


June 30, 2022



## City of Milwaukee Employees' Retirement System

Investment Measurement Service  
Quarterly Review

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**U.S. EQUITY**

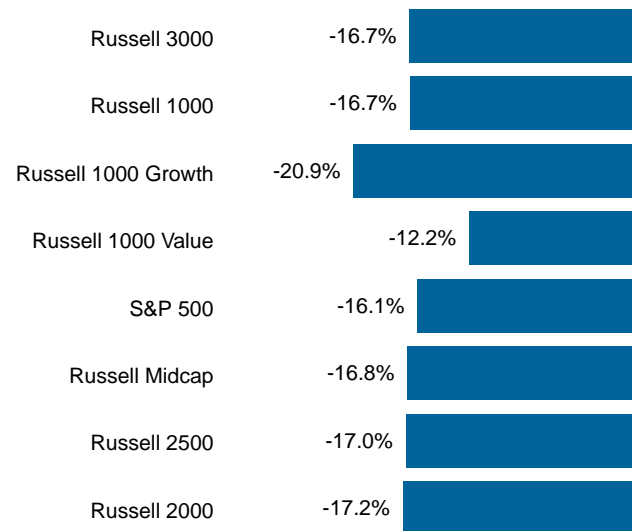
**All major indices fall**

- The S&P 500 plunged 16.1% in 2Q22; all major U.S. indices across styles and market cap ranges fell in the quarter.
- All sectors posted negative returns in the quarter. Energy continued to be the best-performing sector, and the only sector that has posted a gain year-to-date (YTD).
- Large cap stocks nominally outpaced smaller cap stocks. 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.

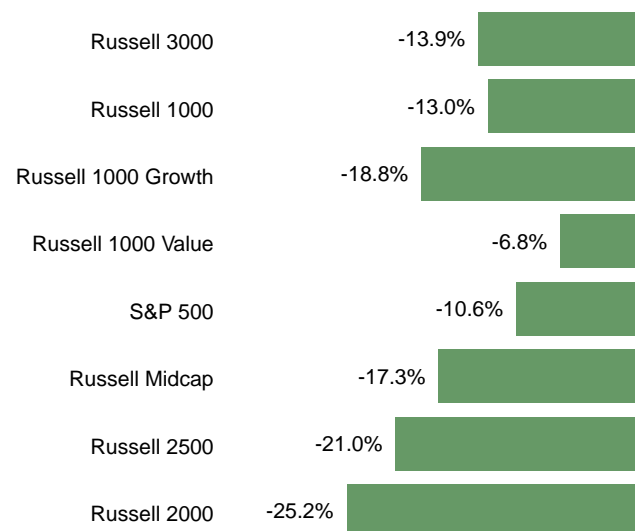
**Volatile environment hits equity markets**

- Rising interest rates and inflation along with geopolitical headlines all contributed to a volatile and risk-averse environment.
- Macroeconomic headlines and data releases will continue to impact equity markets.
- Inflation, rising interest rates, and supply-chain disruptions are all headwinds for equity markets.
- Active large cap growth managers have underperformed the Russell 1000 Growth Index meaningfully recently.
- Large tech firms that have sold-off (e.g., Meta) have become an increasingly large proportion of the value index.
- Federal Reserve interest rate hikes may derail the economy, resulting in lower corporate earnings in the near- to intermediate-term.
- With a potential economic slowdown, sell-side analysts have been cutting corporate earnings estimates.
- Longer-duration growth assets, such as growth stocks, are vulnerable during periods of high inflation because of higher interest rates discounting way-out future earnings.

**U.S. Equity: Quarterly Returns**

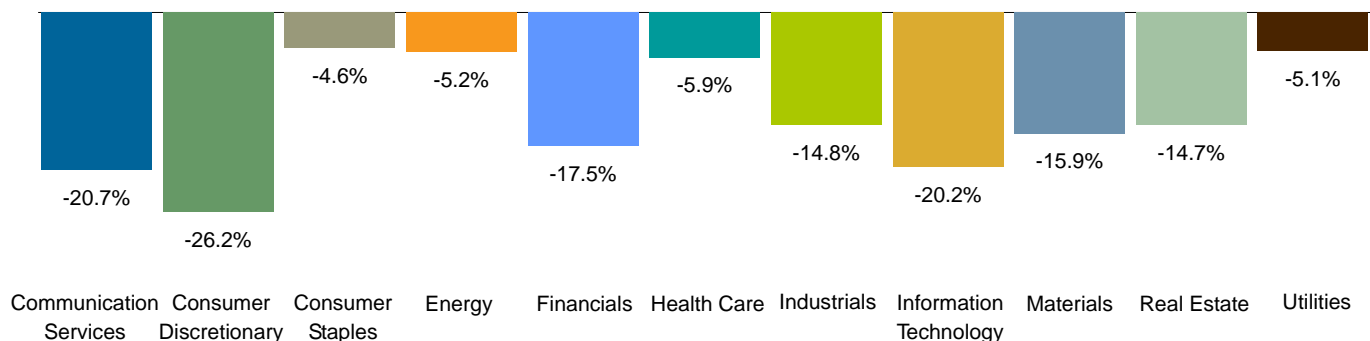


**U.S. Equity: One-Year Returns**



Sources: FTSE Russell, S&P Dow Jones Indices

**S&P Sector Returns, Quarter Ended 6/30/22**



Source: S&P Dow Jones Indices

**GLOBAL EQUITY**

- The war in Ukraine tested an already fragile supply chain, led to energy demand/supply imbalances, and created an inflationary environment that sparked 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 gain in 2Q22.
- 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 YTD 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.

**The rise of the dollar**

- The dollar hit a 20-year high after rising roughly 10% YTD.
- The dollar hit parity with the euro; first time since 2002.
- The yen dipped to a 24-year low against the dollar.

**Strong dollar may burden global ex-U.S. markets**

- Strong currency yields purchasing power.
- Dollar-denominated debt compounded by depreciating local currencies weighs on the economy.
- The dollar and global ex-U.S. equity have exhibited negative correlation over the past four decades.

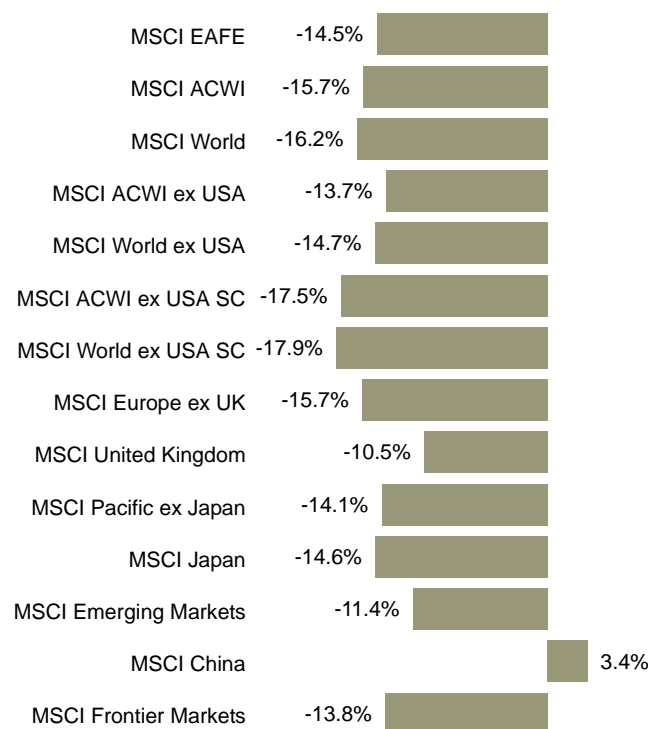
**EM has fared better relative to prior downturns**

- EM historically declined 26% during prior S&P 500 drawdowns greater than 10%.
- As of 2Q22, EM has corrected by 18% YTD.

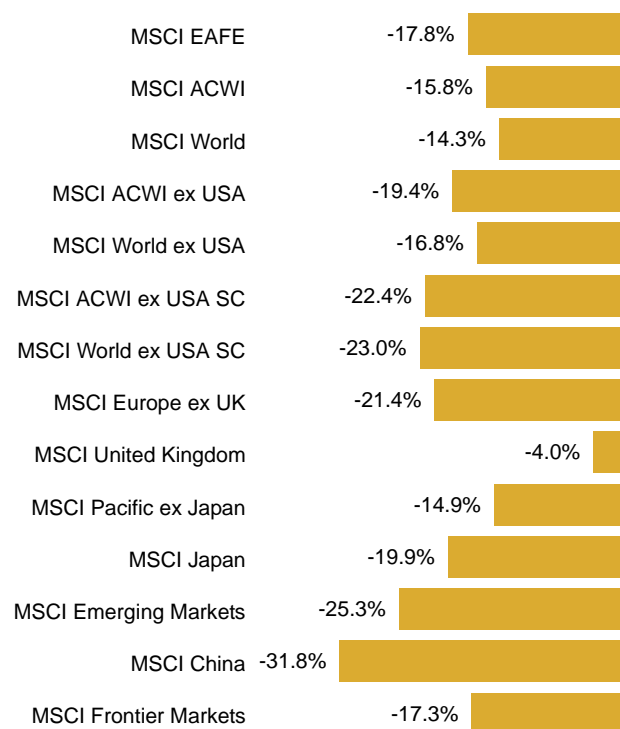
**China presents upside opportunity**

- Although divergence of China and EM ex-China is notable, China may support EM should fears of a U.S. recession fuel further drawdown.
- China offers favorable growth and valuation relative to other emerging markets.

**Global Equity: Quarterly Returns**



**Global Equity: One-Year Returns**



Source: MSCI

**U.S. FIXED INCOME**

**Bonds hit hard as rates rise sharply (again)**

- Bloomberg US Aggregate Bond Index posted its worst six-month return in its 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
- 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 interest rate volatility.
- ABS spreads tightened, led by credit cards.

**MUNICIPAL BONDS**

**Returns hurt by rising rates**

- Lower quality continued to underperform
- BBB: -4.5%; AAA: -2.5% (YTD BBB: -11.3%; AAA: -8.5%)
- Munis outperformed U.S. Treasuries (Bloomberg US Treasury: -3.8%)

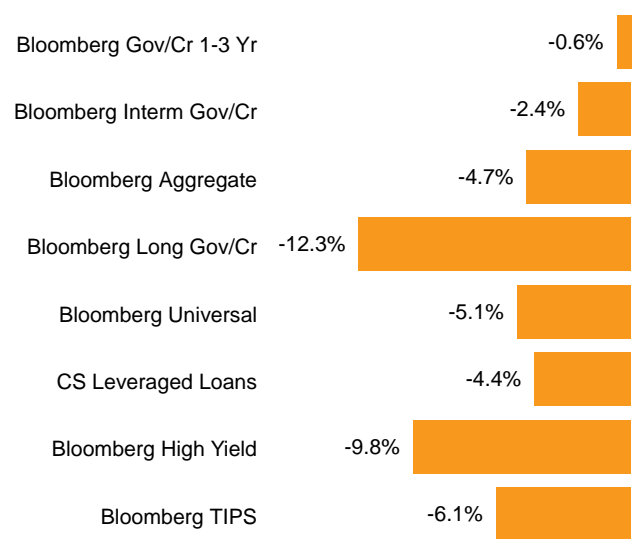
**Valuations relative to U.S. Treasuries at fair value**

- 10-year AAA Muni/10-year U.S. Treasury yield ratio roughly 90%; in line with 10-year average
- Municipal Bond Index after-tax yield = 5.4% (source: Eaton Vance)

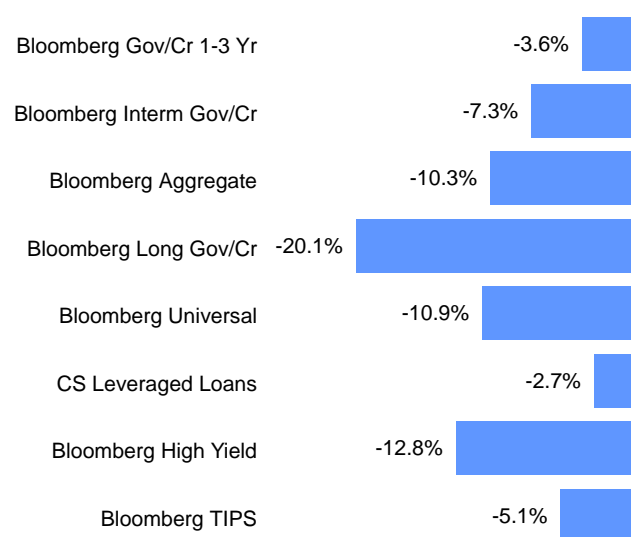
**Supply/demand**

- Outflows of \$76 billion YTD; highest cycle outflow since data series began in 1992
- YTD supply down 14% vs. last year

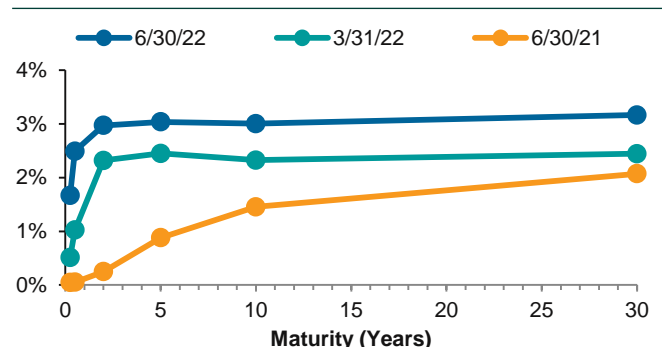
**U.S. Fixed Income: Quarterly Returns**



**U.S. Fixed Income: One-Year Returns**



**U.S. Treasury Yield Curves**



Sources: Bloomberg, Credit Suisse

**GLOBAL FIXED INCOME**

**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.

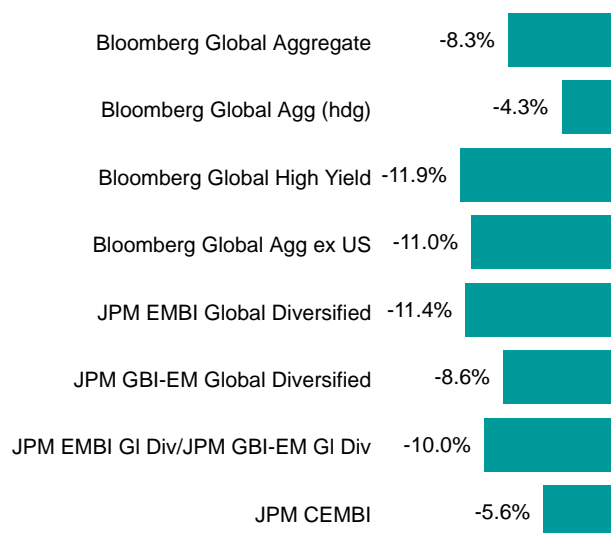
**Inflation and global recession fears drag on EMD**

- 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.

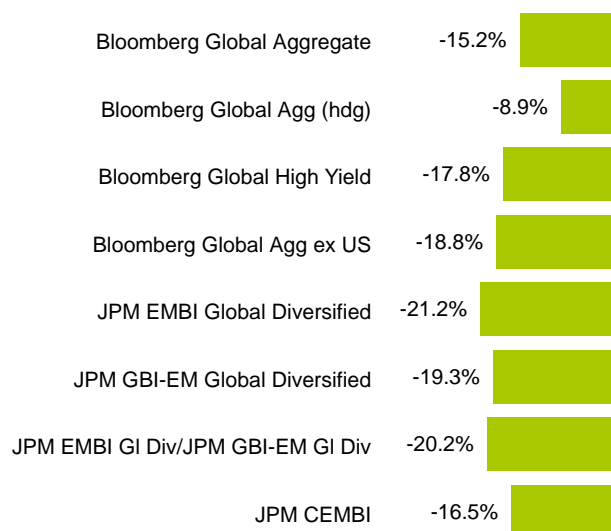
**Interest rates significantly increased**

- First-half returns worst since inflation of 1970s
- Global phenomenon driven by recent inflationary pressure
- All fixed income asset classes negatively impacted
- Developed market duration becoming more compelling after broad repricing

**Global Fixed Income: Quarterly Returns**

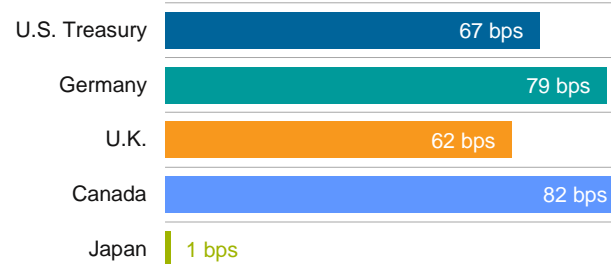


**Global Fixed Income: One-Year Returns**



**Change in 10-Year Global Government Bond Yields**

**1Q22 to 2Q22**



Sources: Bloomberg, JP Morgan





## Investment Manager Asset Allocation

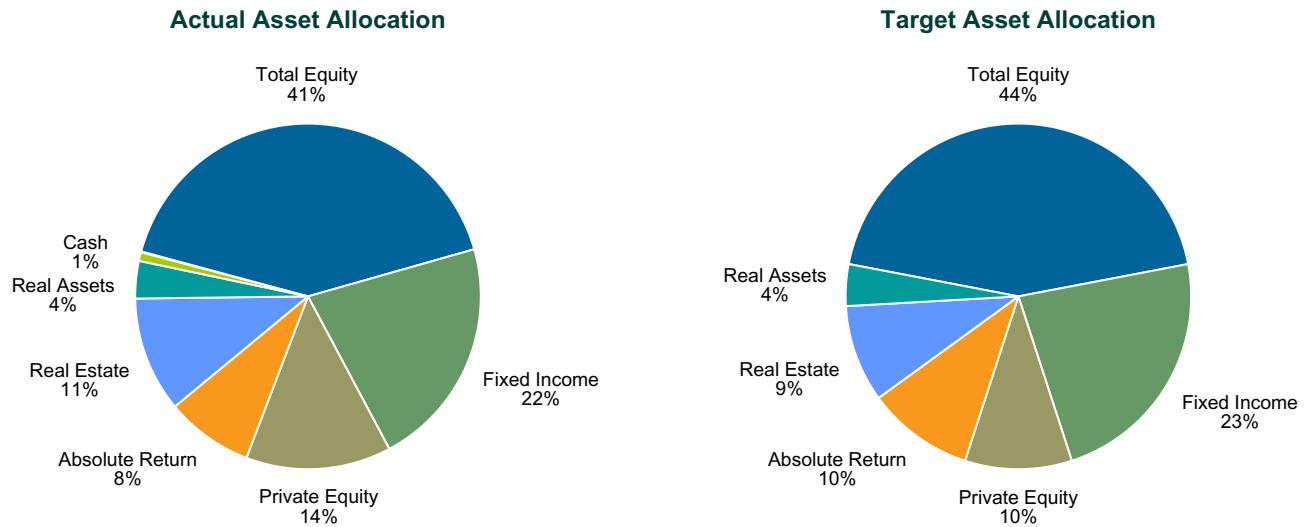
The table below contrasts the distribution of assets across the Fund's investment managers as of June 30, 2022, with the distribution as of March 31, 2022.

### Asset Distribution Across Investment Managers

	June 30, 2022		March 31, 2022	
	Market Value	Weight	Market Value	Weight
<b>Total Domestic Equity</b>	<b>\$1,070,256,720</b>	<b>19.00%</b>	<b>\$1,218,780,744</b>	<b>19.80%</b>
BlackRock Russell 1000 Value	141,446,858	2.51%	161,110,859	2.62%
DFA Large Cap Value	140,730,102	2.50%	160,609,212	2.61%
Northern Trust Global	289,720,143	5.14%	332,088,512	5.39%
Polen Capital Management	139,966,344	2.48%	154,641,096	2.51%
Earnest Partners LLC	103,691,710	1.84%	117,395,530	1.91%
DFA Small Cap Value	174,051,599	3.09%	198,062,605	3.22%
CastleArk Management	80,649,963	1.43%	94,872,932	1.54%
<b>Total Global Equity</b>	<b>\$421,452,750</b>	<b>7.48%</b>	<b>\$480,157,017</b>	<b>7.80%</b>
BlackRock Global Alpha Tilts	245,862,083	4.36%	289,018,287	4.69%
MFS Investment Management	175,590,667	3.12%	191,138,731	3.10%
<b>Total International Equity</b>	<b>\$841,508,868</b>	<b>14.94%</b>	<b>\$903,955,073</b>	<b>14.68%</b>
AQR Emerging Markets	78,538,816	1.39%	91,162,238	1.48%
Brandes Investment Partners	337,504,272	5.99%	364,701,775	5.92%
William Blair & Company	259,090,729	4.60%	262,240,277	4.26%
DFA International Small Cap	166,375,050	2.95%	185,850,783	3.02%
<b>Total Fixed Income</b>	<b>\$1,217,919,587</b>	<b>21.62%</b>	<b>\$1,446,956,245</b>	<b>23.50%</b>
BlackRock US Govt Bond	304,037,990	5.40%	401,669,346	6.52%
Reams Asset Management	553,352,425	9.82%	594,119,824	9.65%
Loomis, Sayles & Company, L.P.	360,529,171	6.40%	451,167,075	7.33%
<b>Total Private Equity</b>	<b>\$765,319,709</b>	<b>13.58%</b>	<b>\$746,031,706</b>	<b>12.12%</b>
Abbott Capital Management 2010	27,065,426	0.48%	28,305,063	0.46%
Abbott Capital Management 2011	55,329,663	0.98%	58,339,194	0.95%
Abbott Capital Management 2012	48,214,460	0.86%	49,026,793	0.80%
Abbott Capital Management 2013	46,725,968	0.83%	47,754,822	0.78%
Abbott Capital Management 2014	51,294,490	0.91%	51,945,588	0.84%
Abbott Capital Management 2015	37,767,328	0.67%	36,205,084	0.59%
Abbott Capital Management 2016	29,637,407	0.53%	27,699,416	0.45%
Abbott Capital Management 2018	19,982,940	0.35%	17,962,563	0.29%
Abbott Capital Management 2019	14,701,270	0.26%	13,385,148	0.22%
Abbott Capital Management 2020	17,392,726	0.31%	11,889,608	0.19%
Abbott Capital Management 2021	4,845,758	0.09%	4,642,156	0.08%
Abbott Capital Management 2022	1,212,100	0.02%	1,225,000	0.02%
Mesirow V	55,052,439	0.98%	59,416,304	0.97%
Mesirow VI	85,253,616	1.51%	90,118,955	1.46%
Mesirow VII	122,621,933	2.18%	113,397,816	1.84%
Mesirow VIII	36,750,733	0.65%	35,825,430	0.58%
NB Secondary Opp Fund III	8,446,195	0.15%	8,555,192	0.14%
NB Secondary Opp Fund IV	18,568,328	0.33%	17,861,084	0.29%
NB Secondary Opp Fund V	9,040,512	0.16%	3,125,000	0.05%
Private Advisors VI	23,466,883	0.42%	22,511,350	0.37%
Private Advisors VII	15,770,069	0.28%	14,696,819	0.24%
Private Advisors VIII	15,222,546	0.27%	13,748,774	0.22%
Private Advisors IX	20,956,919	0.37%	18,394,547	0.30%
<b>Absolute Return</b>	<b>\$463,617,768</b>	<b>8.23%</b>	<b>\$449,877,178</b>	<b>7.31%</b>
UBS A & Q	463,617,768	8.23%	449,877,178	7.31%
<b>Real Assets</b>	<b>\$198,354,663</b>	<b>3.52%</b>	<b>\$264,014,036</b>	<b>4.29%</b>
Principal DRA	198,354,663	3.52%	264,014,036	4.29%
<b>Total Real Estate</b>	<b>\$610,309,679</b>	<b>10.83%</b>	<b>\$570,720,678</b>	<b>9.27%</b>
Real Estate	610,309,679	10.83%	570,720,678	9.27%
<b>Total Cash</b>	<b>\$44,994,945</b>	<b>0.80%</b>	<b>\$75,577,264</b>	<b>1.23%</b>
Cash	44,994,945	0.80%	75,577,264	1.23%
<b>Total Fund</b>	<b>\$5,633,734,690</b>	<b>100.0%</b>	<b>\$6,156,069,941</b>	<b>100.0%</b>

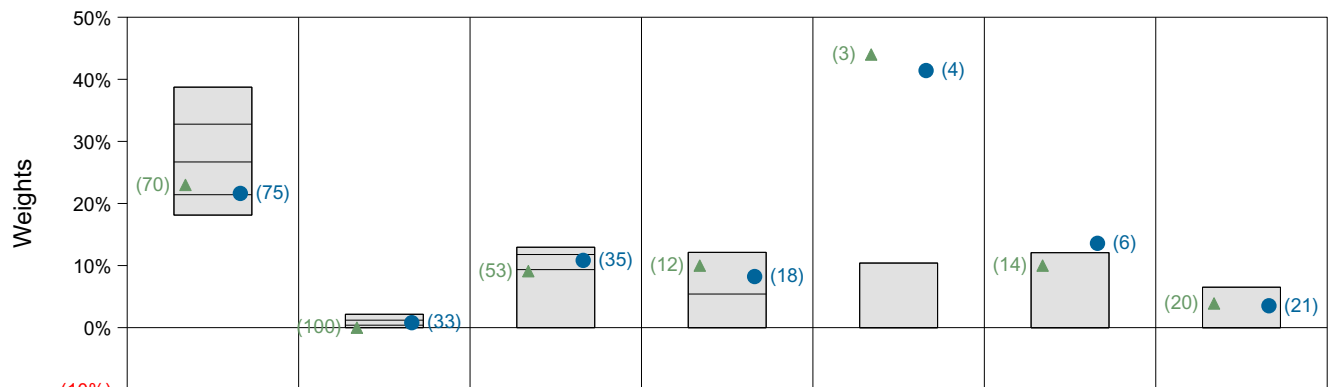
## Actual vs Target Asset Allocation As of June 30, 2022

The top left chart shows the Fund's asset allocation as of June 30, 2022. The top right chart shows the Fund's target asset allocation as outlined in the investment policy statement. The bottom chart ranks the fund's asset allocation and the target allocation versus the Callan Public Fund Sponsor Database.



Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
Total Equity	2,333,218	41.4%	44.0%	(2.6%)	(145,625)
Fixed Income	1,217,920	21.6%	23.0%	(1.4%)	(77,839)
Private Equity	765,320	13.6%	10.0%	3.6%	201,946
Absolute Return	463,618	8.2%	10.0%	(1.8%)	(99,756)
Real Estate	610,310	10.8%	9.1%	1.7%	97,640
Real Assets	198,355	3.5%	3.9%	(0.4%)	(21,361)
Cash	44,995	0.8%	0.0%	0.8%	44,995
Total	5,633,735	100.0%	100.0%		

### Asset Class Weights vs Callan Public Fund Sponsor Database



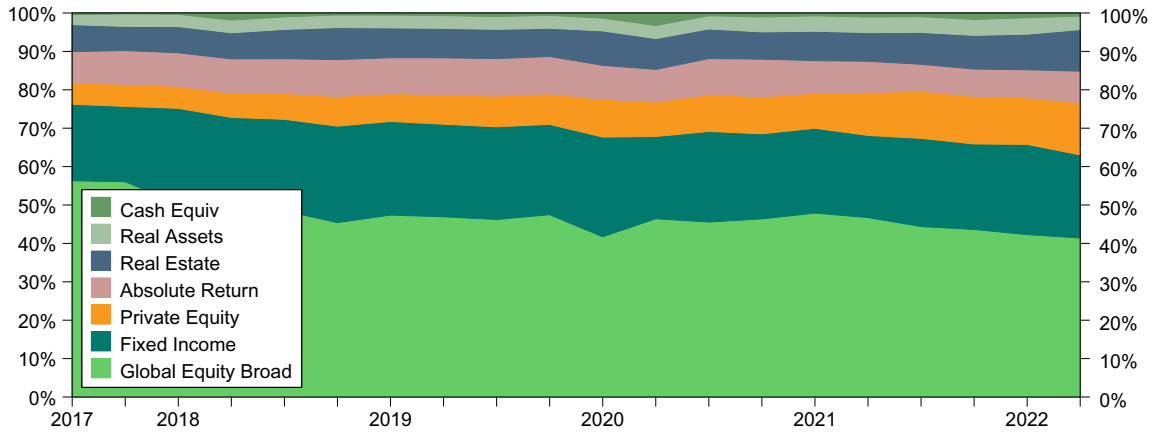
	Fixed Income	Cash	Real Estate	Other Alternatives	Total Equity	Private Equity	Real Assets
10th Percentile	38.74	2.15	12.95	12.12	10.40	12.07	6.51
25th Percentile	32.77	1.20	11.78	5.41	0.00	0.00	0.00
Median	26.69	0.40	9.35	0.00	0.00	0.00	0.00
75th Percentile	21.41	0.00	0.00	0.00	0.00	0.00	0.00
90th Percentile	18.13	0.00	0.00	0.00	0.00	0.00	0.00
<b>Fund</b> ●	21.62	0.80	10.83	8.23	41.42	13.58	3.52
<b>Target</b> ▲	23.00	0.00	9.10	10.00	44.00	10.00	3.90
% Group Invested	98.78%	69.51%	71.95%	25.61%	17.07%	24.39%	24.39%

\* Current Quarter Target = 44.0% MSCI ACWI IMI, 23.0% Blmbg Aggregate, 10.0% Russell 3000 Index lagged 3 months+2.0%, 10.0% 3-month Treasury Bill+3.0%, 9.1% NCREIF NFI-ODCE Eq Wt Net lagged 3 months and 3.9% Principal DRA Blend Index.

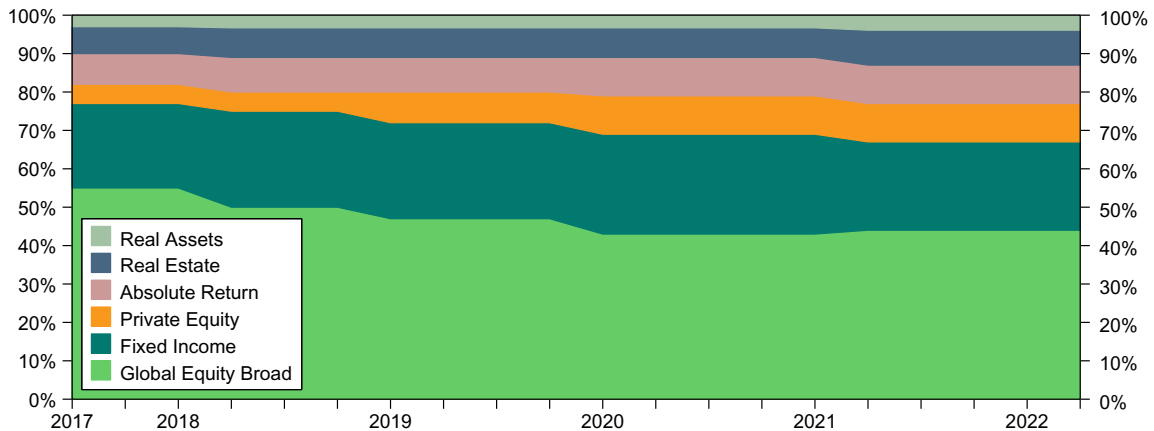
## Actual vs Target Historical Asset Allocation

The Historical asset allocation for a fund is by far the largest factor explaining its performance. The charts below show the fund's historical actual asset allocation, the fund's historical target asset allocation, and the historical asset allocation of the average fund in the Callan Public Fund Sponsor Database.

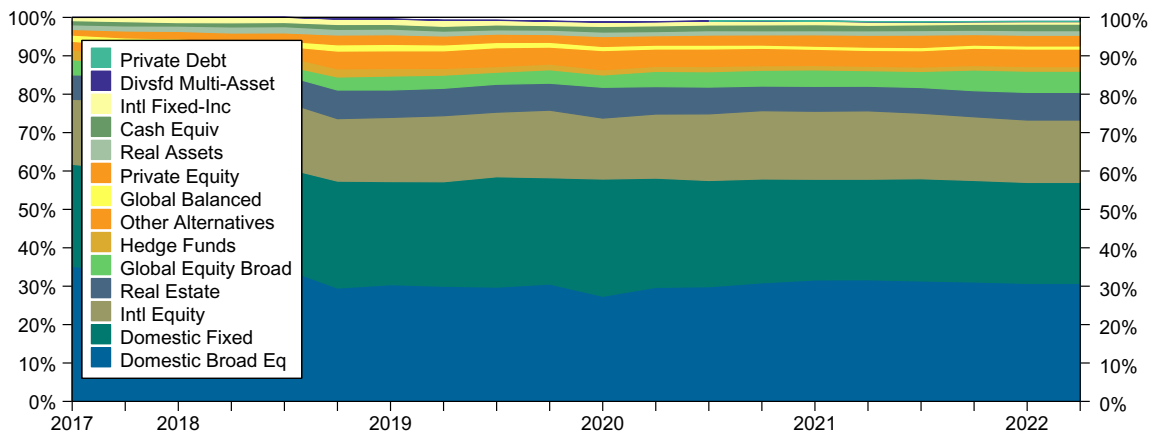
### Actual Historical Asset Allocation



### Target Historical Asset Allocation



### Average Callan Public Fund Sponsor Database Historical Asset Allocation



\* Current Quarter Target = 44.0% MSCI ACWI IMI, 23.0% Blmbg Aggregate, 10.0% Russell 3000 Index lagged 3 months+2.0%, 10.0% 3-month Treasury Bill+3.0%, 9.1% NCREIF NFI-ODCE Eq Wt Net lagged 3 months and 3.9% Principal DRA Blend Index.

# Total Fund

## Period Ended June 30, 2022

### Investment Philosophy

The Public Fund Sponsor Database consists of public employee pension total funds including both Callan Associates client and surveyed non-client funds. Current Quarter Target = 44.0% MSCI ACWI IMI, 23.0% Blmbg Aggregate, 10.0% Russell 3000 Index lagged 3 months+2.0%, 10.0% 3-month Treasury Bill+3.0%, 9.1% NCREIF NFI-ODCE Eq Wt Net lagged 3 months and 3.9% Principal Blended Benchmark.

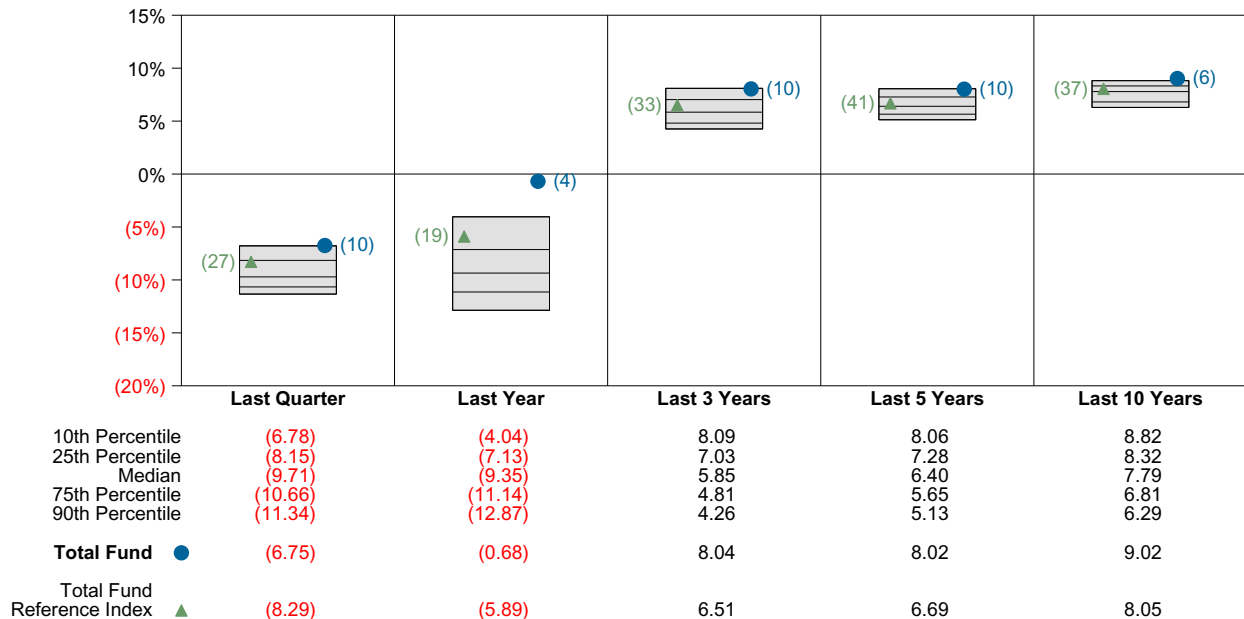
### Quarterly Summary and Highlights

- Total Fund's portfolio posted a (6.75)% return for the quarter placing it in the 10 percentile of the Callan Public Fund Sponsor Database group for the quarter and in the 4 percentile for the last year.
- Total Fund's portfolio outperformed the Total Fund Reference Index by 1.54% for the quarter and outperformed the Total Fund Reference Index for the year by 5.21%.

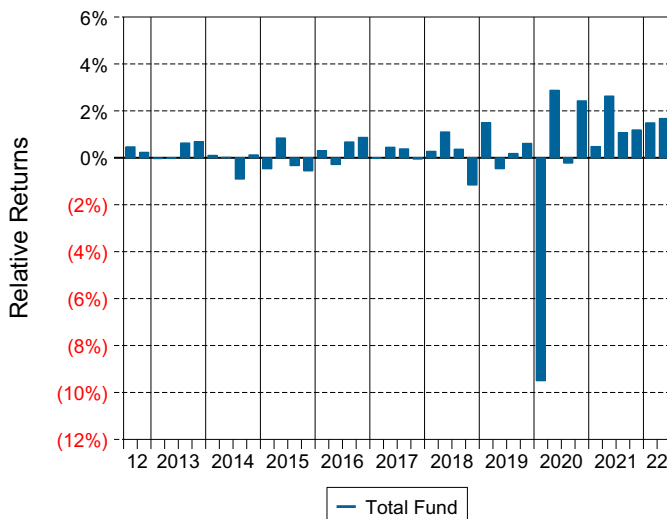
### Quarterly Asset Growth

Beginning Market Value	\$6,156,069,941
Net New Investment	\$-110,065,277
Investment Gains/(Losses)	\$-412,269,975
Ending Market Value	\$5,633,734,690

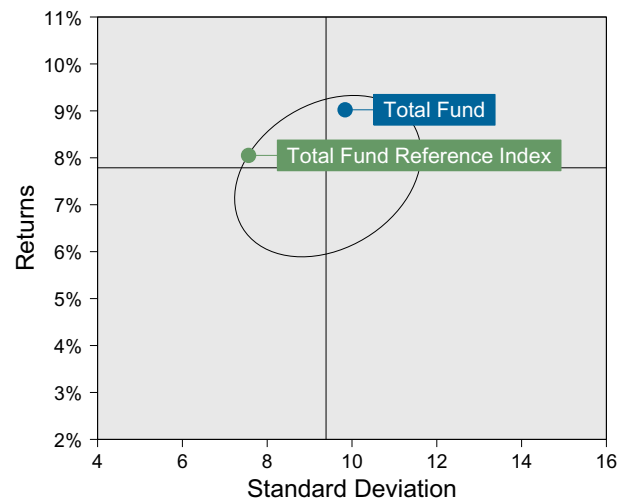
### Performance vs Callan Public Fund Sponsor Database (Gross)



### Relative Return vs Total Fund Reference Index



### Callan Public Fund Sponsor Database (Gross) Annualized Ten Year Risk vs Return

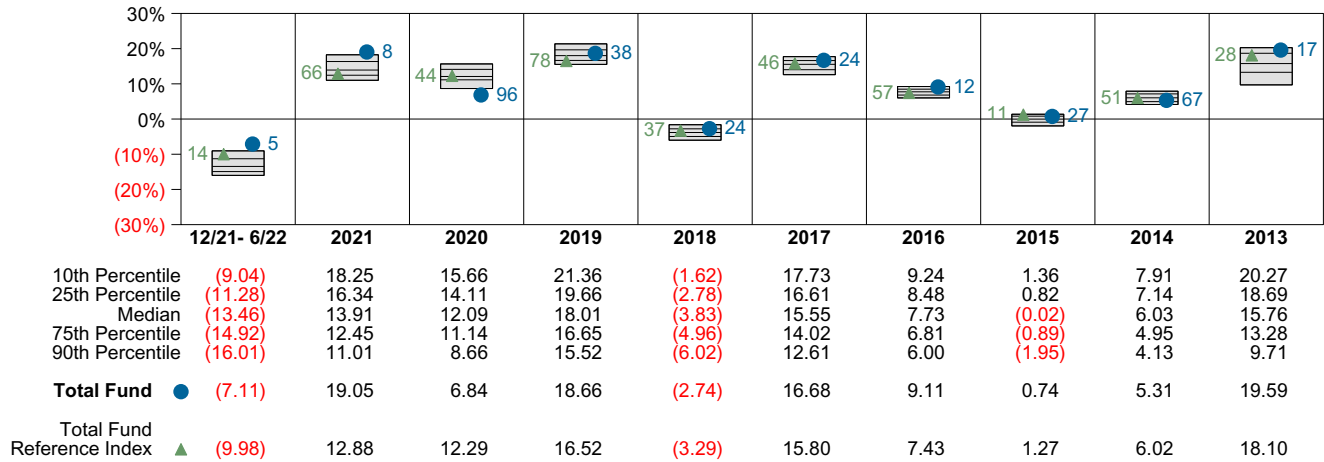


# Total Fund Return Analysis Summary

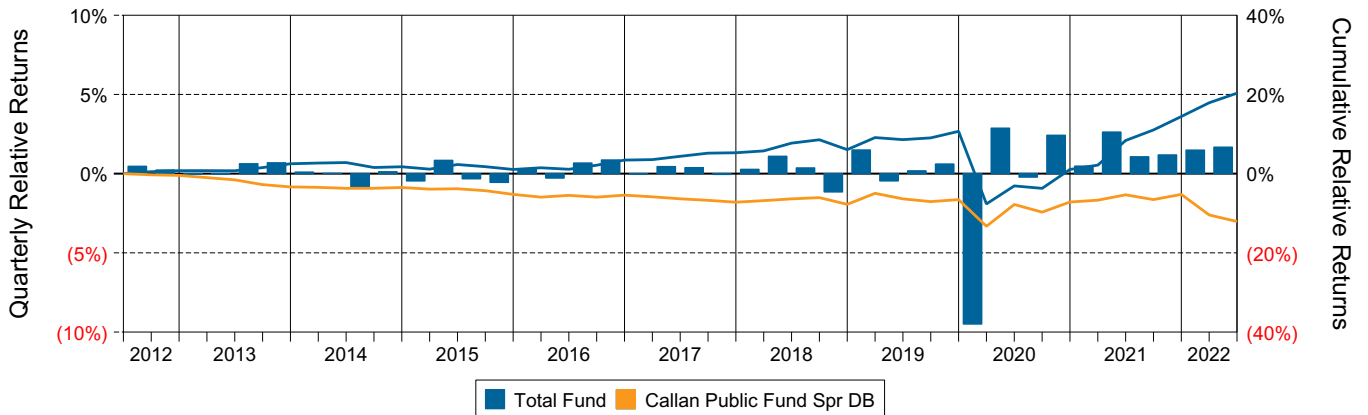
## Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

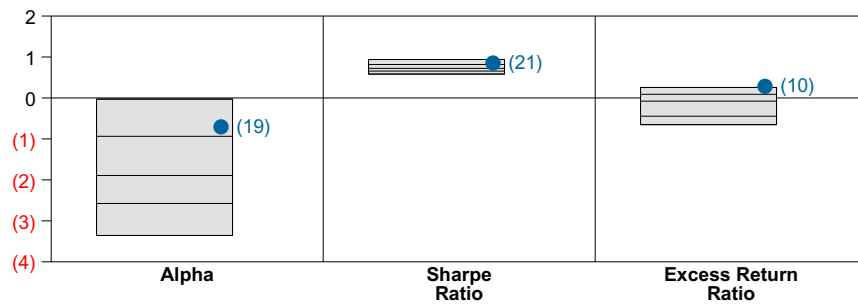
### Performance vs Callan Public Fund Sponsor Database (Gross)



### Cumulative and Quarterly Relative Returns vs Total Fund Reference Index



### Risk Adjusted Return Measures vs Total Fund Reference Index Rankings Against Callan Public Fund Sponsor Database (Gross) Ten Years Ended June 30, 2022



10th Percentile	(0.03)	0.94	0.26
25th Percentile	(0.94)	0.82	0.09
Median	(1.89)	0.72	(0.08)
75th Percentile	(2.58)	0.66	(0.45)
90th Percentile	(3.36)	0.58	(0.65)
<b>Total Fund</b>	● (0.71)	0.85	0.28

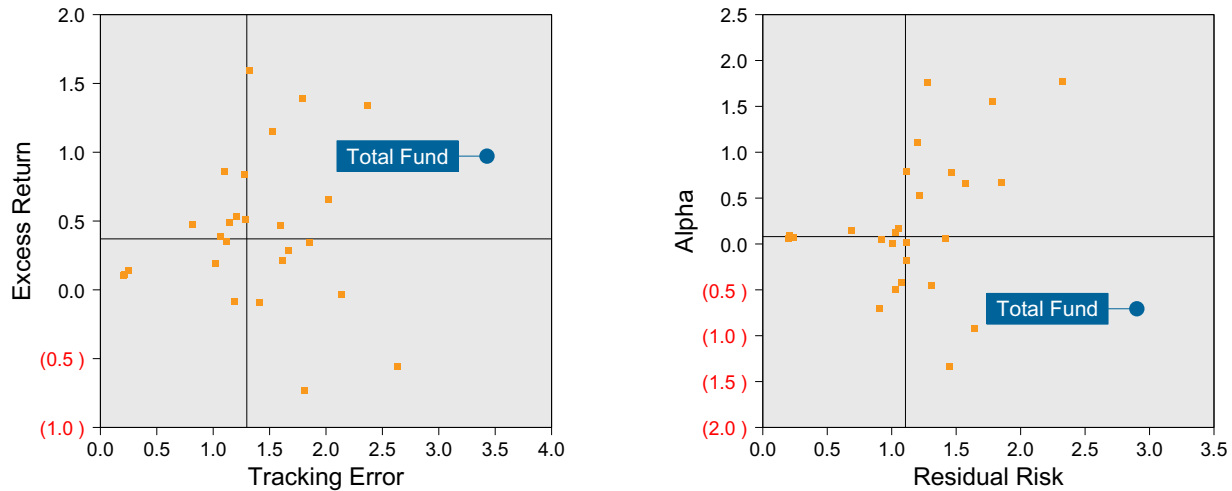
# Total Fund

## Total Fund vs Target Risk Analysis

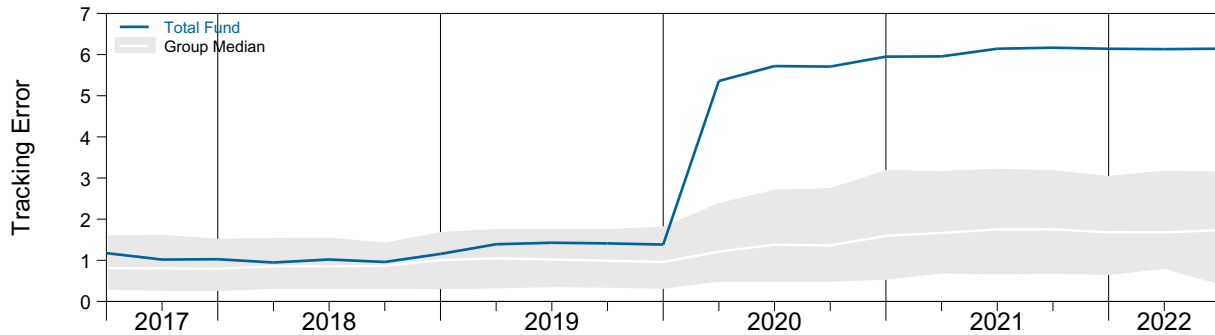
### Risk Analysis

The graphs below analyze the performance and risk of the fund relative to the appropriate target mix. This relative performance is compared to a peer group of funds wherein each member fund is measured against its own target mix. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the target. The second scatter chart displays the relationship, sometimes called Information Ratio, between alpha (market-risk or "beta" adjusted return) and residual risk (non-market or "unsystematic" risk). The third chart shows tracking error patterns over time compared to the range of tracking error patterns for the peer group. The last two charts show the ranking of the fund's risk statistics versus the peer group.

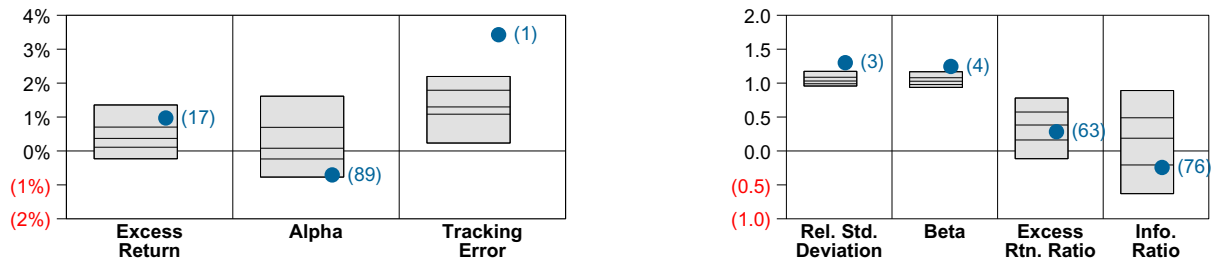
### Risk Analysis vs Callan Public Fund Sponsor Database Ten Years Ended June 30, 2022



### Rolling 12 Quarter Tracking Error vs Targets Compared to Callan Public Fund Sponsor Database



### Risk Statistics Rankings vs Targets Rankings Against Callan Public Fund Sponsor Database Ten Years Ended June 30, 2022



10th Percentile 1.36  
25th Percentile 0.70  
Median 0.37  
75th Percentile 0.11  
90th Percentile (0.23)

10th Percentile 1.62  
25th Percentile 0.70  
Median 0.08  
75th Percentile (0.24)  
90th Percentile (0.77)

10th Percentile 2.20  
25th Percentile 1.79  
Median 1.30  
75th Percentile 1.08  
90th Percentile 0.23

**Total Fund** ● 0.97

(17)

(89)

(1)

10th Percentile 1.17  
25th Percentile 1.09  
Median 1.03  
75th Percentile 0.99  
90th Percentile 0.96

10th Percentile 1.17  
25th Percentile 1.08  
Median 1.03  
75th Percentile 0.98  
90th Percentile 0.94

10th Percentile 0.78  
25th Percentile 0.57  
Median 0.38  
75th Percentile 0.16  
90th Percentile (0.11)

10th Percentile 0.89  
25th Percentile 0.49  
Median 0.19  
75th Percentile (0.21)  
90th Percentile (0.63)

**Total Fund** ● 1.30

(3)

(4)

(63)

(76)

## Investment Manager Returns and Peer Group Rankings

The table below details the rates of return and peer group rankings for the Fund's investment managers over various time periods ended June 30, 2022. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

### Returns and Rankings for Periods Ended June 30, 2022

	Last Quarter		Last Year		Last 3 Years		Last 5 Years		Since Inception	
<b>Total Domestic Equity</b>	<b>(15.28%)</b>	<b>14</b>	<b>(12.83%)</b>	<b>36</b>	<b>9.52%</b>	<b>37</b>	<b>10.25%</b>	<b>35</b>	<b>7.62%</b>	(6/98)
Russell 3000 Index	(16.70%)	76	(13.87%)	55	9.77%	21	10.60%	25	7.27%	(6/98)
Pub Pln- Dom Equity	(16.24%)		(13.67%)		9.16%		9.98%		-	
BlackRock Russell 1000 Value	(12.21%)	66	(6.82%)	79	7.09%	85	7.35%	74	7.27%	(3/17)
Russell 1000 Value Index	(12.21%)	66	(6.82%)	79	6.87%	91	7.17%	77	7.09%	(3/17)
Callan Large Cap Value	(11.75%)		(4.90%)		8.32%		8.50%		-	
DFA Large Cap Value	(12.38%)	69	(7.42%)	82	6.72%	93	-		5.18%	(11/17)
Russell 1000 Value Index	(12.21%)	66	(6.82%)	79	6.87%	91	7.17%	77	6.25%	(11/17)
Callan Large Cap Value	(11.75%)		(4.90%)		8.32%		8.50%		-	
Northern Trust Global	(16.09%)	58	(10.61%)	44	10.61%	47	11.34%	44	10.46%	(7/88)
S&P 500 Index	(16.10%)	58	(10.62%)	44	10.60%	48	11.31%	45	10.42%	(7/88)
Callan Large Cap Core	(15.87%)		(11.08%)		10.52%		11.04%		-	
Polen Capital Management	(24.17%)	84	(29.23%)	83	7.15%	78	12.81%	47	14.26%	(6/12)
S&P 500 Index	(16.10%)	8	(10.62%)	7	10.60%	35	11.31%	75	12.96%	(6/12)
Callan Large Cap Growth	(21.41%)		(22.20%)		9.32%		12.68%		-	
Earnest Partners LLC	(11.67%)	16	(7.76%)	31	11.73%	8	12.46%	1	10.94%	(5/05)
Russell MidCap Index	(16.85%)	66	(17.30%)	64	6.59%	66	7.96%	58	8.96%	(5/05)
Callan Mid Capitalization	(14.66%)		(11.70%)		7.50%		8.39%		-	
DFA Small Cap Value	(12.12%)	29	(5.96%)	11	11.67%	14	7.50%	20	11.43%	(10/96)
Russell 2000 Value Index	(15.28%)	82	(16.28%)	88	6.18%	73	4.89%	76	8.87%	(10/96)
Callan Small Cap Value	(12.85%)		(10.84%)		7.82%		6.19%		-	
CastleArk Management	(19.31%)	45	(31.77%)	62	3.74%	73	9.45%	58	9.57%	(8/13)
Russell 2000 Growth Index	(19.25%)	45	(33.43%)	70	1.40%	89	4.80%	96	7.31%	(8/13)
Callan Small Cap Growth	(20.09%)		(29.89%)		4.70%		9.76%		-	
<b>Total Global Equity</b>	<b>(14.37%)</b>	<b>40</b>	<b>(14.70%)</b>	<b>43</b>	<b>7.61%</b>	<b>31</b>	<b>9.16%</b>	<b>27</b>	<b>8.65%</b>	(4/10)
MSCI World	(16.19%)	67	(14.34%)	39	7.00%	41	7.67%	49	8.46%	(4/10)
Callan Global Equity	(15.20%)		(15.97%)		6.64%		7.62%		-	
BlackRock Global Alpha Tilts	(14.93%)	46	(14.93%)	44	6.40%	53	7.44%	53	10.57%	(2/16)
MSCI ACWI Gross	(15.53%)	56	(15.37%)	46	6.71%	48	7.54%	51	10.37%	(2/16)
Callan Global Equity	(15.20%)		(15.97%)		6.64%		7.62%		-	
MFS Investment Management	(13.54%)	32	(14.32%)	39	9.52%	9	11.72%	5	11.72%	(11/12)
MSCI ACWI Gross	(15.53%)	56	(15.37%)	46	6.71%	48	7.54%	51	8.90%	(11/12)
Callan Global Equity	(15.20%)		(15.97%)		6.64%		7.62%		-	
<b>Total International Equity</b>	<b>(13.76%)</b>	<b>78</b>	<b>(19.15%)</b>	<b>34</b>	<b>3.42%</b>	<b>25</b>	<b>2.98%</b>	<b>60</b>	<b>6.55%</b>	(5/96)
MSCI EAFE	(14.51%)	93	(17.77%)	22	1.07%	78	2.20%	86	4.21%	(5/96)
Pub Pln- Intl Equity	(13.30%)		(20.54%)		2.27%		3.12%		-	
AQR Emerging Markets	(13.68%)	76	(25.06%)	41	2.81%	15	2.08%	59	5.27%	(7/16)
MSCI EM Gross	(11.34%)	33	(25.00%)	41	0.92%	46	2.55%	45	5.07%	(7/16)
Callan Emerging Broad	(12.03%)		(26.92%)		0.78%		2.39%		-	
Brandes Investment Partners	(10.44%)	6	(13.85%)	12	2.13%	53	2.16%	71	6.80%	(2/98)
MSCI EAFE	(14.51%)	56	(17.77%)	42	1.07%	75	2.20%	71	3.90%	(2/98)
Callan NonUS Eq	(13.91%)		(19.04%)		2.42%		3.16%		-	
William Blair & Company	(18.86%)	95	(28.29%)	93	4.06%	15	5.18%	13	6.98%	(12/03)
MSCI ACWIxUS Gross	(13.54%)	43	(19.01%)	50	1.81%	60	2.98%	53	5.64%	(12/03)
Callan NonUS Eq	(13.91%)		(19.04%)		2.42%		3.16%		-	
DFA International Small Cap	(13.56%)	6	(13.34%)	1	3.58%	16	0.75%	74	4.07%	(4/06)
MSCI EAFE Small	(17.69%)	73	(23.98%)	45	1.12%	54	1.72%	47	3.55%	(4/06)
Callan Intl Small Cap	(16.40%)		(24.35%)		1.93%		1.65%		-	

## Investment Manager Returns and Peer Group Rankings

The table below details the rates of return and peer group rankings for the Fund's investment managers over various time periods ended June 30, 2022. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

### Returns and Rankings for Periods Ended June 30, 2022

	Last Quarter		Last Year		Last 3 Years		Last 5 Years		Since Inception	
<b>Total Fixed Income</b>	<b>(5.24%)</b>	<b>68</b>	<b>(5.42%)</b>	<b>6</b>	<b>(1.48%)</b>	<b>100</b>	<b>0.96%</b>	<b>93</b>	<b>6.75%</b>	(12/87)
Bimbg Aggregate	(4.69%)	48	(10.29%)	74	(0.93%)	95	0.88%	97	5.61%	(12/87)
Pub Pln- Dom Fixed	(4.73%)		(9.26%)		0.03%		1.47%		-	
BlackRock US Govt Bond	(3.82%)	2	-		-		-		(9.03%)	(12/21)
Bimbg Aggregate	(4.69%)	27	(10.29%)	55	(0.93%)	94	0.88%	95	(10.35%)	(12/21)
Callan Core Bond FI	(4.87%)		(10.26%)		(0.44%)		1.31%		-	
Reams Asset Management	(4.99%)	22	(9.83%)	18	2.12%	1	3.17%	2	5.05%	(1/01)
Bimbg Aggregate	(4.69%)	13	(10.29%)	31	(0.93%)	93	0.88%	96	3.82%	(1/01)
Callan Core Plus FI	(5.69%)		(10.89%)		(0.25%)		1.53%		-	
Loomis, Sayles & Company, L.P.	(6.75%)	89	(12.11%)	87	0.00%	32	2.05%	15	8.25%	(12/87)
Bimbg Aggregate	(4.69%)	13	(10.29%)	31	(0.93%)	93	0.88%	96	5.61%	(12/87)
Callan Core Plus FI	(5.69%)		(10.89%)		(0.25%)		1.53%		-	
<b>Total Private Equity</b>	<b>1.75%</b>		<b>27.87%</b>		<b>31.54%</b>		<b>26.20%</b>		<b>15.37%</b>	(6/10)
Russell 3000 (1 Qtr in Arrears) + 3%	(4.41%)		15.01%		21.55%		18.65%		-	
Abbott Capital Management 2010	(4.38%)		22.29%		29.59%		26.69%		2.96%	(6/10)
Abbott Capital Management 2011	(5.16%)		22.08%		34.31%		29.22%		7.06%	(6/11)
Abbott Capital Management 2012	(1.66%)		25.68%		34.63%		28.66%		14.84%	(6/12)
Abbott Capital Management 2013	(2.15%)		24.10%		33.75%		29.02%		15.81%	(4/13)
Abbott Capital Management 2014	(1.25%)		29.10%		34.14%		28.00%		15.35%	(3/14)
Abbott Capital Management 2015	4.31%		36.01%		31.27%		23.36%		17.39%	(4/15)
Abbott Capital Management 2016	7.00%		37.22%		31.47%		21.51%		16.41%	(3/16)
Abbott Capital Management 2018	9.40%		37.00%		28.13%		-		19.86%	(6/18)
Abbott Capital Management 2019	9.83%		32.80%		-		-		30.43%	(1/20)
Abbott Capital Management 2020	3.76%		16.16%		-		-		46.38%	(1/21)
Abbott Capital Management 2021	4.39%		14.54%		-		-		11.72%	(2/21)
Abbott Capital Management 2022	(1.05%)		-		-		-		(1.05%)	(2/22)
Mesirow V	(7.34%)		15.73%		29.35%		24.27%		18.32%	(6/10)
Mesirow VI	(1.81%)		25.78%		39.48%		31.05%		17.19%	(6/13)
Mesirow VII	3.70%		26.60%		25.01%		4.69%		4.61%	(5/17)
Mesirow VIII	2.58%		7.85%		-		-		(0.84%)	(9/20)
NB Secondary Opp Fund III	3.70%		11.73%		13.59%		15.13%		17.54%	(12/13)
NB Secondary Opp Fund IV	7.23%		32.93%		24.25%		27.05%		25.61%	(3/17)
NB Secondary Opp Fund V	189.30%		-		-		-		189.30%	(3/22)
Private Advisors VI	9.11%		60.26%		38.18%		28.02%		16.88%	(4/15)
Private Advisors VII	11.96%		44.61%		23.72%		19.95%		16.36%	(1/17)
Private Advisors VIII	8.89%		30.60%		20.63%		-		19.73%	(7/18)
Private Advisors IX	4.09%		24.23%		-		-		26.65%	(1/20)
<b>Absolute Return</b>	<b>3.05%</b>		<b>28.50%</b>		<b>6.02%</b>		<b>5.98%</b>		<b>5.86%</b>	(6/14)
UBS A & Q	3.05%	2	10.36%	5	9.67%	14	7.77%	13	6.31%	(12/14)
1-month LIBOR + 4%	1.28%	20	4.41%	24	4.65%	74	5.19%	39	4.94%	(12/14)
Callan Abs Rtn Hedge FoF	(0.35%)		3.44%		5.39%		4.90%		-	
<b>Real Assets</b>	<b>(10.01%)</b>		<b>1.65%</b>		<b>7.28%</b>		<b>5.90%</b>		<b>6.99%</b>	(1/16)
Principal DRA	(10.01%)	89	1.65%	78	7.28%	52	5.90%	56	6.99%	(1/16)
Principal DRA Blend Index (1)	(10.75%)	95	0.28%	79	5.26%	57	5.17%	61	5.92%	(1/16)
Callan Alternative Inv DB	(4.84%)		14.42%		8.25%		6.28%		-	
<b>Total Real Estate</b>	<b>7.14%</b>		<b>34.31%</b>		<b>14.17%</b>		<b>11.87%</b>		<b>7.29%</b>	(6/86)
Real Estate	7.14%	4	34.31%	6	14.17%	10	11.87%	8	7.29%	(6/86)
Blended Benchmark (2)	7.77%	4	28.69%	23	11.11%	38	9.46%	48	-	
Callan Tot Real Est DB	4.72%		22.13%		10.41%		9.39%		-	
<b>Total Fund</b>	<b>(6.75%)</b>	<b>10</b>	<b>(0.68%)</b>	<b>4</b>	<b>8.04%</b>	<b>10</b>	<b>8.02%</b>	<b>10</b>	<b>9.45%</b>	(1/79)
Total Fund Reference Index*	(8.29%)	27	(5.89%)	19	6.51%	33	6.69%	41	-	
Callan Public Fund Spr DB	(9.71%)		(9.35%)		5.85%		6.40%		-	

\* Current Quarter Target = 44.0% MSCI ACWI IMI, 23.0% Bimbg Aggregate, 10.0% Russell 3000 Index lagged 3 months+2.0%, 10.0% 3-month Treasury Bill+3.0%, 9.1% NCREIF NFI-ODCE Eq Wt Net lagged 3 months and 3.9% Principal DRA Blend Index.

(1) Current Principal DRA Blend Index = 15% Bloomberg US TIPS Idx, 15% Bloomberg Commodity Idx, 30% S&P Global Infrastructure Idx, 15% S&P Global Natural Resources Idx and 25% FTSE EPRA/NAREIT Developed Market Idx.

(2) Blended Benchmark = NCREIF (NPI) through 6/30/06, NCREIF (NPI 1 Qtr Arrears) through 12/31/13 and NFI-ODCE (1 Qtr Arrears) thereafter.



## Investment Manager Returns and Peer Group Rankings

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

	12/2021- 6/2022		2021		2020		2019		2018	
<b>Total Domestic Equity</b>	<b>(19.20%)</b>	<b>15</b>	<b>28.12%</b>	<b>14</b>	<b>16.35%</b>	<b>76</b>	<b>29.24%</b>	<b>75</b>	<b>(5.80%)</b>	<b>48</b>
Russell 3000 Index	(21.10%)	61	25.66%	55	20.89%	25	31.02%	29	(5.24%)	33
Pub Pln- Dom Equity	(20.65%)		25.78%		18.62%		30.26%		(5.84%)	
BlackRock Russell 1000 Value	(12.87%)	74	25.18%	79	3.28%	46	26.79%	46	(8.12%)	43
Russell 1000 Value Index	(12.86%)	74	25.16%	79	2.80%	52	26.54%	50	(8.27%)	45
Callan Large Cap Value	(10.95%)		28.39%		3.04%		26.52%		(8.70%)	
DFA Large Cap Value	(12.10%)	67	27.52%	65	(1.56%)	90	26.71%	47	(12.40%)	84
Russell 1000 Value Index	(12.86%)	74	25.16%	79	2.80%	52	26.54%	50	(8.27%)	45
Callan Large Cap Value	(10.95%)		28.39%		3.04%		26.52%		(8.70%)	
Northern Trust Global	(19.95%)	62	28.69%	53	18.42%	53	31.54%	39	(4.34%)	33
S&P 500 Index	(19.96%)	63	28.71%	53	18.40%	53	31.49%	39	(4.38%)	33
Callan Large Cap Core	(19.67%)		28.98%		19.19%		30.50%		(5.33%)	
Polen Capital Management	(34.66%)	90	24.84%	43	35.13%	55	38.85%	11	9.14%	4
S&P 500 Index	(19.96%)	4	28.71%	20	18.40%	98	31.49%	76	(4.38%)	91
Callan Large Cap Growth	(28.96%)		24.26%		35.55%		34.55%		0.51%	
Earnest Partners LLC	(16.53%)	43	26.09%	48	21.61%	41	38.38%	12	(9.80%)	45
Russell MidCap Index	(21.57%)	60	22.58%	58	17.10%	48	30.54%	52	(9.06%)	41
Callan Mid Capitalization	(17.60%)		25.38%		16.17%		31.00%		(10.60%)	
DFA Small Cap Value	(11.26%)	13	40.61%	16	3.85%	45	18.79%	89	(14.84%)	53
Russell 2000 Value Index	(17.31%)	76	28.27%	64	4.63%	37	22.39%	64	(12.86%)	23
Callan Small Cap Value	(14.94%)		31.82%		2.88%		24.31%		(14.79%)	
CastleArk Management	(31.89%)	72	12.30%	42	45.10%	46	23.28%	86	3.29%	15
Russell 2000 Growth Index	(29.45%)	45	2.83%	80	34.63%	73	28.48%	54	(9.31%)	84
Callan Small Cap Growth	(30.01%)		10.91%		44.48%		30.25%		(2.91%)	
<b>Total Global Equity</b>	<b>(19.61%)</b>	<b>42</b>	<b>19.03%</b>	<b>54</b>	<b>18.78%</b>	<b>43</b>	<b>31.05%</b>	<b>27</b>	<b>(8.18%)</b>	<b>40</b>
MSCI World	(20.51%)	48	21.82%	28	15.90%	55	27.67%	49	(8.71%)	44
Callan Global Equity	(20.74%)		19.50%		17.13%		27.49%		(9.52%)	
BlackRock Global Alpha Tilts	(19.37%)	39	18.73%	57	16.53%	52	26.86%	53	(11.20%)	67
MSCI ACWI Gross	(19.97%)	45	19.04%	54	16.82%	51	27.30%	51	(8.93%)	46
Callan Global Equity	(20.74%)		19.50%		17.13%		27.49%		(9.52%)	
MFS Investment Management	(19.95%)	45	19.56%	50	22.42%	32	37.31%	4	(3.75%)	11
MSCI ACWI Gross	(19.97%)	45	19.04%	54	16.82%	51	27.30%	51	(8.93%)	46
Callan Global Equity	(20.74%)		19.50%		17.13%		27.49%		(9.52%)	
<b>Total International Equity</b>	<b>(19.21%)</b>	<b>44</b>	<b>13.08%</b>	<b>11</b>	<b>10.84%</b>	<b>73</b>	<b>21.68%</b>	<b>74</b>	<b>(15.19%)</b>	<b>69</b>
MSCI EAFE	(19.57%)	50	11.26%	23	7.82%	90	22.01%	64	(13.79%)	42
Pub Pln- Intl Equity	(19.54%)		8.38%		13.20%		22.93%		(14.03%)	
AQR Emerging Markets	(16.69%)	24	1.23%	36	18.26%	49	20.54%	63	(18.31%)	86
MSCI EM Gross	(17.47%)	30	(2.22%)	55	18.69%	44	18.90%	71	(14.24%)	28
Callan Emerging Broad	(19.54%)		(0.75%)		18.17%		22.12%		(15.34%)	
Brandes Investment Partners	(12.80%)	7	14.42%	18	(1.30%)	96	15.31%	98	(8.79%)	6
MSCI EAFE	(19.57%)	47	11.26%	52	7.82%	66	22.01%	66	(13.79%)	36
Callan NonUS Eq	(19.80%)		11.45%		11.48%		23.78%		(15.13%)	
William Blair & Company	(30.81%)	95	13.27%	30	31.44%	6	31.58%	9	(16.86%)	73
MSCI ACWIxUS Gross	(18.15%)	36	8.29%	71	11.13%	51	22.13%	64	(13.77%)	35
Callan NonUS Eq	(19.80%)		11.45%		11.48%		23.78%		(15.13%)	
DFA International Small Cap	(15.72%)	2	16.47%	14	1.47%	89	21.62%	81	(23.31%)	91
MSCI EAFE Small	(24.71%)	54	10.10%	72	12.34%	45	24.96%	50	(17.89%)	30
Callan Intl Small Cap	(24.36%)		12.78%		11.08%		24.96%		(19.67%)	

## Investment Manager Returns and Peer Group Rankings

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

	12/2021- 6/2022		2021		2020		2019		2018	
<b>Total Fixed Income</b>	<b>(5.52%)</b>	<b>5</b>	<b>(0.36%)</b>	<b>43</b>	<b>(1.82%)</b>	<b>98</b>	<b>11.82%</b>	<b>6</b>	<b>(0.33%)</b>	<b>72</b>
Blmbg Aggregate	(10.35%)	68	(1.54%)	90	7.51%	65	8.72%	58	0.01%	57
Pub Pln- Dom Fixed	(9.79%)		(0.71%)		8.37%		8.97%		0.11%	
BlackRock US Govt Bond	(9.03%)	4	-		-		-		-	
Blmbg Aggregate	(10.35%)	48	(1.54%)	88	7.51%	94	8.72%	82	0.01%	62
Callan Core Bond FI	(10.37%)		(1.04%)		8.70%		9.17%		0.11%	
Reams Asset Management	(10.24%)	25	(1.23%)	91	17.28%	2	8.82%	92	1.91%	1
Blmbg Aggregate	(10.35%)	27	(1.54%)	97	7.51%	91	8.72%	93	0.01%	30
Callan Core Plus FI	(11.21%)		(0.28%)		9.25%		10.03%		(0.24%)	
Loomis, Sayles & Company, L.P.	(12.13%)	81	2.13%	4	7.14%	92	14.42%	1	(2.11%)	98
Blmbg Aggregate	(10.35%)	27	(1.54%)	97	7.51%	91	8.72%	93	0.01%	30
Callan Core Plus FI	(11.21%)		(0.28%)		9.25%		10.03%		(0.24%)	
<b>Total Private Equity</b>	<b>1.69%</b>		<b>67.66%</b>		<b>22.14%</b>		<b>16.63%</b>		<b>21.48%</b>	
Russell 3000 (1 Qtr in Arrears) + 3%	5.01%		34.93%		18.77%		6.19%		20.60%	
Abbott Capital Management 2010	(4.38%)		65.55%		24.43%		16.52%		26.90%	
Abbott Capital Management 2011	(5.16%)		76.29%		29.13%		19.64%		25.70%	
Abbott Capital Management 2012	(1.66%)		72.85%		29.04%		17.91%		24.39%	
Abbott Capital Management 2013	(2.15%)		70.21%		28.65%		21.13%		25.17%	
Abbott Capital Management 2014	(1.25%)		75.52%		26.51%		19.74%		22.58%	
Abbott Capital Management 2015	4.31%		75.81%		16.62%		15.14%		13.57%	
Abbott Capital Management 2016	6.90%		71.04%		20.02%		9.08%		9.43%	
Abbott Capital Management 2018	9.24%		47.06%		22.73%		7.26%		-	
Abbott Capital Management 2019	9.83%		57.22%		10.04%		-		-	
Abbott Capital Management 2020	3.76%		65.36%		-		-		-	
Abbott Capital Management 2021	4.09%		-		-		-		-	
Mesirow V	(7.34%)		78.52%		21.39%		16.29%		18.01%	
Mesirow VI	(1.81%)		88.26%		29.10%		22.73%		24.87%	
Mesirow VII	3.68%		60.27%		16.43%		3.33%		(7.82%)	
Mesirow VIII	2.58%		10.14%		-		-		-	
NB Secondary Opp Fund III	2.20%		30.34%		4.23%		12.18%		16.65%	
NB Secondary Opp Fund IV	5.84%		48.73%		14.80%		14.76%		68.26%	
Private Advisors VI	9.14%		83.78%		16.54%		17.98%		15.19%	
Private Advisors VII	11.96%		52.55%		3.97%		11.23%		19.02%	
Private Advisors VIII	8.89%		47.25%		15.78%		(4.08%)		-	
Private Advisors IX	4.34%		37.25%		23.58%		-		-	
<b>Absolute Return</b>	<b>21.65%</b>		<b>8.87%</b>		<b>(14.04%)</b>		<b>12.79%</b>		<b>1.61%</b>	
UBS A & Q	4.56%	15	8.08%	45	12.18%	11	9.53%	4	2.65%	12
1-month LIBOR + 4%	2.34%	32	4.10%	77	4.49%	45	6.26%	31	6.07%	2
Callan Abs Rtn Hedge FoF	1.10%		6.76%		4.03%		4.71%		0.58%	
<b>Real Assets</b>	<b>(4.63%)</b>		<b>18.24%</b>		<b>4.69%</b>		<b>15.39%</b>		<b>(7.47%)</b>	
Principal DRA	(4.63%)	79	18.24%	42	4.69%	25	15.39%	15	(7.47%)	51
Principal DRA Blend Index (1)	(4.71%)	79	15.87%	45	2.08%	34	14.86%	17	(7.27%)	49
Callan Alternative Inv DB	8.82%		13.57%		(0.39%)		7.90%		(7.42%)	
<b>Total Real Estate</b>	<b>15.25%</b>		<b>23.85%</b>		<b>0.76%</b>		<b>6.21%</b>		<b>9.18%</b>	
Real Estate	15.25%	9	23.85%	33	0.76%	54	6.21%	65	9.18%	40
Blended Benchmark (2)	15.72%	8	14.83%	58	0.89%	53	5.26%	72	7.89%	51
Callan Tot Real Est DB	9.31%		19.20%		1.40%		7.74%		7.95%	
<b>Total Fund</b>	<b>(7.11%)</b>	<b>5</b>	<b>19.05%</b>	<b>8</b>	<b>6.84%</b>	<b>96</b>	<b>18.66%</b>	<b>38</b>	<b>(2.74%)</b>	<b>24</b>
Total Fund Reference Index*	(9.98%)	14	12.88%	66	12.29%	44	16.52%	78	(3.29%)	37
Callan Public Fund Spr DB	(13.46%)		13.91%		12.09%		18.01%		(3.83%)	

\* Current Quarter Target = 44.0% MSCI ACWI IMI, 23.0% Blmbg Aggregate, 10.0% Russell 3000 Index lagged 3 months+2.0%, 10.0% 3-month Treasury Bill+3.0%, 9.1% NCREIF NFI-ODCE Eq Wt Net lagged 3 months and 3.9% Principal DRA Blend Index.

(1) Current Principal DRA Blend Index = 15% Bloomberg US TIPS Idx, 15% Bloomberg Commodity Idx, 30% S&P Global Infrastructure Idx, 15% S&P Global Natural Resources Idx and 25% FTSE EPRA/NAREIT Developed Market Idx.

(2) Blended Benchmark = NCREIF (NPI) through 6/30/06, NCREIF (NPI 1 Qtr Arrears) through 12/31/13 and NFI-ODCE (1 Qtr Arrears) thereafter.

## Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended June 30, 2022. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

### Returns for Periods Ended June 30, 2022

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
<b>Net of Fee Returns</b>					
Total Domestic Equity Net	(15.35%)	(13.03%)	9.28%	9.97%	12.12%
Russell 3000 Index	(16.70%)	(13.87%)	9.77%	10.60%	12.57%
BlackRock Russell 1000 Value	(12.21%)	(6.83%)	7.08%	7.34%	-
Russell 1000 Value Index	(12.21%)	(6.82%)	6.87%	7.17%	10.50%
DFA Large Cap Value	(12.42%)	(7.55%)	6.52%	-	-
Russell 1000 Value Index	(12.21%)	(6.82%)	6.87%	7.17%	10.50%
Northern Trust Global	(16.10%)	(10.62%)	10.60%	11.32%	12.98%
S&P 500 Index	(16.10%)	(10.62%)	10.60%	11.31%	12.96%
Polen Capital Management	(24.26%)	(29.52%)	6.72%	12.32%	13.73%
S&P 500 Index	(16.10%)	(10.62%)	10.60%	11.31%	12.96%
Earnest Partners LLC	(11.79%)	(8.13%)	11.19%	11.89%	13.57%
Russell MidCap Index	(16.85%)	(17.30%)	6.59%	7.96%	11.29%
DFA Small Cap Value	(12.27%)	(6.34%)	11.45%	7.17%	10.77%
Russell 2000 Value Index	(15.28%)	(16.28%)	6.18%	4.89%	9.05%
CastleArk Management	(19.45%)	(32.23%)	3.04%	8.72%	-
Russell 2000 Growth Index	(19.25%)	(33.43%)	1.40%	4.80%	9.30%
Total Global Equity Net	(14.42%)	(14.88%)	7.35%	8.84%	10.03%
MSCI World	(16.19%)	(14.34%)	7.00%	7.67%	9.51%
BlackRock Global Alpha Tilts	(14.95%)	(14.98%)	6.27%	7.32%	-
MFS Investment Management	(13.63%)	(14.69%)	9.05%	11.25%	-
MSCI ACWI Gross	(15.53%)	(15.37%)	6.71%	7.54%	9.32%
Total International Equity Net	(13.87%)	(19.52%)	2.93%	2.49%	6.09%
MSCI EAFE Index	(14.51%)	(17.77%)	1.07%	2.20%	5.40%
AQR Emerging Markets	(13.85%)	(25.62%)	2.05%	1.32%	-
MSCI EM Gross	(11.34%)	(25.00%)	0.92%	2.55%	3.44%
Brandes Investment Partners	(10.53%)	(14.18%)	1.74%	1.76%	5.43%
MSCI EAFE Index	(14.51%)	(17.77%)	1.07%	2.20%	5.40%
William Blair & Company	(18.97%)	(28.62%)	3.59%	4.72%	6.74%
MSCI ACWI ex-US Index	(13.54%)	(19.01%)	1.81%	2.98%	5.31%
DFA International Small Cap	(13.65%)	(13.74%)	3.00%	0.37%	6.85%
MSCI EAFE Small	(17.69%)	(23.98%)	1.12%	1.72%	7.18%
Total Fixed Income Net	(5.26%)	(5.51%)	(1.58%)	0.84%	1.92%
Bimbg Aggregate	(4.69%)	(10.29%)	(0.93%)	0.88%	1.54%
BlackRock US Govt Bond	(3.83%)	-	-	-	-
Reams Asset Management	(5.02%)	(9.95%)	1.98%	3.02%	2.76%
Loomis, Sayles & Company, L.P.	(6.78%)	(12.24%)	(0.14%)	1.90%	3.73%
Bimbg Aggregate	(4.69%)	(10.29%)	(0.93%)	0.88%	1.54%
Total Private Equity	1.75%	27.87%	31.54%	26.20%	18.29%
Russell 3000 (1 Qtr in Arrears) + 3%	(4.41%)	15.01%	21.55%	18.65%	17.43%
Abbott Capital Management 2010	(4.38%)	22.29%	29.59%	26.69%	17.80%
Abbott Capital Management 2011	(5.16%)	22.08%	34.31%	29.22%	17.85%
Abbott Capital Management 2012	(1.66%)	25.68%	34.63%	28.66%	14.84%
Abbott Capital Management 2013	(2.15%)	24.10%	33.75%	29.02%	-
Abbott Capital Management 2014	(1.25%)	29.10%	34.14%	28.00%	-
Abbott Capital Management 2015	4.31%	36.01%	31.27%	23.36%	-
Abbott Capital Management 2016	7.00%	37.22%	31.47%	21.51%	-
Abbott Capital Management 2018	9.40%	37.00%	28.13%	-	-
Abbott Capital Management 2019	9.83%	32.80%	-	-	-
Abbott Capital Management 2020	3.76%	16.16%	-	-	-
Abbott Capital Management 2021	4.39%	14.54%	-	-	-
Abbott Capital Management 2022	(1.05%)	-	-	-	-
Mesirow V	(7.34%)	15.73%	29.35%	24.27%	20.23%
Mesirow IV	(1.81%)	25.78%	39.48%	31.05%	-
Mesirow VII	3.70%	26.60%	25.01%	4.69%	-
Mesirow VIII	2.58%	7.85%	-	-	-
NB Secondary Opp Fund III	3.70%	11.73%	13.59%	15.13%	-
NB Secondary Opp Fund IV	7.23%	32.93%	24.25%	27.05%	-
NB Secondary Opp Fund V	189.30%	-	-	-	-
Private Advisors VI	9.11%	60.26%	38.18%	28.02%	-
Private Advisors VII	11.96%	44.61%	23.72%	19.95%	-
Private Advisors VIII	8.89%	30.60%	20.63%	-	-
Private Advisors IX	4.09%	24.23%	-	-	-
Absolute Return	3.05%	28.47%	5.85%	5.87%	-
UBS A & Q	3.05%	10.36%	9.67%	7.77%	-
1-month LIBOR + 4%	1.28%	4.41%	4.65%	5.19%	4.75%
Real Assets	(10.16%)	1.01%	6.60%	5.46%	-
Principal DRA	(10.16%)	1.01%	6.60%	5.46%	-
Principal DRA Blend Index	(10.75%)	0.28%	5.26%	5.17%	-
Total Real Estate	7.11%	33.95%	13.80%	11.56%	11.68%
Real Estate	7.11%	33.95%	13.80%	11.56%	11.68%
Blended Benchmark	7.77%	28.69%	11.11%	9.46%	10.19%
Total Fund Net	(6.80%)	(0.89%)	7.79%	7.75%	8.74%
Total Fund Reference Index	(8.29%)	(5.89%)	6.51%	6.69%	8.05%

\*Net returns are simulated with the use of fee schedules through March 31, 2019. Actual fees paid are used thereafter.

## Investment Manager Returns

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

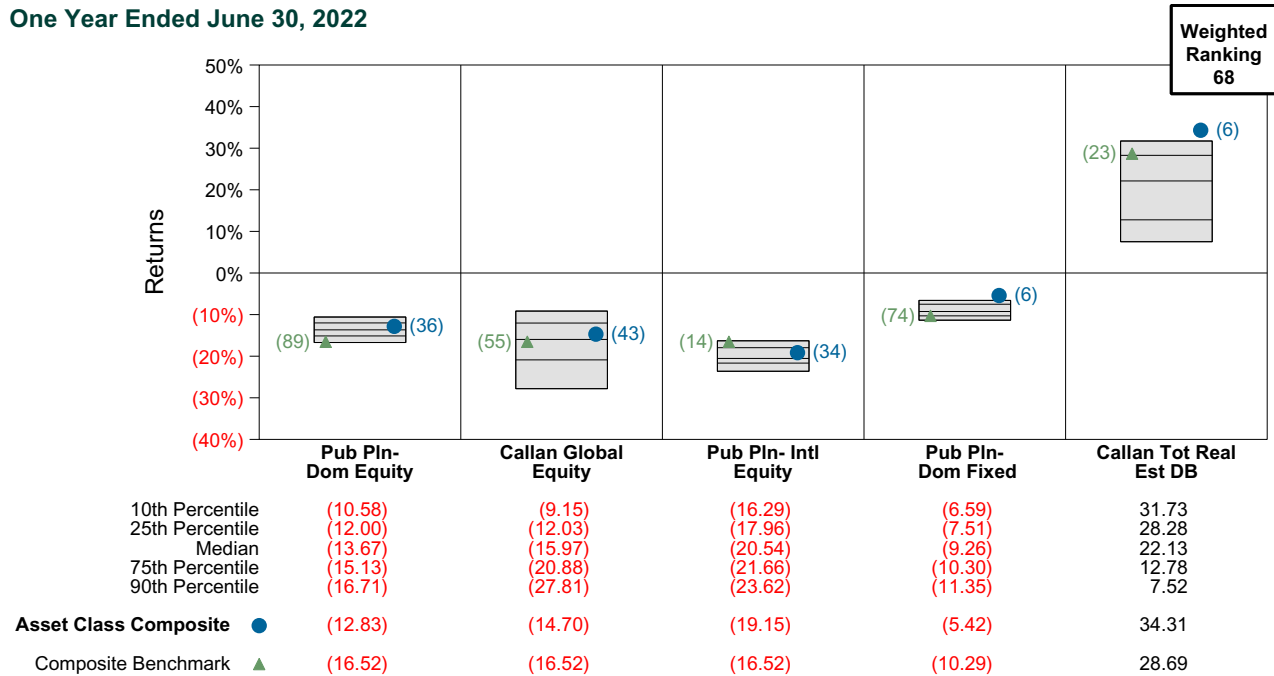
	12/2021- 6/2022	2021	2020	2019	2018
<b>Net of Fee Returns</b>					
Total Domestic Equity Net	(19.31%)	27.88%	16.09%	28.94%	(6.10%)
Russell 3000 Index	(21.10%)	25.66%	20.89%	31.02%	(5.24%)
BlackRock Russell 1000 Value	(12.88%)	25.17%	3.27%	26.77%	(8.13%)
Russell 1000 Value Index	(12.86%)	25.16%	2.80%	26.54%	(8.27%)
DFA Large Cap Value	(12.18%)	27.35%	(1.78%)	26.42%	(12.60%)
Russell 1000 Value Index	(12.86%)	25.16%	2.80%	26.54%	(8.27%)
Northern Trust Global	(19.95%)	28.68%	18.41%	31.53%	(4.37%)
S&P 500 Index	(19.96%)	28.71%	18.40%	31.49%	(4.38%)
Polen Capital Management	(34.80%)	24.34%	34.59%	38.27%	8.60%
S&P 500 Index	(19.96%)	28.71%	18.40%	31.49%	(4.38%)
Earnest Partners LLC	(16.75%)	25.59%	20.96%	37.65%	(10.29%)
Russell MidCap Index	(21.57%)	22.58%	17.10%	30.54%	(9.06%)
DFA Small Cap Value	(11.51%)	40.38%	3.74%	18.58%	(15.30%)
Russell 2000 Value Index	(17.31%)	28.27%	4.63%	22.39%	(12.86%)
CastleArk Management	(32.12%)	11.55%	44.12%	22.47%	2.60%
Russell 2000 Growth Index	(29.45%)	2.83%	34.63%	28.48%	(9.31%)
Total Global Equity Net	(19.70%)	18.80%	18.48%	30.55%	(8.51%)
MSCI World	(20.51%)	21.82%	15.90%	27.67%	(8.71%)
BlackRock Global Alpha Tilts	(19.40%)	18.67%	16.39%	26.48%	(11.24%)
MFS Investment Management	(20.13%)	19.05%	21.88%	36.74%	(4.16%)
MSCI ACWI Gross	(19.97%)	19.04%	16.82%	27.30%	(8.93%)
Total International Equity Net	(19.40%)	12.57%	10.28%	21.08%	(15.60%)
MSCI EAFE Index	(19.57%)	11.26%	7.82%	22.01%	(13.79%)
AQR Emerging Markets	(17.00%)	0.47%	17.38%	19.64%	(18.93%)
MSCI EM Gross	(17.47%)	(2.22%)	18.69%	18.90%	(14.24%)
Brandes Investment Partners	(12.97%)	14.00%	(1.69%)	14.86%	(9.17%)
MSCI EAFE Index	(19.57%)	11.26%	7.82%	22.01%	(13.79%)
William Blair & Company	(30.97%)	12.77%	30.84%	31.01%	(17.20%)
MSCI ACWI ex-US Index	(18.15%)	8.29%	11.13%	22.13%	(13.77%)
DFA International Small Cap	(15.90%)	15.89%	0.81%	21.00%	(23.31%)
MSCI EAFE Small	(24.71%)	10.10%	12.34%	24.96%	(17.89%)
Total Fixed Income Net	(5.57%)	(0.45%)	(1.91%)	11.68%	(0.47%)
Blmbg Aggregate	(10.35%)	(1.54%)	7.51%	8.72%	0.01%
BlackRock US Govt Bond	(9.04%)	-	-	-	-
Reams Asset Management	(10.30%)	(1.36%)	17.11%	8.65%	1.76%
Loomis, Sayles & Company, L.P.	(12.20%)	1.98%	6.99%	14.25%	(2.24%)
Blmbg Aggregate	(10.35%)	(1.54%)	7.51%	8.72%	0.01%
Total Private Equity	1.69%	67.66%	22.14%	16.63%	21.48%
Russell 3000 (1 Qtr in Arrears) + 3%	5.01%	34.93%	18.77%	6.19%	20.60%
Abbott Capital Management 2010	(4.38%)	65.55%	24.43%	16.52%	26.90%
Abbott Capital Management 2011	(5.16%)	76.29%	29.13%	19.64%	25.70%
Abbott Capital Management 2012	(1.66%)	72.85%	29.04%	17.91%	24.39%
Abbott Capital Management 2013	(2.15%)	70.21%	28.65%	21.13%	25.17%
Abbott Capital Management 2014	(1.25%)	75.52%	26.51%	19.74%	22.58%
Abbott Capital Management 2015	4.31%	75.81%	16.62%	15.14%	13.57%
Abbott Capital Management 2016	6.90%	71.04%	20.02%	9.08%	9.43%
Abbott Capital Management 2018	9.24%	47.06%	22.73%	7.26%	-
Abbott Capital Management 2019	9.83%	57.22%	10.04%	-	-
Abbott Capital Management 2020	3.76%	65.36%	-	-	-
Abbott Capital Management 2021	4.09%	-	-	-	-
Mesirow V	(7.34%)	78.52%	21.39%	16.29%	18.01%
Mesirow IV	(1.81%)	88.26%	29.10%	22.73%	24.87%
Mesirow VII	3.68%	60.27%	16.43%	3.33%	(7.82%)
Mesirow VIII	2.58%	10.14%	-	-	-
NB Secondary Opp Fund III	2.20%	30.34%	4.23%	12.18%	16.65%
NB Secondary Opp Fund IV	5.84%	48.73%	14.80%	14.76%	68.26%
Private Advisors VI	9.14%	83.78%	16.54%	17.98%	15.19%
Private Advisors VII	11.96%	52.55%	3.97%	11.23%	19.02%
Private Advisors VIII	8.89%	47.25%	15.78%	(4.08%)	-
Private Advisors IX	4.34%	37.25%	23.58%	-	-
Absolute Return	21.65%	8.77%	(14.21%)	12.52%	1.61%
UBS A & Q	4.56%	8.08%	12.18%	9.53%	2.65%
1-month LIBOR + 4%	2.34%	4.10%	4.49%	6.26%	6.07%
Real Assets	(4.93%)	17.51%	4.02%	14.84%	(7.47%)
Principal DRA	(4.93%)	17.51%	4.02%	14.84%	(7.47%)
Principal DRA Blend Index	(4.71%)	15.87%	2.08%	14.86%	(7.27%)
Total Real Estate	15.12%	23.45%	0.39%	5.95%	8.94%
Real Estate	15.12%	23.45%	0.39%	5.95%	8.94%
Blended Benchmark	15.72%	14.83%	0.89%	5.26%	7.89%
Total Fund Net	(7.20%)	18.80%	6.59%	18.34%	(3.01%)
Total Fund Reference Index	(9.98%)	12.88%	12.29%	16.52%	(3.29%)

\*Net returns are simulated with the use of fee schedules through March 31, 2019. Actual fees paid are used thereafter.

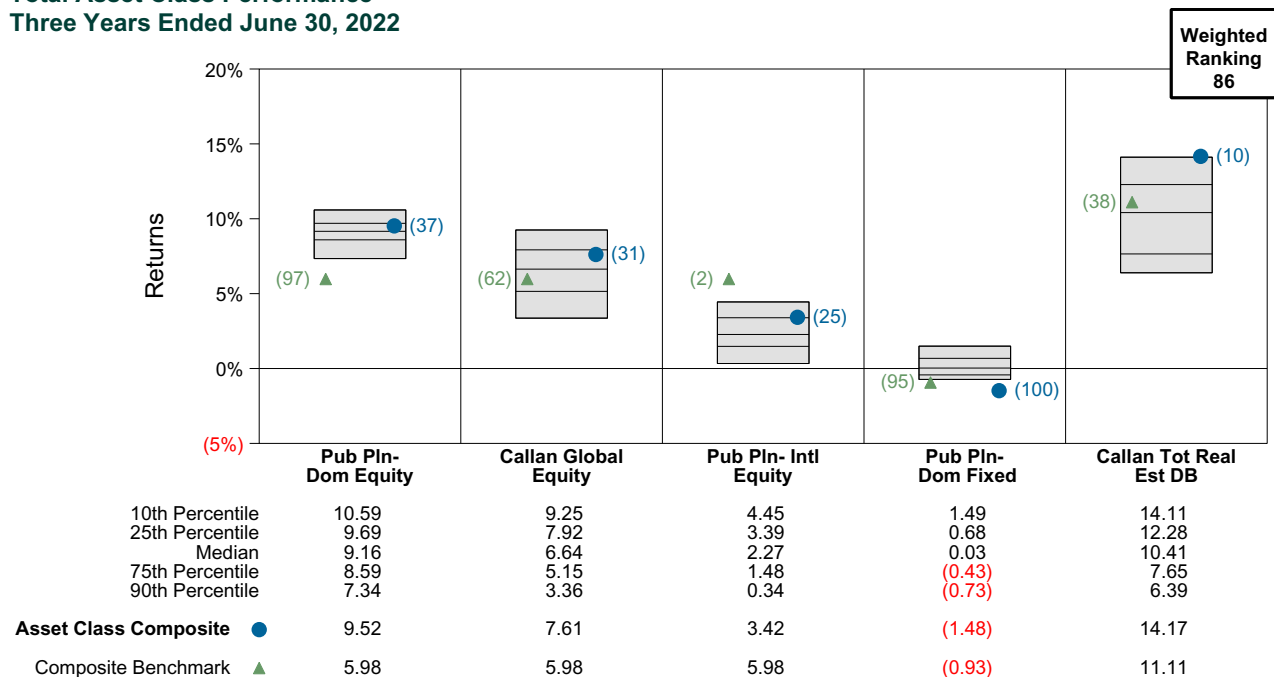
## Asset Class Rankings

The charts below show the rankings of each asset class component of the Total Fund relative to appropriate comparative databases. In the upper right corner of each graph is the weighted average of the rankings across the different asset classes. The weights of the fund's actual asset allocation are used to make this calculation. The weighted average ranking can be viewed as a measure of the fund's overall success in picking managers and structuring asset classes.

### Total Asset Class Performance One Year Ended June 30, 2022



### Total Asset Class Performance Three Years Ended June 30, 2022

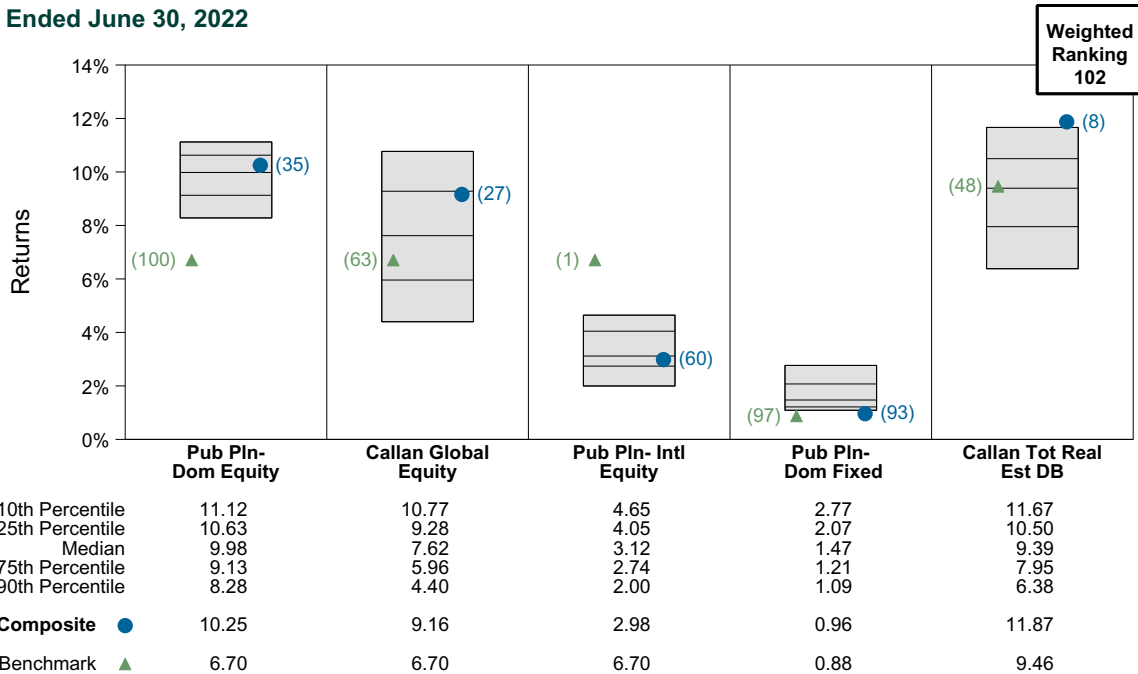


\* Current Quarter Target = 44.0% MSCI ACWI IMI, 23.0% Blmbg Aggregate, 10.0% Russell 3000 Index lagged 3 months+2.0%, 10.0% 3-month Treasury Bill+3.0%, 9.1% NCREIF NFI-ODCE Eq Wt Net lagged 3 months and 3.9% Principal DRA Blend Index.

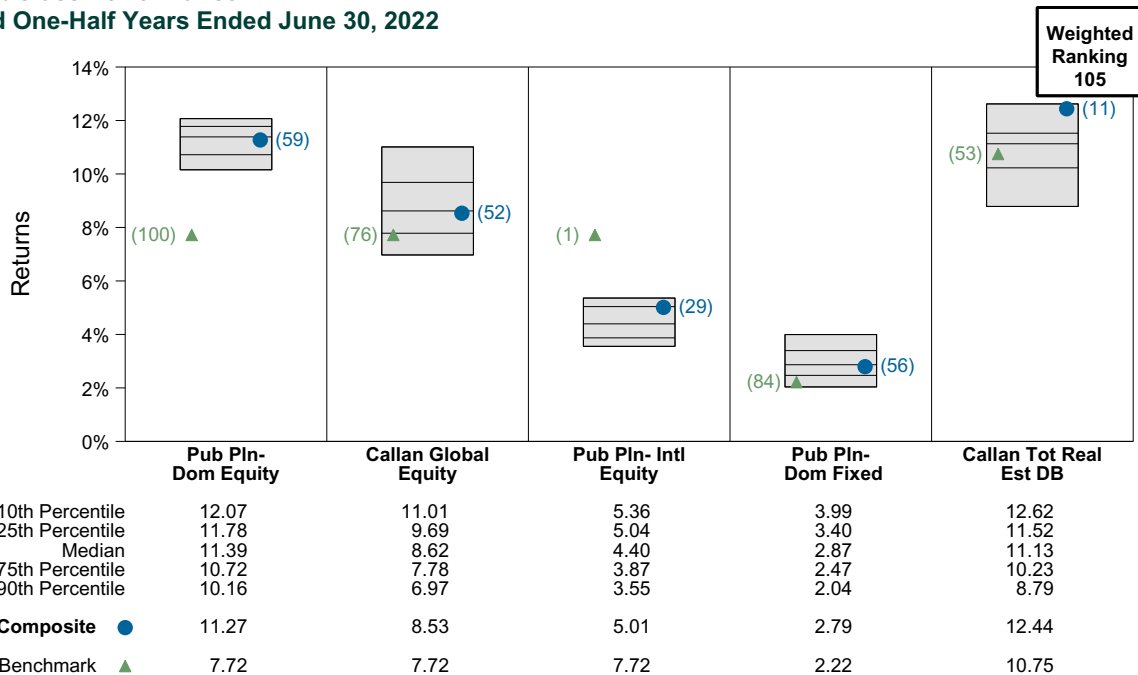
## Asset Class Rankings

The charts below show the rankings of each asset class component of the Total Fund relative to appropriate comparative databases. In the upper right corner of each graph is the weighted average of the rankings across the different asset classes. The weights of the fund's actual asset allocation are used to make this calculation. The weighted average ranking can be viewed as a measure of the fund's overall success in picking managers and structuring asset classes.

### Total Asset Class Performance Five Years Ended June 30, 2022



### Total Asset Class Performance Eleven and One-Half Years Ended June 30, 2022

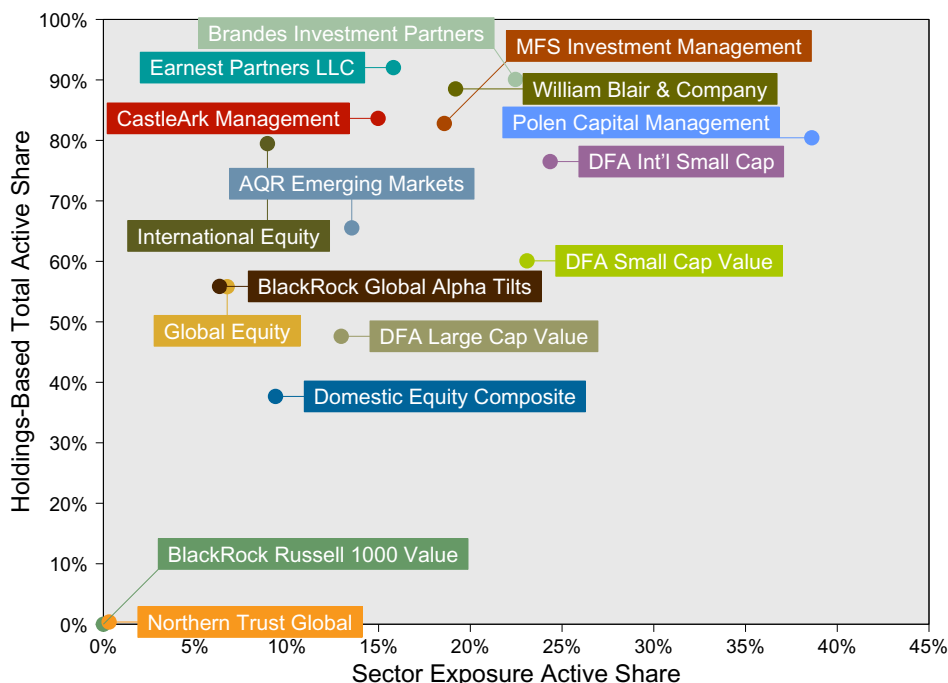


\* Current Quarter Target = 44.0% MSCI ACWI IMI, 23.0% Blmbg Aggregate, 10.0% Russell 3000 Index lagged 3 months+2.0%, 10.0% 3-month Treasury Bill+3.0%, 9.1% NCREIF NFI-ODCE Eq Wt Net lagged 3 months and 3.9% Principal DRA Blend Index.

## Active Share Structure Analysis For One Quarter Ended June 30, 2022

This analysis compares multiple portfolios and composites in an active share context, illustrating the varying degrees of active risk taken by individual portfolios, and how they combine into active risk profiles for composites and the equity structure. Two sources of active share (active risk) are shown: 1) Total Holdings-Based Active Share based on individual position comparisons to the index (and the subcomponent from holding non-index securities), and 2) Sector Exposure Active Share that quantifies the more macro-level sector differences from the index.

### Active Share Analysis Ended June 30, 2022



	Index	Total Act Share	Non-Idx Act Share	Sector Act Share	Number Securities	Security Diverse
<b>Domestic Equity Composite</b>	<b>Russell 3000</b>	<b>37.67%</b>	<b>0.60%</b>	<b>9.38%</b>	<b>1890</b>	<b>111.66</b>
BlackRock Russell 1000 Value	Russell 1000 Value	0.00%	0.00%	0.00%	859	63.99
DFA Large Cap Value	Russell 1000 Value	47.61%	0.58%	12.96%	309	39.28
Northern Trust Global	S&P 500	0.37%	0.00%	0.31%	502	41.52
Polen Capital Management	S&P 500	80.43%	2.44%	38.61%	23	6.59
Earnest Partners LLC	Russell MidCap	92.04%	8.30%	15.81%	57	22.77
DFA Small Cap Value	Russell 2000 Value	60.09%	15.84%	23.09%	954	125.97
CastleArk Management	Russell 2000 Growth	83.64%	18.75%	14.97%	101	34.51
<b>Global Equity</b>	<b>MSCI World</b>	<b>55.82%</b>	<b>7.32%</b>	<b>6.75%</b>	<b>793</b>	<b>54.71</b>
BlackRock Global Alpha Tilts	MSCI ACWI GD	55.86%	3.92%	6.33%	755	48.48
MFS Investment Management	MSCI ACWI GD	82.80%	3.82%	18.58%	76	22.53
<b>International Equity</b>	<b>MSCI EAFE</b>	<b>79.47%</b>	<b>27.81%</b>	<b>8.94%</b>	<b>2434</b>	<b>65.32</b>
AQR Emerging Markets	MSCI EM GD	65.53%	3.28%	13.54%	277	34.51
Brandes Investment Partners	MSCI EAFE	90.08%	15.68%	22.46%	63	21.05
William Blair & Company	MSCI ACWI xUS GD	88.51%	19.38%	19.20%	276	45.52
DFA Int'l Small Cap	MSCI EAFE Small	76.50%	15.28%	24.35%	1973	169.49

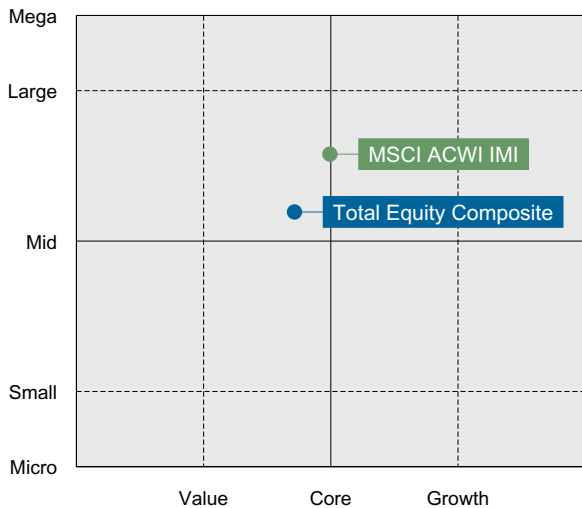
# Current Holdings Based Style Analysis

## Total Equity Composite

### As of June 30, 2022

This page analyzes the current investment style of a portfolio utilizing a detailed holdings-based style analysis to determine actual exposures to various regional and style segments of the international/global equity market. The market is segmented quarterly by region and style. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left style map illustrates the current market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the current portfolio and index weights and stock counts (in parentheses) in each region/style segment of the market. The middle chart illustrates the total exposures and stock counts in the three style segments, with a legend showing the total growth, value, and "combined Z" (growth - value) scores. The bottom chart exhibits the sector weights as well as the style weights within each sector.

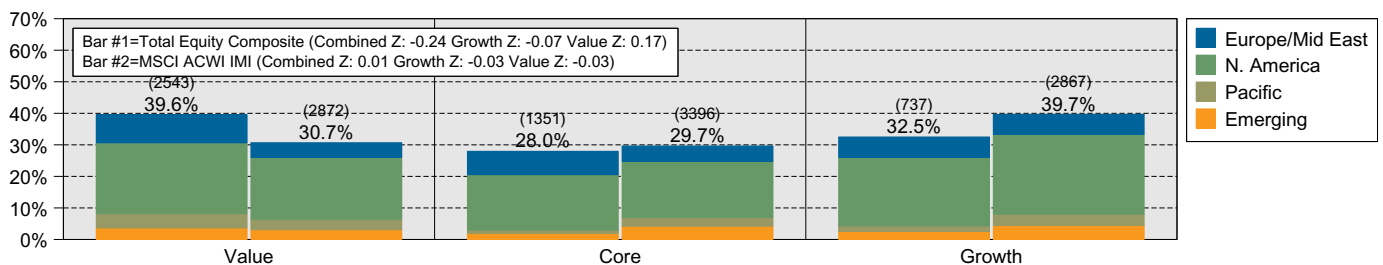
**Style Map vs Callan Public Fund Spr DB Holdings as of June 30, 2022**



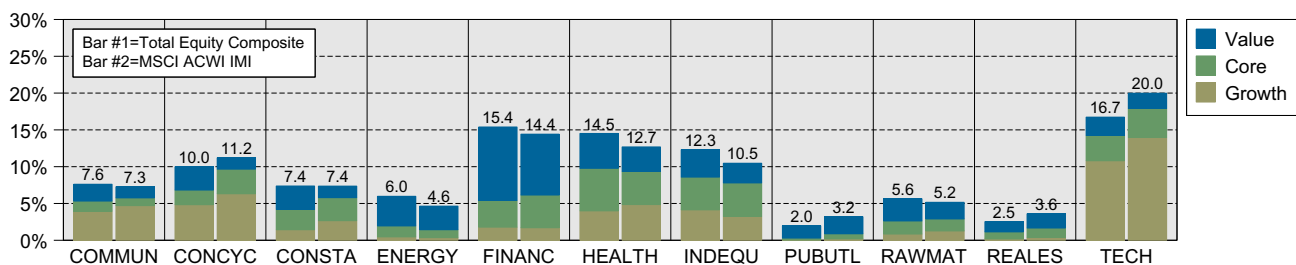
**Style Exposure Matrix Holdings as of June 30, 2022**

	Value	Core	Growth	Total
Europe/Mid East	8.9% (439)	7.4% (313)	6.4% (161)	22.7% (913)
N. America	4.7% (485)	4.8% (542)	6.4% (528)	15.8% (1555)
Pacific	22.4% (988)	17.6% (681)	21.8% (364)	61.8% (2033)
Emerging	19.6% (888)	17.9% (1224)	25.3% (793)	62.8% (2905)
<b>Total</b>	<b>39.6% (2543)</b>	<b>28.0% (1351)</b>	<b>32.5% (737)</b>	<b>100.0% (4631)</b>
	30.7% (2872)	29.7% (3396)	39.7% (2867)	100.0% (9135)

**Combined Z-Score Style Distribution Holdings as of June 30, 2022**



**Sector Weights Distribution Holdings as of June 30, 2022**





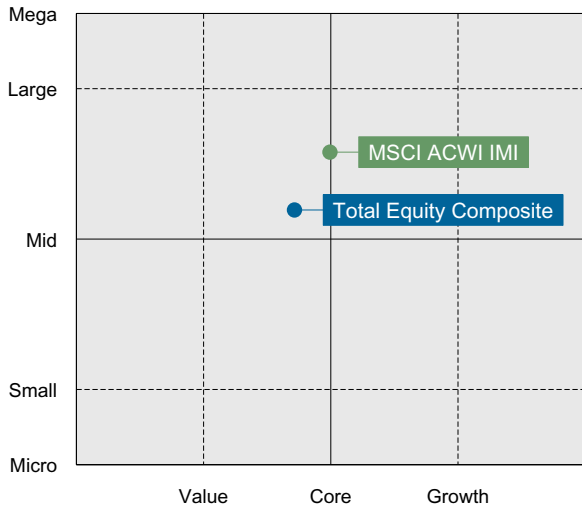
# Current Holdings Based Style Analysis

## Total Equity Composite

### As of June 30, 2022

This page analyzes the current investment style of a portfolio utilizing a detailed holdings-based style analysis to determine actual exposures to various regional and style segments of the international/global equity market. The market is segmented quarterly by region and style. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left style map illustrates the current market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the current portfolio and index weights and stock counts (in parentheses) in each capitalization/style segment of the market. The middle chart illustrates the total exposures and stock counts in the three style segments, with a legend showing the total growth, value, and "combined Z" (growth - value) scores. The bottom chart exhibits the sector weights as well as the style weights within each sector.

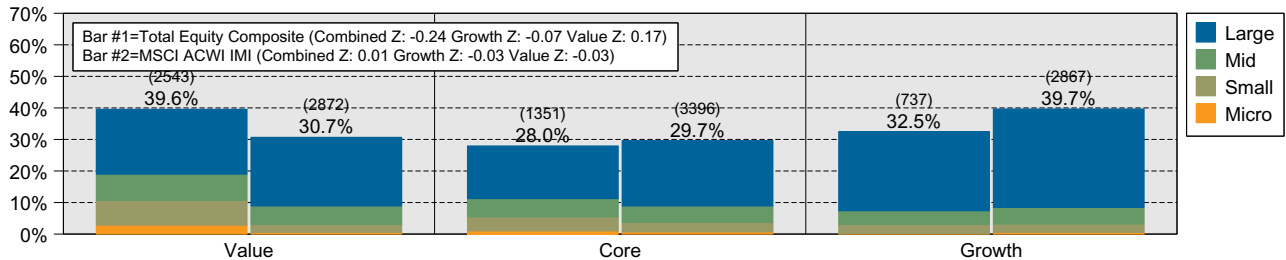
**Style Map vs Callan Public Fund Spr DB Holdings as of June 30, 2022**



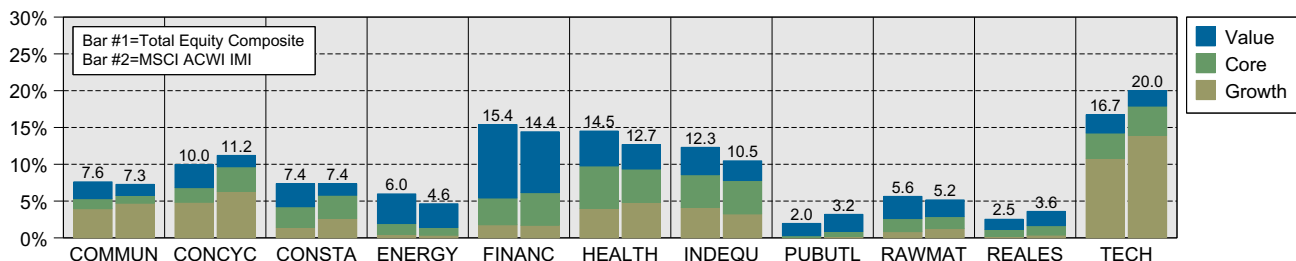
**Style Exposure Matrix Holdings as of June 30, 2022**

	Value	Core	Growth	Total
Large	20.6% (249)	16.7% (189)	25.1% (206)	62.4% (644)
	21.8% (326)	20.8% (262)	31.2% (326)	73.7% (914)
Mid	8.2% (303)	5.8% (284)	4.3% (224)	18.4% (811)
	5.8% (585)	5.1% (585)	5.4% (656)	16.3% (1826)
Small	7.9% (517)	4.4% (421)	2.9% (192)	15.2% (1130)
	2.6% (1106)	3.1% (1406)	2.6% (1142)	8.3% (3654)
Micro	2.8% (1474)	1.0% (457)	0.2% (115)	4.0% (2046)
	0.5% (855)	0.7% (1143)	0.5% (743)	1.7% (2741)
Total	39.6% (2543)	28.0% (1351)	32.5% (737)	100.0% (4631)
	30.7% (2872)	29.7% (3396)	39.7% (2867)	100.0% (9135)

**Combined Z-Score Style Distribution Holdings as of June 30, 2022**



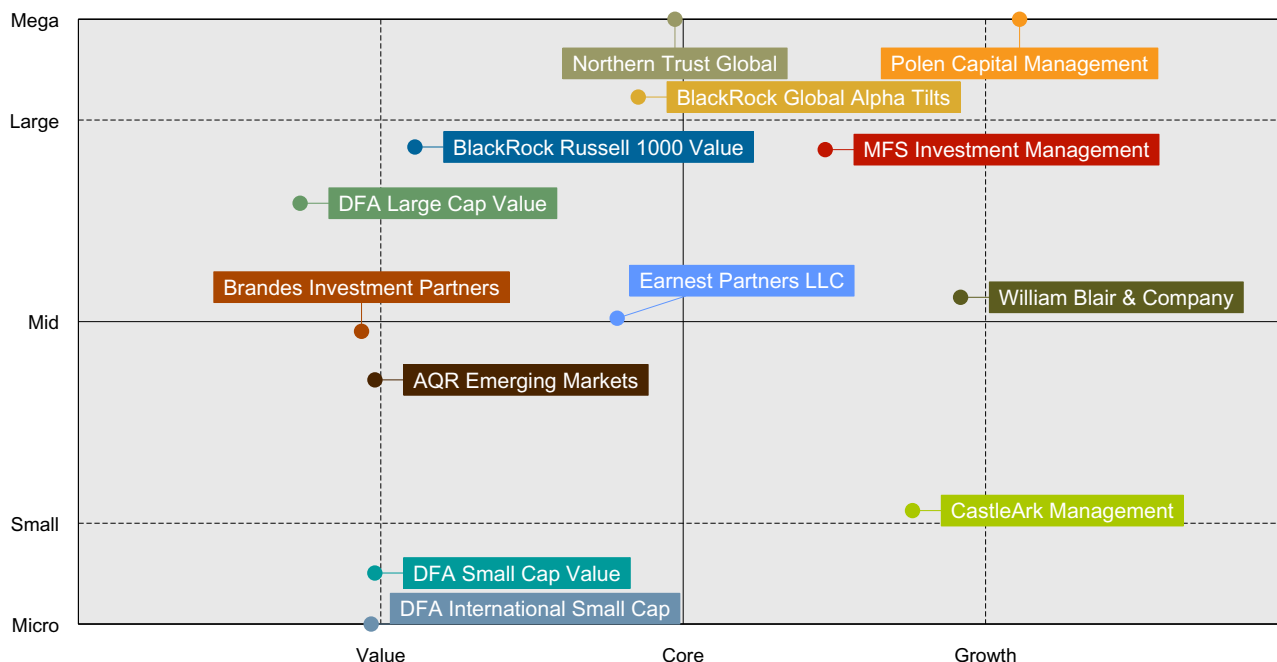
**Sector Weights Distribution Holdings as of June 30, 2022**



## Global Holdings Based Style Analysis For One Quarter Ended June 30, 2022

This page analyzes and compares the investment styles of multiple portfolios using a detailed holdings-based style analysis methodology. The size component of style is measured by the weighted median market capitalization of the holdings. The value/core/growth style dimension is captured by the "Combined Z-Score" of the portfolio. This score is based on eight fundamental factors used in the MSCI stock style scoring system. The table below gives a more detailed breakdown of several relevant style metrics on the portfolios.

### Style Map Holdings for One Quarter Ended June 30, 2022



	Weight %	Wtd Median Mkt Cap	Combined Z-Score	Growth Z-Score	Value Z-Score	Number of Securities	Security Diversification
BlackRock Russell 1000 Value	6.06%	74.52	(0.77)	(0.34)	0.43	859	63.99
DFA Large Cap Value	6.03%	56.36	(1.11)	(0.31)	0.80	309	39.28
Northern Trust Global	12.42%	160.89	(0.01)	(0.02)	(0.01)	502	41.52
Polen Capital Management	6.00%	302.39	1.06	0.40	(0.66)	23	6.59
Earnest Partners LLC	4.44%	19.23	(0.18)	(0.01)	0.17	57	22.77
DFA Small Cap Value	7.46%	2.28	(0.89)	(0.18)	0.71	954	125.97
CastleArk Management	3.46%	3.97	0.72	0.17	(0.55)	101	34.51
MFS Investment Management	7.53%	73.67	0.45	0.00	(0.45)	76	22.53
BlackRock Global Alpha Tilts	10.54%	99.98	(0.12)	(0.04)	0.08	755	48.48
AQR Emerging Markets	3.37%	13.77	(0.89)	(0.12)	0.77	277	34.51
Brandes Investment Partners	14.47%	17.41	(0.93)	(0.30)	0.63	63	21.05
William Blair & Company	11.10%	25.99	0.87	0.26	(0.61)	276	45.52
DFA International Small Cap	7.13%	1.46	(0.90)	(0.17)	0.73	1973	169.49



## Quarterly Highlights

The Callan Institute provides research to update clients on the latest industry trends and carefully structured educational programs to enhance the knowledge of industry professionals. Visit [www.callan.com/research-library](http://www.callan.com/research-library) to see all of our publications, and [www.callan.com/blog](http://www.callan.com/blog) to view our blog. For more information contact Barb Gerraty at 415-274-3093 / [institute@callan.com](mailto:institute@callan.com).

## New Research from Callan's Experts

**[Research Cafe: ESG Interview Series](#)** | Mark Wood of Callan discusses with Jon Hale, Director of ESG Strategy at Morningstar, the evolving definition of sustainable investments.

**[Research Cafe: Private Equity](#)** | In this session, private equity experts Ashley Kahn and Jonathan Farr provide actionable insights for institutional investors to help them negotiate with private equity managers, and offer private equity managers crucial information about how their peers determine fees and terms. This session also includes a special feature on credit line usage.

**[Investing in Data Centers: The Real Assets of the Digital Age](#)** | Lauren Sertich discusses investing in data centers, a growing sector in which institutional investors have more investment options as the universe of qualified managers/operators rapidly expands.

**[Do Active Fixed Income Managers Add Value With Sector Rotation?](#)** | Kevin Machiz analyzes whether institutional investors could take a DIY approach to strategic sector allocations and forego sector rotation within fixed income and still achieve results comparable to active managers. Our study found that the average manager has added value with sector rotation.

### Blog Highlights

**[SEC Proposes Rule to Enhance and Standardize Climate-Related Disclosures](#)** | The U.S. Securities and Exchange Commission unveiled its proposed rule amendments designed to improve and standardize disclosures around climate change risks for public companies.

**[Unprecedented Territory—and the Inherent Limits of Diversification](#)** | Stock and bond markets around the globe were down together for the first four months of 2022. How often does that happen? Did diversification fail us?

**[Rising Interest Rates Spur Look at Structured Credit](#)** | Structured credit has seen increased interest from institutional investors as they explore ways to adapt their fixed income portfolios for an expected environment of rising rates.

**[Hedge Fund Strategies: A Guide for Institutional Investors](#)** | Hedge fund strategies are beginning to see renewed interest from institutional investors seeking diversification benefits and downside protection. But these strategies can be complex; this explainer educates investors about investing in these strategies.

### Quarterly Periodicals

**[Private Equity Update, 1Q22](#)** | A high-level summary of private equity activity in the quarter through all the investment stages

**[Active vs. Passive Charts, 1Q22](#)** | A comparison of active managers alongside relevant benchmarks over the long term

**[Market Pulse Flipbook, 1Q22](#)** | A quarterly market reference guide covering trends in the U.S. economy, developments for institutional investors, and the latest data on the capital markets

**[Capital Markets Review, 1Q22](#)** | Analysis and a broad overview of the economy and public and private markets activity each quarter across a wide range of asset classes

**[Hedge Fund Update, 1Q22](#)** | Commentary on developments for hedge funds and multi-asset class (MAC) strategies

**[Real Assets Update, 1Q22](#)** | A summary of market activity for real assets and private real estate during the quarter

**[Private Credit Update, 1Q22](#)** | A review of performance and fundraising activity for private credit during the quarter

## Events

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A complete list of all upcoming events can be found on our website: [callan.com/events-education](https://callan.com/events-education).

Please mark your calendar and look forward to upcoming invitations:

### October Regional Workshop

Oct. 18, 2022 – Denver, CO

Oct. 20, 2022 – San Francisco, CA

### 2023 National Conference

April 2-4, 2023 – Scottsdale, AZ

For more information about events, please contact Barb Gerraty: 415-274-3093 / [gerraty@callan.com](mailto:gerraty@callan.com)

## Education: By the Numbers

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**50+**

Unique pieces of research the Institute generates each year

**525**

Attendees (on average) of the Institute's annual National Conference

**3,700**

Total attendees of the "Callan College" since 1994

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## Education

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Founded in 1994, the "Callan College" offers educational sessions for industry professionals involved in the investment decision-making process.

### Introduction to Investments

September 20-22 – Virtual

This program familiarizes institutional investor trustees and staff and asset management advisers with basic investment theory, terminology, and practices. Our virtual session is held over three days with virtual modules of 2.5-3 hours, while the in-person session lasts one-and-a-half days. This course is designed for individuals with less than two years of experience with asset-management oversight and/or support responsibilities. Virtual tuition is \$950 per person and includes instruction and digital materials. In-person tuition is \$2,350 per person and includes instruction, all materials, breakfast and lunch on each day, and dinner on the first evening with the instructors.

Additional information including registration can be found at: [callan.com/events/](https://callan.com/events/)



"Research is the foundation of all we do at Callan, and sharing our best thinking with the investment community is our way of helping to foster dialogue to raise the bar across the industry."

Greg Allen, CEO and Chief Research Officer



## List of Callan's Investment Manager Clients

Confidential – For Callan Client Use Only

Callan takes its fiduciary and disclosure responsibilities to clients very seriously. We recognize that there are numerous potential conflicts of interest encountered in the investment consulting industry, and that it is our responsibility to manage those conflicts effectively and in the best interest of our clients. At Callan, we employ a robust process to identify, manage, monitor, and disclose potential conflicts on an ongoing basis.

The list below is an important component of our conflicts management and disclosure process. It identifies those investment managers that pay Callan fees for educational, consulting, software, database, or reporting products and services. We update the list quarterly because we believe that our fund sponsor clients should know the investment managers that do business with Callan, particularly those investment manager clients that the fund sponsor clients may be using or considering using. Please note that if an investment manager receives a product or service on a complimentary basis (e.g., attending an educational event), they are not included in the list below. Callan is committed to ensuring that we do not consider an investment manager's business relationship with Callan, or lack thereof, in performing evaluations for or making suggestions or recommendations to its other clients. Please refer to Callan's ADV Part 2A for a more detailed description of the services and products that Callan makes available to investment manager clients through our Institutional Consulting Group, Independent Adviser Group, and Fund Sponsor Consulting Group. Due to the complex corporate and organizational ownership structures of many investment management firms, parent and affiliate firm relationships are not indicated on our list.

Fund sponsor clients may request a copy of the most currently available list at any time. Fund sponsor clients may also request specific information regarding the fees paid to Callan by particular fund manager clients. Per company policy, information requests regarding fees are handled exclusively by Callan's Compliance department.

### Manager Name

abrdrn (Aberdeen Standard Investments)  
Acadian Asset Management LLC  
Adams Street Partners, LLC  
AEGON USA Investment Management Inc.  
AllianceBernstein  
Allianz  
Allspring Global Investments  
American Century Investments  
Amundi US, Inc.  
Antares Capital LP  
AQR Capital Management  
Ares Management LLC  
Ariel Investments, LLC  
Aristotle Capital Management, LLC  
Atlanta Capital Management Co., LLC  
AXA Investment Managers  
Baillie Gifford International, LLC  
Baird Advisors

### Manager Name

Barings LLC  
Baron Capital Management, Inc.  
Barrow, Hanley, Mewhinney & Strauss, LLC  
BentallGreenOak  
Black Creek Investment Management Inc.  
BlackRock  
Blackstone Group (The)  
Blue Vista Capital Management, LLC  
BNY Mellon Asset Management  
Boston Partners  
Brandes Investment Partners, L.P.  
Brandywine Global Investment Management, LLC  
Brookfield Asset Management  
Brown Brothers Harriman & Company  
Brown Investment Advisory & Trust Company  
Capital Group  
Carillon Tower Advisers  
CastleArk Management, LLC

**Manager Name**

Chartwell Investment Partners  
CIBC Asset Management Inc,  
ClearBridge Investments, LLC  
Cohen & Steers Capital Management, Inc.  
Columbia Threadneedle Investments North America  
Credit Suisse Asset Management, LLC  
Crescent Capital Group LP  
DePrince, Race & Zollo, Inc.  
Dimensional Fund Advisors L.P.  
Doubleline  
Duff & Phelps Investment Management Co.  
DWS  
EARNEST Partners, LLC  
Epoch Investment Partners, Inc.  
Fayez Sarofim & Company  
Federated Hermes, Inc.  
Fidelity Institutional Asset Management  
Fiera Capital Corporation  
First Hawaiian Bank Wealth Management Division  
First Sentier Investors  
Fisher Investments  
Franklin Templeton  
Fred Alger Management, LLC  
GAM (USA) Inc.  
GlobeFlex Capital, L.P.  
GoldenTree Asset Management, LP  
Goldman Sachs  
Golub Capital  
Guggenheim Investments  
GW&K Investment Management  
Harbor Capital Group Trust  
Hardman Johnston Global Advisors LLC  
Heitman LLC  
Hotchkis & Wiley Capital Management, LLC  
Impax Asset Management LLC  
Income Research + Management Inc.  
Insight Investment  
Intech Investment Management LLC  
Intercontinental Real Estate Corporation  
Invesco

**Manager Name**

J.P. Morgan  
Janus  
Jennison Associates LLC  
Jobs Peak Advisors  
KeyCorp  
Lazard Asset Management  
LGIM America  
Lincoln National Corporation  
Longview Partners  
Loomis, Sayles & Company, L.P.  
Lord Abbett & Company  
LSV Asset Management  
MacKay Shields LLC  
Macquarie Asset Management  
Manning & Napier Advisors, LLC  
Manulife Investment Management  
Marathon Asset Management, L.P.  
McKinley Capital Management, LLC  
Mellon  
MetLife Investment Management  
MFS Investment Management  
MidFirst Bank  
MLC Asset Management  
Mondrian Investment Partners Limited  
Montag & Caldwell, LLC  
Morgan Stanley Investment Management  
MUFG Union Bank, N.A.  
Natixis Investment Managers  
Neuberger Berman  
Newton Investment Management  
Ninety One North America, Inc.  
Nomura Asset Management U.S.A. Inc.  
Northern Trust Asset Management  
Nuveen  
P/E Investments  
Pacific Investment Management Company  
Pantheon Ventures  
Parametric Portfolio Associates LLC  
Partners Group (USA) Inc.  
Pathway Capital Management, LP



**Manager Name**

Peregrine Capital Management, LLC

PFM Asset Management LLC

PGIM Fixed Income

PGIM Quantitative Solutions LLC

Pictet Asset Management

PineBridge Investments

Polen Capital Management, LLC

Principal Global Investors

Putnam Investments, LLC

RBC Global Asset Management

Regions Financial Corporation

Richard Bernstein Advisors LLC

Robeco Institutional Asset Management, US Inc.

Rothschild &amp; Co. Asset Management US

S&amp;P Dow Jones Indices

Schroder Investment Management North America Inc.

Segall Bryant &amp; Hamill

SLC Management

Smith Graham &amp; Co. Investment Advisors, L.P.

State Street Global Advisors

Strategic Global Advisors, LLC

**Manager Name**

T. Rowe Price Associates, Inc.

The TCW Group, Inc.

Thompson, Siegel &amp; Walmsley LLC

Thornburg Investment Management, Inc.

Tri-Star Trust Bank

UBS Asset Management

VanEck

Versus Capital Group

Victory Capital Management Inc.

Virtus Investment Partners, Inc.

Vontobel Asset Management

Voya

Walter Scott &amp; Partners Limited

Washington Capital Management, Inc.

WCM Investment Management

Wellington Management Company, LLP

Western Asset Management Company LLC

Westfield Capital Management Company, LP

Westwood Holdings Group, Inc.

William Blair &amp; Company LLC