Callan

December 31, 2021

City of Milwaukee Employes' Retirement System

Investment Measurement Service Quarterly Review

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U.S. EQUITY

Returns grind higher despite mounting concerns

- S&P 500 posted a strong 11.0% gain in 4Q21; large cap growth (Russell 1000 Growth) was the top performer, which contrasted with the worst-performing asset class, small cap growth (Russell 2000 Growth).
- The new Omicron variant, continued supply chain disruptions, and renewed fears of persistent inflation pushed investors into the perceived safety of the largest stocks.
- S&P 500 sector results were mixed, with Real Estate (+17.5%) posting the top returns alongside Technology (+16.7%) and Materials (+15.2%); Communication Services (0.0%) and Financials (+4.6%) lagged broad returns.
- In 2021, small value outperformed small growth by over 2,500 bps (Russell 2000 Value: 28.3% vs. Russell 2000 Growth: 2.8%), a stark reversal from 2020 and a pattern consistent with periods of robust GDP growth.

Index concentration driving positive returns...

- The 10 largest stocks in the S&P 500 comprised 30.5% of the index but accounted for 65% of the 2021 return.
- During 4Q21, top 10 weights accounted for ~40% of return.

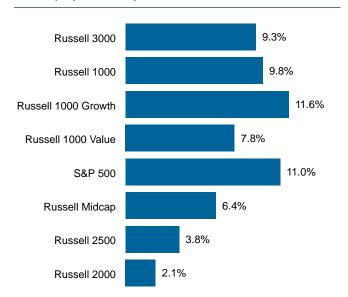
...but this may be hiding underlying weakness

 Nearly 10% of Russell 3000 stocks fell by 35% or more in 2021, which is unusual for a year when market returns were in excess of 25%.

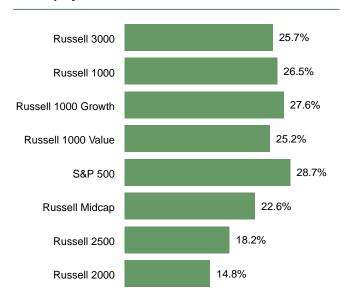
Market capitalization, style driving divergence in returns

- Mega-cap growth (Russell Top 200 Growth) was the strongest performer in both 4Q21 and 2021.
- Growth style returns highly correlated with market capitalization in both 4Q21 and 2021 (higher market capitalization = high return).
- Within micro-, small-, and smid-cap growth, Health Care (especially biotech/pharma) was biggest detractor to returns.
- Value returns correlated with market capitalization in 4Q21; for 2021, value returns did not experience much divergence.

U.S. Equity: Quarterly Returns

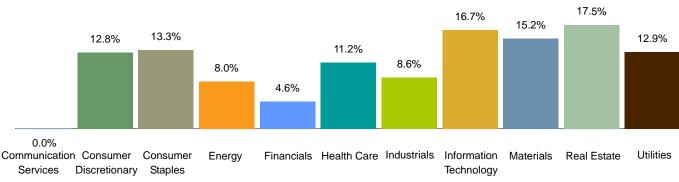


U.S. Equity: One-Year Returns



Sources: FTSE Russell, S&P Dow Jones Indices

S&P Sector Returns, Quarter Ended 12/31/21







GLOBAL EQUITY

Omicron takes center stage

- A recovery-driven market shifted back to COVID favorites, boosting Information Technology stocks.
- Small cap underperformed large amid global growth concerns.
- Emerging markets struggled relative to developed markets as China experienced significant pressure from an economic slowdown and its regulatory crackdown.

Stalled recovery

- As the new variant took hold, Energy and Communication Services lagged on fear of restrained growth.
- Japan suffered from both supply chain issues and economic constraints from COVID-19.
- Growth and momentum factors outperformed in developed markets but not in emerging markets.

U.S. dollar vs. other currencies

 The U.S. dollar rose against other major currencies as tapering accelerated alongside the expectation for 2022 rate hikes, which notably detracted from global ex-U.S. results.

Growth vs. value

 Inflationary pressures and the ultimate rebound from COVID-19 supported value's leadership for the full year, despite the shift to growth in 4Q21.

Regulation has spooked Chinese market

- Although regulation is not new in China, the duration, scope, and intensity of the current regime are unprecedented.
- Regulations have been centered on antitrust, financial markets, data/national security, and social welfare to enhance sustainability of its economy.
- Regulatory uncertainty should subside as China focuses on implementation.

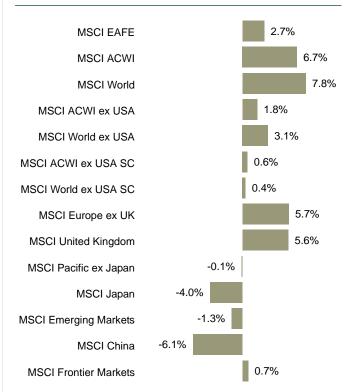
Inflation is expected to normalize in a few years

- Forecasted year-over-year core CPI is expected to reach its peak between 1Q22 and 2Q22.
- Inflationary environment by and large has shifted central banks to contractionary policy.

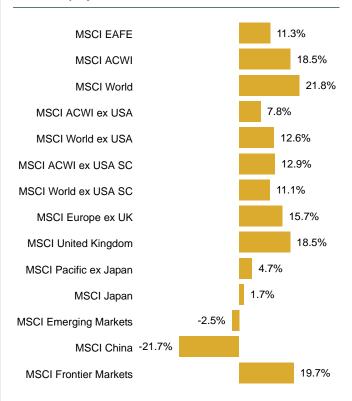
Rise in inflation expectations tends to stoke value

- Correlation between cyclical sectors and inflation/interest rate expectations generally has been positive.
- Growth relative to value is more vulnerable as interest rates normalize.
- Global recovery from COVID and deficit in Energy should support value.

Global Equity: Quarterly Returns



Global Equity: One-Year Returns



Source: MSCI



U.S. FIXED INCOME

Treasury yields again unchanged

- 10-year at 1.52% at 9/30 and 12/31, up slightly from 1.45% on 6/30.
- TIPS outperformed nominal Treasuries and 10-year breakeven spreads widened to 2.56%.
- Real yields remain solidly in negative territory.

Bloomberg Aggregate was flat, literally

- Spread sectors (Agencies, ABS, CMBS, MBS, and Credit) all underperformed UST by a modest amount (but positive YTD).
- Yield curve flattened; curve positioning had a meaningful impact on returns in 4Q.

High yield and leveraged performed relatively well

- Spreads remain near historic tights.
- High yield issuers' default rate declined to a record low in December (J.P. Morgan).
- New issuance hit a record for the second year in a row as issuers looked to finance at relatively low rates.

Munis outperformed Treasuries

 Lower-quality bonds continued their trend of outperformance as investors sought yield.

Inflation is being felt, indicated by several measures

- Annual CPI jumped to 7.0% in December—its eighth consecutive reading above 5% and the largest 12-month increase since the period ending June 1982.
- Increases for shelter and for used cars/trucks were the largest contributors to the seasonally adjusted all-items increase.
- Even service inflation, which had declined initially, has since recovered and is on an upward trend.

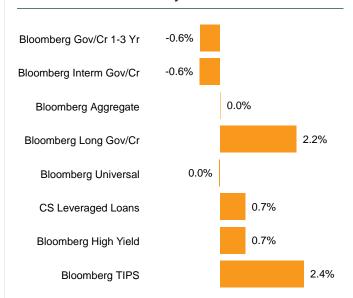
Fed has turned more hawkish than expected

- Fed announced a doubling of the pace of tapering and an upward revision to the anticipated path of rate hikes.
- FOMC participants now expect three rate hikes in 2022 to bring the targeted range to 0.75%-1.0% by year-end.

Spreads have returned to tights

- Fundamentals remain strong and default expectations low.
- Revenue, profits, and free cash flow at or near cycle highs.
- Gross and net leverage trending lower while interest coverage trends higher.

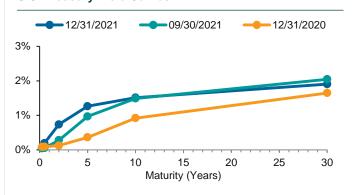
U.S. Fixed Income: Quarterly Returns



U.S. Fixed Income: One-Year Returns



U.S. Treasury Yield Curves



Sources: Bloomberg, Credit Suisse



GLOBAL FIXED INCOME

Global fixed income flat on a hedged basis

- Returns were muted and U.S. dollar strength eroded returns for unhedged U.S. investors in both 4Q and 2021.
- Yen was a notable underperformer in developed markets, falling 10% for the year.

Emerging market debt posted negative returns

- Emerging market debt indices underperformed most other fixed income sectors in 2021.
- Currencies fared the worst vs. the U.S. dollar; the Turkish lira sank 44% on spiking inflation.

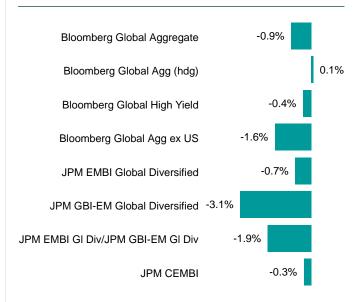
Global outlook may shift lower with regional variance

 Moderating and differentiated outlook for various regions reflects certain DM and EM economies shifting to tightening balanced by others managing legacy issues.

Central bank policy is mixed

- The U.K. has led the way with interest rate hikes as the BOE expects inflation to peak in April 2022.
- Europe and Japan continue to have below-target inflation and are expected to maintain relatively accommodating monetary policy.
- EM central banks, having moved early to battle inflation, may be moving to a more late-cycle posture.

Global Fixed Income: Quarterly Returns



Global Fixed Income: One-Year Returns



Change in 10-Year Global Government Bond Yields



Sources: Bloomberg, JP Morgan



Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of December 31, 2021, with the distribution as of September 30, 2021.

Asset Distribution Across Investment Managers

	December 31,	2021	September 30	, 2021
	Market Value	Weight	Market Value	Weight
otal Domestic Equity	\$1,225,055,592	19.70%	\$1,227,007,328	20.36%
BlackRock Russell 1000 Value	162,342,754	2.61%	157,204,438	2.61%
DFA Large Cap Value	160,098,792	2.57%	155,476,187	2.58%
Northern Trust Global	329,597,979	5.30%	329,818,153	5.47%
Polen Capital Management	155,925,522	2.51%	161,511,450	2.68%
Earnest Partners LLC	124,222,736	2.00%	122,106,245	2.03%
DFA Small Cap Value	198,175,261	3.19%	204,467,879	3.39%
CastleArk Management	94,692,549	1.52%	96,422,976	1.60%
otal Global Equity	\$514,044,092	8.27%	\$485,210,271	8.05%
BlackRock Global Alpha Tilts	310,576,017	4.99%	294,733,721	4.89%
MFS Investment Management	203,468,075	3.27%	190,476,550	3.16%
atal International Equity	¢072 020 E0E	4E 669/	¢062.004.640	45 000/
otal International Equity	\$973,838,505	15.66%	\$962,901,640	15.98%
AQR Emerging Markets	94,625,993	1.52%	95,786,113	1.59%
Brandes Investment Partners	386,359,448	6.21%	385,472,498	6.40%
William Blair & Company	294,789,424	4.74%	287,385,597	4.77%
DFA International Small Cap	198,063,639	3.19%	194,257,432	3.22%
otal Fixed Income	\$1,384,433,408	22.26%	\$1,383,740,549	22.96%
BlackRock US Debt Idx Fd		-	495,398,367	8.22%
BlackRock US Govt Bond	424,668,206	6.83%	-	-
Reams Asset Management	516,683,840	8.31%	444,888,631	7.38%
Loomis, Sayles & Company, L.P.	443,081,362	7.13%	443,453,551	7.36%
otal Private Equity	\$770,114,625	12.39%	\$738,881,640	12.26%
Abbott Capital Management 2010	29,880,063	0.48%	30,906,489	0.51%
Abbott Capital Management 2011	61,089,194	0.98%	61,603,196	1.02%
Abbott Capital Management 2012	51,626,793	0.83%	52,494,116	0.87%
Abbott Capital Management 2013	50,204,822	0.81%	49,934,970	0.83%
Abbott Capital Management 2014	54,745,588	0.88%	55,458,521	0.92%
Abbott Capital Management 2015	38,092,584	0.61%	37,535,606	0.62%
Abbott Capital Management 2016	28,579,416	0.46%	25,872,586	0.43%
Abbott Capital Management 2018	17,222,563	0.28%	14,263,040	0.24%
Abbott Capital Management 2019	13,385,148	0.22%	9,973,914	0.17%
Abbott Capital Management 2020	11,889,608	0.19%	6,599,065	0.11%
Abbott Capital Management 2021	2,982,156	0.05%	2,781,391	0.05%
Mesirow V	63,691,304	1.02%	70,607,892	1.17%
Mesirow VI	94,498,955	1.52%	95,783,484	1.59%
Mesirow VII	114,916,758	1.85%	102,789,594	1.71%
Mesirow VIII	35,825,430	0.58%	23,044,301	0.38%
NB Secondary Opp Fund III	9,092,478	0.36 %	9,565,790	0.36%
NB Secondary Opp Fund IV		0.15%		
Private Advisors VI	19,525,286 26,546,578	0.43%	19,897,800 26,203,341	0.33% 0.43%
	26,546,578			
Private Advisors VII	15,765,520	0.25%	16,208,483	0.27%
Private Advisors VIII Private Advisors IX	13,462,488 17,091,893	0.22% 0.27%	12,569,382 14,788,679	0.21% 0.25%
Absolute Return	\$443,410,582	7.13%	\$423,977,407	7.04%
UBS A & Q	443,410,582	7.13%	423,977,407	7.04%
Real Assets	\$258,013,600	4.15%	\$246,493,503	4.09%
Principal DRA	258,013,600	4.15%	246,493,503	4.09%
otal Baal Estata	\$545,009,761	9 769/	¢500 000 770	8.30%
otal Real Estate Real Estate	\$ 345,009,761 545,009,761	8.76% 8.76%	\$500,028,779 500,028,779	8.30% 8.30%
otal Cash	\$104,133,681	1.67%	\$58,048,665	0.96%
Cash	104,133,681	1.67%	58,048,665	0.96%

\$6,218,053,846

100.0%



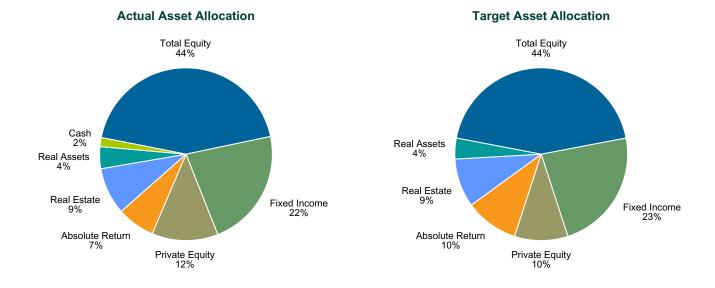
Total Fund

100.0%

\$6,026,289,783

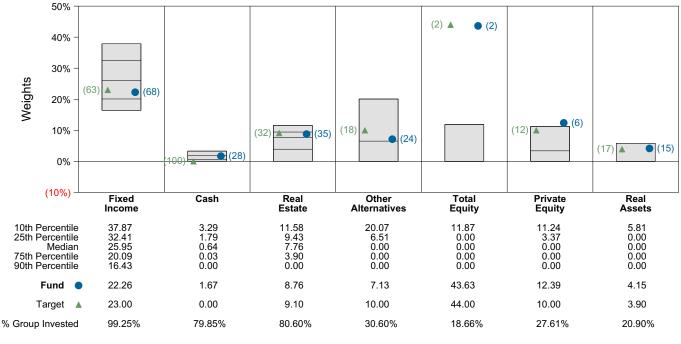
Actual vs Target Asset Allocation As of December 31, 2021

The top left chart shows the Fund's asset allocation as of December 31, 2021. 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	\$Millions Actual	Weight Actual	Target	Percent Difference	\$Millions Difference
Total Equity	2.713	43.6%	44.0%	(0.4%)	(23)
Fixed Income	1,384	22.3%	23.0%	(0.7%)	(46)
Private Equity	770	12.4%	10.0%	2.4%	148′
Absolute Return	443	7.1%	10.0%	(2.9%)	(178)
Real Estate	545	8.8%	9.1%	(0.3%)	`(21)
Real Assets	258	4.1%	3.9%	`0.2%´	`16 [′]
Cash	104	1.7%	0.0%	1.7%	104
Total	6.218	100.0%	100.0%		

Asset Class Weights vs Callan Public Fund Sponsor Database



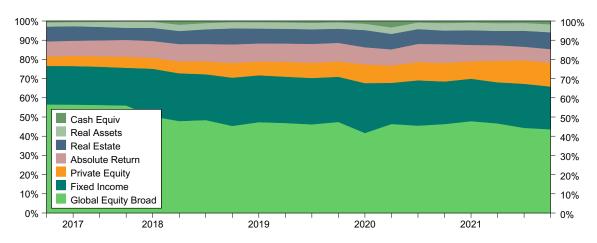
^{*} Current Quarter Target = 44.0% MSCI ACWI IMI, 23.0% Blmbg Aggregate, 10.0% Russell 3000 Index lagged 3 months+2.0%, 10.0% 3-month Treasury Bill+3.0%, 9.1% NCREIF NFI-ODCE Eq Wt Net lagged 3 months and 3.9% Principal Blended Benchmark.



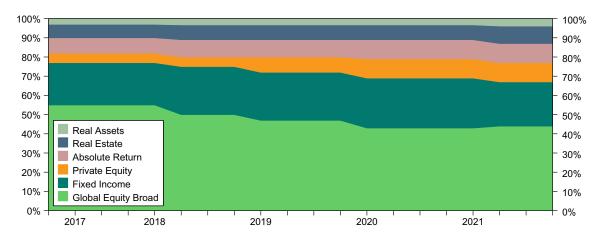
Actual vs Target Historical Asset Allocation

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.

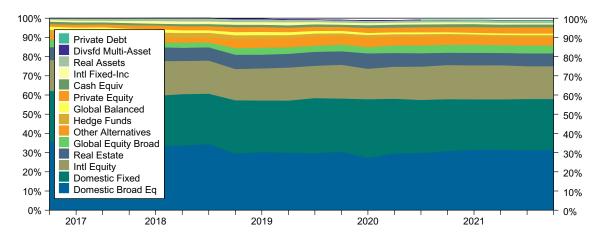
Actual Historical Asset Allocation



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 Blended Benchmark.



Total Fund Period Ended December 31, 2021

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 4.85% return for the quarter placing it in the 22 percentile of the Callan Public Fund Sponsor Database group for the quarter and in the 6 percentile for the last year.
- Total Fund's portfolio outperformed the Total Fund Reference Index by 1.23% for the quarter and outperformed the Total Fund Reference Index for the year by 6.17%.

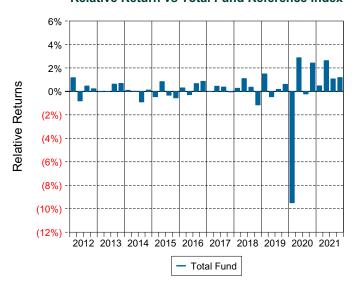
Quarterly Asset Growth

Beginning Market Value	\$6,026,289,783
Net New Investment	\$-100,902,017
Investment Gains/(Losses)	\$292,666,080
Ending Market Value	\$6,218,053,846

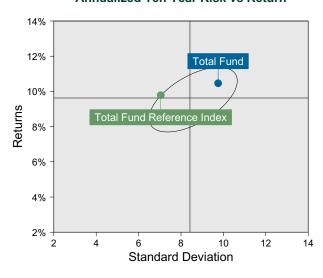
Performance vs Callan Public Fund Sponsor Database (Gross)



Relative Return vs Total Fund Reference Index



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



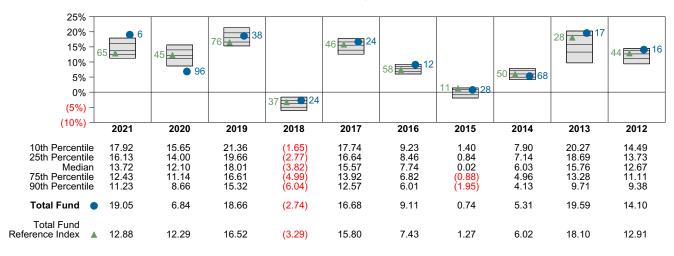


Total Fund Return Analysis Summary

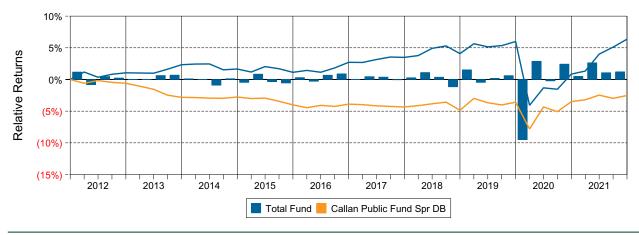
Return Analysis

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.

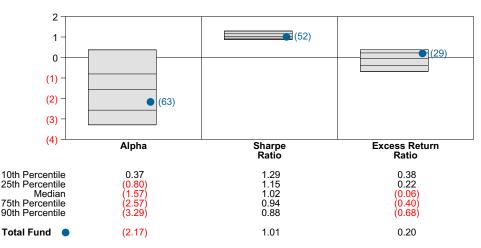
Performance vs Callan Public Fund Sponsor Database (Gross)



Cumulative and Quarterly Relative Return 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 December 31, 2021



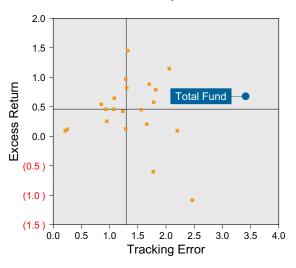


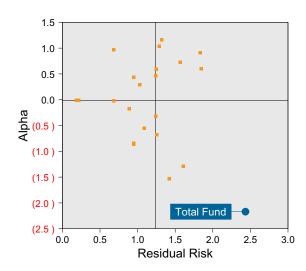
Total Fund Total Fund vs Target Risk Analysis

Risk Analysis

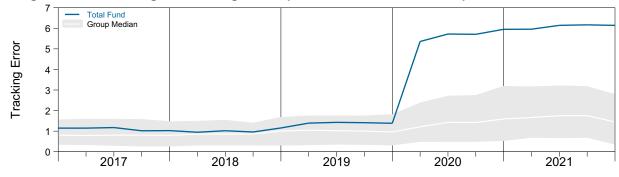
The graphs below analyze the performance and risk of the fund relative to the appropriate target mix. This relative performance is compared to a peer group of funds wherein each member fund is measured against its own target mix. The first scatter chart illustrates the relationship, called Excess Return 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 December 31, 2021

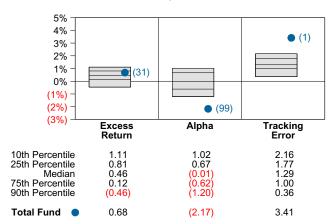


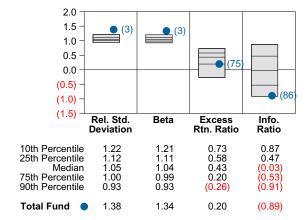


Rolling 12 Quarter Tracking Error vs Targets Compared to Callan Public Fund Sponsor Database



Risk Statistics Rankings vs Targets Rankings Against Callan Public Fund Sponsor Database Ten Years Ended December 31, 2021



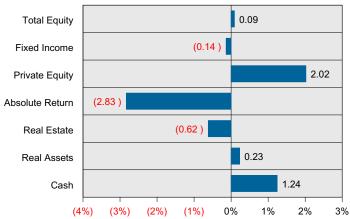




Quarterly Total Fund Relative Attribution - December 31, 2021

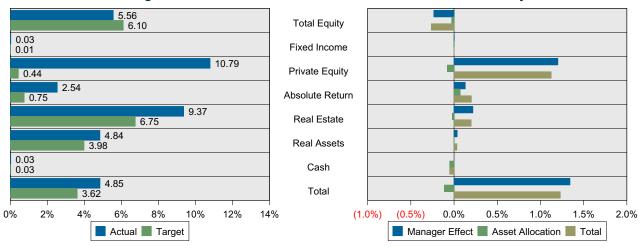
The following analysis approaches Total Fund Attribution from the perspective of relative return. Relative return attribution separates and quantifies the sources of total fund excess return relative to its target. This excess return is separated into two relative attribution effects: Asset Allocation Effect and Manager Selection Effect. The Asset Allocation Effect represents the excess return due to the actual total fund asset allocation differing from the target asset allocation. Manager Selection Effect represents the total fund impact of the individual managers excess returns relative to their benchmarks.





Actual vs Target Returns

Relative Attribution by Asset Class



Relative Attribution Effects for Quarter ended December 31, 2021

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	N	lanager Effect		Asset Allocation	Total Relative Return
Total Equity	44%	44%	5.56%	6.10%		(0.23%))	(0.03%)	(0.26%)
Fixed Income	23%	23%	0.03%	0.01%		0.00%		(0.00%)	(0.00%)
Private Equity	12%	10%	10.79%	0.44%		1.20%		(0.08%)	(0.00%) 1.12%
Absolute Return	7%	10%	2.54%	0.75%		0.13%		`0.07%´	0.20%
Real Estate	8%	9%	9.37%	6.75%		0.22%		(0.02%)	0.20%
Real Assets	4%	4%	4.84%	3.98%		0.04%		(0.00%)	0.03%
Cash	1%	0%	0.03%	0.03%		0.00%		(0.05%)	(0.05%)
Total			4.85% =	3.62%	+	1.34%	+	(0.11%)	1.23%

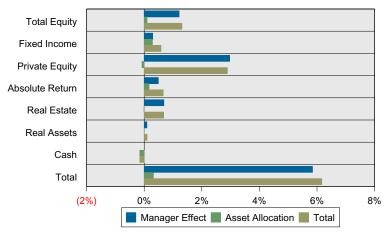
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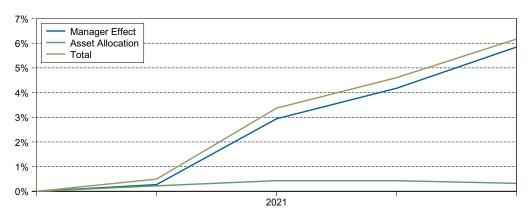
Cumulative Total Fund Relative Attribution - December 31, 2021

The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

One Year Relative Attribution Effects



Cumulative Relative Attribution Effects



One Year Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Total Equity	46%	44%	20.92%	18.22%	1.21%	0.10%	1.31%
Fixed Income	22%	24%	(0.36%)	(1.54%)	0.30%	0.29%	0.58%
Private Equity	10%	10%	67.66%	34.08%	2.97%	(0.08%)	2.89%
Absolute Return	8%	10%	8.87%	3.05%	0.49%	0.17%	0.66%
Real Estate	8%	9%	23.85%	14.83%	0.68%	(0.01%)	0.68%
Real Assets	4%	4%	18.26%	15.87%	0.10%	`0.01%´	0.10%
Cash	1%	0%	0.22%	0.22%	0.00%	(0.15%)	(0.15%)
Total			19.05% =	12.88% +	+ 5.85% +	0.32%	6.17%

^{*} 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.



The table below details the rates of return and peer group rankings for the Fund's investment managers over various time periods ended December 31, 2021. 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 December 31, 2021

	Last		Last		Last 3		Last 5		Since	
	Quarter		Year		Years		Years		Inception	1
Total Domestic Equity Russell 3000 Index Pub Pln- Dom Equity	8.20% 9.28% 8.95%	73 37	28.12% 25.66% 25.73%	12 51	24.43% 25.79% 24.88%	65 25	17.02% 17.97% 17.13%	54 25	8.77% 8.52%	(7/98) (7/98)
BlackRock Russell 1000 Value Russell 1000 Value Index Callan Large Cap Value	7.80% 7.77% 8.08%	53 53	25.18% 25.16% 28.30%	78 78	17.91% 17.64% 18.87%	62 64	- 11.16% 12.36%	74	11.22% 10.60% -	(3/17) (3/17)
DFA Large Cap Value Russell 1000 Value Index Callan Large Cap Value	6.92% 7.77% 8.08%	75 53	27.52% 25.16% 28.30%	64 78	16.74% 17.64% 18.87%	81 64	- 11.16% 12.36%	74	10.07% 11.29% -	(11/17) (11/17)
Northern Trust Global S&P 500 Index Callan Large Cap Core	11.02% 11.03% 9.90%	28 28	28.69% 28.71% 28.75%	50 50	26.09% 26.07% 25.58%	45 46	18.50% 18.47% 18.02%	38 38	11.37% 11.32% -	(8/88) (8/88)
Polen Capital Management S&P 500 Index Callan Large Cap Growth	5.28% 11.03% 8.74%	82 21	24.84% 28.71% 24.26%	43 21	32.81% 26.07% 31.56%	36 96	26.69% 18.47% 24.42%	14 98	20.34% 16.38% -	(7/12) (7/12)
Earnest Partners LLC Russell MidCap Index Callan Mid Capitalization	11.56% 6.44% 7.84%	1 62	26.09% 22.58% 25.31%	47 59	28.50% 23.29% 23.31%	23 50	19.28% 15.10% 15.11%	28 52	12.73% 11.11% -	(5/05) (5/05)
DFA Small Cap Value Russell 2000 Value Index Callan Small Cap Value	6.68% 4.36% 6.78%	55 90	40.61% 28.27% 32.26%	13 65	20.15% 17.99% 19.13%	40 71	9.73% 9.07% 9.99%	54 61	12.20% 9.88% -	(11/96) (11/96)
CastleArk Management Russell 2000 Growth Index Callan Small Cap Growth	4.94% 0.01% 2.03%	22 63	12.30% 2.83% 10.76%	43 81	26.18% 21.17% 27.70%	60 92	20.79% 14.53% 20.43%	46 96	15.37% 12.37% -	(9/13) (9/13)
Total Global Equity MSCI World Callan Global Equity	7.64% 7.77% 6.04%	29 26	19.03% 21.82% 19.50%	55 26	22.82% 21.70% 21.52%	39 48	17.44% 15.03% 15.42%	33 53	11.03% 10.92% -	(4/10) (4/10)
BlackRock Global Alpha Tilts MSCI ACWI Gross Callan Global Equity	7.12% 6.77% 6.04%	37 41	18.73% 19.04% 19.50%	57 55	20.63% 20.97% 21.52%	58 55	15.19% 14.97% 15.42%	51 54	15.72% 15.64% -	(3/16) (3/16)
MFS Investment Management MSCI ACWI Gross Callan Global Equity	8.49% 6.77% 6.04%	15 41	19.56% 19.04% 19.50%	50 55	26.20% 20.97% 21.52%	20 55	20.83% 14.97% 15.42%	12 54	15.19% 12.13% -	(12/12) (12/12)
Total International Equity MSCI EAFE Pub Pln- Intl Equity	1.20% 2.69% 1.43%	58 16	13.08% 11.26% 9.04%	14 22	15.11% 13.54% 15.21%	55 78	10.09% 9.55% 11.03%	75 87	7.49% 5.09% -	(5/96) (5/96)
AQR Emerging Markets MSCI EM Gross Callan Emerging Broad	(1.02%) (1.24%) (0.67%)	58 62	1.23% (2.22%) (0.71%)	36 55	13.00% 11.33% 12.73%	44 66	9.82% 10.27% 10.86%	70 62	9.40% 9.36% -	(8/16) (8/16)
Brandes Investment Partners MSCI EAFE Callan NonUS Eq	0.23% 2.69% 2.30%	85 41	14.42% 11.26% 11.41%	17 52	9.20% 13.54% 15.48%	96 66	6.72% 9.55% 10.93%	93 62	7.85% 5.19% -	(2/98) (2/98)
William Blair & Company MSCI ACWIxUS Gross Callan NonUS Eq	2.63% 1.88% 2.30%	43 56	13.27% 8.29% 11.41%	30 72	25.12% 13.70% 15.48%	2 65	16.45% 10.12% 10.93%	6 58	9.45% 7.39% -	(12/03) (12/03)
DFA International Small Cap Blended Benchmark Callan Intl Small Cap	2.09% 0.07% 0.46%	16 58	16.47% 10.10% 12.92%	15 73	12.85% 15.62% 16.17%	87 55	7.12% 11.04% 11.26%	91 59	5.35% 4.88% -	(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 December 31, 2021. 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 December 31, 2021

	Last		Last		Last 3		Last 5		Since	
	Quarter		Year		Years		Years		Inception	
Total Fixed Income Blmbg Aggregate Pub Pln- Dom Fixed	0.03% 0.01% 0.03%	51 52	(0.36%) (1.54%) (0.59%)	42 90	3.04% 4.79% 5.60%	99 76	2.80% 3.57% 4.26%	96 76	7.01% 6.06%	(12/87) (12/87)
Reams Asset Management Blmbg Aggregate	0.41% 0.01%	7 65	(1.23%) (1.54%)	91 97	8.02% 4.79%	1 94	5.89% 3.57%	2 98	5.79% 4.52%	(1/01) (1/01)
Callan Core Plus FI	0.06%	00	(0.24%)	01	6.12%	5 4	4.63%	30	-	(1/01)
Loomis, Sayles & Company, L.P. Blmbg Aggregate Callan Core Plus Fl	(0.08%) 0.01% 0.06%	79 65	2.13% (1.54%) (0.24%)	5 97	7.78% 4.79% 6.12%	2 94	5.86% 3.57% 4.63%	2 98	8.76% 6.06% -	(12/87) (12/87)
Total Private Equity	10.79%		67.66%		33.67%		27.75%		15.22%	(6/10)
Russell 3000 (1 Qtr in Arrears) + 3%	0.64%		34.93%		19.39%		20.09%		-	
Abbott Capital Management 2010	15.49%		65.55%		33.89%		29.59%		3.44%	(6/10)
Abbott Capital Management 2011	15.19%		76.29%		39.65%		32.49%		7.89%	(6/11)
Abbott Capital Management 2012	14.51%		72.85%		38.03%		31.01%		15.88%	(7/12)
Abbott Capital Management 2013	13.70%		70.21%		38.43%		31.56%		17.09%	(5/13)
Abbott Capital Management 2014	15.78%		75.52%		38.53%		29.90%		16.61%	(4/14)
Abbott Capital Management 2015	11.17%		75.81%		33.15%		23.43%		17.82%	(4/15)
Abbott Capital Management 2016	11.17%		71.04%		30.83%		19.36%		16.34%	(3/16)
Abbott Capital Management 2018	11.53%		47.06%		24.63%		=		19.94%	(7/18)
Abbott Capital Management 2019	7.62%		57.22%		-		-		31.53%	(1/20)
Abbott Capital Management 2020	0.23%		65.36%		-		-		65.36%	(1/21)
Abbott Capital Management 2021	7.22%		-		-		-		11.36%	(2/21)
Mesirow V	5.01%		78.52%		36.08%		29.19%		19.20%	(6/10)
Mesirow VI	9.18%		88.26%		43.95%		33.18%		18.54%	(7/13)
Mesirow VII	11.80%		60.27%		24.47%		-		4.30%	(6/17)
Mesirow VIII	2.13%		10.14%		-		-		(2.98%)	(9/20)
NB Secondary Opp Fund III	2.35%		30.34%		15.08%		16.48%		13.48%	(12/13)
NB Secondary Opp Fund IV	7.67%		48.73%		25.13%		-		27.13%	(4/17)
Private Advisors VI	15.35%		83.78%		36.21%		26.92%		15.89%	(4/15)
Private Advisors VII	10.51%		52.55%		20.83%		15.21%		15.21%	(1/17)
Private Advisors VIII	9.47%		47.25%		17.81%		-		19.91%	(8/18)
Private Advisors IX	8.62%		37.25%		-		-		31.74%	(2/20)
Absolute Return	2.54%		8.87%		1.82%		2.59%		3.48%	(6/14)
UBS A & Q	2.54%	4	8.08%	43	9.92%	16	7.26%	17	6.03%	(12/14)
1-month LIBOR + 4%	1.01%	35	4.10%	73	4.95%	63	5.20%	45	4.95%	(12/14)
Callan Abs Rtn Hedge FoF	(0.69%)		5.60%		7.06%		4.76%		-	
Real Assets	4.84%		18.26%		12.63%		7.81%		7.67%	(1/16)
Principal DRA	4.84%	10	18.26%	42 45	12.63%	15	7.81%	14	7.67%	(1/16)
Principal Blended Benchmark (1)	3.98%	20	15.87%	45	10.75%	30	6.82%	15	6.81%	(1/16)
Callan Alterntive Inv DB	0.69%		13.42%		7.02%		4.28%		-	
Total Real Estate	9.37%		23.85%		9.85%		9.58%		6.97%	(7/86)
Real Estate	9.37%	2	23.85%	8	9.85%	16	9.58%	12	6.97%	(7/86)
Blended Benchmark (2)	6.75%	10	14.83%	55	6.84%	62	7.07%	63	-	
Callan Tot Real Est DB	4.46%		15.72%		7.52%		7.70%		-	
Total Fund	4.85%	22	19.05%	6	14.70%	52	11.36%	40	9.74%	(1/79)
Total Fund Reference Index*	3.62%	72	12.88%	65	13.88%	72	10.59%	58	-	
Callan Public Fund Spr DB	4.12%		13.72%		14.82%		10.89%		-	
•										

⁽¹⁾ Current Principal Blended Benchmark = 35% Bloomberg US Treasury US TIPS ldx, 15% Bloomberg Commodity ldx, 20% S&P Global Infrastructure ldx, 20% S&P Global Natural Resources ldx and 10% FTSE EPRA/NAREIT Developed Market ldx. (2) Blended Benchmark = NCREIF (NPI) through 6/30/06, NCREIF (NPI 1 Qtr Arrears) through 12/31/13 and



^{*} 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.

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.

	2021		2020		2019		2018		2017	
Total Domestic Equity Russell 3000 Index Pub Pln- Dom Equity	28.12% 25.66% 25.73%	12 51	16.35% 20.89% 18.62%	75 25	29.24% 31.02% 30.26%	75 29	(5.80%) (5.24%) (5.83%)	49 34	20.91% 21.13% 20.51%	41 40
BlackRock Russell 1000 Value Russell 1000 Value Index Callan Large Cap Value	25.18% 25.16% 28.30%	78 78	3.28% 2.80% 3.04%	46 52	26.79% 26.54% 26.52%	46 50	(8.12%) (8.27%) (8.70%)	43 45	- 13.66% 17.12%	91
DFA Large Cap Value Russell 1000 Value Index Callan Large Cap Value	27.52% 25.16% 28.30%	64 78	(1.56%) 2.80% 3.04%	90 52	26.71% 26.54% 26.52%	47 50	(12.40%) (8.27%) (8.70%)	84 45	- 13.66% 17.12%	91
Northern Trust Global S&P 500 Index Callan Large Cap Core	28.69% 28.71% 28.75%	50 50	18.42% 18.40% 19.19%	53 53	31.54% 31.49% 30.50%	39 39	(4.34%) (4.38%) (5.33%)	33 33	21.87% 21.83% 21.72%	48 49
Polen Capital Management S&P 500 Index Callan Large Cap Growth	24.84% 28.71% 24.26%	43 21	35.13% 18.40% 35.55%	55 98	38.85% 31.49% 34.55%	11 76	9.14% (4.38%) 0.51%	4 91	27.67% 21.83% 28.84%	65 98
Earnest Partners LLC Russell MidCap Index Callan Mid Capitalization	26.09% 22.58% 25.31%	47 59	21.61% 17.10% 16.17%	41 48	38.38% 30.54% 31.00%	12 52	(9.80%) (9.06%) (10.60%)	45 41	26.16% 18.52% 19.58%	23 55
DFA Small Cap Value Russell 2000 Value Index Callan Small Cap Value	40.61% 28.27% 32.26%	13 65	3.85% 4.63% 2.65%	44 36	18.79% 22.39% 24.34%	90 64	(14.84%) (12.86%) (14.79%)	53 23	7.68% 7.84% 9.18%	64 63
CastleArk Management Russell 2000 Growth Index Callan Small Cap Growth	12.30% 2.83% 10.76%	43 81	45.10% 34.63% 44.48%	46 73	23.28% 28.48% 30.25%	86 54	3.29% (9.31%) (2.91%)	15 84	23.93% 22.17% 26.16%	61 72
Total Global Equity MSCI World Callan Global Equity	19.03% 21.82% 19.50%	55 26	18.78% 15.90% 17.13%	43 55	31.05% 27.67% 27.49%	27 49	(8.18%) (8.71%) (9.52%)	40 44	31.31% 22.40% 25.31%	16 75
BlackRock Global Alpha Tilts MSCI ACWI Gross Callan Global Equity	18.73% 19.04% 19.50%	57 55	16.53% 16.82% 17.13%	52 51	26.86% 27.30% 27.49%	53 51	(11.20%) (8.93%) (9.52%)	67 46	30.12% 24.62% 25.31%	22 57
MFS Investment Management MSCI ACWI Gross Callan Global Equity	19.56% 19.04% 19.50%	50 55	22.42% 16.82% 17.13%	32 51	37.31% 27.30% 27.49%	4 51	(3.75%) (8.93%) (9.52%)	11 46	33.16% 24.62% 25.31%	12 57
Total International Equity MSCI EAFE Pub Pln- Intl Equity	13.08% 11.26% 9.04%	14 22	10.84% 7.82% 13.20%	73 90	21.68% 22.01% 22.93%	75 64	(15.19%) (13.79%) (14.04%)	68 42	25.03% 25.03% 29.11%	94 94
AQR Emerging Markets MSCI EM Gross Callan Emerging Broad	1.23% (2.22%) (0.71%)	36 55	18.26% 18.69% 18.17%	49 44	20.54% 18.90% 22.12%	63 71	(18.31%) (14.24%) (15.34%)	86 28	35.53% 37.75% 39.31%	73 58
Brandes Investment Partners MSCI EAFE Callan NonUS Eq	14.42% 11.26% 11.41%	17 52	(1.30%) 7.82% 11.48%	96 66	15.31% 22.01% 23.78%	98 66	(8.79%) (13.79%) (15.13%)	6 36	16.53% 25.03% 28.08%	99 74
William Blair & Company MSCI ACWIxUS Gross Callan NonUS Eq	13.27% 8.29% 11.41%	30 72	31.44% 11.13% 11.48%	6 51	31.58% 22.13% 23.78%	9 64	(16.86%) (13.77%) (15.13%)	73 35	31.45% 27.77% 28.08%	22 55
DFA International Small Cap Blended Benchmark Callan Intl Small Cap	16.47% 10.10% 12.92%	15 73	1.47% 12.34% 11.08%	89 45	21.62% 24.96% 24.96%	81 50	(23.31%) (17.89%) (19.67%)	91 30	27.98% 33.01% 35.22%	92 74



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.

	2021		2020		2019		2018		2017	
Total Fixed Income	(0.36%)	42	(1.82%)	98	11.82%	5	(0.33%)	71	5.28%	29
Blmbg Aggregate	(1.54%)	90	7.51%	66	8.72%	58	0.01%	57	3.54%	76
Pub Pln- Dom Fixed	(0.59%)		8.37%		8.97%		0.11%		4.46%	
Reams Asset Management	(1.23%)	91	17.28%	2	8.82%	92	1.91%	1	3.62%	95
Blmbg Aggregate	(1.54%)	97	7.51%	91	8.72%	93	0.01%	30	3.54%	95
Callan Core Plus Fl	(0.24%)		9.25%		10.03%		(0.24%)		4.90%	
Loomis, Sayles & Company, L.P.	2.13%	5	7.14%	92	14.42%	1	(2.11%)	98	8.50%	1
Blmbg Aggregate	(1.54%)	97	7.51%	91	8.72%	93	0.01%	30	3.54%	95
Callan Core Plus Fl	(0.24%)		9.25%		10.03%		(0.24%)		4.90%	
Total Private Equity	67.66%		22.14%		16.63%		21.48%		17.27%	
Russell 3000 (1 Qtr in Arrears) + 3%	34.93%		18.77%		6.19%		20.60%		21.71%	
Abbott Capital Management 2010	65.55%		24.43%		16.52%		26.90%		19.98%	
Abbott Capital Management 2011	76.29%		29.13%		19.64%		25.70%		19.24%	
Abbott Capital Management 2012	72.85%		29.04%		17.91%		24.39%		17.97%	
Abbott Capital Management 2013	70.21%		28.65%		21.13%		25.17%		18.71%	
Abbott Capital Management 2014	75.52%		26.51%		19.74%		22.58%		13.50%	
Abbott Capital Management 2015	75.81%		16.62%		15.14%		13.57%		6.87%	
Abbott Capital Management 2016	71.04%		20.02%		9.08%		9.43%		(1.13%)	
Abbott Capital Management 2018	47.06%		22.73%		7.26%		-		-	
Abbott Capital Management 2019	57.22%		10.04%		-		-		-	
Abbott Capital Management 2020	65.36%		<u>-</u>		-					
Mesirow V	78.52%		21.39%		16.29%		18.01%		21.00%	
Mesirow VI	88.26%		29.10%		22.73%		24.87%		12.50%	
Mesirow VII	60.27%		16.43%		3.33%		(7.82%)		-	
Mesirow VIII	10.14%		-		-		-		-	
NB Secondary Opp Fund III	30.34%		4.23%		12.18%		16.65%		20.63%	
NB Secondary Opp Fund IV	48.73%		14.80%		14.76%		68.26%		40.450/	
Private Advisors VI	83.78%		16.54%		17.98%		15.19%		13.15%	
Private Advisors VII	52.55%		3.97%		11.23%		19.02%		(3.33%)	
Private Advisors VIII	47.25%		15.78%		(4.08%)		-		-	
Private Advisors IX	37.25%		-		-		-		-	
Absolute Return	8.87%		(14.04%)		12.79%		1.61%		5.96%	
UBS A & Q	8.08%	43	12.18%	11	9.53%	4	2.65%	12	4.16%	67
1-month LIBOR + 4%	4.10%	73	4.49%	45	6.26%	31	6.07%	2	5.11%	50
Callan Abs Rtn Hedge FoF	5.60%		4.03%		4.71%		0.58%		5.10%	
Real Assets	18.26%		4.69%		15.39%		(7.47%)		10.15%	
Principal DRA	18.26%	42	4.69%	25	15.39%	15	(7.47%)	51	10.15%	16
Principal Blended Benchmark (1)	15.87%	45	2.08%	35	14.86%	17	(7.27%)	49	10.38%	15
Callan Alterntive Inv DB	13.42%		(0.43%)		7.87%		(7.42%)		4.75%	
Total Real Estate	23.85%		0.76%		6.21%		9.18%		9.20%	
Real Estate	23.85%	8	0.76%	53	6.21%	65	9.18%	40	9.20%	41
Blended Benchmark (2)	14.83%	55	0.89%	52	5.26%	72	7.89%	51	6.93%	59
Callan Tot Real Est DB	15.72%		1.25%		7.74%		7.95%		7.88%	
Total Fund	19.05%	6	6.84%	96	18.66%	38	(2.74%)	24	16.68%	24
Total Fund Reference Index*	12.88%	65	12.29%	45	16.52%	76	(3.29%)	37	15.80%	46
Callan Public Fund Spr DB	13.72%		12.10%		18.01%		(3.82%)		15.57%	
Callan Fublic Fund Spi DD	13.1270		12.10/0		10.01/0		(3.02 /0)		13.37 /0	

⁽¹⁾ Current Principal Blended Benchmark = 35% Bloomberg US Treasury US TIPS ldx, 15% Bloomberg Commodity ldx, 20% S&P Global Infrastructure ldx, 20% S&P Global Natural Resources ldx and 10% FTSE EPRA/NAREIT Developed Market ldx. (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.



^{*} 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.

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2021. 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 December 31, 2021

	l aet	Last Last		Last 5	Last 10
	Quarter	Year	3 Years	Years	Years
of Fee Returns					
Total Domestic Equity Net	8.15%	27.88%	24.16%	16.72%	15.47%
Russell 3000 Index BlackRock Russell 1000 Value	9.28% 7.80%	25.66% 25.17%	25.79% 17.89%	17.97%	16.30%
Russell 1000 Value Index	7.77%	25.16%	17.64%	- 11.16%	12.97%
DFA Large Cap Value	6.87%	27.35%	16.50%	-	-
Russell 1000 Value Index	7.77%	25.16%	17.64%	11.16%	12.97%
Northern Trust Global S&P 500 Index	11.02% 11.03%	28.68% 28.71%	26.08% 26.07%	18.48% 18.47%	16.58% 16.55%
Polen Capital Management	5.18%	24 34%	32.27%	26.13%	10.55%
S&P 500 Index	11.03%	28.71%	26.07%	18.47%	16.55%
Earnest Partners LLC	11.56%	25.59%	27.88%	18.68%	16.40%
Russell MidCap Index	6.44% 6.60%	22.58%	23.29% 19.97%	15.10%	14.91% 13.02%
DFA Small Cap Value Russell 2000 Value Index	4.36%	40.38% 28.27%	17.99%	9.39% 9.07%	12.03%
CastleArk Management	4.76%	11.55%	25.33%	19.99%	-
Russell 2000 Growth Index	0.01%	2.83%	21.17%	14.53%	14.14%
Total Global Equity Net	7.59%	18.80%	22.48%	17.08%	12.97%
MSCI World	7.77%	21.82%	21.70%	15.03%	12.70%
BlackRock Global Alpha Tilts	7.10%	18.67%	20.44%	15.06%	-
MFS Investment Management MSCI ACWI Gross	8.37%	19.05%	25.66%	20.32%	10.440/
MSCI ACWI Gross	6.77%	19.04%	20.97%	14.97%	12.44%
Total International Equity Net	1.08%	12.57%	14.55%	9.56%	8.91%
MSCI EAFE Index AQR Emerging Markets	2.69% (1.21%)	11.26% 0.47%	13.54% 12.16%	9.55% 9.01%	8.03%
MSCI EM Gross	(1.24%)	(2.22%)	11.33%	10.27%	5.87%
Brandes Investment Partners	0.14%	14.00%	8.78%	6.30%	7.03%
MSCI EAFE Index	2.69%	11.26%	13.54%	9.55%	8.03%
William Blair & Company MSCI ACWI ex-US Index	2.52% 1.88%	12.77% 8.29%	24.57% 13.70%	15.95% 10.12%	11.66% 7.78%
DFA International Small Cap	1.96%	15.89%	12.23%	6.77%	9.13%
Blended Benchmark	0.07%	10.10%	15.62%	11.04%	10.80%
Total Fixed Income Net	0.00%	(0.45%)	2.93%	2.67%	2.93%
_Blmbg Aggregate	0.01%	(1.54%)	4.79%	3.57%	2.90%
Reams Asset Management	0.37%	(1.36%)	7.87% 7.62%	5.73% 5.72%	4.33% 5.82%
Loomis, Sayles & Company, L.P. Blmbg Aggregate	(<mark>0.12%)</mark> 0.01%	1.98% (1.54%)	4.79%	3.57%	2.90%
Total Private Equity	10.79%	67.66%	33.67%	27.75%	18.39%
Russell 3000 (1 Qtr in Arrears) + 3%	0.64%	34.93%	19.39%	20.09%	-
Abbott Capital Management 2010	15.49%	65.55%	33.89%	29.59%	18.38%
Abbott Capital Management 2011	15.19%	76.29%	39.65%	32.49%	17.87%
Abbott Capital Management 2012 Abbott Capital Management 2013	14.51% 13.70%	72.85% 70.21%	38.03% 38.43%	31.01% 31.56%	-
Abbott Capital Management 2014	15.78%	75.52%	38.53%	29.90%	
Abbott Capital Management 2015	11.17%	75.81%	33.15%	23.43%	-
Abbott Capital Management 2016	11.17%	71.04%	30.83%	19.36%	-
Abbott Capital Management 2018 Abbott Capital Management 2019	11.53% 7.62%	47.06% 57.22%	24.63%	-	-
Abbott Capital Management 2019 Abbott Capital Management 2020	0.23%	65.36%	-	-	-
Abbott Capital Management 2021	7.22%	-	-	-	-
Mesirow V	5.01%	78.52%	36.08%	29.19%	21.65%
Mesirow IV Mesirow VII	9.18% 11.80%	88.26% 60.27%	43.95% 24.47%	33.18%	-
Mesirow VIII	2.13%	10.14%	24.47 70	- -	- -
NB Secondary Opp Fund III	2.35%	30.34%	15.08%	16.48%	-
NB Secondary Opp Fund IV	7.67%	48.73%	25.13%	-	-
Private Advisors VI Private Advisors VII	15.35% 10.51%	83.78% 52.55%	36.21% 20.83%	26.92% 15.21%	-
Private Advisors VIII	9.47%	47.25%	17.81%	10.21/0	-
Private Advisors IX	8.62%	37.25%	-	-	-
Absolute Return	2.54%	8.77%	1.64%	2.48%	-
UBS A & Q	2.54%	8.08%	9.92%	7.26%	<u>-</u>
1-month LIBOR + 4%	1.01%	4.10%	4.95%	5.20%	4.73%
Real Assets	4.67%	17.51%	11.97%	7.43%	-
Principal DRA Principal Blended Benchmark (1)	4.67% 3.98%	17.51% 15.87%	11.97% 10.75%	7.43% 6.82%	-
Total Real Estate			9.50%		10.59%
Real Estate	9.28% 9.28%	23.45% 23.45%	9.50% 9.50%	9.27% 9.27%	10.59% 10.59%
Blended Benchmark (2)	6.75%	14.83%	6.84%	7.07%	9.18%
` '					
Total Fund Net	4.79%	18.80%	14.43%	11.08%	10.17%

^{*}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.

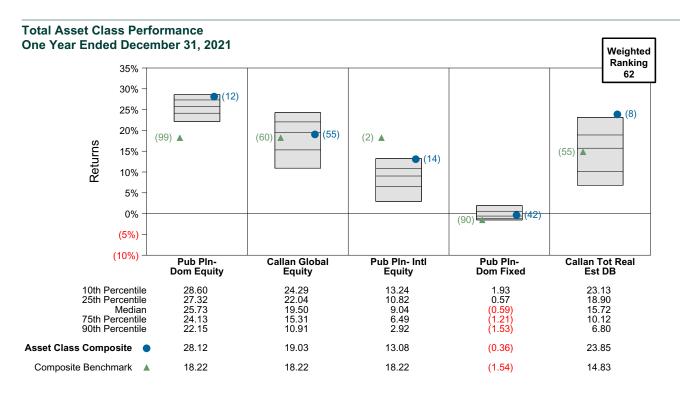
	2021	2020	2019	2018	2017
t of Fee Returns					
Total Domestic Equity Net	27.88%	16.09%	28.94%	(6.10%)	20.53%
Russell 3000 Index BlackRock Russell 1000 Value	25.66% 25.17%	20.89% 3.27%	31.02% 26.77%	(5.24%) (8.13%)	21.13%
Russell 1000 Value Index	25.16%	2.80%	26.54%	(8.27%)	13.66%
DFA Large Cap Value	27.35%	(1.78%)	26.42%	(12.60%)	-
Russell 1000 Value Index	25.16%	2.80%	26.54%	(8.27%)	13.66%
Northern Trust Global	28.68% 28.71%	18.41%	31.53%	(4.37%)	21.83%
S&P 500 Index Polen Capital Management	24.34%	18.40% 34.59%	31.49% 38.27%	(4.38%) 8.60%	21.83% 27.05%
S&P 500 Index	28.71%	18.40%	31.49%	(4.38%)	21.83%
Earnest Partners LLC	25.59%	20.96%	37.65%	(10.29%)	25.50%
Russell MidCap Index	22.58%	17.10%	30.54%	(9.06%)	18.52%
DFA Small Cap Value	40.38% 28.27%	3.74% 4.63%	18.58% 22.39%	(15.30%)	7.10% 7.84%
Russell 2000 Value Index CastleArk Management	11.55%	4.03% 44.12%	22.39% 22.47%	(12.86%) 2.60%	23.12%
Russell 2000 Growth Index	2.83%	34.63%	28.48%	(9.31%)	22.17%
Total Global Equity Net	18.80%	18.48%	30.55%	(8.51%)	30.85%
MSCI World	21.82%	15.90%	27.67%	(8.71%)	22.40%
BlackRock Global Alpha Tilts	18.67% 19.05%	16.39% 21.88%	26.48% 36.74%	(11.24%) (4.16%)	30.06% 32.62%
MFS Investment Management MSCI ACWI Gross	19.04%	16.82%	27.30%	(8.93%)	24.62%
Total International Equity Net	12.57%	10.28%	21.08%	(15.60%)	24.44%
MSCI EAFE Index	11.26%	7.82%	22.01%	(13.79%)	25.03%
AQR Emerging Markets	0.47%	17.38%	19.64%	(18.93%)	34.55%
MSCI EM Gross Brandes Investment Partners	<mark>(2.22%)</mark> 14.00%	18.69% (1.69%)	18.90% 14.86%	(14.24%) (9.17%)	37.75% 16.06%
MSCI EAFE Index	11.26%	7.82%	22.01%	(13.79%)	25.03%
William Blair & Company	12.77%	30.84%	31.01%	(17.20%)	30.94%
MSCI ACWI ex-US Index	8.29%	11.13%	22.13%	(13.77%)	27.77%
DFA International Small Cap Blended Benchmark	15.89% 10.10%	0.81% 12.34%	21.00% 24.96%	(23.31%) (17.89%)	27.98% 33.01%
Total Fixed Income Net	(0.45%)	(1.91%)	11.68%	(0.47%)	5.09%
Blmbg Aggregate	(1.54%)	7.51%	8.72%	0.01%	3.54%
Reams Asset Management	(1.36%)	17.11%	8.65%	1.76%	3.46%
Loomis, Sayles & Company, L.P. Blmbg Aggregate	1.98% (1.54%)	6.99% 7.51%	14.25% 8.72%	(<mark>2.24%)</mark> 0.01%	8.36% 3.54%
Total Private Equity	67.66%	22.14%	16.63%	21.48%	17.27%
Russell 3000 (1 Qtr in Arrears) + 3%	34.93%	18.77%	6.19%	20.60%	21.71%
Abbott Capital Management 2010	65.55%	24.43%	16.52%	26.90%	19.98%
Abbott Capital Management 2011	76.29%	29.13%	19.64%	25.70%	19.24%
Abbott Capital Management 2012	72.85%	29.04%	17.91%	24.39%	17.97%
Abbott Capital Management 2013	70.21%	28.65%	21.13%	25.17%	18.71%
Abbott Capital Management 2014 Abbott Capital Management 2015	75.52% 75.81%	26.51% 16.62%	19.74% 15.14%	22.58% 13.57%	13.50% 6.87%
Abbott Capital Management 2016	71.04%	20.02%	9.08%	9.43%	(1.13%)
Abbott Capital Management 2018	47.06%	22.73%	7.26%	-	(
Abbott Capital Management 2019	57.22%	10.04%	-	-	-
Abbott Capital Management 2020	65.36%	-	-	-	-
Mesirow V Mesirow IV	78.52% 88.26%	21.39% 29.10%	16.29% 22.73%	18.01% 24.87%	21.00% 12.50%
Mesirow VII	60.27%	16.43%	3.33%	(7.82%)	-
Mesirow VIII	10.14%	-	-	` - ′	-
NB Secondary Opp Fund III	30.34%	4.23%	12.18%	16.65%	20.63%
NB Secondary Opp Fund IV Private Advisors VI	48.73%	14.80%	14.76% 17.98%	68.26% 15.19%	- 13.15%
Private Advisors VII	83.78% 52.55%	16.54% 3.97%	11.23%	19.02%	(3.33%)
Private Advisors VIII	47.25%	15.78%	(4.08%)	-	(0.0070)
Private Advisors IX	37.25%	-	-	-	-
Absolute Return	8.77%	(14.21%)	12.52%	1.61%	5.96%
UBS A & Q 1-month LIBOR + 4%	8.08% 4.10%	12.18% 4.49%	9.53% 6.26%	2.65% 6.07%	4.16% 5.11%
Real Assets	17.51%	4.02%	14.84%	(7.47%)	10.15%
Principal DRA	17.51%	4.02%	14.84%	(7.47%)	10.15%
Principal Blended Benchmark (1)	15.87%	2.08%	14.86%	(7.27%)	10.38%
Total Real Estate	23.45%	0.39%	5.95%	8.94%	8.89%
Real Estate	23.45%	0.39%	5.95%	8.94%	8.89%
Blended Benchmark (2)	14.83%	0.89%	5.26%	7.89%	6.93%
Total Fund Net	18.80%	6.59%	18.34%	(3.01%)	16.36%
Total Fund Reference Index	12.88%	12.29%	16.52%	(3.29%)	15.80%

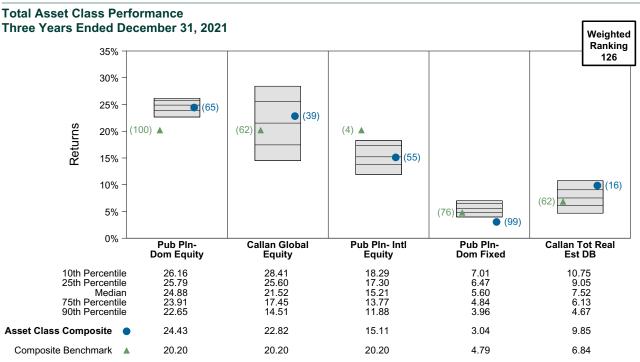
^{*}Net returns are simulated with the use of fee schedules through March 31, 2019. Actual fees paid are used thereafter.



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.



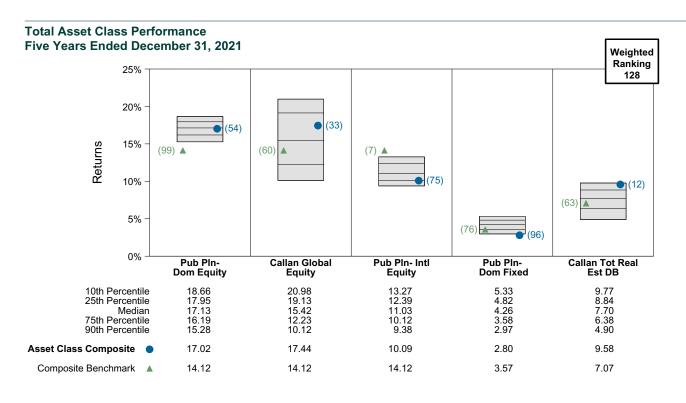


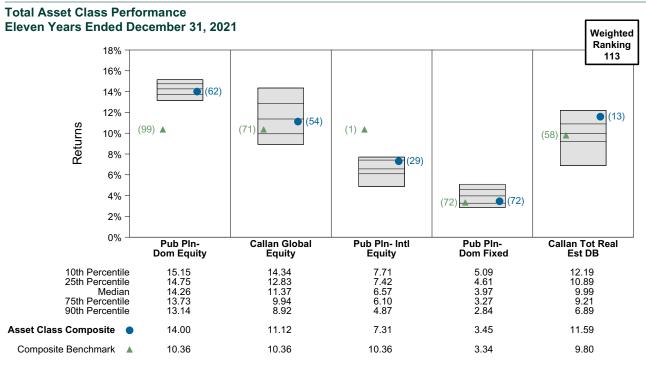
^{*} Current Quarter Target = 44.0% MSCI ACWI IMI, 23.0% Blmbg Aggregate, 10.0% Russell 3000 Index lagged 3 months+2.0%, 10.0% 3-month Treasury Bill+3.0%, 9.1% NCREIF NFI-ODCE Eq Wt Net lagged 3 months and 3.9% Principal Blended Benchmark.



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.





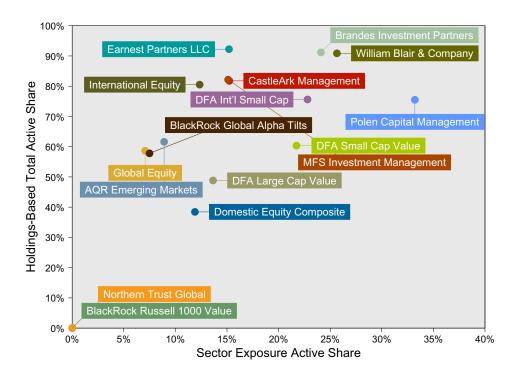
^{*} Current Quarter Target = 44.0% MSCI ACWI IMI, 23.0% Blmbg Aggregate, 10.0% Russell 3000 Index lagged 3 months+2.0%, 10.0% 3-month Treasury Bill+3.0%, 9.1% NCREIF NFI-ODCE Eq Wt Net lagged 3 months and 3.9% Principal Blended Benchmark.



Active Share Structure Analysis For One Quarter Ended December 31, 2021

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 December 31, 2021



		Total	Non-ldx	Sector	Number	Security
_	Index	Act Share	Act Share	Act Share	Securities	Diverse
Domestic Equity Composite	Russell 3000	38.43%	0.97%	11.89%	1916	114.77
BlackRock Russell 1000 Value	Russell 1000 Value	0.00%	0.00%	0.00%	853	64.89
DFA Large Cap Value	Russell 1000 Value	48.82%	1.26%	13.65%	317	43.86
Northern Trust Global	S&P 500	0.10%	0.00%	0.02%	505	39.65
Polen Capital Management	S&P 500	75.50%	2.23%	33.20%	26	8.35
Earnest Partners LLC	Russell MidCap	92.23%	9.57%	15.19%	58	21.91
DFA Small Cap Value	Russell 2000 Value	60.35%	14.08%	21.73%	973	116.17
CastleArk Management	Russell 2000 Growth	81.77%	15.82%	15.22%	105	33.38
Global Equity	MSCI World	58.65%	7.74%	7.06%	760	54.56
BlackRock Global Alpha Tilts	MSCI ACWI Gross	57.80%	4.67%	7.49%	723	53.62
MFS Investment Management	MSCI ACWI Gross	82.16%	3.63%	15.11%	73	21.13
International Equity	MSCI EAFE	80.51%	27.99%	12.35%	2397	62.91
AQR Emerging Markets	MSCI EM Gross	61.61%	3.46%	8.91%	277	36.46
Brandes Investment Partners	MSCI EAFE	91.17%	14.95%	24.10%	59	20.39
William Blair & Company	MSCI ACWIxUS Gross	90.87%	22.67%	25.65%	283	46.90
DFA Int'l Small Cap MS	SCI World ex US Sm Cap	75.60%	9.54%	22.80%	1937	161.95



Current Holdings Based Style Analysis Total Equity Composite As of December 31, 2021

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.

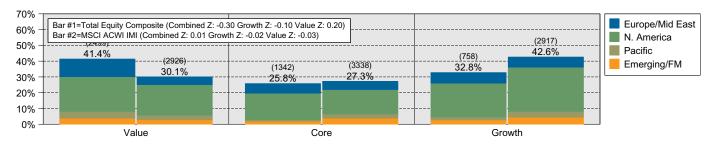
Style Map vs Callan Public Fund Spr DB Holdings as of December 31, 2021



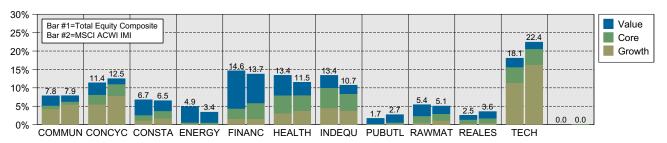
Style Exposure Matrix Holdings as of December 31, 2021

	Value	Core	Growth	Total
	30.1% (2926)	27.3% (3338)	42.6% (2917)	100.0% (9181)
Total				
	41.4% (2499)	25.8% (1342)	32.8% (758)	100.0% (4599)
Emerging/ FM	2.8% (1016)	3.9% (1074)	4.5% (1035)	11.2% (3125)
	3.9% (192)	2.0% (123)	2.7% (111)	8.5% (426)
	2.9% (533)	2.6% (554)	3.6% (518)	9.1% (1605)
Pacific	(882)	0.070 (2.0)	2.0 % ()	110 /0 (1222)
	4.2% (862)	0.8% (249)	2.0% (111)	7.0% (1222)
	19.3% (886)	15.5% (1151)	28.1% (831)	63.0% (2868)
N. America		(3.7)	(11)	(,
	22.1% (1022)	17.0% (667)	21.4% (361)	60.6% (2050)
Europe/ Mid East	5.0% (491)	5.3% (559)	6.4% (533)	16.8% (1583)
- ,	11.2% (423)	6.0% (303)	6.7% (175)	23.9% (901)

Combined Z-Score Style Distribution Holdings as of December 31, 2021



Sector Weights Distribution Holdings as of December 31, 2021





Current Holdings Based Style Analysis Total Equity Composite As of December 31, 2021

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.

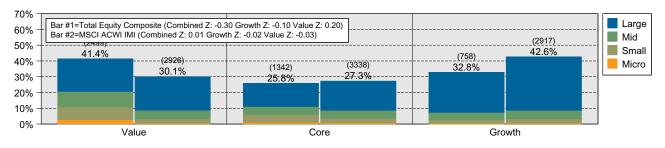
Style Map vs Callan Public Fund Spr DB Holdings as of December 31, 2021



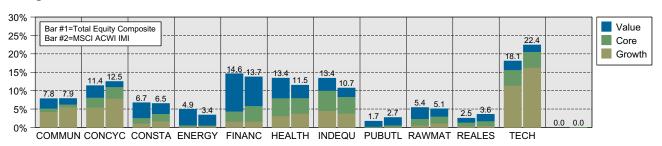
Style Exposure Matrix Holdings as of December 31, 2021

	Value	Core	Growth	Total
TOTAL	30.1% (2926)	27.3% (3338)	42.6% (2917)	100.0% (9181)
Total	41.4% (2499)	25.8 % (1342)	32.8% (758)	100.0% (4599)
	0.6% (903)	0.7% (1112)	0.5% (739)	1.8% (2754)
Micro	2.070 (1423)	1.170 (454)	0.070 (100)	4.2 /0 (2000)
	2.8% (1429)	1.1% (494)	0.3% (136)	4.2% (2059)
Small	2.6% (1128)	3.0% (1379)	2.6% (1167)	8.3% (3674)
	8.1% (519)	4.7% (399)	2.5% (193)	15.2% (1111)
iiiid	5.6% (585)	5.0% (581)	5.5% (669)	16.1% (1835)
Mid	9.8% (325)	5.3% (267)	4.5% (221)	19.6% (813)
	21.3% (310)	18.5% (266)	33.9% (342)	73.8% (918)
Large	20.8% (226)	14.7% (182)	25.5% (208)	61.0% (616)

Combined Z-Score Style Distribution Holdings as of December 31, 2021



Sector Weights Distribution Holdings as of December 31, 2021

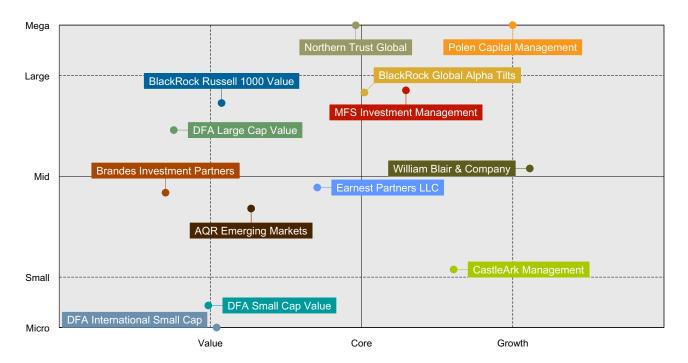




Global Holdings Based Style Analysis For One Quarter Ended December 31, 2021

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 December 31, 2021



	Weight	Wtd Median	Combined	Growth	Value	Number of	Security
	%	Mkt Cap	Z-Score	Z-Score	Z-Score	Securities D	Diversification
BlackRock Russell 1000 Value	5.98%	82.01	(0.89)	(0.38)	0.51	853	64.89
DFA Large Cap Value	5.90%	60.49	(1.20)	(0.35)	0.85	317	43.86
Northern Trust Global	12.15%	215.10	(0.03)	(0.02)	0.00	505	39.65
Polen Capital Management	5.75%	271.61	0.98	0.34	(0.64)	26	8.35
Earnest Partners LLC	4.58%	21.52	(0.28)	(0.09)	0.19	58	21.91
DFA Small Cap Value	7.30%	2.84	(0.98)	(0.21)	0.77	973	116.17
CastleArk Management	3.49%	5.44	0.60	0.08	(0.51)	105	33.38
MFS Investment Management	7.50%	92.09	0.29	(0.07)	(0.37)	73	21.13
BlackRock Global Alpha Tilts	11.45%	90.37	0.03	(0.01)	(0.04)	723	53.62
AQR Emerging Markets	3.49%	17.40	(0.70)	(0.18)	0.53	277	36.46
Brandes Investment Partners	14.24%	20.50	(1.25)	(0.36)	0.89	59	20.39
William Blair & Company	10.87%	29.93	1.09	0.36	(0.72)	283	46.90
DFA International Small Cap	7.30%	1.96	(0.92)	(0.21)	0.72	1937	161.95





4th Quarter 2021

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 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

2021 Investment Management Fee Study | The purpose of this study, the ninth we have done, is to provide a detailed analysis on institutional investment management fee levels and trends across multiple asset classes and mandate sizes, for both active and passive management.

2021 Nuclear Decommissioning Funding Study | This study offers key insights into the status of nuclear decommissioning funding to make peer comparisons more accurate and relevant.

2021 Private Equity Fees and Terms Study | This study is intended to help institutional investors better evaluate private equity funds, serving as an industry benchmark when comparing a partnership's terms to its peers.

2021 Cost of Doing Business Survey | In this survey, Callan compares the costs of administering and operating funds across all types of tax-exempt and tax-qualified organizations in the U.S. We identify practices to help institutional investors manage expenses.

A Guide to Reinsurance for Institutional Investors | Reinsurance investments are a potential option for institutional investors looking to diversify both equity and rate risks while also offering attractive risk-adjusted returns. Sean Lee examines how insurance-linked securities can be incorporated into institutional investors' portfolios.

2021 ESG Survey | Callan's ninth annual survey assessing the status of environmental, social, and governance (ESG) investing in the U.S. institutional investment market.

Blog Highlights

Rising Rates! Why the Heck Do We Own Bonds? | Investment grade bonds spin off yield and participate in rising rate markets through principal reinvestment, and their return distribution

provides downside protection that counter-balances growth-oriented portfolio investments. Despite frustratingly low expected returns, IG bonds can still contribute meaningfully to the long-term investment goals of most institutional investors.

<u>Understanding Return Forecasts for Public DB Plans</u> | It is important for decision makers to understand that actuaries and investment consultants offer assumptions on expected return that are inherently different: Actuarial discount rates assume a static return over time with no variability, whereas investment consultants estimate a median and a range of expected returns based on expected risk.

Quarterly Periodicals

<u>Private Equity Trends, 3Q21</u> | A high-level summary of private equity activity in the quarter through all the investment stages

Active vs. Passive Charts, 3Q21 | A comparison of active managers alongside relevant benchmarks over the long term

Market Pulse Flipbook, 3Q21 | 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, 3Q21</u> | Analysis and a broad overview of the economy and public and private market activity each quarter across a wide range of asset classes

Hedge Fund Quarterly, 3Q21 | Commentary on developments for hedge funds and multi-asset class (MAC) strategies

Real Assets Reporter, 3Q21 | A summary of market activity for real assets and private real estate during the quarter

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:

2022 DC Survey Results Webinar February 23, 2022 – 9:30 am (PT)

National Conference

April 25-27, 2022, in San Francisco

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

3,700 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 March 1-3, 2022 – 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/ccintro-march/

Introductory Workshop for DC Plan Fiduciaries March 23, 2022 – San Francisco

This one-day workshop centers on the fundamentals of administering a defined contribution (DC) plan. Designed primarily for ERISA fiduciaries and supporting staff members, attendees will gain a better understanding of the key responsibilities of an ERISA fiduciary and best practices for executing those responsibilities. Additionally, we will cover the basics of capital markets theory and DC investment menu design principles; investment manager evaluation, selection, and monitoring; best practices for evaluating fees; the regulatory and legal landscape; and industry trends. This workshop is complimentary and open to institutional investor clients.

Additional information including dates and registration can be found at: callan.com/events/mar-dc-college/



"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







Callan

Quarterly List as of December 31, 2021

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
abrdn (Aberdeen Standard Investments)
Acadian Asset Management LLC
Adams Street Partners, LLC
AEGON USA Investment Management Inc.
AllianceBernstein
Allianz
Allspring Global Investments (formerly Wells Fargo Asset Mgmt)
American Century Investments
AQR Capital Management
Ares Management LLC
Ariel Investments, LLC
Aristotle Capital Management, LLC
Atlanta Capital Management Co., LLC
Aviva Investors
AXA Investment Managers
Baillie Gifford International, LLC
Baird Advisors
Barings LLC

Manager Name
Baron Capital Management, Inc.
Barrow, Hanley, Mewhinney & Strauss, LLC
BlackRock
BMO Global Asset Management
BNP Paribas Asset Management
BNY Mellon Asset Management
Boston Partners
Brandes Investment Partners, L.P.
Brandywine Global Investment Management, LLC
Brookfield Asset Management
Brown Brothers Harriman & Company
Cambiar Investors, LLC
Capital Group
Carillon Tower Advisers
CastleArk Management, LLC
Causeway Capital Management LLC
Chartwell Investment Partners
ClearBridge Investments, LLC

Manager Name

Cohen & Steers Capital Management, Inc.

Columbia Threadneedle Investments North America

Credit Suisse Asset Management, LLC

Crescent Capital Group LP

D.E. Shaw Investment Management, LLC

DePrince, Race & Zollo, Inc.

Dimensional Fund Advisors L.P.

Doubleline

Duff & Phelps Investment Management Co.

DWS

EARNEST Partners, LLC

Eaton Vance Management

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 (formerly First State Investments)

Fisher Investments

Franklin Templeton

GAM (USA) Inc.

GCM Grosvenor

GlobeFlex Capital, L.P.

GoldenTree Asset Management, LP

Goldman Sachs

Guggenheim Investments

GW&K Investment Management

Harbor Capital Group Trust

Heitman LLC

Hotchkis & Wiley Capital Management, LLC

Income Research + Management Inc.

Insight Investment

Intech Investment Management LLC

Intercontinental Real Estate Corporation

Invesco

J.P. Morgan

Janus

Jennison Associates LLC

Jobs Peak Advisors

Manager Name

J O Hambro Capital Management Limited

KeyCorp

Lazard Asset Management

LGIM America (formerly Legal & General Inv. Mgmt. America)

Lincoln National Corporation

Longview Partners

Loomis, Sayles & Company, L.P.

Lord Abbett & Company

LSV Asset Management

MacKay Shields LLC

Macquarie Investment Management (MIM)

Manning & Napier Advisors, LLC

Manulife Investment Management

McKinley Capital Management, LLC

Mellon

MetLife Investment Management

MFS Investment Management

MidFirst Bank

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. (formerly Investec Asset Mgmt.)

Northern Trust Asset Management

Nuveen

P/E Investments

Pacific Investment Management Company

Parametric Portfolio Associates LLC

Partners Group (USA) Inc.

Pathway Capital Management

Peregrine Capital Management, LLC

PFM Asset Management LLC

PGIM Fixed Income

PGIM Quantitative Solutions LLC

PineBridge Investments

Polen Capital Management, LLC

Principal Global Investors



Manager Name

Putnam Investments, LLC

RBC Global Asset Management

Regions Financial Corporation

Richard Bernstein Advisors LLC

Riverbridge Partners LLC

Robeco Institutional Asset Management, US Inc.

Rothschild & Co. Asset Management US

S&P Dow Jones Indices

Schroder Investment Management North America Inc.

Securian Asset Management, Inc.

SLC Management

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

State Street Global Advisors

Stone Harbor Investment Partners L.P.

Strategic Global Advisors, LLC

T. Rowe Price Associates, Inc.

The TCW Group, Inc.

Manager Name

Thompson, Siegel & 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

Waterton Associates LLC

WCM Investment Management

WEDGE Capital Management

Wellington Management Company, LLP

Western Asset Management Company LLC

Westfield Capital Management Company, LP

William Blair & Company LLC

