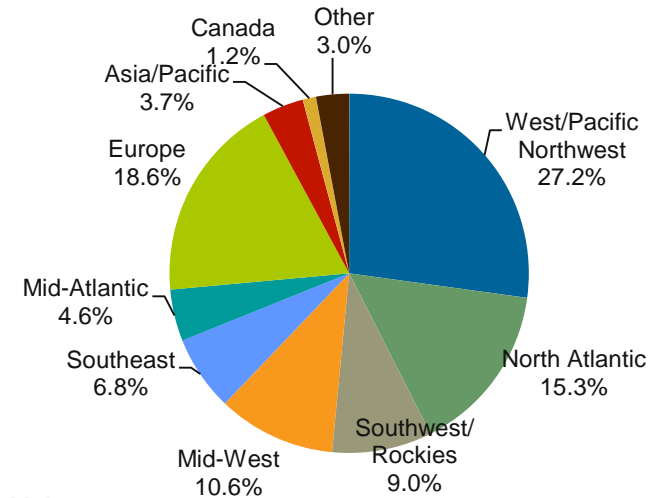
Uncalled capital above does not reflect currency fluctuations for Pathway's investments in foreign partnerships.

Private Equity Portfolio Exposure

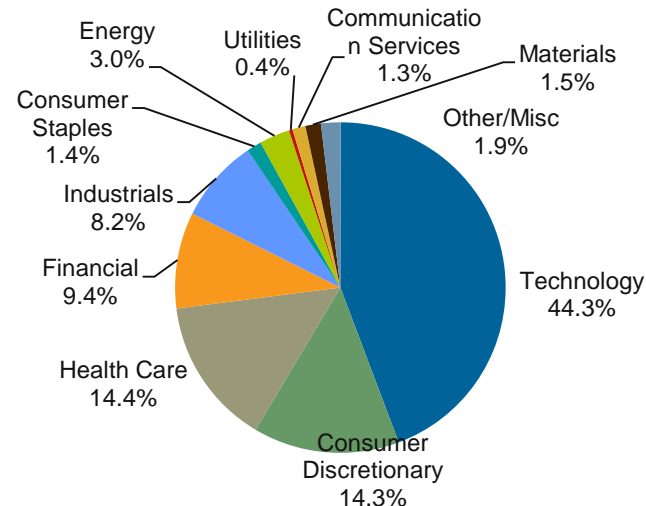
Strategy Mix by Net Asset Value



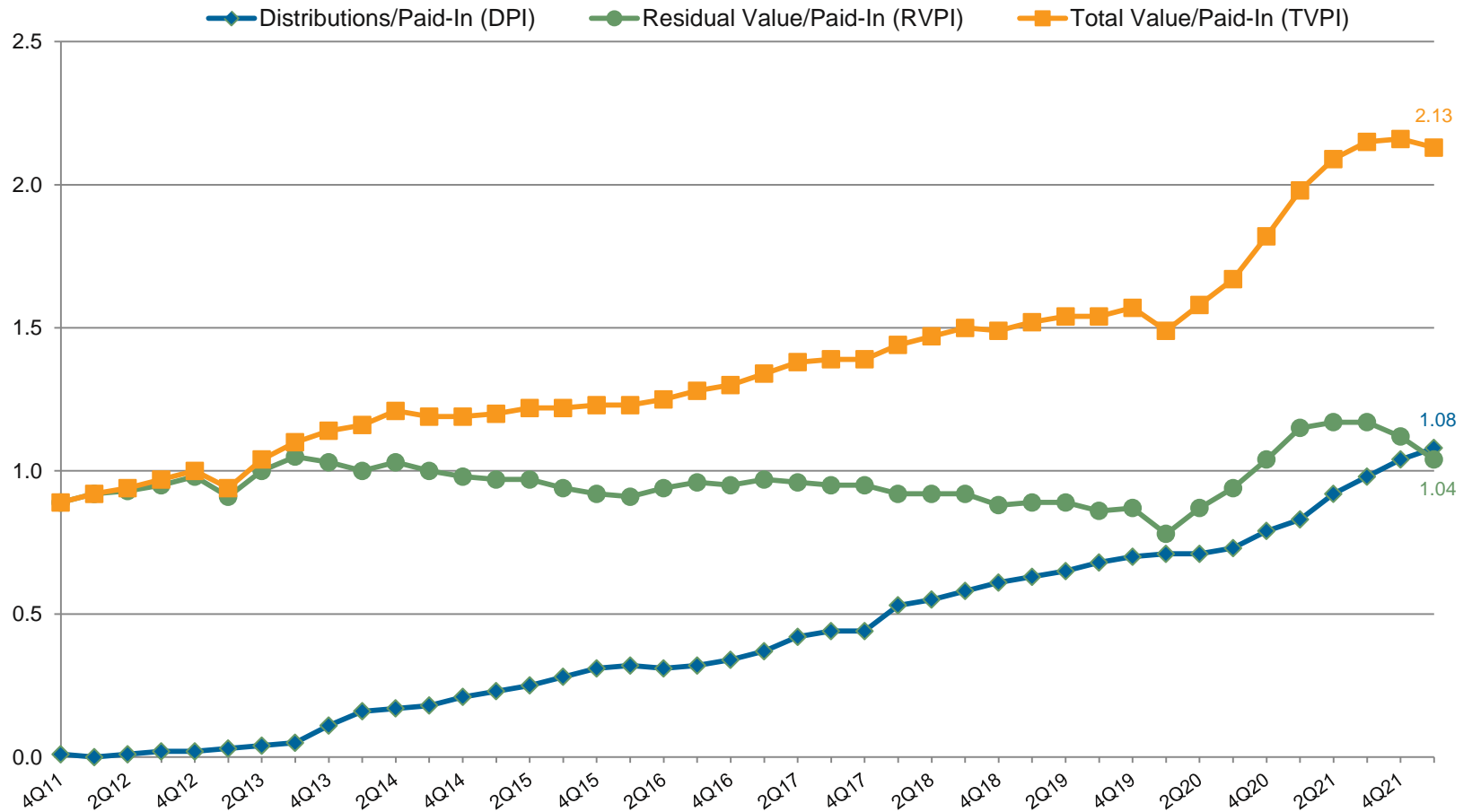
Geographic Mix by Net Asset Value



Industry Mix by Net Asset Value



Private Equity Ratios – Changes Over Time



Opportunistic Portfolio

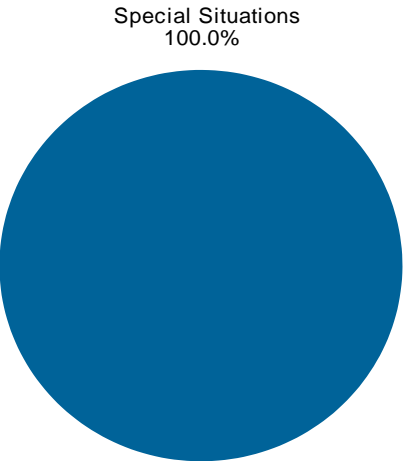
- 53.2% Paid-In through 6/30/2022.
- The total portfolio is diversified by industry type and geographic location.

	June 30, 2022	Quarter Change	March 31, 2022
Summary			
Vintage Year	2020		2020
# Total Partnerships	193	10	183
# Active Partnerships	193	10	183
# Liquidated Partnerships	0	-	0
Changes in Value			
Capital Commitments	\$100,000,000	-	\$100,000,000
Paid-In Capital	\$53,159,127	\$9,790,677	\$43,368,450
Uncalled Capital	\$48,669,782	\$(8,034,723)	\$56,704,505
% Paid-In	53.16%	9.79%	43.37%
Distributed Capital	\$2,142,541	\$1,755,954	\$386,587
Net Asset Value	\$52,423,308	\$5,241,634	\$47,181,674
Total Realized and Unrealized Value	\$54,565,849	\$6,997,588	\$47,568,261
Ratios and Performance			
Distributions to Paid-In Capital (DPI)	0.04x	0.03x	0.01x
Residual Value to Paid-In Capital (RVPI)	0.99x	(0.10)x	1.09x
Total Value to Paid-In Capital (TVPI)	1.03x	(0.07)x	1.10x
Quartile Ranking	3rd		3rd
Net IRR	2.97%	(8.90%)	11.87%
Additional Performance Metrics			
Distribution Rate, as % of Beginning NAV		3.72%	
Unrealized Gain/(Loss), Dollars		\$(2,793,089)	
Unrealized Gain/(Loss), %		(5.92%)	

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	49.33%
Financial	15.51%
Consumer Discretionary	13.45%
Energy	6.60%
Communication Services	5.98%
Materials	3.96%
Industrials	2.23%
Consumer Staples	1.04%
Utilities	1.03%
Technology	0.86%

Geographic Mix by Net Asset Value

United States	64.31%
Europe	17.56%
Other	2.31%
Asia/Pacific	12.25%
Latin America & Caribbean	3.57%