Callan

March 31, 2021

City of Milwaukee Employes' Retirement System

Investment Measurement Service Quarterly Review

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U.S. EQUITY

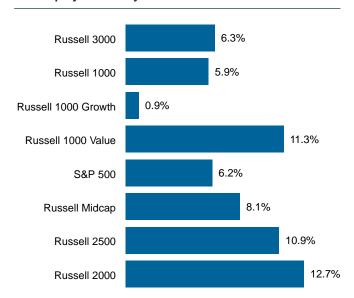
Markets continue setting all-time highs

- The S&P 500 Index hit record highs in 1Q21, gaining 6.2%.
- Since the prior peak (February 2020) the S&P is up over 19.6%, with only Energy (-4.7%) and Utilities (-4.9%) declining from peak-to-peak.
- Since March 2020 market low, S&P up over 80.7%, with all sectors posting gains over 40%; Energy +116.2%
- 1Q21 top sectors were Energy and Financials, while Industrials and Consumer Staples underperformed.
- "Re-opening" sectors (airlines, retail REITs, hospitality) outperformed while "work from home" sectors (online retail, home improvement) lagged.

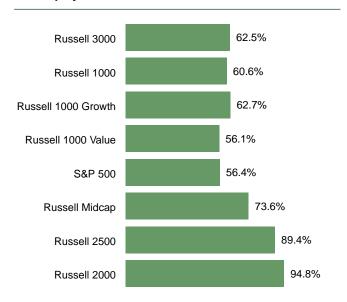
Value and small cap trends continue through 1Q21

- Value outperformed growth across the market cap spectrum.
- Small caps outperformed large in 1Q.
- Small value was the top-performing asset class for the quarter (+21.2%) and from the March 2020 low (+127.7%).
- In 1Q21, Russell 2000 gained 12.7%, extending the rally from 4Q20 when the index experienced its best quarterly return on record (+31.4%).
- Small cap stocks surged on stronger GDP and economic recovery forecasts due to higher exposure to cyclical sectors relative to large cap indices.
- Industrials, Financials, and Real Estate sectors benefit most from expectations of GDP expansion.
- Small cap stocks have historically outperformed in recoveries following market crashes.
- Cyclical sectors and industries (Energy, Financials, Industrials, Materials) continued to outperform their growth counterparts as GDP forecasts improved, stimulus was enacted, and vaccinations progressed.
- November 2020 vaccine data news a catalyst for market rotation into value/cyclicals

U.S. Equity: Quarterly Returns

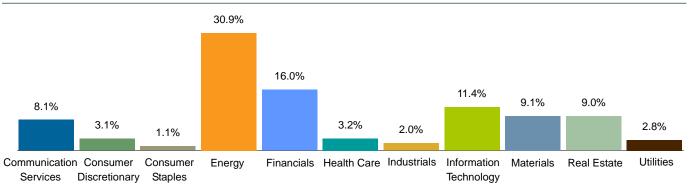


U.S. Equity: One-Year Returns



Sources: FTSE Russell, S&P Dow Jones Indices

S&P Sector Returns, Quarter Ended March 31, 2021



Source: S&P Dow Jones Indices



GLOBAL EQUITY

Nearly 100 million people fully vaccinated worldwide

- Markets responded positively to the global rollout of the COVID-19 vaccine.
- Most risk assets continued to outperform as global businesses reopen.
- Small cap outperformed large over the quarter on continued economic optimism.
- Emerging markets trailed developed markets; COVID-19 outbreaks and vaccination challenges hindered EM results.

Market continues to favor cyclicals

- Market recovery and rising interest rates buoyed cyclicals;
 Energy, Financials, and Industrials drove the market.
- Factor performance showed a preference for beta and volatility, similar to 4Q20.

U.S. dollar vs. other currencies

 The U.S. stimulus package announcement, combined with yields rising on economic confidence, fueled the U.S. dollar.

Growth vs. value

- Value outpaced growth for the second consecutive quarter.
- Vaccination rollout has stoked style rotation.
- Value outperformed growth by 17.0% and 10.5% in developed and emerging markets over the past two quarters, respectively.
- Rotation to value in 4Q20 was sharp and narrow.
- Cheap, low-quality factors were rewarded, favoring fundamental deep value managers.
- Quantitative value managers struggled as market rotation yielded a severe momentum reversal.

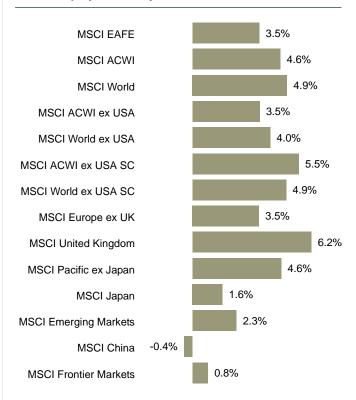
Factor payoffs may hinge on macroeconomy

- Over the past 20 years, small cap and value thrived in recoveries, momentum in expansions, low volatility in slowdowns, and low volatility and quality in contractions.
- As the market continues its recovery and transitions to expansion, value run may persist.
- Furthermore, relative value and quantitative managers are expected to participate as the value rally broadens out.

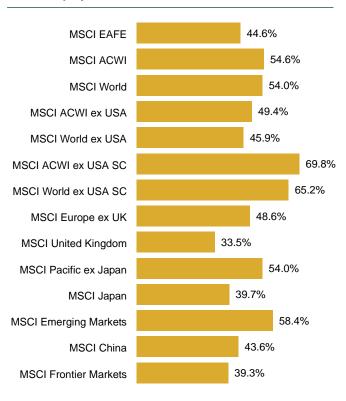
COVID-19 resurgence may delay EM recovery

- Although daily COVID-19 fatalities for developed markets have declined dramatically by 70% from the peak in January, they are notably increasing in emerging markets.
- China, South Korea, and Taiwan have by and large contained the pandemic, while pockets of developing economies are challenged with rising infections.

Global Equity: Quarterly Returns



Global Equity: One-Year Returns



Source: MSCI



U.S. FIXED INCOME

U.S. Treasury yield curve steepens

- The 10-year U.S. Treasury yield closed 1Q21 at 1.74%, up 81 bps from 4Q20.
- The short-end of the curve remained anchored, with no rate hikes expected until at least 2023, steepening the yield curve.
- TIPS outperformed nominal U.S. Treasuries as 10-year breakeven spreads widened from 1.99% to 2.37%.

Bloomberg Barclays Aggregate falls

- The Bloomberg Barclays US Aggregate Bond Index dropped 3.4%, with spread sectors outperforming treasuries.
- Demand for corporate credit remains strong, and spreads did not change meaningfully over the quarter

High yield bonds gain as rally extends

- High yield (HY) bonds outperformed investment grade (IG) in 1Q, gaining 0.8% amid a wave of new issuance.
- Leveraged loans rose 2.0% during the quarter, driven by favorable supply/demand dynamics, floating rate coupons, and relatively short durations.

Stimulus boosts munis

- Municipals outperformed treasuries for the quarter, as municipal yields rose less than treasury yields.
- The municipal market was supported by the American Rescue Act.

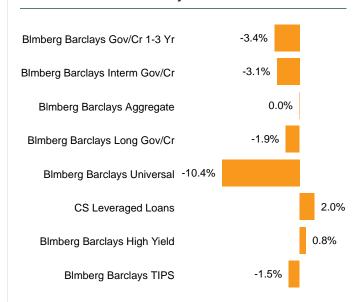
Fixed income outlook

- High demand, low and negative interest rates globally, and improving growth should continue to support spread product.
- The Federal Reserve continues to support U.S. fixed income markets.
- Private credit remains a compelling, actionable opportunity.
- Bond pickers stay constructive on select COVID-sensitive sectors.

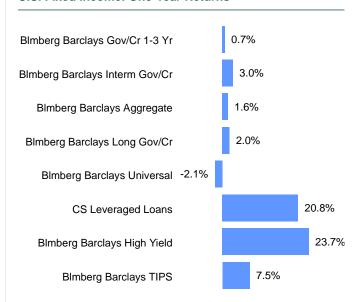
Growth and inflation expectations

- In 1Q21, the Treasury curve steepened 78 bps as the market anticipated stronger economic growth after another round of fiscal stimulus.
- The 10-year breakeven inflation rate rose 38 bps, reaching levels last seen in 2014 and 60 bps above pre-pandemic levels, implying the market expects the economy to heat-up.

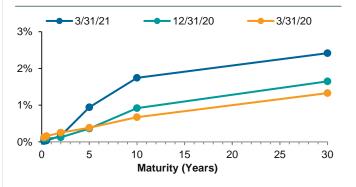
U.S. Fixed Income: Quarterly Returns



U.S. Fixed Income: One-Year Returns



U.S. Treasury Yield Curves



Sources: Bloomberg, Bloomberg Barclays, Credit Suisse



Market expectations diverge from Fed guidance

- The Fed dot plot continues to indicate the central bank should keep its policy rate low until 2023.
- Inflation (PCE) is estimated to tick up in 2021, but the policy shift to average inflation targeting in 2020 allows for inflation to rise above the 2% target during economic expansions, letting the Fed keep rates lower for longer.

Bond market response

- Common sentiment among managers is a near-term inflation increase. However, the front-end should remain anchored as unemployment and savings rates remain elevated, bank lending activity is muted, and secular forces persist.
- Recent and additional curve steepening provides opportunities along the curve and better roll down.

GLOBAL FIXED INCOME

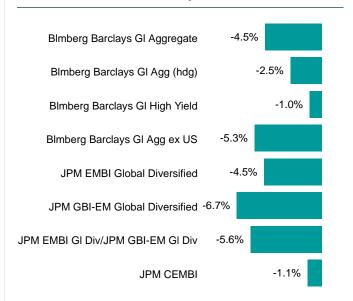
Global fixed income posts negative returns

- Global fixed income fell as developed market rates rose and the U.S. dollar strengthened.
- The U.S. dollar gained nearly 4% versus a basket of currencies, 6.6% versus the yen, and nearly 4% versus the euro.

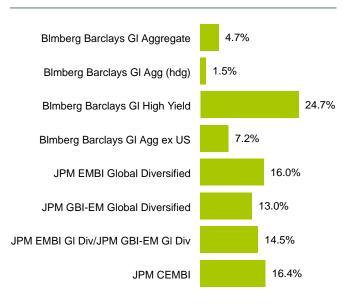
Emerging market debt sells off

- Emerging market debt indices fell in 1Q21, with EM corporates faring better than hard and local currency sovereigns amid improving corporate fundamentals.
- U.S. dollar-denominated index (EMBI Global Diversified) fell
 4.5% as rising U.S. rates spilled into emerging markets;
 returns were largely negative across the 70+ constituents.
- Local currency index (GBI-EM Global Diversified) fared worse than hard currency, as real yields rose higher than in the U.S.

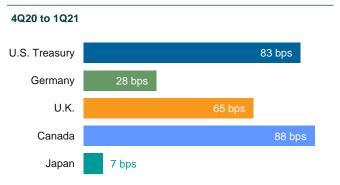
Global Fixed Income: Quarterly Returns



Global Fixed Income: One-Year Returns



Change in 10-Year Global Government Bond Yields



Sources: Bloomberg, Bloomberg Barclays, JP Morgan

Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of March 31, 2021, with the distribution as of December 31, 2020.

Asset Distribution Across Investment Managers

	March 31, 2	021	December 31, 2020			
	Market Value	Weight	Market Value	Weight		
otal Domestic Equity	\$1,263,956,661	22.20%	\$1,164,014,770	21.04%		
BlackRock Russell 1000 Value	162,914,510	2.86%	146,403,458	2.65%		
DFA Large Cap Value	168,896,277	2.97%	151,146,558	2.73%		
Northern Trust Global	322,681,428	5.67%	303,916,903	5.49%		
Polen Capital Management	155,527,419	2.73%	152,786,115	2.76%		
Earnest Partners LLC	126,598,690	2.22%	115,485,548	2.09%		
DFA Small Cap Value	226,266,478	3.97%	185,628,704	3.36%		
CastleArk Management	101,071,859	1.78%	108,647,483	1.96%		
otal Global Equity	\$492 COO CE7	9.400/	\$462,577,483	8.36%		
	\$483,609,657	8.49%				
BlackRock Global Alpha Tilts	287,603,167	5.05%	273,690,606	4.95%		
MFS Investment Management	196,006,491	3.44%	188,886,877	3.41%		
otal International Equity	\$978,904,152	17.19%	\$938,968,636	16.98%		
AQR Emerging Markets	108,941,395	1.91%	114,942,949	2.08%		
Brandes Investment Partners	396,048,555	6.96%	363,206,816	6.57%		
William Blair & Company	275,357,526	4.84%	277,206,314	5.01%		
DFA International Small Cap	198,556,677	3.49%	183,612,557	3.32%		
atal Fixed Income	¢4 250 200 606	22 109/	¢4 225 550 000	22 169/		
otal Fixed Income	\$1,258,200,686	22.10%	\$1,225,550,090 423,305,316	22.16%		
BlackRock US Debt Idx Fd	469,418,527	8.24%	432,305,316	7.82%		
Reams Asset Management	390,345,276	6.86%	391,485,474	7.08%		
Loomis, Sayles & Company, L.P.	398,436,883	7.00%	401,759,301	7.26%		
otal Private Equity	\$519,563,568	9.12%	\$533,249,666	9.64%		
Abbott Capital Management 2010	24,331,062	0.43%	26,781,062	0.48%		
Abbott Capital Management 2011	50,910,572	0.89%	50,910,572	0.92%		
Abbott Capital Management 2012	39,131,711	0.69%	41,931,711	0.76%		
Abbott Capital Management 2013	38,427,241	0.67%	40,877,241	0.74%		
Abbott Capital Management 2014	41,410,682	0.73%	43,510,682	0.79%		
Abbott Capital Management 2015	26,345,519	0.46%	26,345,519	0.48%		
Abbott Capital Management 2016	17,789,852	0.31%	17,789,852	0.32%		
Abbott Capital Management 2018	8,488,412	0.15%	7,768,412	0.14%		
Abbott Capital Management 2019	6,794,618	0.12%	4,694,618	0.08%		
Abbott Capital Management 2020	4,000,000	0.07%	4,004,010	0.0070		
Abbott Capital Management 2021	696,495	0.01%				
Mesirow V	49,493,596	0.87%	54,438,478	0.98%		
Mesirow VI	66,547,339	1.17%	73,454,788	1.33%		
Mesirow VII	65,965,738 5,734,633	1.16% 0.10%	65,965,738 5,734,633	1.19%		
Mesirow VIII	5,724,632		5,724,632	0.10%		
NB Secondary Opp Fund IV	9,034,731	0.16%	9,922,108	0.18%		
NB Secondary Opp Fund IV	15,090,138	0.27%	13,647,325	0.25%		
Private Advisors VI	21,247,416	0.37%	24,362,574	0.44%		
Private Advisors VII	12,233,662	0.21%	11,457,842	0.21%		
Private Advisors VIII	8,665,180	0.15%	8,023,233	0.15%		
Private Advisors IX	7,234,972	0.13%	5,643,279	0.10%		
bsolute Return	\$483,621,466	8.49%	\$541,932,591	9.80%		
Newton	93,475,793	1.64%	183,340,857	3.31%		
UBS A & Q	390,145,673	6.85%	358,591,734	6.48%		
No. 1 According	\$000 F70 0F0	4.040/	0044.046.070	0.000/		
Real Assets	\$228,573,352	4.01%	\$214,618,870	3.88%		
Principal DRA	228,573,352	4.01%	214,618,870	3.88%		
otal Real Estate	\$435,301,424	7.64%	\$392,721,942	7.10%		
Real Estate	435,301,424	7.64%	392,721,942	7.10%		
	*	a =	 ==			
otal Cash	\$42,348,326	0.74%	\$57,672,677	1.04%		
Cash	42,348,326	0.74%	57,672,677	1.04%		

\$5,694,079,293

100.0%



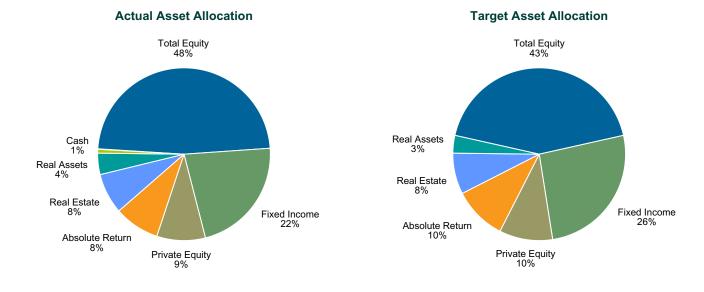
Total Fund

100.0%

\$5,531,306,726

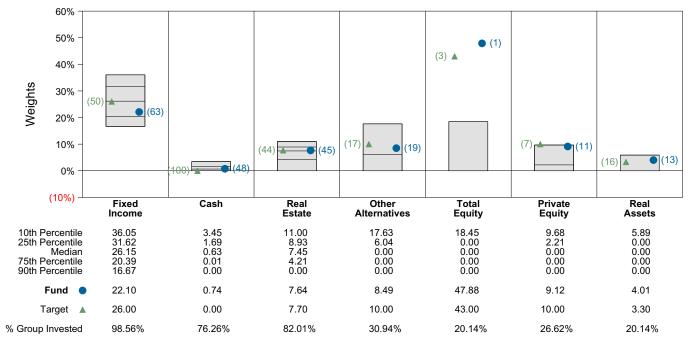
Actual vs Target Asset Allocation As of March 31, 2021

The top left chart shows the Fund's asset allocation as of March 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	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
Total Equity	2,726,470	47.9%	43.0%	4.9%	278,016
Fixed Income	1,258,201	22.1%	26.0%	(3.9%)	(222,260)
Private Equity	519,564	9.1%	10.0%	(0.9%)	`(49,844)
Absolute Return	483,621	8.5%	10.0%	(1.5%)	(85,786)
Real Estate	435,301	7.6%	7.7%	(0.1%)	(3,143)
Real Assets	228,573	4.0%	3.3%	0.7%	40,669
Cash	42,348	0.7%	0.0%	0.7%	42,348
Total	5,694,079	100.0%	100.0%		

Asset Class Weights vs Callan Public Fund Sponsor Database



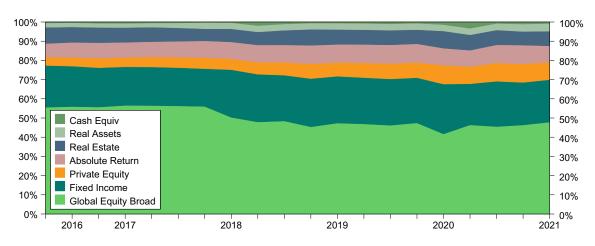
^{*} Current Quarter Target = 43.0% MSCI ACWI IMI, 26.0% Blmbg Aggregate, 10.0% Russell 3000 Index lagged 3 months+2.0%, 10.0% 3-month Treasury Bill+3.0%, 7.7% NCREIF NFI-ODCE Eq Wt Net lagged 3 months and 3.3% Principal Blended Benchmark.



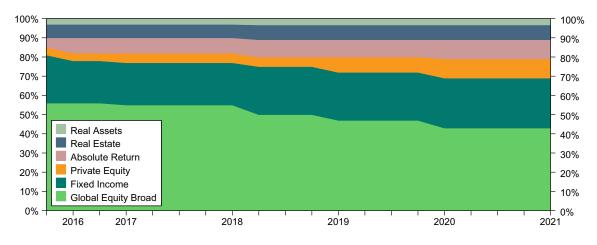
Actual vs Target Historical Asset Allocation

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.

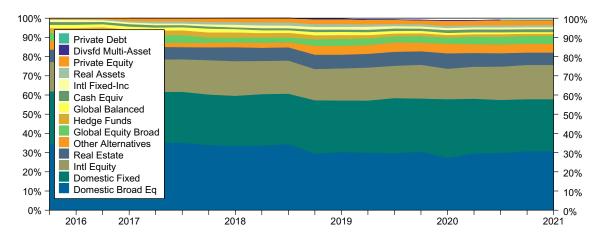
Actual Historical Asset Allocation



Target Historical Asset Allocation



Average Callan Public Fund Sponsor Database Historical Asset Allocation



^{*} Current Quarter Target = 43.0% MSCI ACWI IMI, 26.0% Blmbg Aggregate, 10.0% Russell 3000 Index lagged 3 months+2.0%, 10.0% 3-month Treasury Bill+3.0%, 7.7% NCREIF NFI-ODCE Eq Wt Net lagged 3 months and 3.3% Principal Blended Benchmark.



Total Fund Period Ended March 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 = 55.0% MSCI ACWI IMI, 22.0% BB Barclays Aggregate Idx, 8.0% 3-month Treasury Bill+3.0%, 7.0% NFI-ODCE (1 Qtr in Arrears), 5.0% Russell 3000 (1 Qtr in Arrears)+3.0% and 3.0% Principal Blended Benchmark.

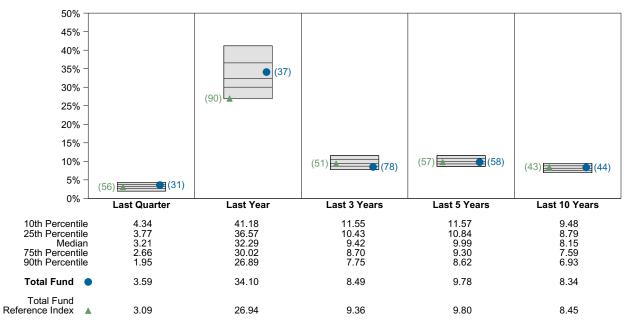
Quarterly Summary and Highlights

- Total Fund's portfolio posted a 3.59% return for the quarter placing it in the 31 percentile of the Callan Public Fund Sponsor Database group for the quarter and in the 37 percentile for the last year.
- Total Fund's portfolio outperformed the Total Fund Reference Index by 0.49% for the quarter and outperformed the Total Fund Reference Index for the year by 7.16%.

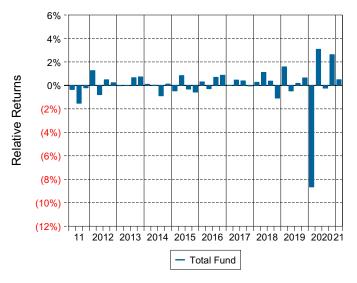
Quarterly Asset Growth

Beginning Market Value	\$5,531,306,726
Net New Investment	\$-35,998,971
Investment Gains/(Losses)	\$198,771,538
Ending Market Value	\$5,694,079,293

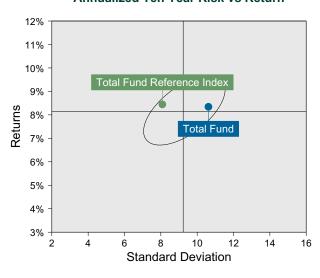
Performance vs Callan Public Fund Sponsor Database (Gross)



Relative Return vs Total Fund Reference Index



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



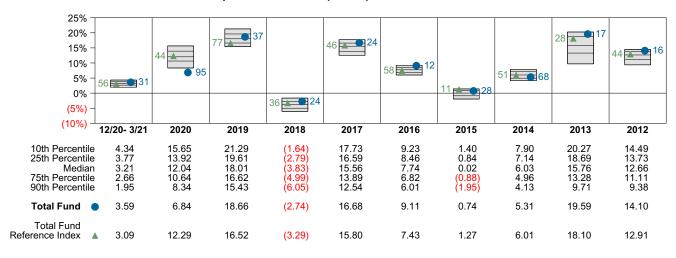


Total Fund Return Analysis Summary

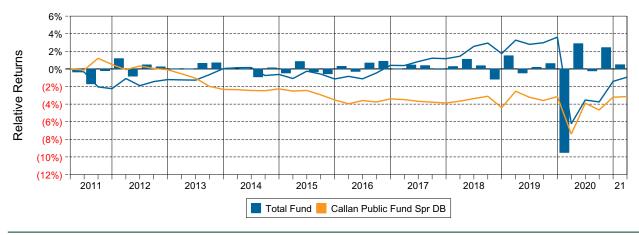
Return Analysis

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.

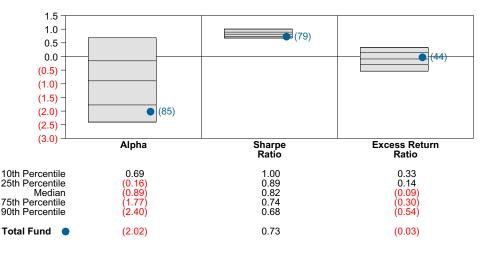
Performance vs Callan Public Fund Sponsor Database (Gross)



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 March 31, 2021



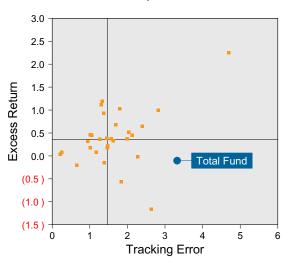


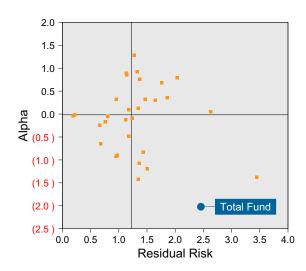
Total Fund Total Fund vs Target Risk Analysis

Risk Analysis

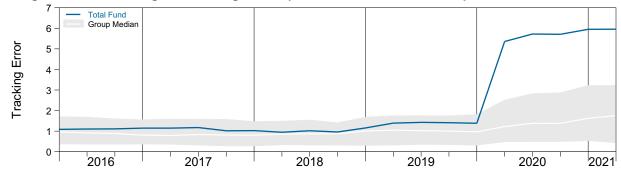
The graphs below analyze the performance and risk of the fund relative to the appropriate target mix. This relative performance is compared to a peer group of funds wherein each member fund is measured against its own target mix. The first scatter chart illustrates the relationship, called Excess Return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

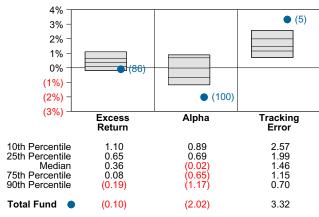


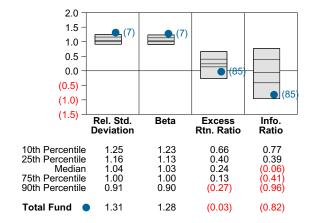


Rolling 12 Quarter Tracking Error vs Targets Compared to Callan Public Fund Sponsor Database



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



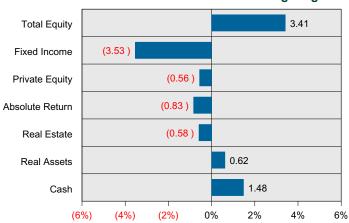




Quarterly Total Fund Relative Attribution - March 31, 2021

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.

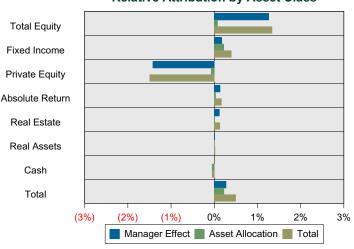




Actual vs Target Returns

7.90 (2.63)(0.13)15.09 2.33 2.81 1 16 4 27 3.99 0.02 0.02 3.59 10% (10%)(5%)0% 5% 15% 20% Actual Target

Relative Attribution by Asset Class



Relative Attribution Effects for Quarter ended March 31, 2021

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Total Equity	46%	43%	7.90%	5.14%	1.26%	0.08%	1.34%
Fixed Income	22%	26%	(2.63%)	(3.37%)	0.17%	0.22%	0.39%
Private Equity	9%	10%	(0.13%)	15.09%	(1.42%)	(0.07%)	(1.49%)
Absolute Return	9%	10%	`2.33%′	0.77%	0.13%	`0.03%´	`0.17%´
Real Estate	7%	8%	2.81%	1.16%	0.12%	0.01%	0.13%
Real Assets	4%	3%	4.27%	3.99%	0.01%	0.01%	0.02%
Cash	1%	0%	0.02%	0.02%	0.00%	(0.05%)	_(0.05%)
Total			3.59% =	3.09% +	0.27% +	0.22%	0.49%

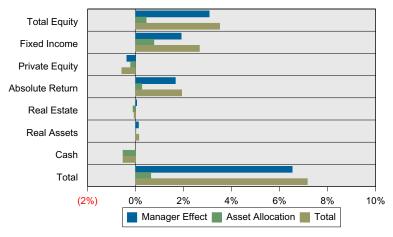
^{*} Current Quarter Target = 43.0% MSCI ACWI IMI, 26.0% Blmbg Aggregate, 10.0% Russell 3000 Index lagged 3 months+2.0%, 10.0% 3-month Treasury Bill+3.0%, 7.7% NCREIF NFI-ODCE Eq Wt Net lagged 3 months and 3.3% Principal Blended Benchmark.



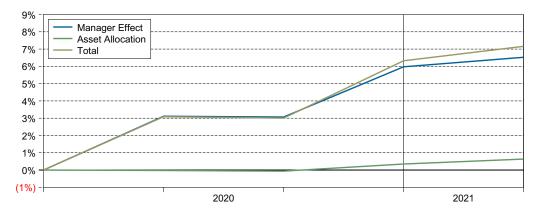
Cumulative Total Fund Relative Attribution - March 31, 2021

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%	43%	65.84%	57.58%	3.06%	0.44%	3.50%
Fixed Income	23%	26%	7.66%	0.71%	1.90%	0.76%	2.66%
Private Equity	9%	10%	22.04%	24.03%	(0.36%)	(0.21%)	(0.57%)
Absolute Return	9%	10%	19.74%	3.12%	`1.66%′	0.26%	1.92%
Real Estate	8%	8%	1.62%	0.75%	0.04%	(0.11%)	(0.06%)
Real Assets	4%	3%	34.53%	30.86%	0.12%	`0.01%´	`0.14%´
Cash	2%	0%	0.99%	0.99%	0.00%	(0.53%)	(0.53%)
Total			34.10% =	= 26.94%	+ 6.52% +	0.63%	7.16%

^{*} Current Quarter Target = 43.0% MSCI ACWI IMI, 26.0% Blmbg Aggregate, 10.0% Russell 3000 Index lagged 3 months+2.0%, 10.0% 3-month Treasury Bill+3.0%, 7.7% NCREIF NFI-ODCE Eq Wt Net lagged 3 months and 3.3% 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 March 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 March 31, 2021

	Last		Last		Last 3		Last 5		Since	
	Quarter		Year			Years			Inception	1
Total Domestic Equity Russell 3000 Index Pub PIn- Dom Equity	11.10% 6.35% 7.19%	2 81	73.94% 62.53% 63.93%	4 69	16.50% 17.12% 16.07%	41 23	Years 16.51% 16.64% 16.09%	37 32	8.39% 8.02%	(7/98) (7/98)
BlackRock Russell 1000 Value Russell 1000 Value Index Callan Large Cap Value	11.28% 11.26% 12.92%	72 74	56.34% 56.09% 60.30%	67 67	11.27% 10.96% 10.80%	42 45	- 11.74% 12.46%	71	10.19% 9.46% -	(3/17) (3/17)
DFA Large Cap Value Russell 1000 Value Index Callan Large Cap Value	15.05% 11.26% 12.92%	30 74	67.35% 56.09% 60.30%	32 67	8.87% 10.96% 10.80%	83 45	- 11.74% 12.46%	71	9.07% 10.08% -	(11/17) (11/17)
Northern Trust Global S&P 500 Index Callan Large Cap Core	6.17% 6.17% 7.18%	67 67	56.36% 56.35% 59.07%	72 72	16.82% 16.78% 16.98%	53 54	16.33% 16.29% 16.25%	46 46	10.99% 10.94% -	(8/88) (8/88)
Polen Capital Management S&P 500 Index Callan Large Cap Growth	1.79% 6.17% 1.62%	46 3	58.02% 56.35% 60.55%	63 73	26.35% 16.78% 21.98%	8 96	21.99% 16.29% 20.80%	27 97	19.45% 15.34% -	(7/12) (7/12)
Earnest Partners LLC Russell MidCap Index Callan Mid Capitalization	9.62% 8.14% 9.71%	51 57	74.30% 73.64% 74.12%	49 53	18.49% 14.73% 14.16%	29 46	19.36% 14.67% 15.00%	23 53	12.38% 10.79% -	(5/05) (5/05)
DFA Small Cap Value Russell 2000 Value Index Callan Small Cap Value	26.81% 21.17% 20.31%	7 40	116.48% 97.05% 96.57%	13 49	10.85% 11.57% 10.61%	44 27	12.60% 13.56% 12.59%	48 30	12.12% 9.95% -	(11/96) (11/96)
CastleArk Management Russell 2000 Growth Index Callan Small Cap Growth	6.41% 4.88% 5.44%	37 51	119.33% 90.20% 93.37%	16 57	23.72% 17.16% 22.58%	46 88	22.27% 18.61% 22.36%	51 85	16.18% 13.97% -	(9/13) (9/13)
Total Global Equity MSCI World Callan Global Equity	4.55% 4.92% 4.96%	55 51	56.69% 54.03% 56.97%	51 60	14.16% 12.81% 12.58%	40 48	15.64% 13.36% 13.79%	32 56	10.51% 10.20%	(4/10) (4/10)
BlackRock Global Alpha Tilts MSCI ACWI Gross Callan Global Equity	5.08% 4.68% 4.96%	49 53	57.09% 55.31% 56.97%	49 56	11.36% 12.66% 12.58%	61 50	14.07% 13.81% 13.79%	46 49	15.44% 15.19% -	(3/16) (3/16)
MFS Investment Management MSCI ACWI Gross Callan Global Equity	3.77% 4.68% 4.96%	63 53	56.20% 55.31% 56.97%	53 56	18.39% 12.66% 12.58%	12 50	17.95% 13.81% 13.79%	17 49	14.70% 11.56% -	(12/12) (12/12)
Total International Equity MSCI EAFE Pub PIn- Intl Equity	5.63% 3.48% 3.43%	5 45	60.54% 44.57% 53.84%	20 89	6.28% 6.02% 7.51%	77 80	9.76% 8.85% 10.62%	80 95	7.43% 4.94% -	(5/96) (5/96)
AQR Emerging Markets MSCI EM Gross Callan Emerging Broad	5.58% 2.34% 3.38%	25 61	64.37% 58.92% 62.67%	44 73	6.20% 6.87% 7.67%	63 58	- 12.48% 13.35%	69	12.00% 12.04% -	(8/16) (8/16)
Brandes Investment Partners MSCI EAFE Callan NonUS Eq	9.04% 3.48% 3.91%	7 54	53.97% 44.57% 52.59%	42 83	3.45% 6.02% 7.31%	90 64	7.19% 8.85% 10.16%	90 71	7.89% 5.04% -	(2/98) (2/98)
William Blair & Company MSCI ACWIxUS Gross Callan NonUS Eq	(0.59%) 3.60% 3.91%	92 53	62.54% 50.03% 52.59%	13 64	12.69% 7.02% 7.31%	12 52	13.62% 10.28% 10.16%	14 47	9.06% 7.44% -	(12/03) (12/03)
DFA International Small Cap Blended Benchmark Callan Intl Small Cap	8.27% 4.50% 5.01%	22 56	65.41% 61.98% 63.77%	38 59	1.59% 6.32% 5.70%	93 41	7.38% 10.50% 10.52%	90 51	5.11% 4.77% -	(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 March 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 March 31, 2021

	Last Quarter		Last Year		Last 3 Years		Last 5 Years		Since Inception	1
Total Fixed Income Blmbg Aggregate	(2.63%) (3.37%)		7.66% 0.71%		2.56% 4.65%		2.91% 3.10%		7.10% 6.14%	(12/87) (12/87)
BlackRock US Debt ldx Fd Blmbg Aggregate Callan Core Bond Fl	(3.38%) (3.37%) (3.20%)	73 72	1.01% 0.71% 3.04%	93 95	4.76% 4.65% 5.29%	93 95	3.10% 3.74%	96	2.96% 3.13% -	(6/16) (6/16)
Reams Asset Management Blmbg Aggregate Callan Core Plus FI	(3.55%) (3.37%) (2.86%)	94 87	8.85% 0.71% 6.94%	20 100	8.18% 4.65% 5.73%	1 96	5.41% 3.10% 4.51%	9 100	5.89% 4.59% -	(1/01) (1/01)
Loomis, Sayles & Company, L.P. Blmbg Aggregate Callan Core Plus FI	(0.83%) (3.37%) (2.86%)	3 87	15.69% 0.71% 6.94%	3 100	6.32% 4.65% 5.73%	11 96	7.15% 3.10% 4.51%	1 100	8.87% 6.14%	(12/87) (12/87)
Total Private Equity Abbott Capital Management 2010 Abbott Capital Management 2011 Abbott Capital Management 2012 Abbott Capital Management 2013 Abbott Capital Management 2013 Abbott Capital Management 2014 Abbott Capital Management 2016 Abbott Capital Management 2016 Abbott Capital Management 2018 Abbott Capital Management 2018 Abbott Capital Management 2019 Mesirow V Mesirow VI Mesirow VII NB Secondary Opp Fund III NB Secondary Opp Fund IV Private Advisors VII Private Advisors VIII Private Advisors VIII Private Advisors IX Russell 3000 (1 Qtr in Arrears) + 3%	(0.13%) 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% (0.30%) (0.42%) (0.27%) 0.00% 0.00% 0.00% (1.58%) 0.03% 0.00% (1.58%) 0.00% 1.58%		22.04% 24.43% 29.13% 29.04% 28.65% 26.51% 16.62% 20.26% 22.81% 9.51% 20.88% 28.75% 17.00 4.23% 12.99% 16.53% 3.97% 15.69% 23.73% 24.74%		20.06% 22.53% 24.76% 23.70% 24.95% 22.91% 15.10% 12.96% 		17.23% 19.64% 20.66% 19.56% 19.50% 16.73% 9.11% 7.17% - 17.64% 18.28% - 13.17% - 12.08%		10.92% (1.03%) 2.43% 10.24% 11.13% 9.39% 7.05% 9.42% 7.54% (7.01%) 10.88% 19.94% 6.66% 6.95% 9.14% 20.02% 28.97%	(6/11) (7/12) (5/13) (4/14) (4/15) (3/16) (7/18) (1/20) (6/10) (7/13)
Absolute Return	2.33%		19.74%		0.30%		2.22%		2.93%	(6/14)
Newton 1-month LIBOR + 4% Callan Abs Rtn Hedge FoF	3.09% 1.01% 3.20%	51 88	25.82% 4.17% 19.27%	35 96	10.36% 5.48% 4.50%	7 22	6.95% 5.27% 4.96%	11 48	6.16% 5.00% -	(8/14) (8/14)
UBS A & Q 1-month LIBOR + 4% Callan Abs Rtn Hedge FoF	2.26% 1.01% 3.20%	68 88	17.35% 4.17% 19.27%	68 96	7.98% 5.48% 4.50%	11 22	6.97% 5.27% 4.96%	11 48	5.84% 5.05% -	(12/14) (12/14)
Real Assets	4.27%		34.53%		5.66%		6.22%		6.23%	(1/16)
Principal DRA Principal Blended Benchmark (1) Callan Alterntive Inv DB	4.27% 3.99% 6.62%	61 62	34.53% 30.86% 28.88%	38 49	5.66% 4.97% 0.73%	22 25	6.22% 5.48% 3.27%	25 27	6.23% 5.62% -	(1/16) (1/16)
Total Real Estate	2.81%		1.62%		5.44%		7.10%		6.55%	(7/86)
Real Estate Blended Benchmark (2) Callan Tot Real Est DB	2.81% 1.16% 1.61%	7 85	1.62% 0.75% 2.80%	74 84	5.44% 4.38% 5.04%	41 64	7.10% 5.67% 6.22%	28 59	6.55% - -	(7/86)
Total Fund Total Fund Reference Index*	3.59% 3.09%		34.10% 26.94%		8.49% 9.36%		9.78% 9.80%		9.56% -	(1/79)

⁽¹⁾ Current Principal Blended Benchmark = 35% Barclays 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 = 43.0% MSCI ACWI IMI, 26.0% Blmbg Aggregate, 10.0% Russell 3000 Index lagged 3 months+2.0%, 10.0% 3-month Treasury Bill+3.0%, 7.7% NCREIF NFI-ODCE Eq Wt Net lagged 3 months and 3.3% 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.

	12/2020- 3/2021		2020		2019		2018		2017	
Total Domestic Equity Russell 3000 Index Pub Pln- Dom Equity	11.10% 6.35% 7.19%	2 81	16.35% 20.89% 18.81%	76 25	29.24% 31.02% 30.26%	75 30	(5.80%) (5.24%) (5.82%)	49 34	20.91% 21.13% 20.50%	40 39
BlackRock Russell 1000 Value Russell 1000 Value Index Callan Large Cap Value	11.28% 11.26% 12.92%	72 74	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	15.05% 11.26% 12.92%	30 74	(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	6.17% 6.17% 7.18%	67 67	18.42% 18.40% 19.29%	54 54	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	1.79% 6.17% 1.62%	46 3	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	9.62% 8.14% 9.71%	51 57	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	26.81% 21.17% 20.31%	7 40	3.85% 4.63% 2.58%	43 35	18.79% 22.39% 24.34%	89 64	(14.84%) (12.86%) (14.73%)	53 24	7.68% 7.84% 9.18%	67 67
CastleArk Management Russell 2000 Growth Index Callan Small Cap Growth	6.41% 4.88% 5.44%	37 51	45.10% 34.63% 44.48%	46 72	23.28% 28.48% 29.79%	83 52	3.29% (9.31%) (3.04%)	15 85	23.93% 22.17% 25.74%	59 70
Total Global Equity MSCI World Callan Global Equity	4.55% 4.92% 4.96%	55 51	18.78% 15.90% 17.02%	42 55	31.05% 27.67% 27.49%	27 49	(8.18%) (8.71%) (9.52%)	40 44	31.31% 22.40% 25.27%	16 75
BlackRock Global Alpha Tilts MSCI ACWI Gross Callan Global Equity	5.08% 4.68% 4.96%	49 53	16.53% 16.82% 17.02%	52 51	26.86% 27.30% 27.49%	53 51	(11.20%) (8.93%) (9.52%)	67 46	30.12% 24.62% 25.27%	22 56
MFS Investment Management MSCI ACWI Gross Callan Global Equity	3.77% 4.68% 4.96%	63 53	22.42% 16.82% 17.02%	32 51	37.31% 27.30% 27.49%	4 51	(3.75%) (8.93%) (9.52%)	11 46	33.16% 24.62% 25.27%	12 56
Total International Equity MSCI EAFE Pub Pln- Intl Equity	5.63% 3.48% 3.43%	5 45	10.84% 7.82% 13.20%	73 91	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	5.58% 2.34% 3.38%	25 61	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	9.04% 3.48% 3.91%	7 54	(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	(<mark>0.59%)</mark> 3.60% 3.91%	92 53	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	8.27% 4.50% 5.01%	22 56	1.47% 12.34% 11.29%	89 46	21.62% 24.96% 24.94%	82 49	(23.31%) (17.89%) (19.66%)	91 30	27.98% 33.01% 35.26%	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.

	12/2020- 3/2021		2020		2019		2018		2017	
Total Fixed Income Blmbg Aggregate	(2.63%) (3.37%)		(<mark>1.82%)</mark> 7.51%		11.82% 8.72%		(0.33%) 0.01%		5.28% 3.54%	
BlackRock US Debt ldx Fd Blmbg Aggregate Callan Core Bond Fl	(3.38%) (3.37%) (3.20%)	73 72	7.70% 7.51% 8.67%	90 94	8.79% 8.72% 9.17%	80 82	0.06% 0.01% 0.11%	57 62	3.68% 3.54% 3.96%	76 87
Reams Asset Management Bimbg Aggregate Callan Core Plus FI	(3.55%) (3.37%) (2.86%)	94 87	17.28% 7.51% 9.27%	2 91	8.82% 8.72% 10.03%	92 93	1.91% 0.01% (0.24%)	1 30	3.62% 3.54% 4.90%	95 95
Loomis, Sayles & Company, L.P. Blmbg Aggregate Callan Core Plus FI	(0.83%) (3.37%) (2.86%)	3 87	7.14% 7.51% 9.27%	92 91	14.42% 8.72% 10.03%	1 93	(2.11%) 0.01% (0.24%)	98 30	8.50% 3.54% 4.90%	1 95
Total Private Equity Abbott Capital Management 2010 Abbott Capital Management 2011 Abbott Capital Management 2012 Abbott Capital Management 2012 Abbott Capital Management 2014 Abbott Capital Management 2015 Abbott Capital Management 2016 Abbott Capital Management 2016 Abbott Capital Management 2018 Abbott Capital Management 2019 Mesirow V Mesirow VI NB Secondary Opp Fund III NB Secondary Opp Fund IV Private Advisors VI Private Advisors VII Private Advisors VIII Private Advisors IX Russell 3000 (1 Qtr in Arrears) + 3%	(0.13%) 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% (0.30%) (0.48%) (0.42%) (0.27%) 0.00% (1.58%) 0.03% 0.00% 0.12% 15.18%		22.14% 24.43% 29.13% 29.04% 28.65% 26.51% 16.62% 20.02% 21.39% 29.10% 16.43% 4.23% 14.80% 16.54% 3.97% 15.78%		16.63% 16.52% 19.64% 17.91% 21.13% 19.74% 15.14% 9.08% 7.26% 22.73% 3.33% 32.18% 14.76% 17.98% 11.23% (4.08%) -6.19%		21.48% 26.90% 25.70% 24.39% 25.17% 22.58% 13.57% 9.43% - 18.01% 24.87% (7.82%) 16.65% 68.26% 15.19% 19.02% - 20.60%		17.27% 19.98% 19.24% 17.97% 18.71% 13.50% 6.87% (1.13%) 21.00% 12.50% 20.63% 13.15% (3.33%) 21.71%	
Absolute Return	2.33%		(14.04%)		12.79%		1.61%		5.96%	
Newton 1-month LIBOR + 4% Callan Abs Rtn Hedge FoF	3.09% 1.01% 3.20%	51 88	11.50% 4.49% 4.03%	12 45	13.15% 6.26% 4.71%	2 28	2.18% 6.07% 0.51%	14 2	5.59% 5.11% 4.97%	39 47
UBS A & Q 1-month LIBOR + 4% Callan Abs Rtn Hedge FoF	2.26% 1.01% 3.20%	68 88	12.18% 4.49% 4.03%	11 45	9.53% 6.26% 4.71%	4 28	2.65% 6.07% 0.51%	12 2	4.16% 5.11% 4.97%	67 47
Real Assets	4.27%		4.69%		15.39%		(7.47%)		10.15%	
Principal DRA Principal Blended Benchmark (1) Callan Alterntive Inv DB	4.27% 3.99% 6.62%	61 62	4.69% 2.08% (0.96%)	21 31	15.39% 14.86% 7.80%	13 14	(7.47%) (7.27%) (7.74%)	49 47	10.15% 10.38% 4.59%	15 15
Total Real Estate	2.81%		0.76%		6.21%		9.18%		9.20%	
Real Estate Blended Benchmark (2) Callan Tot Real Est DB	2.81% 1.16% 1.61%	7 85	0.76% 0.89% 0.62%	48 47	6.21% 5.26% 7.42%	62 71	9.18% 7.89% 7.72%	37 48	9.20% 6.93% 7.79%	39 59
Total Fund Total Fund Reference Index*	3.59% 3.09%		6.84% 12.29%		18.66% 16.52%		(2.74%) (3.29%)		16.68% 15.80%	

^{*} Current Quarter Target = 43.0% MSCI ACWI IMI, 26.0% Blmbg Aggregate, 10.0% Russell 3000 Index lagged 3 months+2.0%, 10.0% 3-month Treasury Bill+3.0%, 7.7% NCREIF NFI-ODCE Eq Wt Net lagged 3 months and 3.3% Principal Blended Benchmark.

(1) Current Principal Blended Benchmark = 35% Barclays US Treasury US TIPS Idx, 15% Bloomberg Commodity Idx, 20% S&P Global Infrastructure Idx, 20% S&P Global Natural Resources Idx and 10% 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 NEI ODC (1 Otr Arrears) through 12/31/13 and



Investment Manager Returns

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

	Last	Last	Last 3	Last 5	Last 10
Net of Fee Returns	Quarter	Year	Years	Years	Years
Total Domestic Equity Net	11.04%	73.57%	16.21%	16.19%	12.72%
Russell 3000 Index	6.35%	62.53%	17.12%	16.64%	13.79%
BlackRock Russell 1000 Value	11.28%	56.33%	11.26%	-	-
Russell 1000 Value Index DFA Large Cap Value	11.26% 14.99%	56.09% 66.99%	10.96% 8.62%	11.74%	10.99%
Russell 1000 Value Index	11.26%	56.09%	10.96%	11.74%	10.99%
Northern Trust Global	6.17%	56.34%	16.80%	16.30%	13.94%
S&P 500 Index	6.17%	56.35%	16.78%	16.29%	13.91%
Polen Capital Management S&P 500 Index	1.69% 6.17%	57.39% 56.35%	25.80% 16.78%	21.44% 16.29%	- 13.91%
Earnest Partners LLC	9.48%	73.37%	17.86%	18.73%	13.77%
Russell MidCap Index	8.14%	73.64%	14.73%	14.67%	12.47%
DFA Small Cap Value Russell 2000 Value Index	26.78% 21.17%	116.29% 97.05%	10.58% 11.57%	12.20% 13.56%	10.12% 10.06%
CastleArk Management	6.23%	117.95%	22.89%	21.46%	10.00 %
Russell 2000 Growth Index	4.88%	90.20%	17.16%	18.61%	13.02%
Total Global Equity Net	4.49%	56.33%	13.80%	15.26%	9.86%
MSCI World	4.92%	54.03%	12.81%	13.36%	9.88%
BlackRock Global Alpha Tilts	5.07%	56.95%	11.18%	13.94%	-
MFS Investment Management MSCI ACWI Gross	3.66% 4.68%	55.53% 55.31%	17.88% 12.66%	17.45% 13.81%	9.73%
MSCI ACVII GIOSS					
Total International Equity Net	5.51% 3.48%	59.77% 44.57%	5.76% 6.02%	9.23%	6.55%
MSCI EAFE Index AQR Emerging Markets	3.48% 5.39%	44.57% 63.17%	5.41%	8.85%	5.52%
MSCI EM Gross	2.34%	58.92%	6.87%	12.48%	4.02%
Brandes Investment Partners	8.94%	53.38%	3.04%	6.77%	4.96%
MSCI EAFE Index	3.48%	44.57%	6.02%	8.85% 13.14%	5.52% 8.80%
William Blair & Company MSCI ACWI ex-US Index	(<mark>0.71%)</mark> 3.60%	61.81% 50.03%	12.20% 7.02%	10.28%	5.41%
DFA International Small Cap	8.14%	64.42%	1.15%	7.11%	5.74%
Blended Benchmark	4.50%	61.98%	6.32%	10.50%	8.01%
Total Fixed Income Net	(2.66%)	7.56%	2.45%	2.77%	3.24%
Blmbg Aggregate	(3.37%)	0.71%	4.65%	3.10%	3.44%
BlackRock US Debt ldx Fd Reams Asset Management	(3.38%) (3.58%)	0.99% 8.69%	4.74% 8.02%	- 5.25%	- 4.75%
Loomis, Sayles & Company, L.P.	(0.86%)	15.53%	6.17%	7.00%	5.91%
Blmbg Aggregate	(3.37%)	0.71%	4.65%	3.10%	3.44%
Total Private Equity	(0.13%)	22.04%	20.06%	17.23%	12.21%
Abbott Capital Management 2010	0.00%	24.43%	22.53%	19.64%	8.50%
Abbott Capital Management 2011	0.00% 0.00%	29.13% 29.04%	24.76% 23.70%	20.66% 19.56%	=
Abbott Capital Management 2012 Abbott Capital Management 2013	0.00%	28.65%	24.95%	19.50%	-
Abbott Capital Management 2014	0.00%	26.51%	22.91%	16.73%	-
Abbott Capital Management 2015	0.00%	16.62%	15.10%	9.11%	=
Abbott Capital Management 2016 Abbott Capital Management 2018	0.00% (0.30%)	20.26% 22.81%	12.96% -	7.17% -	- -
Abbott Capital Management 2019	(0.48%)	9.51%	-	-	-
Mesirow V	(0.42%)	20.88%	18.44%	17.64%	15.32%
Mesirow IV	(0.27%)	28.75%	25.42%	18.28%	-
Mesirow VII Mesirow VIII	0.00% 0.00%	17.00%	3.75%	-	-
NB Secondary Opp Fund III	0.00%	4.23%	11.13%	13.17%	-
NB Secondary Opp Fund IV	(1.58%)	12.99%	29.70%	-	-
Private Advisors VI	0.03%	16.53%	16.84%	12.08%	-
Private Advisors VII Private Advisors VIII	0.00% 0.00%	3.97% 15.69%	11.94% -	-	-
Private Advisors IX	0.12%	23.73%	-	- -	-
Russell 3000 (1 Qtr in Arrears) + 3%	15.18%	24.74%	17.88%	18.67%	=
Absolute Return	2.29%	19.52%	0.15%	2.12%	=
Newton	2.88%	25.02%	9.90%	6.68%	-
UBS A & Q	2.26%	17.35%	7.98%	6.97%	- 1710/
1-month LIBOR + 4%	1.01%	4.17%	5.48%	5.27%	4.74%
Real Assets	4.10%	33.68%	5.21%	5.95%	-
Principal DRA Principal Blended Benchmark (1)	4.10% 3.99%	33.68% 30.86%	5.21% 4.97%	5.95% 5.48%	-
Total Real Estate Real Estate	2.71% 2.71%	1.25% 1.25%	5.13% 5.13%	6.80% 6.80%	9.75% 9.75%
Blended Benchmark (2)	1.16%	0.75%	4.38%	5.67%	9.75% 8.94%
` '					
Total Fund Net Total Fund Reference Index	3.53% 3.09%	33.78% 26.94%	8.21% 9.36%	9.49% 9.80%	8.05% 8.45%
Total Fulla Releasing Illust	0.0070	20.07/0	3.50 /0	3.00 /0	OTO /0

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



Investment Manager Returns

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

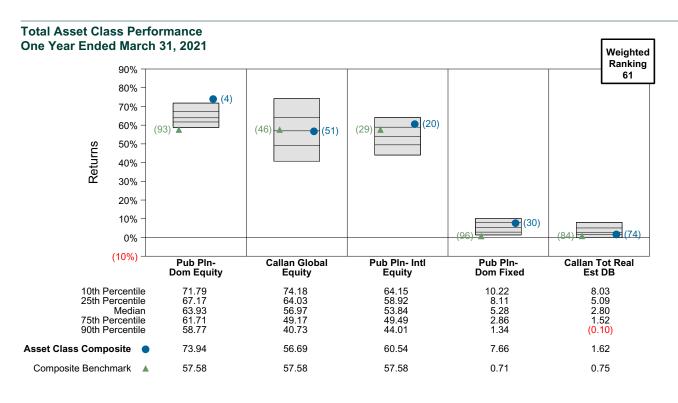
	12/2020-	_			
	3/2021	2020	2019	2018	2017
Net of Fee Returns Total Domestic Equity Net	11.04%	16.09%	28.94%	(6.10%)	20.53%
Russell 3000 Index	6.35%	20.89%	31.02%	(5.24%)	21.13%
BlackRock Russell 1000 Value	11.28%	3.27%	26.77%	(8.13%)	-
Russell 1000 Value Index DFA Large Cap Value	11.26% 14.99%	2.80% (1.78%)	26.54% 26.42%	(8.27%) (12.60%)	13.66%
Russell 1000 Value Index	11.26%	2.80%	26.54%	(8.27%)	13.66%
Northern Trust Global	6.17%	18.41%	31.53%	(4.37%)	21.83%
S&P 500 Index	6.17%	18.40%	31.49%	(4.38%)	21.83%
Polen Capital Management S&P 500 Index	1.69% 6.17%	34.59% 18.40%	38.27% 31.49%	8.60% (4.38%)	27.05% 21.83%
Earnest Partners LLC	9.48%	20.96%	37.65%	(10.29%)	25.50%
Russell MidCap Index	8.14%	17.10%	30.54%	(9.06%)	18.52%
DFA Small Cap Value	26.78%	3.74%	18.58%	(15.30%)	7.10%
Russell 2000 Value Index CastleArk Management	21.17% 6.23%	4.63% 44.12%	22.39% 22.47%	(12.86%) 2.60%	7.84% 23.12%
Russell 2000 Growth Index	4.88%	34.63%	28.48%	(9.31%)	22.17%
Total Global Equity Net	4.49%	18.48%	30.55%	(8.51%)	30.85%
MSCI World	4.49%	15.90%	27.67%	(8.71%)	22.40%
BlackRock Global Alpha Tilts	5.07%	16.39%	26.48%	(11.24%)	30.06%
MFS Investment Management	3.66%	21.88%	36.74%	(4.16%)	32.62%
MSCI ACWI Gross	4.68%	16.82%	27.30%	(8.93%)	24.62%
Total International Equity Net	5.51%	10.28%	21.08%	(15.60%)	24.44%
MSCI EAFE Index	3.48%	7.82%	22.01%	(13.79%)	25.03%
AQR Emerging Markets MSCI EM Gross	5.39% 2.34%	17.38% 18.69%	19.64% 18.90%	(18.93%) (14.24%)	34.55% 37.75%
Brandes Investment Partners	8.94%	(1.69%)	14.86%	(9.17%)	16.06%
MSCI EAFE Index	3.48%	7.82%	22.01%	(13.79%)	25.03%
William Blair & Company	(0.71%)	30.84%	31.01%	(17.20%)	30.94%
MSCI ACWI ex-US Index DFA International Small Cap	3.60% 8.14%	11.13% 0.81%	22.13% 21.00%	(13.77%) (23.31%)	27.77% 27.98%
Blended Benchmark	4.50%	12.34%	24.96%	(17.89%)	33.01%
Total Fixed Income Net	(2.66%)	(1.91%)	11.68%	(0.47%)	5.09%
Blmbg Aggregate	(3.37%)	7.51%	8.72%	0.01%	3.54%
BlackRock US Debt ldx Fd	(3.38%)	7.68%	8.77%	0.04%	3.66%
Reams Asset Management	(3.58%)	17.11%	8.65%	1.76%	3.46%
Loomis, Sayles & Company, L.P. Blmbg Aggregate	(0.86%) (3.37%)	6.99% 7.51%	14.25% 8.72%	(<mark>2.24%)</mark> 0.01%	8.36% 3.54%
Total Private Equity	(0.13%)	22.14%	16.63%	21.48%	17.27%
Abbott Capital Management 2010	0.00%	24.43%	16.52%	26.90%	19.98%
Abbott Capital Management 2011	0.00%	29.13%	19.64%	25.70%	19.24%
Abbott Capital Management 2012	0.00%	29.04%	17.91%	24.39%	17.97%
Abbott Capital Management 2013 Abbott Capital Management 2014	0.00% 0.00%	28.65% 26.51%	21.13% 19.74%	25.17% 22.58%	18.71% 13.50%
Abbott Capital Management 2014 Abbott Capital Management 2015	0.00%	16.62%	15.74%	13.57%	6.87%
Abbott Capital Management 2016	0.00%	20.02%	9.08%	9.43%	(1.13%)
Abbott Capital Management 2018	(0.30%)	22.73%	7.26%	-	- '
Abbott Capital Management 2019	(0.48%)	10.04%	-	-	-
Mesirow V Mesirow IV	(0.42%) (0.27%)	21.39% 29.10%	16.29% 22.73%	18.01% 24.87%	21.00% 12.50%
Mesirow VII	0.00%	16.43%	3.33%	(7.82%)	-
Mesirow VIII	0.00%	-	-	· -	-
NB Secondary Opp Fund III	0.00%	4.23%	12.18%	16.65%	20.63%
NB Secondary Opp Fund IV Private Advisors VI	(<mark>1.58%)</mark> 0.03%	14.80% 16.54%	14.76% 17.98%	68.26% 15.19%	- 13.15%
Private Advisors VII	0.00%	3.97%	11.23%	19.02%	(3.33%)
Private Advisors VIII	0.00%	15.78%	(4.08%)	-	-
Private Advisors IX	0.12%	- 10 770/	- 6.100/	-	- 24.740/
Russell 3000 (1 Qtr in Arrears) + 3%	15.18%	18.77%	6.19%	20.60%	21.71%
Absolute Return	2.29%	(14.21%)	12.52%	1.61%	5.96%
Newton UBS A & Q	2.88% 2.26%	10.85% 12.18%	12.64% 9.53%	2.18% 2.65%	5.59% 4.16%
1-month LIBOR + 4%	1.01%	4.49%	6.26%	6.07%	5.11%
Real Assets	4.10%	4.02%	14.84%	(7.47%)	10.15%
Principal DRA	4.10%	4.02%	14.84%	(7.47%)	10.15%
Principal Blended Benchmark (1)	3.99%	2.08%	14.86%	(7.27%)	10.38%
Total Real Estate	2.71%	0.39%	5.95%	8.94%	8.89%
Real Estate	2.71%	0.39%	5.95%	8.94%	8.89%
Blended Benchmark (2)	1.16%	0.89%	5.26%	7.89%	6.93%
Total Fund Net	3.53%	6.59%	18.34%	(3.01%)	16.36%
Total Fund Reference Index	3.09%	12.29%	16.52%	(3.29%)	15.80%

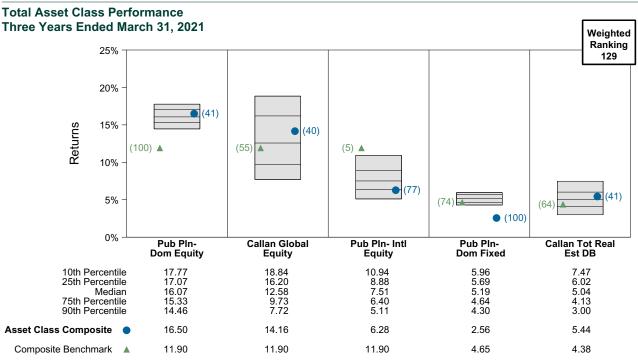
^{*}Net returns are simulated with the use of fee schedules through March 31, 2019. Actual fees paid are used thereafter.



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.



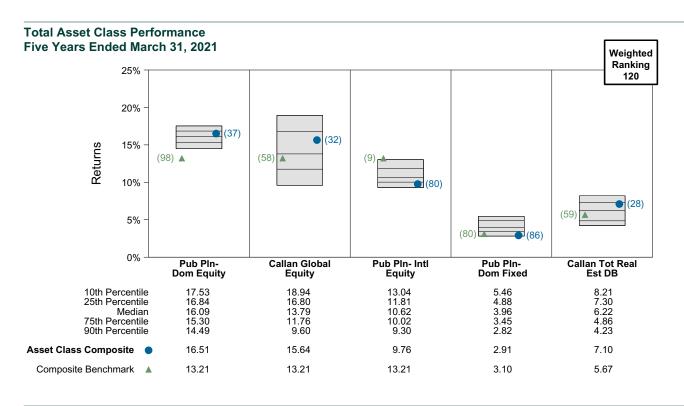


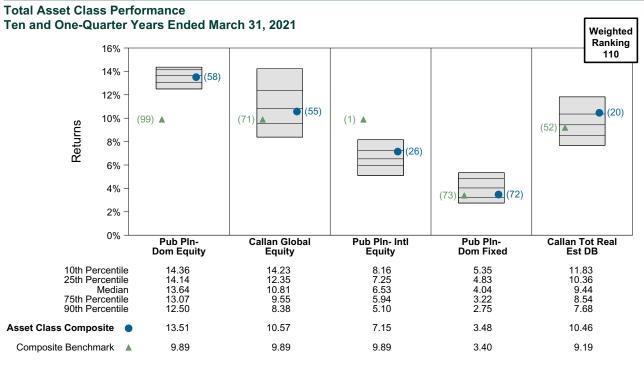
^{*} Current Quarter Target = 43.0% MSCI ACWI IMI, 26.0% Blmbg Aggregate, 10.0% Russell 3000 Index lagged 3 months+2.0%, 10.0% 3-month Treasury Bill+3.0%, 7.7% NCREIF NFI-ODCE Eq Wt Net lagged 3 months and 3.3% Principal Blended Benchmark.



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.





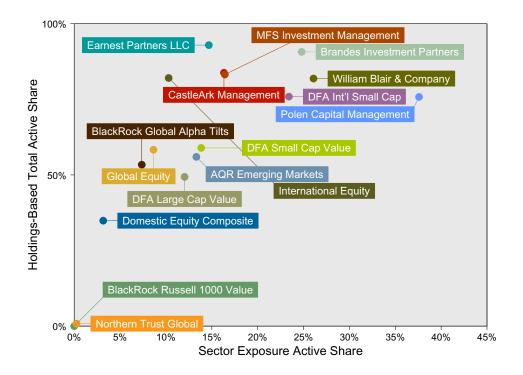
^{*} Current Quarter Target = 43.0% MSCI ACWI IMI, 26.0% Blmbg Aggregate, 10.0% Russell 3000 Index lagged 3 months+2.0%, 10.0% 3-month Treasury Bill+3.0%, 7.7% NCREIF NFI-ODCE Eq Wt Net lagged 3 months and 3.3% Principal Blended Benchmark.



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



	Index	Total Act Share	Non-Idx Act Share	Sector Act Share	Number Securities	Security Diverse
*Domestic Equity Composite	Russell 3000	34.87%	0.37%	3.16%	1917	62.47
BlackRock Russell 1000 Value	Russell 1000 Value	0.00%	0.00%	0.00%	860	68.35
DFA Large Cap Value	Russell 1000 Value	49.34%	0.60%	12.03%	328	40.69
Northern Trust Global	S&P 500	0.81%	0.07%	0.25%	505	43.94
Polen Capital Management	S&P 500	75.79%	0.00%	37.59%	24	7.89
Earnest Partners LLC	Russell MidCap	92.92%	11.99%	14.68%	57	21.80
DFA Small Cap Value	Russell 2000 Value	58.93%	14.91%	13.84%	957	119.63
CastleArk Management	Russell 2000 Growth	83.78%	17.84%	16.32%	107	36.82
Global Equity	MSCI World	58.32%	10.69%	8.64%	1108	65.94
BlackRock Global Alpha Tilts	MSCI ACWI Gross	53.38%	7.03%	7.37%	1065	92.76
MFS Investment Management	MSCI ACWI Gross	83.20%	4.54%	16.42%	77	23.33
International Equity	MSCI EAFE	82.05%	29.48%	10.30%	2417	78.89
AQR Emerging Markets	MSCI EM Gross	55.96%	0.66%	13.32%	279	31.03
Brandes Investment Partners	MSCI EAFE	90.68%	13.61%	24.79%	63	22.32
William Blair & Company	MSCI ACWIxUS Gross	81.86%	14.92%	26.09%	292	45.24
DFA Int'l Small Cap MS	SCI World ex US Sm Cap	75.89%	9.87%	23.41%	1812	159.91

^{*3/31/21} portfolio characteristics generated using most recently available holdings (12/31/20) modified based on a "buy-and-hold" assumption (repriced and adjusted for corporate actions). Analysis is then done using current market and company financial data.



Current Holdings Based Style Analysis Total Equity Composite As of March 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.

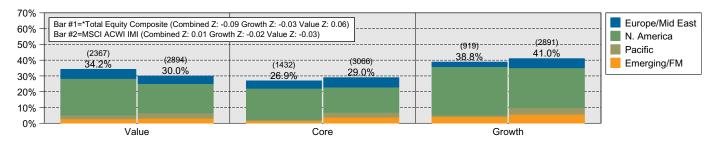
Style Map vs Callan Public Fund Spr DB Holdings as of March 31, 2021



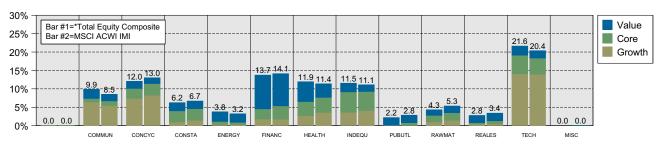
Style Exposure Matrix Holdings as of March 31, 2021

	Value	Core	Growth	Total
	30.0% (2894)	29.0% (3066)	41.0% (2891)	100.0% (8851)
Total				
	34.2% (2367)	26.9% (1432)	38.8% (919)	100.0% (4718)
Emerging/ FM	3.2% (1052)	3.9% (1022)	5.7% (955)	12.7% (3029)
_	2.7% (211)	1.5% (136)	4.2% (197)	8.4% (544)
	3.3% (583)	3.0% (565)	4.1% (576)	10.4% (1724)
Pacific		(223)	(52)	(1112)
	2.4% (798)	0.7% (285)	1.0% (99)	4.1% (1182)
	18.6% (817)	16.1% (970)	25.3% (834)	59.9% (2621)
N. America	(11)	,	,	
	23.2% (954)	19.9% (722)	30.6% (417)	73.7% (2093)
Europe/ Mid East	5.0% (442)	6.1% (509)	5.9% (526)	17.0% (1477)
	5.9% (404)	4.8% (289)	3.1% (206)	13.8% (899)

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



Sector Weights Distribution Holdings as of March 31, 2021



^{*3/31/21} portfolio characteristics generated using most recently available holdings (12/31/20) modified based on a "buy-and-hold" assumption (repriced and adjusted for corporate actions). Analysis is then done using current market and company financial data.



Current Holdings Based Style Analysis Total Equity Composite As of March 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.

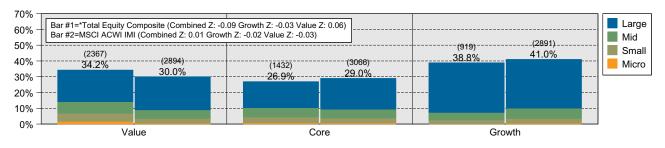
Style Map vs Callan Public Fund Spr DB Holdings as of March 31, 2021



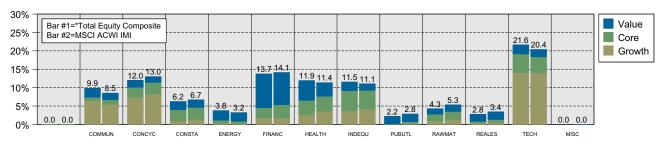
Style Exposure Matrix Holdings as of March 31, 2021

3.7% ((1136) 3.7% ((1136) 3.19 (301) 0.7% ((6) (931) 0.6 (2367) 26.9%	(449) 2.49 % (1250) 3 (471) 0.29 (3% (955) (1432) 38.8	.0% (274) 11.2% .0% (1156) 9.1 % (131) 2.6% 0.6% (768) 1.8 3% (919) 100.0	% (1770) % (1242) % (3542) (1903) % (2654) % (4718) % (8851)
3.7% ((1136) 3.1% (3.10) 0.7% ((4) (931) 0.6	(449) 2.49 % (1250) 3 (471) 0.29 3% (955)	% (274) 11.2% .0% (1156) 9.1 % (131) 2.6% 0.6% (768) 1.8	% (3542) (1903) % (2654)
3.7% ((1136) 3.1% (3.10) 0.7% ((4) (931) 0.6	(449) 2.49 % (1250) 3 (471) 0.29 3% (955)	% (274) 11.2% .0% (1156) 9.1 % (131) 2.6% 0.6% (768) 1.8	% (3542) (1903) % (2654)
3.7% ((1136) 3.1% (301) 0.7% ((449) 2.4% % (1250) 3 (471) 0.2%	.0% (274) 11.2% .0% (1156) 9.1 % (131) 2.6%	% (3542) (1903)
3.7% ((1136) 3.1%	(449) 2.4 % (1250) 3	.0% (1156) 11.2 %	% (3542)
3.7% ((449) 2.4%	% (274) 11.2 %	(1242)
` '	, ,	` '	
` '	, ,	` '	
% (529) 5.6	6% (591)	6.5% (650) 17.5	% (1770)
0.070	(000)	(231)	, (555)
6.0% ((303) 4 79	% (291) 18.2 %	(903)
% (298) 19.6	5% (270) 3·	1.0% (317) 71.	6% (885)
1	(====)	1% (223) 68.1 %	(670)

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



Sector Weights Distribution Holdings as of March 31, 2021



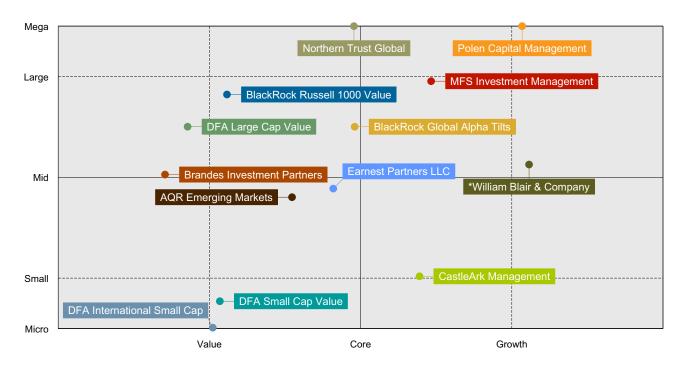
^{*3/31/21} portfolio characteristics generated using most recently available holdings (12/31/20) modified based on a "buy-and-hold" assumption (repriced and adjusted for corporate actions). Analysis is then done using current market and company financial data.



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



	Weight	Wtd Median	Combined	Growth	Value	Number of	Security
	%	Mkt Cap	Z-Score	Z-Score	Z-Score	Securities D	iversification
BlackRock Russell 1000 Value	5.98%	74.29	(0.78)	(0.34)	0.44	860	68.35
DFA Large Cap Value	6.19%	54.12	(1.01)	(0.32)	0.69	328	40.69
Northern Trust Global	11.84%	165.98	(0.03)	(0.02)	0.01	505	43.94
Polen Capital Management	5.70%	236.48	1.04	0.40	(0.64)	24	7.89
Earnest Partners LLC	4.64%	20.31	(0.15)	(0.05)	0.10	57	21.80
DFA Small Cap Value	8.30%	2.88	(0.82)	(0.17)	0.65	957	119.63
CastleArk Management	3.71%	4.07	0.38	(80.0)	(0.46)	107	36.82
MFS Investment Management	7.19%	82.62	0.46	0.07	(0.39)	77	23.33
BlackRock Global Alpha Tilts	10.55%	54.07	(0.03)	0.02	0.05	1065	92.76
AQR Emerging Markets	4.00%	18.72	(0.39)	(0.04)	0.36	279	31.03
Brandes Investment Partners	14.53%	24.12	(1.14)	(0.32)	0.82	63	22.32
*William Blair & Company	10.10%	30.41	1.08	0.36	(0.73)	292	45.24
DFA International Small Cap	7.28%	1.90	(0.86)	(0.26)	0.60	1812	159.91

^{*3/31/21} portfolio characteristics generated using most recently available holdings (2/28/21) modified based on a "buy-and-hold" assumption (repriced and adjusted for corporate actions). Analysis is then done using current market and company financial data.







1st Quarter 2021

Research and Education

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/callan/research-library to see all of our publications, and www.callan.com/callan/blog to view our blog. For more information contact Barb Gerraty at 415-274-3093 / institute@callan.com.

New Research from Callan's Experts

<u>Callan's 2021-2030 Capital Markets Assumptions</u> | Callan develops capital markets assumptions to help clients with their long-term strategic planning. For the period 2021-2030, we made almost revolutionary changes to our projections. We also added several new asset classes, including private credit.

2021 Defined Contribution Survey | The world is changing dramatically, and our annual *DC Survey* is evolving to fit the shifting landscape. Callan's 14th Annual *DC Survey* now covers the SECURE and CARES Acts, the impacts of the COVID-19 pandemic, along with the key tenets of DC plan management, financial wellness, and HSAs.

<u>GameStopped—or Just Getting Started?</u> In this quarter's *Hedge Fund Monitor*, Jim McKee explains what the GameStop saga means for institutional investors, and outlines what questions they should be asking their hedge fund managers.

Coping with COVID-19: How Work Is Evolving for Investment Managers, 3rd Edition | Following up on our September publication, Callan surveyed investment managers regarding how their firms were responding to the COVID-19 pandemic, focusing on office closures and re-openings, work-from-home approaches, business travel, and meetings. This edition also includes data on how firms are handling attendance to live events and changes to employee benefits packages specific to the COVID-19 pandemic.

Blog Highlights

Captive Insurance Stepped in to Ease Pandemic's Blow. Now

<u>What?</u> | By accessing permissible capital invested in the captive investment portfolio, some captive insurers were able to support their parent organizations during COVID-19 by providing relief from business interruption losses. As dependence on captive

insurance increases, the demand for higher investment returns from the captive investment portfolio will also increase.

How the Pandemic Affected Private Credit, and What's Next | As interest rates on investment grade bonds have fallen to near-zero, private credit has attracted more interest from institutional investors.

Why the Yield Curve Is Really Curving | As prospects for growth have brightened on the back of increasing vaccinations, a gradual reopening across the country, and continued fiscal stimulus, yields on longer maturity bonds have risen while short-term rates have been anchored by the Fed.

Quarterly Periodicals

<u>Private Equity Trends, 4Q20</u> | A high-level summary of private equity activity in the quarter through all the investment stages

Active vs. Passive Charts, 4Q20 | A comparison of active managers alongside relevant benchmarks over the long term

<u>Market Pulse Flipbook, 4Q20</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, 4Q20</u> | Analysis and a broad overview of the economy and public and private market activity each quarter across a wide range of asset classes

<u>Hedge Fund Quarterly, 4Q20</u> | Commentary on developments for hedge funds and multi-asset class (MAC) strategies

Real Assets Reporter, 4Q20 | A summary of market activity for real assets and private real estate during the quarter

Events

Miss out on a Callan conference or workshop? Event summaries and speakers' presentations are available on our website: callan.com/callan/research-library

Please mark your calendar and look forward to upcoming invitations:

2021 National Conference
July 19-21, 2021, in Salt Lake City

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—Virtual August 17-19, 2021

This program familiarizes institutional investor trustees and staff and asset management advisers with basic investment theory, terminology, and practices. It is held over three days with virtual modules of 2.5-3 hours. This course is designed for individuals with less than two years of experience with asset-management oversight and/or support responsibilities. Tuition is \$950 per person and includes instruction and digital materials.

Additional information including registration can be found at: callan.com/callan/events/ccintro_august/

Introduction to Investments—In Person October 6-7, 2021, in Chicago

This program familiarizes institutional investor trustees and staff and asset management advisers with basic investment theory, terminology, and practices. It lasts one-and-a-half days and is designed for individuals with less than two years of experience with asset-management oversight and/or support responsibilities. 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 dates and registration can be found at: callan.com/callan/events/oct-intro-college-2/



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

Greg Allen, CEO and Chief Research Officer





List of Callan's Investment Manager Clients

Confidential - For Callan Client Use Only

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

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

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

Manager Name
Aberdeen Standard Investments
Acadian Asset Management LLC
Adams Street Partners, LLC
AEGON USA Investment Management Inc.
AllianceBernstein
Allianz
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
Baron Capital Management, Inc.

Manager Name
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
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
Cohen & Steers Capital Management, Inc.
Columbia Threadneedle Investments North America

Manager Name

Credit Suisse Asset Management

Crescent Capital Group LP

D.E. Shaw Investment Management, LLC

DePrince, Race & Zollo, Inc.

Dimensional Fund Advisors LP

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

Ivy Investments

J.P. Morgan

Janus

Jennison Associates LLC

Jobs Peak Advisors

J O Hambro Capital Management Limited

Manager Name

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

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

PineBridge Investments

Polen Capital Management, LLC

Principal Global Investors

Putnam Investments, LLC

QMA LLC

RBC Global Asset Management



Manager Name

Regions Financial Corporation

Richard Bernstein Advisors LLC

Robeco Institutional Asset Management, US Inc.

Rothschild & Co. Asset Management US

S&P Dow Jones Indices

Schroder Investment Management North America Inc.

SLC Management

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

State Street Global Advisors

Stone Harbor Investment Partners L.P.

Strategic Global Advisors

T. Rowe Price Associates, Inc.

The TCW Group, Inc.

Thompson, Siegel & Walmsley LLC

Thornburg Investment Management, Inc.

Manager Name

Tri-Star Trust Bank

VanEck

Versus Capital Group

Victory Capital Management Inc.

Virtus Investment Partners, Inc.

Vontobel Asset Management, Inc.

Voya

WCM Investment Management

WEDGE Capital Management

Wellington Management Company LLP

Wells Fargo Asset Management

Western Asset Management Company LLC

Westfield Capital Management Company, LP

William Blair & Company LLC

