Callan

June 30, 2024
City of Milwaukee Employes'
Retirement System
Investment Measurement Service
Quarterly Review

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U.S. EQUITIES

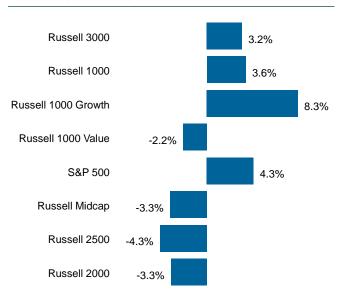
Broad indices exhibit strong start to 2024

- The U.S. equity markets had an exceptional start with the S&P 500 hitting 31 record highs over the first six months of 2024 and gaining 15.3%.
- Index returns continue to be driven by a handful of stocks, especially the "Magnificent Seven," which comprised 33% of the S&P 500 as of quarter-end. As a group, the cohort gained 33% in the first six months of the year, far exceeding the S&P 493 gain of only 5%.

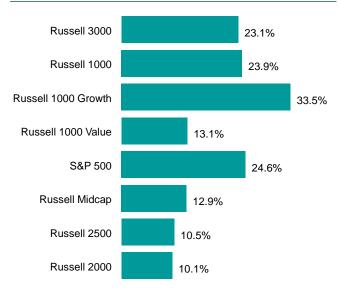
Performance underlying indices is uneven

- 2Q returns for the broad index were modest at 4.3%, but sector performance was quite mixed, ranging from -4.5% (Materials) to +13.8% (Technology), with 6 of the 11 S&P 500 sectors posting negative returns during the period.
- During 2Q, value (R1000V: -2.2%) continued to underperform growth (R1000G: +8.3%) and small cap (R2000: -3.3%) continued to underperform large cap (R1000: +3.6%).
- The "Magnificent Seven" stocks pushed large cap indices to record highs while the rest of the market traded sideways.
- Magnificent Seven stocks accounted for 116% of S&P 500 total return in 2Q24.
- YTD 2024, the bucket of Magnificent Seven stocks handily outperformed the equal weight S&P 500 Index and small cap Russell 2000 Index returns.
- Magnificent Seven returns over the trailing 3½ years (dating back to 2021) drove a large contribution of total index returns relative to the remaining ~493 stocks in the S&P 500.
- Market concentration has hit its highest level since 1972.
 The top 10 stocks have broken away from stocks #11-#50 to an even greater degree than in the tech bubble in 2000-01.
- The largest and most successful stocks were generating more earnings, earnings growth, and cash relative to the smaller stocks in the index. Price appreciation for the largest stocks is supported by strong earnings growth and robust economic profits.

U.S. Equity: Quarterly Returns

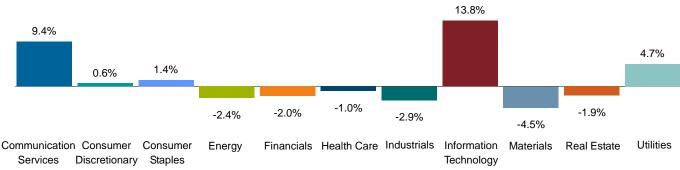


U.S. Equity: One-Year Returns



Sources: FTSE Russell, S&P Dow Jones Indices

S&P Sector Returns, Quarter Ended 6/30/24



Source: S&P Dow Jones Indices



GLOBAL EQUITIES

Broad market

- The U.S. continued its lead over developed non-U.S. markets resulting in a positive ACWI return.
- Developed non-U.S. markets struggled with growing uncertainty on future economic growth, political instability, and divergent central bank policies.
- Small caps once again trailed large caps in a higher interest rate environment and amid exchange rate volatility.

Emerging markets

- Emerging markets rebounded, snapping a two-quarter losing streak relative to developed markets as both China and India produced strong returns.
- China's GDP growth exceeded expectations with a rebound in industrial production, manufacturing, and exports. Further, the Chinese government implemented several measures to support capital markets.

Growth vs. value

 Growth and value saw little difference, as much of the caution was driven around macro concerns about future growth and a growing risk of a recession.

U.S. dollar strength

 The U.S. Dollar Index (DXY), was relatively flat in 2Q due to a balancing act of increased global uncertainty but a more likely 2024 U.S. central bank rate cut.

China experiences significant decline

 Mainland China's allocation within the MSCI EM Index and active EM equity strategies has steadily declined since peaking in 2020. Sluggish growth with weak home sales and deflationary pressures combined with heightened geopolitical risks have been contributors.

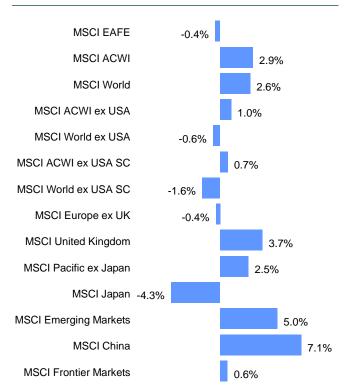
Taiwan increases with Taiwan Semiconductor strength

 Despite Taiwan's related geopolitical concerns to mainland China, Taiwan has seen increasing allocations in the index and across managers. The largest stock in the MSCI Taiwan Index, Taiwan Semiconductor, which accounts for ~50% of the index, continues to exhibit robust growth as the global leader in semiconductor manufacturing.

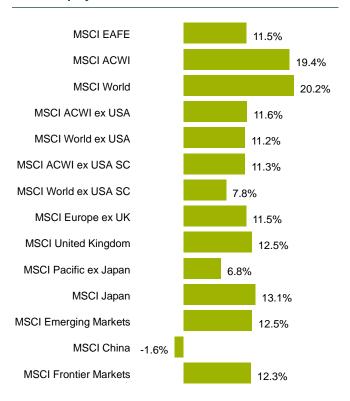
India continues rapid growth

- Benefiting from positive demographics with a large growing working population, India has experienced one of the highest real GDP growth rates globally in recent years when compared to other major countries/regions.
- India's growth within the MSCI EM Index and manager allocations has been nearly the mirror image to China's allocations since 2020.

Global Equity: Quarterly Returns



Global Equity: One-Year Returns



Source: MSCI



U.S. FIXED INCOME

Macro environment

- Fed on hold awaiting more evidence that inflation is under control as economy remained resilient
- 10-year U.S. Treasury yield up modestly from 4.21% to 4.36%
- Curve remained inverted

Performance and drivers

- The Bloomberg US Aggregate Index rose 0.1% amid higher rates.
- Corporates and most securitized sectors were roughly flat vs. U.S. Treasuries on a duration-adjusted basis.
- Lower quality outperformed, with high yield corporates and leveraged loans posting the best returns.
- Longer maturity underperformed short and intermediate strategies as curve steepened from 5 years out to 30.

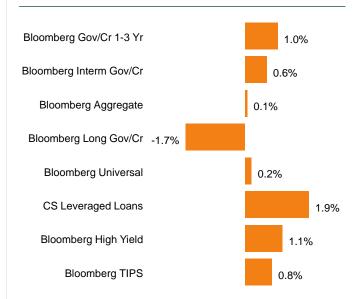
Valuations

- Corporate credit remains rich with spreads near historical tights.
- Default rates fell to just 1.2% for HY and 1.1% for bank loans.
- Corporate bond issuance remained robust
- IG corporate new issuance slowed from record highs in 1Q but remained robust with \$349 billion in new debt, bringing YTD total to \$886 billion.
- HY new issuance in 2Q nearly matched 1Q with \$83 billion, bringing YTD total to \$172 billion.
- Both were met with strong investor demand.

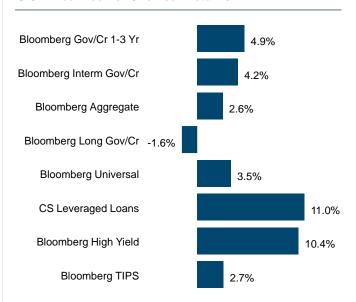
Rate cut expectations

- Strong April jobs reports and sticky inflation readings initially drove intermediate- and long-term rates higher, sending the 10-year Treasury 50 bps higher and reducing the 2s10s inversion to just -24 bps.
- Markets reacted with reduced expectations for Fed rate cuts.
 Entering 2024, Fed Funds futures priced in at least six cuts for the year; that declined to around one as of April.
- However, subsequent data, including easing inflation, brought rates back close to where they started, with the 10year Treasury ending the quarter 16 bps higher.

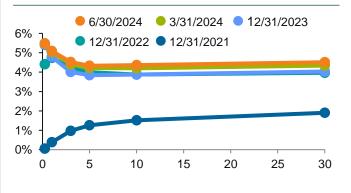
U.S. Fixed Income: Quarterly Returns



U.S. Fixed Income: One-Year Returns



U.S. Treasury Yield Curves



Sources: Bloomberg, Credit Suisse



MUNICIPAL BONDS

Higher quality municipal bonds post flat returns in 2Q

- Muni bond yields climbed more than U.S. Treasury yields.
- 10-year AAA municipal bond yield rose 33 bps to 2.84%.
- 10-year U.S. Treasury yield ended 2Q at 4.36% from 4.21%.
- YTD issuance (\$235 billion, up 37% YOY) has been met by strong demand with \$11.4 billion in positive flows to municipal bond funds.

BBB performs best for the quarter and year

- AAA: -0.28%
- AA: -0.11%
- A: +0.22%
- BBB: +0.68%

Muni valuations vs. U.S. Treasuries remain rich

- 10-year AAA Muni/10-year U.S. Treasury yield ratio increased to 65%, but remains below the 10-year median
- Fundamentals for state and local governments remain sound as upgrades continue to surpass downgrades.
- The need for increased infrastructure spending could benefit municipal bond issuance in years to come.

GLOBAL FIXED INCOME

Macro environment

- Developed market rates rose further in 2Q.
- In June, the Bank of Canada lowered its overnight rate, and the European Central bank cut rates for the first time in five years as growth and inflation moderated.
- Japan's 10-year government bond yield rose above 1% for the first time since 2013.

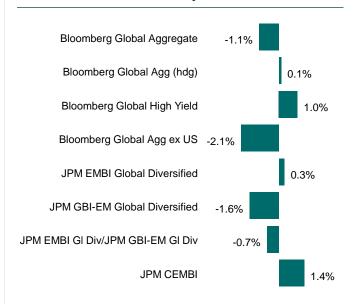
U.S. dollar continues to strengthen

- Major currencies generally continued to weaken relative to the U.S. dollar, albeit at a slower pace from 2Q, detracting from unhedged returns.
- Hedged investors were flat for the quarter following the increase in yields.

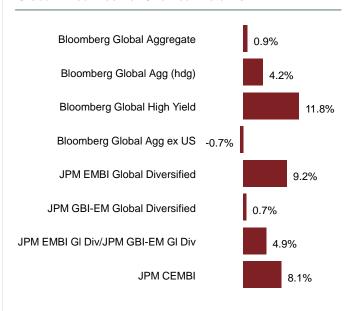
Emerging market debt is similarly lackluster

- India was added to the JPM GBI-EM suite of indices in June.
- EM hard currency rose 0.3% while the local currency JPM EMBI Global Diversified Index declined 1.6% as the U.S. dollar generally if modestly strengthened relative to local currencies.

Global Fixed Income: Quarterly Returns



Global Fixed Income: One-Year Returns



Change in 10-Year Global Government Bond Yields

1Q24 to 2Q24 U.S. Treasury 20 bps Germany 20 bps U.K. 24 bps Canada 4 bps Japan 33 bps

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, 2024, with the distribution as of March 31, 2024. The change in asset distribution is broken down into the dollar change due to Net New Investment and the dollar change due to Investment Return.

Asset Distribution Across Investment Managers

	June 30, 2024				March 31, 2024			
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight		
Total Domestic Equity	\$1,035,227,582	17.60%	\$(12,800,000)	\$(16,557,066)	\$1.064.584.648	17.84%		
BlackRock Russell 1000 Value	205,548,622	3.49%	0	(4,548,551)	210,097,174	3.52%		
DFA Large Cap Value	144,403,247	2.46%	(5,200,000)	(4,975,856)	154,579,103	2.59%		
Northern Trust Global	209,117,761	3.56%	(7,600,000)	8,921,688	207,796,073	3.48%		
Polen Capital Management	124,668,155	2.12%	0	(653,231)	125,321,386	2.10%		
Earnest Partners LLC	166,713,279	2.83%	0	(8,911,648)	175,624,928	2.94%		
DFA Small Cap Value	184,776,517	3.14%	0	(6,389,467)	191,165,984	3.20%		
Total Global Equity	\$469,523,687	7.98%	\$(26,300,000)	\$13,077,307	\$482,746,380	8.09%		
BlackRock Global Alpha Tilts	264,807,605	4.50%	(18,800,000)	10,951,981	272,655,623	4.57%		
MFS Investment Management	204,716,082	3.48%	(7,500,000)	2,125,325	210,090,757	3.52%		
Total International Equity	\$843,414,662	14.34%	\$(23,165,641)	\$4,884,736	\$861,695,567	14.44%		
AQR Emerging Markets	114,588,108	1.95%	(4,279,326)	5,876,142	112,991,292	1.89%		
Brandes Investment Partners	326,633,396	5.55%	(12,400,000)	88,183	338,945,213	5.68%		
William Blair & Company	235,725,360	4.01% 2.83%	(106,990)	(3,113,679)	238,946,029	4.00% 2.86%		
DFA International Small Cap	166,467,798	2.0370	(6,379,326)	2,034,090	170,813,033	2.00%		
Total Fixed Income	\$1,597,996,277	27.17%	\$0	\$5,251,819	\$1,592,744,458	26.69%		
BlackRock US Govt Bond	410,464,856	6.98%	0	731,767	409,733,089	6.86%		
Reams Asset Management	726,979,261	12.36%	0	3,406,555	723,572,706	12.12%		
Loomis, Sayles & Company, L.P.	460,552,159	7.83%	0	1,113,498	459,438,662	7.70%		
Total Private Equity	\$780,372,655	13.27%	\$4,862,382	\$25,985,008	\$749,525,265	12.56%		
Abbott Capital Management 2010	16,329,155	0.28%	(700,000)	(265,881)	17,295,036	0.29%		
Abbott Capital Management 2011	35,210,615	0.60%	0	(507,858)	35,718,473	0.60%		
Abbott Capital Management 2012	32,400,316	0.55%	0	(521,354)	32,921,670	0.55%		
Abbott Capital Management 2013	31,401,825	0.53%	0	(310,067)	31,711,892	0.53%		
Abbott Capital Management 2014 Abbott Capital Management 2015	34,636,795	0.59% 0.50%	(1,050,000)	(418,590)	36,105,385	0.60% 0.50%		
Abbott Capital Management 2016	29,456,729 27,318,253	0.46%	(1,243,750) (732,500)	731,580 1,309,501	29,968,899 26,741,252	0.30%		
Abbott Capital Management 2018	24,267,387	0.41%	(732,300)	565,095	23,702,292	0.43%		
Abbott Capital Management 2019	22,150,300	0.38%	870,000	835,365	20,444,935	0.34%		
Abbott Capital Management 2020	30,296,370	0.52%	2,040,000	1,364,312	26,892,058	0.45%		
Abbott Capital Management 2021	10,480,982	0.18%	1,020,000	300,052	9,160,930	0.15%		
Abbott Capital Management 2022	11,728,787	0.20%	1,677,812	(80,034)	10,131,008	0.17%		
Abbott Capital Management 2023	3,538,118	0.06%	0	243,618	3,294,500	0.06%		
Mesirow V	34,821,696	0.59%	(900,000)	1,361,400	34,360,296	0.58%		
Mesirow VI	59,088,725	1.00%	(3,420,000)	1,633,258	60,875,467	1.02%		
Mesirow VII	128,315,484	2.18%	0	4,967,489	123,347,995	2.07%		
Mesirow VIII NB Secondary Opp Fund III	71,650,074	1.22%	6,600,000	2,586,215	62,463,859	1.05%		
NB Secondary Opp Fund III NB Secondary Opp Fund IV	6,624,348 17,485,164	0.11% 0.30%	(186,110) (920,948)	292,403 1,268,196	6,518,055 17,137,916	0.11% 0.29%		
NB Secondary Opp Fund V	47,720,494	0.81%	3,065,247	5,140,217	39,515,030	0.25%		
Private Advisors VI	20,829,158	0.35%	(910,020)	1,772,221	19,966,957	0.33%		
Private Advisors VII	13,633,727	0.23%	(558,278)	577,619	13,614,386	0.23%		
Private Advisors VIII	19,809,772	0.34%	0	1,280,163	18,529,609	0.31%		
Private Advisors IX	37,418,308	0.64%	0	1,593,631	35,824,677	0.60%		
Apogem Capital X	13,760,073	0.23%	210,929	266,456	13,282,688	0.22%		
Absolute Return	\$458,580,698	7.80%	\$0	\$7,732,212	\$450,848,486	7.55%		
Aptitude	194,749,808	3.31%	0	2,741,577	192,008,231	3.22%		
UBS A & Q	263,830,890	4.49%	0	4,990,635	258,840,255	4.34%		
Real Assets	\$177,905,119	3.02%	\$(276,119)	\$(363,827)	\$178,545,065	2.99%		
Principal DRA	177,905,119	3.02%	(276,119)	(363,827)	178,545,065	2.99%		
Total Real Estate	\$448,791,324	7.63%	\$(4,973,781)	\$1,524,414	\$452,240,691	7.58%		
Real Estate	448,791,324	7.63%	(4,973,781)	1,524,414	452,240,691	7.58%		
Total Cash	\$69,972,732	1.19%	\$(67,128,325)	\$1,377,543	\$135,723,515	2.27%		
Cash	69,972,732	1.19%	(67,128,325)	1,377,543	135,723,515	2.27%		
Total Found	RE 004 704 705	400.00/	£(400 704 404)	£40.040.445	¢E 000 0E4 07E	400.00/		

\$5,881,784,735

100.0%

\$(129,781,484)



Total Fund

\$5,968,654,075

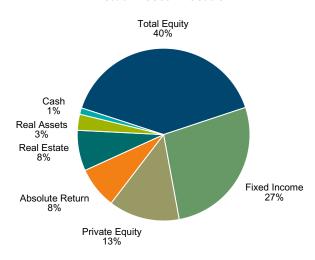
\$42,912,145

100.0%

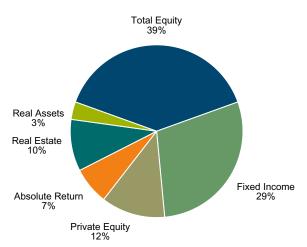
Actual vs Target Asset Allocation As of June 30, 2024

The first chart below shows the Fund's asset allocation as of June 30, 2024. The second chart shows the Fund's target asset allocation as outlined in the investment policy statement.

Actual Asset Allocation



Target Asset Allocation



Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
Total Equity	2,348,166	39.9%	39.0%	0.9%	54,270
Fixed Income	1,597,996	27.2%	29.0%	(1.8%)	(107,721)
Private Equity	780,373	13.3%	12.0%	`1.3%´	` 74,559′
Absolute Return	458,581	7.8%	7.0%	0.8%	46,856
Real Estate	448,791	7.6%	9.7%	(2.1%)	(121,742)
Real Assets	177,905	3.0%	3.3%	(0.3%)	`(16,194)
Cash	69,973	1.2%	0.0%	`1.2%´	`69,973
Total	5.881.785	100.0%	100.0%		

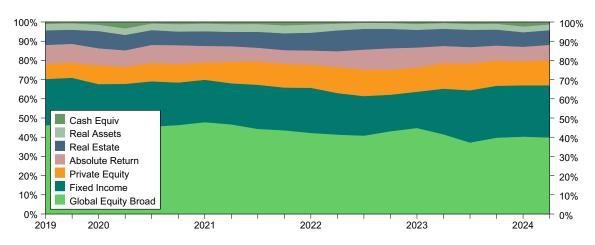
^{*} Current Quarter Target = 39.0% MSCI ACWI IMI, 29.0% Blmbg:Aggregate, 12.0% Russell 3000 Index lagged 3 months+2.0%, 9.7% NCREIF NFI-ODCE Val Wt Nt lagged 3 months, 7.0% 3-month Treasury Bill+3.0% and 3.3% Principal DRA Blend Index.



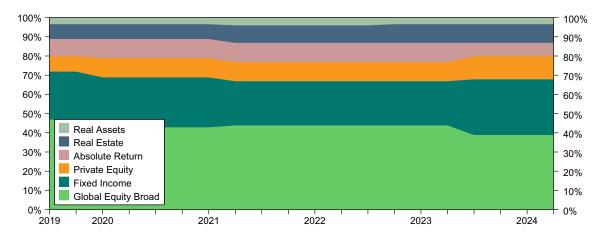
Actual vs Target Historical Asset Allocation

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.

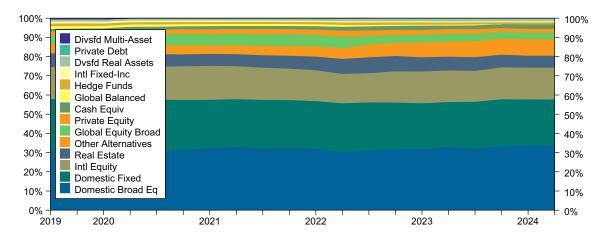
Actual Historical Asset Allocation



Target Historical Asset Allocation



Average Callan Public Fund Sponsor Database Historical Asset Allocation



^{*} Current Quarter Target = 39.0% MSCI ACWI IMI, 29.0% Blmbg:Aggregate, 12.0% Russell 3000 Index lagged 3 months+2.0%, 9.7% NCREIF NFI-ODCE Val Wt Nt lagged 3 months, 7.0% 3-month Treasury Bill+3.0% and 3.3% Principal DRA Blend Index.



Total Fund Period Ended June 30, 2024

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 = 39.0% MSCI ACWI IMI, 29.0% Blmbg Aggregate, 12.0% Russell 3000 Index lagged 3 months+2.0%, 7.0% 3-month Treasury Bill+3.0%, 9.7% NCREIF NFI-ODCE Eq Wt Net lagged 3 months and 3.3% Principal Blended Benchmark.

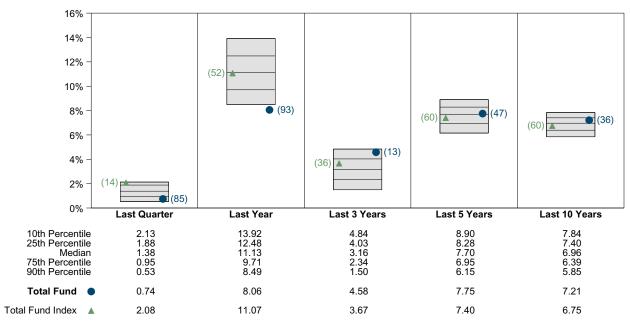
Quarterly Summary and Highlights

- Total Fund's portfolio posted a 0.74% return for the quarter placing it in the 85 percentile of the Callan Public Fund Sponsor Database group for the quarter and in the 93 percentile for the last year.
- Total Fund's portfolio underperformed the Total Fund Index by 1.34% for the quarter and underperformed the Total Fund Index for the year by 3.01%.

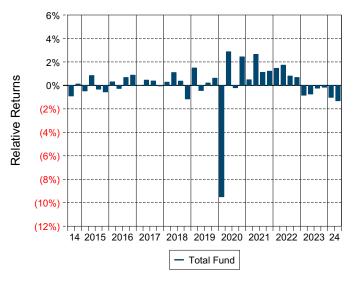
Quarterly Asset Growth

Beginning Market Value	\$5,968,654,075
Net New Investment	\$-129,781,484
Investment Gains/(Losses)	\$42,912,145
Ending Market Value	\$5,881,784,735

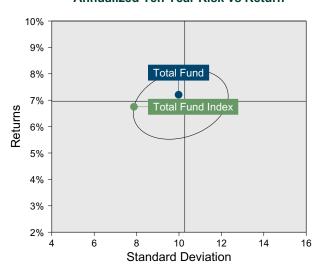
Performance vs Callan Public Fund Sponsor Database (Gross)



Relative Return vs Total Fund Index



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



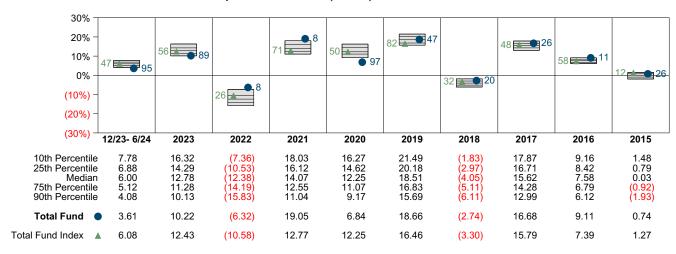


Total Fund Return Analysis Summary

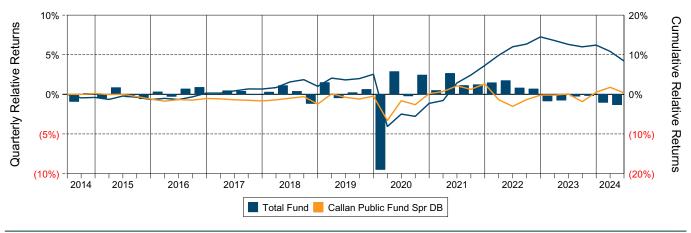
Return Analysis

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.

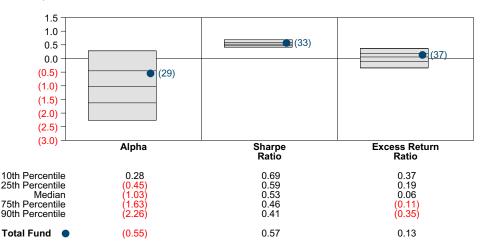
Performance vs Callan Public Fund Sponsor Database (Gross)



Cumulative and Quarterly Relative Returns vs Total Fund Index



Risk Adjusted Return Measures vs Total Fund Index Rankings Against Callan Public Fund Sponsor Database (Gross) Ten Years Ended June 30, 2024



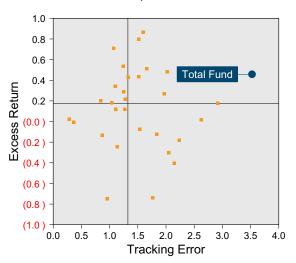


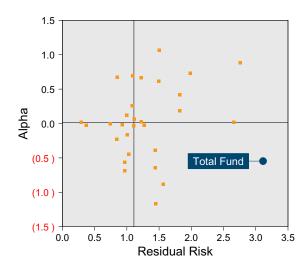
Total Fund Total Fund vs Target Risk Analysis

Risk Analysis

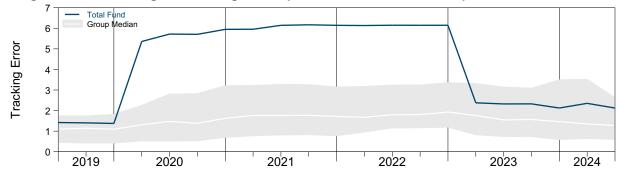
The graphs below analyze the performance and risk of the fund relative to the appropriate target mix. This relative performance is compared to a peer group of funds wherein each member fund is measured against its own target mix. The first scatter chart illustrates the relationship, called Excess Return 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, 2024

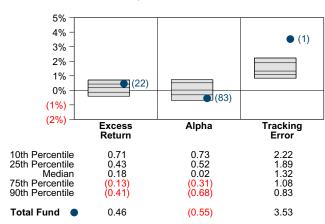


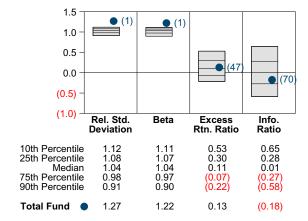


Rolling 12 Quarter Tracking Error vs Targets Compared to Callan Public Fund Sponsor Database



Risk Statistics Rankings vs Targets Rankings Against Callan Public Fund Sponsor Database Ten Years Ended June 30, 2024







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, 2024. 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, 2024

	Last Quarter		Last Year		Last 3 Years		Last 5 Years		Since Inception	
Total Public Equity MSCI ACWI IMI	0.07% 2.38%		16.69% 18.40%		4.86% 4.70%		10.79% 10.36%		10.80% 10.26%	(1/16) (1/16)
Total Domestic Equity Russell 3000 Index Pub Pln- Dom Equity	(<mark>1.55%)</mark> 3.22% 2.16%	99 12	16.17% 23.13% 21.15%	95 15	5.28% 8.05% 7.52%	87 28	11.95% 14.14% 13.31%	81 21	8.22% 8.27% -	(7/98) (7/98)
BlackRock Russell 1000 Value Russell 1000 Value Index Callan Large Cap Value	(2.16%) (2.17%) (1.58%)	67 67	13.07% 13.06% 16.26%	83 83	5.53% 5.52% 7.38%	82 82	9.15% 9.01% 10.98%	89 89	8.64% 8.50% -	(4/17) (4/17)
DFA Large Cap Value Russell 1000 Value Index Callan Large Cap Value	(3.20%) (2.17%) (1.58%)	81 67	16.01% 13.06% 16.26%	54 83	6.69% 5.52% 7.38%	64 82	9.78% 9.01% 10.98%	82 89	8.47% 8.44% -	(11/17) (11/17)
Northern Trust Global S&P 500 Index Callan Large Cap Core	4.28% 4.28% 4.08%	47 47	24.56% 24.56% 26.57%	75 75	10.02% 10.01% 10.31%	55 55	15.06% 15.05% 15.00%	48 48	11.08% 11.03% -	(8/88) (8/88)
Polen Capital Management S&P 500 Index Callan Large Cap Growth	(<mark>0.52%)</mark> 4.28% 6.42%	100 68	18.27% 24.56% 31.92%	96 84	(<mark>0.03%)</mark> 10.01% 8.73%	97 34	11.68% 15.05% 16.51%	96 72	15.01% 14.42% -	(7/12) (7/12)
Earnest Partners LLC Russell MidCap Index Callan Mid Capitalization	(5.07%) (3.35%) (4.03%)	78 31	10.79% 12.88% 11.62%	66 39	4.23% 2.37% 3.59%	43 57	11.36% 9.46% 9.80%	20 60	11.13% 9.69% -	(5/05) (5/05)
DFA Small Cap Value Russell 2000 Value Index Callan Small Cap Value	(3.34%) (3.64%) (3.48%)	44 57	15.72% 10.90% 13.22%	23 71	8.33% (<mark>0.53%)</mark> 3.65%	10 90	13.49% 7.07% 9.38%	7 89	11.77% 8.84% -	(11/96) (11/96)
Total Global Equity MSCI World Callan Global Equity	2.86% 2.63% 1.91%	32 37	18.53% 20.19% 18.18%	48 41	5.99% 6.86% 5.22%	40 29	11.71% 11.78% 11.11%	37 36	9.90% 9.88% -	(4/10) (4/10)
BlackRock Global Alpha Tilts MSCI ACWI Gross Callan Global Equity	4.29% 3.01% 1.91%	10 29	22.95% 19.92% 18.18%	26 42	7.18% 5.94% 5.22%	26 41	11.76% 11.28% 11.11%	36 48	12.84% 12.27% -	(3/16) (3/16)
MFS Investment Management MSCI ACWI Gross Callan Global Equity	1.07% 3.01% 1.91%	63 29	13.09% 19.92% 18.18%	81 42	4.49% 5.94% 5.22%	62 41	11.84% 11.28% 11.11%	35 48	12.34% 10.51% -	(12/12) (12/12)
Total International Equity MSCI EAFE Pub Pln- Intl Equity	0.54% (<mark>0.42%)</mark> 1.62%	83 99	16.21% 11.54% 12.62%	7 76	3.46% 2.89% 0.93%	8 16	8.67% 6.46% 6.63%	5 57	7.19% 4.87% -	(5/96) (5/96)
AQR Emerging Markets MSCI EM Gross Callan Emerging Broad	5.32% 5.12% 4.54%	38 42	22.91% 12.97% 12.44%	8 46	(1.57%) (4.68%) (4.92%)	27 47	6.70% 3.49% 4.30%	18 64	7.13% 5.67% -	(8/16) (8/16)
Brandes Investment Partners MSCI EAFE Callan NonUS Eq	(0.07%) (0.42%) 0.23%	59 69	18.47% 11.54% 11.15%	6 44	8.36% 2.89% 2.10%	1 37	9.49% 6.46% 7.10%	7 64	8.11% 4.94% -	(2/98) (2/98)
William Blair & Company MSCI ACWIxUS Gross Callan NonUS Eq	(<mark>1.30%)</mark> 1.17% 0.23%	85 23	9.28% 12.17% 11.15%	67 38	(3.23%) 0.97% 2.10%	93 65	7.33% 6.05% 7.10%	47 70	7.56% 6.67% -	(12/03) (12/03)
DFA International Small Cap MSCI EAFE Small Callan Intl Small Cap	1.09% (1.84%) (1.20%)	5 71	16.81% 7.78% 9.11%	11 63	5.43% (3.35%) (2.26%)	2 58	8.49% 4.19% 5.59%	18 72	5.35% 4.13% -	(5/06) (5/06)



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, 2024. 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, 2024

	Last Quarter		Last Year		Last 3 Years		Last 5 Years		Since Inception	
Total Fixed Income Blmbg Aggregate Pub Pln- Dom Fixed	0.33% 0.07% 0.25%	37 82	3.60% 2.63% 4.02%	62 87	(0.19%) (3.02%) (2.04%)	8 89	0.10% (0.23%) 0.86%	85 97	6.50% 5.37%	
BlackRock US Govt Bond Blmbg Government Callan Core Bond Fl	0.18% 0.11% 0.25%	73 86	1.65% 1.61% 3.34%	98 98	(3.19%) (2.61%)	96	(<mark>0.61%)</mark> 0.38%	100	(3.85%) (3.98%)	
Reams Asset Management Blmbg Aggregate Callan Core Plus FI	0.47% 0.07% 0.42%	36 96	3.07% 2.63% 4.31%	90 95	(1.74%) (3.02%) (2.33%)	17 90	2.30% (<mark>0.23%)</mark> 0.91%	5 98	4.90% 3.62% -	(1/01) (1/01)
Loomis, Sayles & Company, L.P. Blmbg Aggregate Callan Core Plus Fl	0.24% 0.07% 0.42%	78 96	6.29% 2.63% 4.31%	5 95	(1.26%) (3.02%) (2.33%)	11 90	1.84% (0.23%) 0.91%	9 98	8.03% 5.37% -	(12/87) (12/87)
Private Equity Private Equity Benchmark (3) Abbott Capital Management 2010 Abbott Capital Management 2011 Abbott Capital Management 2012 Abbott Capital Management 2012 Abbott Capital Management 2013 Abbott Capital Management 2015 Abbott Capital Management 2016 Abbott Capital Management 2016 Abbott Capital Management 2018 Abbott Capital Management 2019 Abbott Capital Management 2020 Abbott Capital Management 2021 Abbott Capital Management 2021 Abbott Capital Management 2021 Abbott Capital Management 2022 Abbott Capital Management 2023 Mesirow V Mesirow VI Mesirow VII Mesirow VIII NB Secondary Opp Fund III NB Secondary Opp Fund IV NB Secondary Opp Fund V Private Advisors VI Private Advisors VIII Private Advisors VIII Private Advisors IX Apogem Capital X	3.42% 10.40% (1.54%) (1.58%) (0.98%) (1.16%) 2.45% 4.90% 2.38% 4.07% 4.70% 2.89% (0.74%) 7.39% 3.95% 2.75% 4.03% 3.72% 4.48% 7.45% 12.38% 8.90% 4.34% 6.91% 4.45% 2.03%		3.75% 31.52% (7.52%) (7.52%) (7.52%) (4.08%) (4.08%) (4.70%) 3.92% 7.16% 3.41% 5.70% 6.56% 5.34% (1.43%) 6.25% 1.70% 6.26% 3.50% 6.43% 5.75% 24.48% 13.30% 8.91% 11.58% 7.43% 16.31%		8.35% 12.20% (0.78%) (1.68%) 1.65% 2.20% 3.98% 11.14% 13.40% 12.77% 11.86% 6.32% 5.51% 1.17% 4.28% 10.10% 2.26% 8.99% 11.94% 22.56% 20.71% 21.35% 20.32%		17.75% 16.97% 11.69% 13.53% 15.32% 15.53% 16.02% 17.95% 19.28% 17.10% 14.13% 19.59% 15.54% 24.83% 18.16% 19.15%		12.45%	(7/23) (6/10) (7/13) (6/17)
Absolute Return 90 Day T-Bill + 3%	1.72% 2.04%		9.80% 8.40%		14.24% 6.03%		6.69% 5.16%		6.17% 4.50%	(6/14) (6/14)
Aptitude 1-month LIBOR + 4% Callan Abs Rtn Hedge FoF	1.43% 2.33% 1.76%	70 5	10.38% 9.68% 8.78%	23 33	7.33% 5.11%	1	6.34% 5.40%	21	7.96% 9.14% -	(9/22) (9/22)
UBS A & Q 1-month LIBOR + 4% Callan Abs Rtn Hedge FoF	1.93% 2.33% 1.76%	37 5	9.36% 9.68% 8.78%	39 33	8.52% 7.33% 5.11%	1 1	8.84% 6.34% 5.40%	12 21	6.53% 5.75% -	(12/14) (12/14)
Real Assets	(0.20%)		4.85%		2.17%		5.31%		5.36%	(1/16)
Principal DRA Principal DRA Blend Index (1) Callan Alterntive Inv DB	(<mark>0.20%)</mark> 0.40% 1.94%	92 81	4.85% 5.53% 8.62%	77 69	2.17% 1.75% 6.45%	83 84	5.31% 4.14% 8.23%	73 87	5.36% 4.77% -	(1/16) (1/16)
Total Real Estate	0.34%		(9.12%)		4.66%		4.90%		6.45%	(7/86)
Real Estate Blended Benchmark (2) Callan Tot Real Est DB	0.34% (2.38%) (0.62%)	13 95	(9.12%) (12.33%) (6.40%)	68 84	4.66% 2.81% 2.01%	30 44	4.90% 2.98% 3.20%	36 54	6.45% - -	(7/86)
Total Fund Total Fund Index* Callan Public Fund Spr DB	0.74% 2.08% 1.38%	85 14	8.06% 11.07% 11.13%	93 52	4.58% 3.67% 3.16%	13 36	7.75% 7.40% 7.70%	47 60	- - -	

^{*} Current Quarter Target = 39.0% MSCI ACWI IMI, 29.0% Blmbg:Aggregate, 12.0% Russell 3000 Index lagged 3 months+2.0%, 9.7% NCREIF NFI-ODCE Val Wt Nt lagged 3 months, 7.0% 3-month Treasury Bill+3.0% and 3.3% Principal

months+2.0%, 9.7% NCREIF NFI-ODCE val Wt Nt lagged 3 months, 7.0% 3-month Treasury Bill+3.0% and 3.3% 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.

(3) Private Equity Benchmark = Russell 3000 Index lagged 3 months+3.0% through 12/31/19, Russell 3000 Index lagged 3 months+2.0% thereafter.



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.

	12/2023-									
	6/2024		2023		2022		2021		2020	
Total Public Equity MSCI ACWI IMI	7.68% 10.28%		21.40% 21.58%		(15.78%) (18.40%)		20.92% 18.22%		14.78% 16.25%	
Total Domestic Equity Russell 3000 Index Pub Pln- Dom Equity	7.13% 13.56% 12.02%	98 12	19.73% 25.96% 23.70%	89 17	(15.68%) (19.21%) (17.91%)	12 80	28.12% 25.66% 25.85%	16 54	16.35% 20.89% 18.58%	72 24
BlackRock Russell 1000 Value Russell 1000 Value Index Callan Large Cap Value	6.63% 6.62% 8.29%	68 68	11.47% 11.46% 12.85%	63 63	(7.54%) (7.54%) (4.93%)	80 80	25.18% 25.16% 28.35%	79 79	3.28% 2.80% 3.04%	47 52
DFA Large Cap Value Russell 1000 Value Index Callan Large Cap Value	7.99% 6.62% 8.29%	57 68	12.33% 11.46% 12.85%	53 63	(4.95%) (7.54%) (4.93%)	50 80	27.52% 25.16% 28.35%	64 79	(1.56%) 2.80% 3.04%	90 52
Northern Trust Global S&P 500 Index Callan Large Cap Core	15.28% 15.29% 16.45%	63 63	26.30% 26.29% 26.16%	48 48	(18.08%) (18.11%) (17.42%)	58 58	28.69% 28.71% 29.05%	54 54	18.42% 18.40% 18.84%	52 52
Polen Capital Management S&P 500 Index Callan Large Cap Growth	7.17% 15.29% 19.67%	97 78	38.20% 26.29% 40.64%	61 89	(37.72%) (18.11%) (30.18%)	89 6	24.84% 28.71% 24.26%	43 21	35.13% 18.40% 35.57%	55 98
Earnest Partners LLC Russell MidCap Index Callan Mid Capitalization	2.69% 4.96% 4.44%	72 44	17.57% 17.23% 17.82%	52 53	(15.13%) (17.32%) (14.34%)	52 58	26.09% 22.58% 25.38%	48 58	21.61% 17.10% 16.17%	41 48
DFA Small Cap Value Russell 2000 Value Index Callan Small Cap Value	0.15% (0.85%) 1.17%	74 86	21.85% 14.65% 16.41%	13 65	(1.69%) (14.48%) (10.51%)	10 84	40.61% 28.27% 31.82%	16 64	3.85% 4.63% 2.88%	45 37
Total Global Equity MSCI World Callan Global Equity	11.04% 11.75% 10.47%	48 45	22.29% 23.79% 21.74%	47 35	(17.35%) (18.14%) (17.81%)	47 52	19.03% 21.82% 19.46%	54 28	18.78% 15.90% 17.13%	43 55
BlackRock Global Alpha Tilts MSCI ACWI Gross Callan Global Equity	13.79% 11.58% 10.47%	29 46	23.27% 22.81% 21.74%	40 43	(16.80%) (17.96%) (17.81%)	43 51	18.73% 19.04% 19.46%	56 54	16.53% 16.82% 17.13%	52 51
MFS Investment Management MSCI ACWI Gross Callan Global Equity	7.62% 11.58% 10.47%	69 46	21.00% 22.81% 21.74%	53 43	(18.14%) (17.96%) (17.81%)	52 51	19.56% 19.04% 19.46%	49 54	22.42% 16.82% 17.13%	32 51
Total International Equity MSCI EAFE Pub Pln- Intl Equity	6.45% 5.34% 6.42%	46 86	22.82% 18.24% 16.76%	3 20	(15.36%) (14.45%) (16.85%)	23 18	13.08% 11.26% 8.94%	14 23	10.84% 7.82% 12.71%	70 90
AQR Emerging Markets MSCI EM Gross Callan Emerging Broad	11.98% 7.68% 7.96%	17 55	18.78% 10.27% 11.91%	12 59	(20.29%) (19.74%) (21.94%)	38 35	1.23% (2.22%) (0.59%)	36 55	18.26% 18.69% 18.17%	49 44
Brandes Investment Partners MSCI EAFE Callan NonUS Eq	5.19% 5.34% 5.43%	55 51	31.34% 18.24% 18.09%	1 47	(6.79%) (14.45%) (15.11%)	5 43	14.42% 11.26% 11.50%	18 52	(1. <mark>30%)</mark> 7.82% 11.19%	96 65
William Blair & Company MSCI ACWIxUS Gross Callan NonUS Eq	5.49% 6.04% 5.43%	49 41	16.06% 16.21% 18.09%	75 73	(28.57%) (15.57%) (15.11%)	95 52	13.27% 8.29% 11.50%	30 71	31.44% 11.13% 11.19%	6 50
DFA International Small Cap MSCI EAFE Small Callan Intl Small Cap	6.58% 0.51% 3.36%	11 71	18.04% 13.16% 15.18%	22 66	(9.42%) (21.39%) (20.63%)	5 52	16.47% 10.10% 12.78%	14 72	1.47% 12.34% 11.29%	91 46



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.

	12/2023-									
	6/2024		2023		2022		2021		2020	
Total Fixed Income Blmbg Aggregate Pub Pln- Dom Fixed	(<mark>0.03%)</mark> (0.71%) 0.06%	55 91	6.63% 5.53% 6.40%	43 82	(6.83%) (13.01%) (12.24%)	9 72	(0.36%) (1.54%) (0.57%)	45 91	(<mark>1.82%)</mark> 7.51% 8.53%	98 67
BlackRock US Govt Bond Blmbg Government Callan Core Bond Fl	(0.71%) (0.83%) (0.25%)	96 97	4.24% 4.09% 6.17%	99 99	(12.43%) (12.32%) (12.91%)	22 17	(2.28%) (1.03%)	100	- 7.94% 8.71%	85
Reams Asset Management Blmbg Aggregate Callan Core Plus FI	(0.17%) (0.71%) 0.31%	78 96	6.76% 5.53% 6.90%	57 96	(11.39%) (13.01%) (13.27%)	13 41	(1.23%) (1.54%) (0.27%)	91 97	17.28% 7.51% 9.27%	2 93
Loomis, Sayles & Company, L.P. Blmbg Aggregate Callan Core Plus Fl	0.87% (0.71%) 0.31%	14 96	8.56% 5.53% 6.90%	2 96	(12.12%) (13.01%) (13.27%)	18 41	2.13% (1.54%) (0.27%)	5 97	7.14% 7.51% 9.27%	94 93
Total Private Equity Private Equity Benchmark (3) Abbott Capital Management 2010 Abbott Capital Management 2011 Abbott Capital Management 2012 Abbott Capital Management 2013 Abbott Capital Management 2014 Abbott Capital Management 2015 Abbott Capital Management 2016 Abbott Capital Management 2016 Abbott Capital Management 2018 Abbott Capital Management 2019 Abbott Capital Management 2020 Abbott Capital Management 2021 Abbott Capital Management 2021 Abbott Capital Management 2021 Abbott Capital Management 2022 Mesirow V Mesirow VI Mesirow VII Mesirow VIII NB Secondary Opp Fund III NB Secondary Opp Fund IV NB Secondary Opp Fund V Private Advisors VII Private Advisors VII Private Advisors VIII Private Advisors VIII Private Advisors IX Apogem Capital X	3.35% 24.19% (1.58%) (1.42%) (1.58%) (0.98%) (1.16%) 2.45% 4.90% 2.38% 4.07% 4.70% 2.89% (1.06%) 3.95% 2.75% 4.03% 3.72% 3.37% 6.42% 12.38% 8.90% 4.34% 6.34% 4.11% 1.92%		2.89% 22.76% (6.70%) (7.55%) (3.85%) (2.85%) (3.96%) 3.60% 5.24% 3.96% 4.87% (0.80%) (0.52%) 5.78% 0.22% 17.34% 4.64% 21.41% 4.68% 7.32% 9.80% 13.33%		(4.88%) (15.10%) (16.87%) (18.97%) (13.14%) (12.51%) (9.41%) (0.79%) 2.90% 7.44% 7.54% 0.81% 1.72% - (19.60%) (13.41%) (0.68%) (2.15%) (2.34%) 0.29% - 9.97% 21.61% 27.61% 24.00%		67.66% 34.08% 65.55% 76.29% 72.85% 70.21% 75.52% 75.81% 71.04% 47.06% 65.36%		22.14% 17.99% 24.43% 29.13% 29.04% 28.65% 26.51% 16.62% 20.02% 22.73% 10.04% 21.39% 29.10% 16.43% 4.23% 14.80% - 16.54% 3.97% 15.78%	
Absolute Return 90 Day T-Bill + 3%	5.19% 4.08%		6.09% 8.01%		26.46% 4.46%		8.87% 3.05%		(14.04%) 3.67%	
Aptitude 1-month LIBOR + 4% Callan Abs Rtn Hedge FoF	6.29% 4.71% 4.93%	14 54	5.24% 9.38% 5.87%	59 1	5.80% 3.34%	21	- 4.11% 6.76%	77	4.63% 4.03%	45
UBS A & Q 1-month LIBOR + 4% Callan Abs Rtn Hedge FoF	4.47% 4.71% 4.93%	60 54	6.48% 9.38% 5.87%	30 1	8.85% 5.80% 3.34%	13 21	8.08% 4.11% 6.76%	45 77	12.18% 4.63% 4.03%	14 45
Real Assets	1.63%		3.95%		(5.29%)		18.24%		4.69%	
Principal DRA Principal DRA Blend Index (1) Callan Alterntive Inv DB	1.63% 1.07% 6.42%	94 94	3.95% 4.31% 2.81%	46 44	(5.29%) (5.07%) 9.20%	85 85	18.24% 15.87% 13.64%	43 45	4.69% 2.08% (0.39%)	24 32
Total Real Estate	(3.78%)		(10.23%)		13.88%		23.85%		0.76%	
Real Estate Blended Benchmark (2) Callan Tot Real Est DB	(3.78%) (7.62%) (1.82%)	77 96	(10.23%) (13.08%) (3.50%)	71 79	13.88% 21.68% 8.21%	28 18	23.85% 14.83% 19.51%	37 60	0.76% 0.89% 1.43%	55 54
Total Fund Total Fund Index* Callan Public Fund Spr DB	3.61% 6.08% 6.00%	95 47	10.22% 12.43% 12.78%	89 56	(6.32%) (10.58%) (12.38%)	8 26	19.05% 12.77% 14.07%	8 71	6.84% 12.25% 12.25%	97 50



^{*} Current Quarter Target = 39.0% MSCI ACWI IMI, 29.0% Blmbg:Aggregate, 12.0% Russell 3000 Index lagged 3 months+2.0%, 9.7% NCREIF NFI-ODCE Val Wt Nt lagged 3 months, 7.0% 3-month Treasury Bill+3.0% and 3.3% Principal

months+2.0%, 9.7% NoREIF NFI-ODGE val WERE lagged 3 months+3.0% 5 months 1.2.31/19, 9.7% NoREIF NFI-ODGE val WERE lagged 3 months+3.0% 15% Bloomberg Commodity Idx, 10% 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. (3) Private Equity Benchmark = Russell 3000 Index lagged 3 months+3.0% through 12/31/19, Russell 3000 Index lagged 3 months+2.0% thereafter.

The table below details the rates of return for the Fund's investment managers over various time periods ended June 30, 2024. 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, 2024

	Retuins for Peri	ous Ended Juli	e 30, 2024		
	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Net of Fee Returns	Quarter	i cai	Icais	i cais	i cais
Total Demostic Equity	(1.62%)	15.82%	5.01%	11.68%	10.75%
Total Domestic Equity Russell 3000 Index	3.22%	23.13%	8.05%	14.14%	12.15%
BlackRock Russell 1000 Value	(2.17%)	13.06%	5.52%	9.14%	_
Russell 1000 Value Index	(2.17%)	13.06%	5.52%	9.01%	8.23%
DFA Large Cap Value	(3.24%)	15.80%	6.51%	9.57%	_
Russell 1000 Value Index	(2.17%)	13.06%	5.52%	9.01%	8.23%
Northern Trust Global	4.28%	24.55%	10.01%	15.05%	12.88%
S&P 500 Index	4.28%	24.56%	10.01%	15.05%	12.86%
Polen Capital Management	(0.62%)	17.80%	(0.40%)	11.25%	14.26%
S&P 500 Index	4.28%	24.56%	10.01%	15.05%	12.86%
Earnest Partners LLC	(5.20%)	10.20%	3.72%	10.79%	10.98%
Russell MidCap Index	(3.35%)	12.88%	2.37%	9.46%	9.04%
DFA Small Cap Value	(3.50%)	14.95%	7.78%	13.09%	8.40%
Russell 2000 Value Index	(3.64%)	10.90%	(0.53%)	7.07%	6.23%
otal Global Equity	2.74%	18.09%	5.68%	11.39%	9.56%
MSCI World	2.63%	20.19%	6.86%	11.78%	9.16%
BlackRock Global Alpha Tilts	4.16%	22.54%	6.97%	11.56%	-
MSCI ACWI Gross	3.01%	19.92%	5.94%	11.28%	8.99%
MFS Investment Management	0.97%	12.61%	4.05%	11.36%	10.77%
MSCI ACWI Gross	3.01%	19.92%	5.94%	11.28%	8.99%
Total International Equity	0.43%	15.67%	2.99%	8.15%	5.02%
MSCI EAFE Index	(0.42%)	11.54%	2.89%	6.46%	4.33%
AQR Emerging Markets	5.15%	22.05%	(2.30%)	5.91%	-
MSCI EM Gross	5.12%	12.97%	(4.68%)	3.49%	3.18%
Brandes Investment Partners	(0.17%)	18.00%	7.94%	9.07%	5.00%
MSCI EAFE Index	(0.42%)	11.54%	2.89%	6.46%	4.33%
William Blair & Company	(1.42%)	8.75%	(3.68%)	6.83%	5.31%
MSCI ACWI ex-US Index	1.17%	12.17%	0.97%	6.05%	4.34%
DFA International Small Cap	0.98%	16.31%	4.96%	7.93%	4.43%
MSCI EAFE Small	(1.84%)	7.78%	(3.35%)	4.19%	4.30%

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



The table below details the rates of return for the Fund's investment managers over various time periods ended June 30, 2024. 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, 2024

	Last	Last	Last 3	Last 5	Last 10
	Quarter	Year	Years	Years	Years
Net of Fee Returns					
Total Fixed Income	0.30%	3.50%	(0.30%)	(0.00%)	1.56%
Blmbg Aggregate	0.07%	2.63%	(3.02%)	(0.23%)	1.35%
BlackRock US Govt Bond	0.17%	1.64%	-	-	_
Blmbg Government	0.11%	1.61%	(3.19%)	(0.61%)	0.92%
Reams Asset Management	0.44%	2.95%	(1.86%)	2.17%	2.78%
Blmbg Aggregate	0.07%	2.63%	(3.02%)	(0.23%)	1.35%
Loomis, Sayles & Company, L.P.	0.20%	6.14%	(1.41%)	1.69%	2.90%
Blmbg Aggregate	0.07%	2.63%	(3.02%)	(0.23%)	1.35%
Total Private Equity	3.42%	3.75%	8.35%	17.75%	15.93%
Private Equity Benchmark	10.40%	31.52%	12.20%	16.97%	-
Abbott Capital Management 2010	(1.54%)	(7.52%)	(0.78%)	11.69%	13.79%
Abbott Capital Management 2011	(1.42%)	(7.26%)	(1.68%)	13.53%	14.31%
Abbott Capital Management 2012	(1.58%)	(5.39%)	1.65%	15.32%	13.86%
Abbott Capital Management 2013	(0.98%)	(4.08%)	2.20%	15.53%	13.62%
Abbott Capital Management 2014	(1.16%)	(4.70%)	3.98%	16.02%	12.16%
Abbott Capital Management 2015	2.45%	3.92%	11.14%	17.95%	-
Abbott Capital Management 2016	4.90%	7.16%	13.40%	19.28%	-
Abbott Capital Management 2018	2.38%	3.41%	12.77%	17.10%	-
Abbott Capital Management 2019	4.07%	5.70%	11.86%	-	-
Abbott Capital Management 2020	4.70%	6.56%	6.32%	-	-
Abbott Capital Management 2021	2.89%	5.34%	5.51%	-	-
Abbott Capital Management 2022	(0.74%)	(1.43%)	-	-	-
Abbott Capital Management 2023	7.39%	6.25%	-	-	-
Mesirow V	3.95%	1.70%	1.17%	14.13%	15.44%
Mesirow IV	2.75%	0.10%	4.28%	19.59%	13.36%
Mesirow VII	4.03%	6.26%	10.10%	15.54%	-
Mesirow VIII	3.72%	3.50%	2.26%	-	-
NB Secondary Opp Fund III	4.48%	6.43%	8.99%	11.18%	14.48%
NB Secondary Opp Fund IV	7.45%	5.75%	11.94%	15.14%	-
NB Secondary Opp Fund V	12.38%	24.48%	=	=	-
Private Advisors VI	8.90%	13.30%	22.56%	24.83%	-
Private Advisors VII	4.34%	8.91%	20.71%	18.16%	_
Private Advisors VIII	6.91%	11.58%	21.35%	19.15%	-
Private Advisors IX	4.45%	7.43%	20.32%	-	_
Apogem Capital X	2.03%	16.31%	-	-	-
Absolute Return	1.72%	9.80%	14.23%	6.59%	6.17%
90 Day T-Bill + 3%	2.04%	8.40%	6.03%	5.16%	4.51%
Aptitude	1.43%	10.38%	-	J. 1070	4.5170
1-month LIBOR + 4%	2.33%	9.68%	7.33%	6.34%	5.68%
UBS A & Q	1.93%	9.36%	8.52%	8.84%	3.00 %
1-month LIBOR + 4%	2.33%	9.68%	7.33%	6.34%	5.68%
Real Assets	(0.36%)	4.20%	1.52%	4.65%	_
Principal DRA	(0.36%)	4.20%	1.52%	4.65%	•
Principal DRA Blend Index	0.40%	5.53%	1.75%	4.14%	-
Total Real Estate	0.24%	(9.43%)	4.33%	4.55%	7.33%
Real Estate	0.24%	(9.43%)	4.33%	4.55%	7.33%
Blended Benchmark	(2.38%)	(12.33%)	2.81%	2.98%	6.13%
Total Fund	0.69%	7.82%	4.35%	7.51%	6.94%
Total Fund Index	2.08%	11.07%	3.67%	7.40%	6.75%

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



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.

	12/2023- 6/2024	2023	2022	2021	2020
Net of Fee Returns					
Total Domestic Equity Russell 3000 Index	6.97% 13.56%	19.38% 25.96%	(15.89%) (19.21%)	27.88% 25.66%	16.09% 20.89%
BlackRock Russell 1000 Value	6.62%	11.46%	(7.55%)	25.17%	3.27%
Russell 1000 Value Index	6.62%	11.46%	(7.54%)	25.16%	2.80%
DFA Large Cap Value	7.90%	12.12%	(5.12%)	27.35%	(1.78%)
Russell 1000 Value Index	6.62%	11.46%	(7.54%)	25.16%	2.80%
Northern Trust Global	15.28%	26.29%	(18.09%)	28.68%	18.41%
S&P 500 Index	15.29%	26.29%	(18.11%)	28.71%	18.40%
Polen Capital Management	6.96%	37.75%	(37.97%)	24.34%	34.59%
S&P 500 Index	15.29%	26.29%	(18.11%)	28.71%	18.40%
Earnest Partners LLC	2.41%	16.95%	(15.58%)	25.59%	20.96%
Russell MidCap Index	4.96%	17.23%	(17.32%)	22.58%	17.10%
DFA Small Cap Value	(0.17%)	21.04%	(2.12%)	40.38%	3.74%
Russell 2000 Value Index	(0.85%)	14.65%	(14.48%)	28.27%	4.63%
Total Global Equity MSCI World	10.81% 11.75%	21.88% 23.79%	(17.55%) (18.14%)	18.80% 21.82%	18.48% 15.90%
BlackRock Global Alpha Tilts	13.57%	22.93%	(16.89%)	18.67%	16.39%
MSCI ACWI Gross	11.58%	22.81%	(17.96%)	19.04%	16.82%
MFS Investment Management MSCI ACWI Gross	7.40%	20.50%	(18.50%)	19.05%	21.88%
	11.58%	22.81%	(17.96%)	19.04%	16.82%
Total International Equity MSCI EAFE Index	6.21% 5.34%	22.25% 18.24%	(15.75%) (14.45%)	12.57% 11.26%	10.28% 7.82%
AQR Emerging Markets	11.61%	17.92%	(20.93%)	0.47%	17.38%
MSCI EM Gross	7.68%	10.27%	(19.74%)	(2.22%)	18.69%
Brandes Investment Partners MSCI EAFE Index	4.98%	30.84%	(7.15%)	14.00%	(1.69%)
	5.34%	18.24%	(14.45%)	11.26%	7.82%
William Blair & Company	5.24%	15.50%	(28.91%)	12.77%	30.84%
MSCI ACWI ex-US Index	6.04%	16.21%	(15.57%)	8.29%	11.13%
DFA International Small Cap MSCI EAFE Small	6.35%	17.52%	(9.80%)	15.89%	0.81%
	0.51%	13.16%	(21.39%)	10.10%	12.34%

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



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.

	12/2023-						
	6/2024	2023	2022	2021	2020		
Net of Fee Returns							
Total Fixed Income	(0.08%)	6.52%	(6.93%)	(0.45%)	(1.91%)		
Blmbg Aggregate	(0.71%)	5.53%	(13.01%)	(1.54%)	7.51%		
BlackRock US Govt Bond	(0.72%)	4.22%	(12.44%)	-	-		
Blmbg Government	(0.83%)	4.09%	(12.32%)	(2.28%)	7.94%		
Reams Asset Management	(0.23%)	6.62%	(11.50%)	(1.36%)	17.11%		
Blmbg Aggregate	(0.71%)	5.53%	(13.01%)	(1.54%)	7.51%		
Loomis, Sayles & Company, L.P.	0.80%	8.41%	(12.26%)	1.98%	6.99%		
Blmbg Aggregate	(0.71%)	5.53%	(13.01%)	(1.54%)	7.51%		
Total Private Equity	3.35%	2.89%	(4.88%)	67.66%	22.14%		
Private Equity Benchmark	24.19%	22.76%	(15.10%)	34.08%	17.99%		
Abbott Capital Management 2010	(1.54%)	(6.70%)	(16.87%)	65.55%	24.43%		
Abbott Capital Management 2011	(1.42%)	(7.55%)	(18.97%)	76.29%	29.13%		
Abbott Capital Management 2012	(1.58%)	(3.85%)	(13.14%)	72.85%	29.04%		
Abbott Capital Management 2013	(0.98%)	(2.85%)	(12.51%)	70.21%	28.65%		
Abbott Capital Management 2014	(1.16%)	(3.96%)	(9.41%)	75.52%	26.51%		
Abbott Capital Management 2015	2.45%	3.60%	(0.79%)	75.81%	16.62%		
Abbott Capital Management 2016	4.90%	5.24%	2.90%	71.04%	20.02%		
Abbott Capital Management 2018	2.38%	3.96%	7.44%	47.06%	22.73%		
Abbott Capital Management 2019	4.07%	3.43%	7.54%	57.22%	10.04%		
Abbott Capital Management 2020	4.70%	1.70%	0.81%	65.36%	-		
Abbott Capital Management 2021	2.89%	2.00%	1.72%	-	_		
Abbott Capital Management 2022	(1.06%)	4.87%	-	_	_		
Mesirow V	3.95%	(0.80%)	(19.60%)	78.52%	21.39%		
Mesirow IV	2.75%	(0.52%)	(13.41%)	88.26%	29.10%		
Mesirow VII	4.03%	5.78%	(0.68%)	60.27%	16.43%		
Mesirow VIII	3.72%	0.22%	(2.15%)	10.14%	10.4370		
NB Secondary Opp Fund III	3.37%	17.34%	(2.13%)	30.34%	4.23%		
NB Secondary Opp Fund IV	6.42%	4.64%	0.29%	48.73%	14.80%		
NB Secondary Opp Fund V Private Advisors VI	12.38%	21.41% 4.68%	9.97%	- 00.700/	16.54%		
	8.90%			83.78%			
Private Advisors VII	4.34%	7.32%	21.61%	52.55%	3.97%		
Private Advisors VIII	6.34%	9.80%	27.61%	47.25%	15.78%		
Private Advisors IX	4.11%	13.33%	24.00%	37.25%	-		
Apogem Capital X	1.92%	-	-	-	-		
Absolute Return	5.19%	6.09%	26.46%	8.77%	(14.21%)		
90 Day T-Bill + 3%	4.08%	8.01%	4.46%	3.05%	3.67%		
Aptitude	6.29%	5.24%	-	-	-		
1-month LIBOR + 4%	4.71%	9.38%	5.80%	4.11%	4.63%		
UBS A & Q	4.47%	6.48%	8.85%	8.08%	12.18%		
1-month LIBOR + 4%	4.71%	9.38%	5.80%	4.11%	4.63%		
Real Assets	1.31%	3.31%	(5.91%)	17.51%	4.02%		
Principal DRA	1.31%	3.31%	(5.91%)	17.51%	4.02%		
Principal DRA Blend Index	1.07%	4.31%	(5.07%)	15.87%	2.08%		
Total Real Estate	(3.97%)	(10.54%)	13.58%	23.45%	0.39%		
Real Estate	(3.97%)	(10.54%)	13.58%	23.45%	0.39%		
Blended Benchmark	(7.62%)	(13.08%)	21.68%	14.83%	0.89%		
Total Fund	3.49%	9.97%	(6.51%)	18.80%	6.59%		
Total Fund Index	6.08%	12.43%	(10.58%)	12.77%	12.25%		
	3.0070	10 / 0	(0		

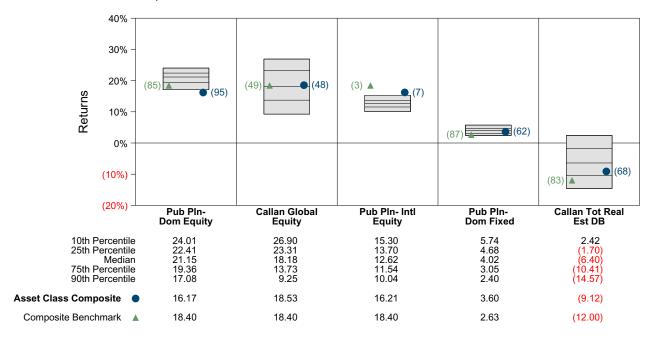
^{*}Net returns are simulated with the use of fee schedules through March 31, 2019. Actual fees paid are used thereafter.



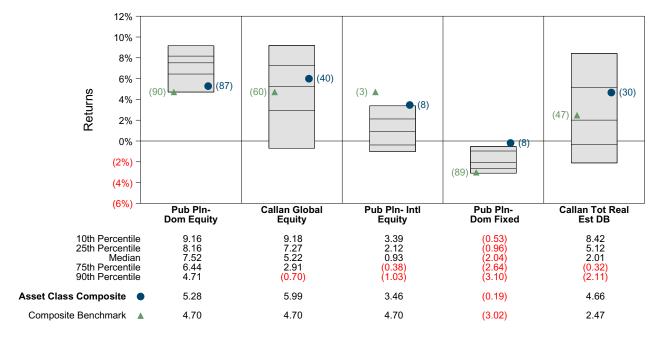
Asset Class Rankings

The charts below show the rankings of each asset class component of the Total Fund relative to appropriate comparative databases.

Total Asset Class Performance One Year Ended June 30, 2024



Total Asset Class Performance Three Years Ended June 30, 2024



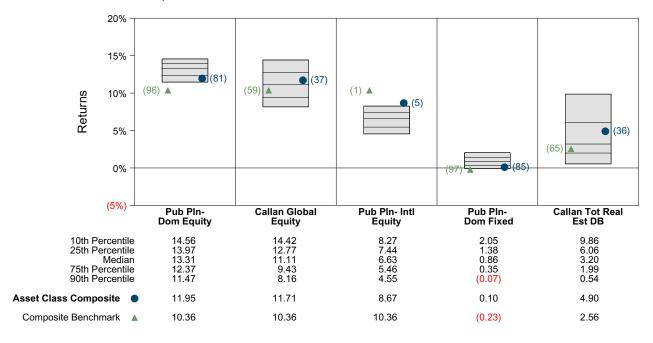
^{*} Current Quarter Target = 39.0% MSCI ACWI IMI, 29.0% Blmbg:Aggregate, 12.0% Russell 3000 Index lagged 3 months+2.0%, 9.7% NCREIF NFI-ODCE Val Wt Nt lagged 3 months, 7.0% 3-month Treasury Bill+3.0% and 3.3% Principal DRA Blend Index.



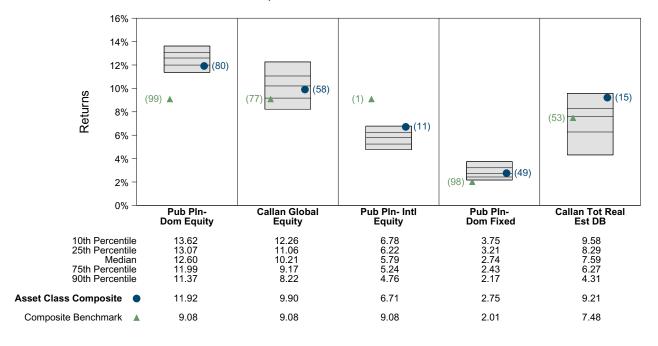
Asset Class Rankings

The charts below show the rankings of each asset class component of the Total Fund relative to appropriate comparative databases.

Total Asset Class Performance Five Years Ended June 30, 2024



Total Asset Class Performance Thirteen and One-Half Years Ended June 30, 2024



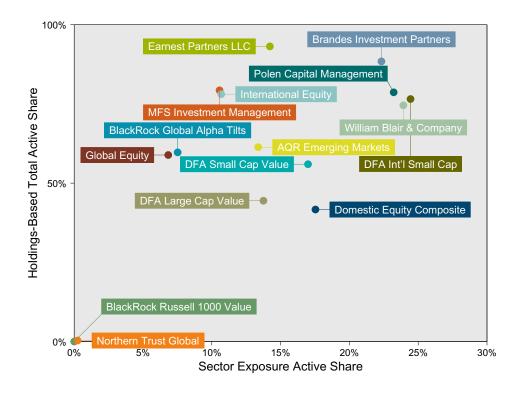
^{*} Current Quarter Target = 39.0% MSCI ACWI IMI, 29.0% Blmbg:Aggregate, 12.0% Russell 3000 Index lagged 3 months+2.0%, 9.7% NCREIF NFI-ODCE Val Wt Nt lagged 3 months, 7.0% 3-month Treasury Bill+3.0% and 3.3% Principal DRA Blend Index.



Active Share Structure Analysis For One Quarter Ended June 30, 2024

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, 2024



		Total	Non-ldx	Sector	Number	Security	
	Index	Act Share	Act Share	Act Share	Securities	Diverse	
Domestic Equity Composite	Russell 3000	41.67%	0.93%	17.53%	1756	99.78	
BlackRock Russell 1000 Value	Russell 1000 Value	0.00%	0.00%	0.00%	846	69.21	
DFA Large Cap Value	Russell 1000 Value	44.44%	0.77%	13.75%	333	53.39	
Northern Trust Global	S&P 500	0.31%	0.02%	0.24%	502	27.47	
Polen Capital Management	S&P 500	78.66%	3.66%	23.22%	23	6.62	
Earnest Partners LLC	Russell MidCap	93.16%	10.11%	14.22%	58	22.24	
DFA Small Cap Value	Russell 2000 Value	55.97%	18.03%	16.99%	925	121.19	
Global Equity	MSCI World	58.87%	7.54%	6.83%	443	38.54	
BlackRock Global Alpha Tilts	MSCI ACWI GD	59.71%	5.08%	7.52%	391	29.89	
MFS Investment Management	MSCI ACWI GD	79.30%	1.48%	10.56%	74	19.91	
International Equity	MSCI EAFE	78.07%	28.64%	10.69%	2416	83.51	
AQR Emerging Markets	MSCI EM GD	61.34%	2.42%	13.37%	316	30.82	
Brandes Investment Partners	MSCI EAFE	88.42%	14.53%	22.33%	70	23.65	
William Blair & Company	MSCI ACWI xUS GD	74.55%	10.65%	23.92%	262	46.03	
DFA Int'l Small Cap	MSCI EAFE Small	76.54%	17.65%	24.44%	1815	146.33	



Current Holdings Based Style Analysis Total Equity Composite As of June 30, 2024

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.

> Europe Mid Eas

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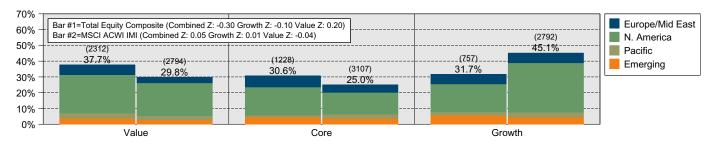
Style Map vs Callan Public Fund Spr DB Holdings as of June 30, 2024



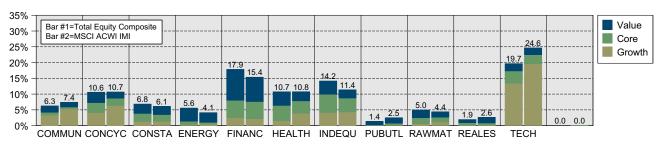
Style Exposure Matrix Holdings as of June 30, 2024

	Value	Core	Growth	Total
	29.8% (2794)	25.0% (3107)	45.1% (2792)	100.0% (8693)
Total	37.7% (2312)	30.6% (1228)	31.7% (757)	100.0% (4297)
	2.7% (982)	3.7% (1131)	4.4% (1156)	10.8% (3269)
erging	, ,	, ,	` ,	, ,
	3.8% (160)	4.5% (155)	5.6% (203)	13.9% (518)
racilic	2.7% (501)	2.6% (496)	3.2% (469)	8.6% (1466)
Pacific	3.3% (756)	1.2% (259)	2.2% (114)	6.7% (1129)
	20.8% (899)	13.9% (960)	31.3% (718)	66.0% (2577)
merica	24.3% (1005)	17.9% (563)	17.6% (302)	39.9 /6 (1670)
a East	3.6% (412) 24.3% (1005)	4.9% (520) 17.9% (563)	6.2% (449) 17.8% (302)	14.7% (1381) 59.9% (1870)
urope/ d East	6.3% (391)	7.0% (251)	6.1% (138)	19.5% (780)

Combined Z-Score Style Distribution Holdings as of June 30, 2024



Sector Weights Distribution Holdings as of June 30, 2024





Current Holdings Based Style Analysis Total Equity Composite As of June 30, 2024

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.

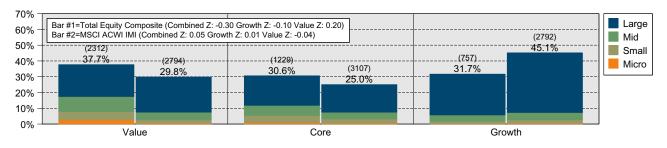
Style Map vs Callan Public Fund Spr DB Holdings as of June 30, 2024



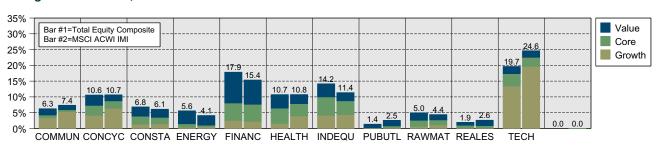
Style Exposure Matrix Holdings as of June 30, 2024

	Value	Core	Growth	Total
	29.8% (2794)	25.0% (3107)	45.1% (2792)	100.0% (8693)
Total	07.770 (2312)	00.070 (1223)	01.170 (131)	100.070 (4230)
	37.7% (2312)	30.6% (1229)	31.7% (757)	100.0% (4298)
	0.5% (939)	0.6% (977)	0.4% (691)	1.5% (2607)
Micro				
	2.5% (1346)	0.9% (385)	0.2% (155)	3.6% (1886)
	2.1% (1002)	2.6% (1303)	2.2% (1176)	6.9% (3481)
Small				
	5.4% (423)	4.5% (407)	1.6% (165)	11.4% (995)
	5.0% (533)	4.4% (563)	4.6% (642)	14.1% (1738)
Mid				
	9.5% (305)	6.4% (249)	3.9% (246)	19.8% (800)
	22.2% (320)	17.5% (264)	37.9% (283)	77.6% (867)
Large	, ,	, ,	, ,	, ,
	20.3% (238)	18.8% (188)	26.0% (191)	65.1% (617)

Combined Z-Score Style Distribution Holdings as of June 30, 2024



Sector Weights Distribution Holdings as of June 30, 2024

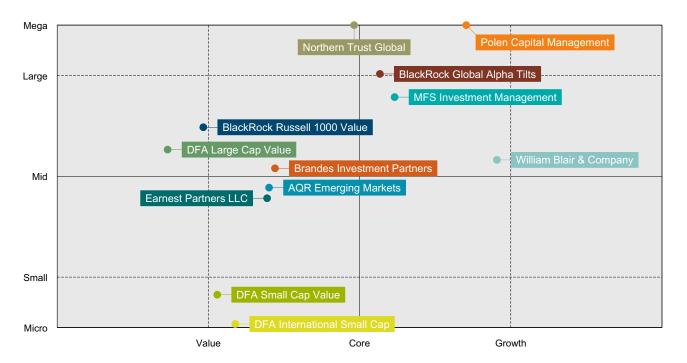




Global Holdings Based Style Analysis For One Quarter Ended June 30, 2024

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, 2024



	Weight	Wtd Median	Combined	Growth	Value	Number of	Security
	%	Mkt Cap	Z-Score	Z-Score	Z-Score	Securities D	Diversification
BlackRock Russell 1000 Value	8.75%	78.64	(1.08)	(0.45)	0.63	846	69.21
DFA Large Cap Value	6.15%	52.99	(1.34)	(0.45)	0.89	333	53.39
Northern Trust Global	8.91%	279.53	0.01	(0.00)	(0.02)	502	27.47
Polen Capital Management	5.31%	373.95	0.75	0.24	(0.51)	23	6.62
Earnest Partners LLC	7.10%	18.26	(0.62)	(0.32)	0.30	58	22.24
DFA Small Cap Value	7.87%	3.07	(0.98)	(0.17)	0.81	925	121.19
MFS Investment Management	8.72%	113.25	0.28	(0.06)	(0.34)	74	19.91
BlackRock Global Alpha Tilts	11.28%	142.43	0.19	0.07	(0.12)	391	29.89
AQR Emerging Markets	4.88%	20.21	(0.60)	(0.03)	0.57	316	30.82
Brandes Investment Partners	13.91%	31.51	(0.56)	(0.19)	0.37	70	23.65
William Blair & Company	10.04%	41.15	0.95	0.30	(0.64)	262	46.03
DFA International Small Cap	7.09%	1.99	(0.85)	(0.16)	0.69	1815	146.33



Education



2Q24

Quarterly Highlights

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

New Research from Callan's Experts

Quantifying Sequence-of-Returns Risk for Institutional Investors | This paper shows institutional investors how to quantify sequence-of-returns risk in a single number. The metric is flexible enough to apply to strategic asset-allocation decisions across a variety of investor types.

Sector-Specialist Strategies on the Rise: Do They Make Sense for Large LPs' Portfolios? | To distinguish themselves in a competitive market, more private equity general partners are offering sector-specialist strategies, which focus on investing in a specific industry.

2024 Asset Manager DEI Study | The study offers a high-level assessment of the degree to which asset management organizations have established diversity, equity, and inclusion (DEI) policies and procedures.

2024 DC Trends Survey | This survey provides extensive information for DC plan sponsors to use in improving and benchmarking their plans.

Webinar Replays

Research Café: ESG Interview Series | This session features Mark Wood, Callan ESG team member, interviewing Nicole Wubbena, fellow ESG and Global Manager Research group member. Their discussion focuses on impact investing in public equity.

Blog Highlights

<u>Commercial</u> Real <u>Estate</u> <u>Capital</u> <u>Markets</u> <u>and</u> <u>Institutional</u> <u>Investors</u> | A blog post from Christine Mays on the state of the commercial real estate capital markets.

<u>Is This a Time for Active Managers to Shine?</u> | Tony Lissuzzo of Callan's Nonprofit Group writes on how dispersion affects active management.

Quarterly Updates

<u>Private Equity Update, 1Q24</u> | A high-level summary of private equity activity in the quarter through all the investment stages

Active vs. Passive Charts, 1Q24 | A comparison of active managers alongside relevant benchmarks over the long term

<u>Market Pulse</u>, <u>1Q24</u> | A quarterly market reference guide covering trends in the U.S. economy, developments for institutional investors, and the latest data on the capital markets

<u>Capital Markets Review, 1Q24</u> | Analysis and a broad overview of the economy and public and private markets activity each quarter across a wide range of asset classes

<u>Hedge Fund Update, 1Q24</u> | Commentary on developments for hedge funds and multi-asset class (MAC) strategies

Real Assets Update, 1Q24 | A summary of market activity for real assets and private real estate during the quarter

<u>Private Credit Update</u>, <u>1Q24</u> | A review of performance and fundraising activity for private credit during the quarter

<u>Callan Target Date Index™, 1Q24</u> | Tracks the performance and asset allocation of available target date mutual funds and CITs

<u>Callan DC Index™, 1Q24</u> | Provides underlying fund performance, asset allocation, and cash flows of more than 100 large defined contribution plans representing approximately \$400 billion in assets.

Events

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

Please mark your calendar and look forward to upcoming invitations:

October Regional Workshops

October 22, 2024 – Denver October 23, 2024 – Chicago

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

Education: By the Numbers

Unique pieces of research the Institute generates each year

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

4,845 Total attendees of the "Callan College" since 1994

Education

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

Introduction to Investments September 24-26, 2024 – Virtual

This program familiarizes institutional investor trustees and staff and asset management advisers with basic investment theory, terminology, and practices. This course is designed for individuals with less than two years of experience with asset-management oversight and/or support responsibilities.

Our virtual sessions are held over two to three days with virtual modules of 2.5-3 hours, while in-person sessions run either a full day or one-and-a-half days. 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-education



"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

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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
abrdn
Acadian Asset Management LLC
ACR Alpine Capital Research
Adams Street Partners, LLC
Aegon Asset Management
AEW Capital Management, L.P.
AllianceBernstein
Allspring Global Investments, LLC
Altrinsic Global Advisors, LLC
American Century Investments
Amundi US, Inc.
Antares Capital LP
Apollo Global Management, Inc.
AQR Capital Management
Ares Management LLC
ARGA Investment Management, LP
Ariel Investments, LLC
Aristotle Capital Management, LLC

Manager Name
Atlanta Capital Management Co., LLC
Audax Private Debt
AXA Investment Managers
Baillie Gifford International, LLC
Baird Advisors
Barings LLC
Baron Capital Management, Inc.
Barrow, Hanley, Mewhinney & Strauss, LLC
BentallGreenOak
Beutel, Goodman & Company Ltd.
BlackRock
Blackstone Group (The)
Blue Owl Capital, Inc.
BNY Mellon Asset Management
Boston Partners
Brandes Investment Partners, L.P.
Brandywine Global Investment Management, LLC
Brookfield Asset Management Inc.

Manager Name

Brown Brothers Harriman & Company

Brown Investment Advisory & Trust Company

Capital Group

CastleArk Management, LLC

Cercano Management LLC

Champlain Investment Partners, LLC

CIBC Asset Management Inc.

CIM Group, LP

ClearBridge Investments, LLC

Cohen & Steers Capital Management, Inc.

Columbia Threadneedle Investments

Comvest Partners

Cooke & Bieler, L.P.

Crescent Capital Group LP

Dana Investment Advisors, Inc.

D.E. Shaw Investment Management, LLC

DePrince, Race & Zollo, Inc.

Dimensional Fund Advisors L.P.

Doubleline

DWS

EARNEST Partners, LLC

Fayez Sarofim & Company

Federated Hermes, Inc.

Fidelity Institutional Asset Management

Fiera Capital Corporation

First Eagle Investment Management, LLC

First Hawaiian Bank Wealth Management Division

Fisher Investments

Franklin Templeton

Fred Alger Management, LLC

GAMCO Investors, Inc.

Glenmeade Investment Management, LP

GlobeFlex Capital, L.P.

Goldman Sachs

Golub Capital

GW&K Investment Management

Harbor Capital Group Trust

HarbourVest Partners, LLC

Hardman Johnston Global Advisors LLC

Heitman LLC

Manager Name

Hotchkis & Wiley Capital Management, LLC

HPS Investment Partners, LLC

IFM Investors

Impax Asset Management LLC

Income Research + Management

Insight Investment

Intercontinental Real Estate Corporation

Invesco

J.P. Morgan

Janus

Jennison Associates LLC

Jobs Peak Advisors

Kayne Anderson Rudnick Investment Management, LLC

King Street Capital Management, L.P.

Kohlberg Kravis Roberts & Co. L.P. (KKR)

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

Manulife Investment Management

Manulife | CQS Investment Management

Marathon Asset Management, L.P.

Maverick Real Estate Partners

Mawer Investment Management Ltd.

MetLife Investment Management

MFS Investment Management

Mondrian Investment Partners Limited

Montag & Caldwell, LLC

Morgan Stanley Investment Management

Mount Lucas Management LP

MUFG Bank, Ltd.

Natixis Investment Managers

Neuberger Berman

Newmarket Capital

Newton Investment Management



Manager Name

Nipun Capital, L.P.

NISA Investment Advisors LLC

Northern Trust Asset Management

Nuveen

Oaktree Capital Management, L.P.

Orbis Investment Management Limited

P/E Investments

Pacific Investment Management Company

Parametric Portfolio Associates LLC

Partners Group (USA) Inc.

Pathway Capital Management, LP

Peavine Capital

Peregrine Capital Management, LLC

PGIM DC Solutions

PGIM Fixed Income

PGIM Quantitative Solutions LLC

Pictet Asset Management

PineBridge Investments

Polen Capital Management, LLC

PPM America, Inc.

Pretium Partners, LLC

Principal Asset Management

Raymond James Investment Management

RBC Global Asset Management

Red Cedar Investment Management

Regions Financial Corporation

S&P Dow Jones Indices

Sands Capital Management

Manager Name

Schroder Investment Management North America Inc.

Segall Bryant & Hamill

SLC Management

Star Mountain Capital, LLC

State Street Global Advisors

Strategic Global Advisors, LLC

T. Rowe Price Associates, Inc.

TD Global Investment Solutions - TD Epoch

The TCW Group, Inc.

Thompson, Siegel & Walmsley LLC

TPG Angelo Gordon

Tweedy, Browne Company LLC

UBS Asset Management

VanEck

Vaughan Nelson Investment Management

Versus Capital Group

Victory Capital Management Inc.

Virtus Investment Partners, Inc.

Vontobel Asset Management

Voya

Walter Scott & Partners Limited

WCM Investment Management

Wellington Management Company LLP

Western Asset Management Company LLC

Westfield Capital Management Company, LP

William Blair & Company LLC

Xponance, Inc.



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