

June 30, 2020



## City of Milwaukee Employees' Retirement System

### Investment Measurement Service Quarterly Review

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## Table of Contents

### June 30, 2020

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<b>Capital Markets Review</b>	1
<hr/>	
<b>Total Fund</b>	
Investment Manager Asset Allocation	7
Actual vs. Target Asset Allocation	8
Total Fund vs. Total Public Fund Database	10
Quarterly Total Fund Attribution	13
Cumulative Total Fund Attribution	14
Investment Manager Returns - Gross of Fee	15
Investment Manager Returns - Net of Fee	19
Asset Class Rankings	21
Active Share Structure Analysis	23
Total Equity Style Analysis	24
Manager Comparison Style Analysis	26
<hr/>	
<b>Callan Research/Education</b>	27
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<b>Disclosures</b>	30



**U.S. EQUITY**

U.S. equity markets bounced back from March lows in 2Q20 (Russell 1000: +21.8%). The S&P 500 (+20.5%) recorded its best quarterly performance since 1998. Three sectors (Technology, Consumer Discretionary, and Energy) posted returns in excess of 30%. Technology (+30.5%) continues to be a top performer with “FAAMG” stocks up 35% in the quarter. Many Technology stocks benefited from the “stay at home” environment. Energy stocks (+30.5%) rebounded after OPEC+ and non-OPEC production cuts buoyed crude prices.

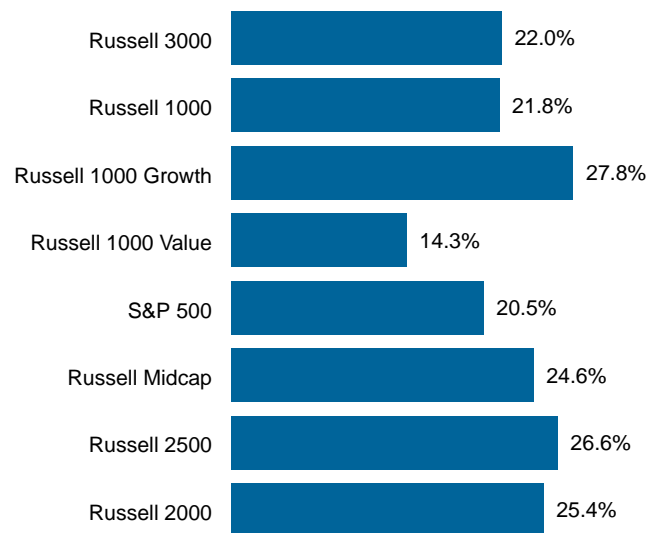
**Small cap (Russell 2000: +25.4%) outgained large cap**

- From the first to the second quarter, the Russell 2000 swung from its worst quarterly performance to one of its three best quarterly returns since the inception of the index.
- The Russell 2000 still lags the Russell 1000 on a year to date and trailing one-year basis, exemplifying the extreme dislocation between large and small cap performance in the first quarter.
- Better-than-expected economic data and Fed actions helped shift investment sentiment in favor of small cap.

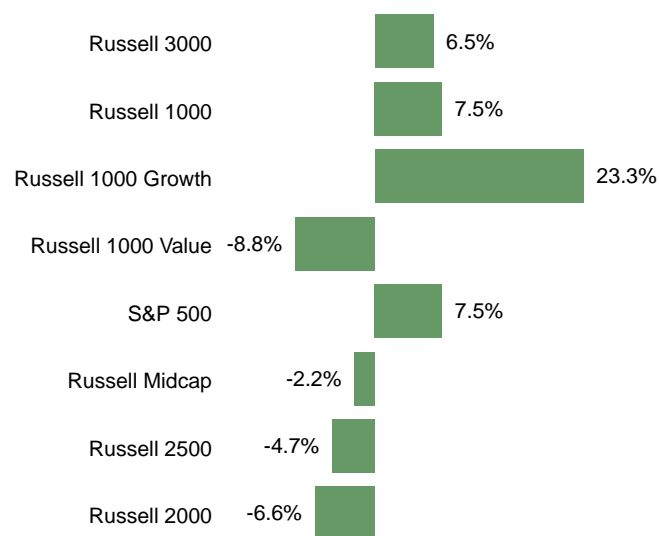
**Growth outpaced value across market capitalizations**

- Value indices underperformed their growth counterparts across the market cap spectrum during the first quarter decline as well as during the second quarter recovery (Russell 1000 Growth: +27.8%; Russell 1000 Value: +14.3%; Russell 2000 Growth: +30.6%; Russell 2000 Value: +18.9%).
- Persistently low interest rates, a flatter yield curve, and slower economic growth are some of the headwinds for the value factor.

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

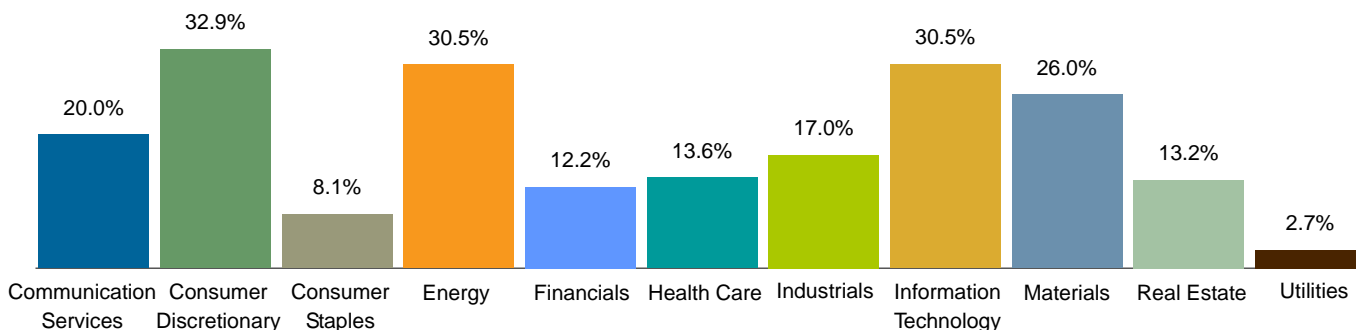


**U.S. Equity: One-Year Returns**



Sources: FTSE Russell, S&P Dow Jones Indices

**S&P Sector Returns, Quarter Ended June 30, 2020**



Source: S&P Dow Jones Indices

**GLOBAL/GLOBAL EX-U.S. EQUITY**

Accommodative monetary policies coupled with massive fiscal stimulus helped fuel the second quarter market recovery after the first quarter's declines.

**Global/Developed ex-U.S.**

- Developed markets with the most success at mitigating the coronavirus led; Australia (+28.9%), New Zealand (+28.1%), and Germany (+26.5%) were the top performers.
- Countries' inability to "flatten the curve" acted as headwinds to their equity markets, namely the U.K. (+7.8%).
- Every sector in MSCI EAFE except Energy (-0.03%) posted positive returns, led by cyclicals; Information Technology (+23.4%) companies also provided strong returns as working-from-home trends continued to support the sector.
- Factor performance in developed ex-U.S. markets was led by momentum and quality, reflecting the cyclical rebound (momentum) coupled with continued pandemic uncertainty (quality, flight to safety); growth continued to outperform value (EAFE Growth: +17.0% vs. EAFE Value: +12.4%).

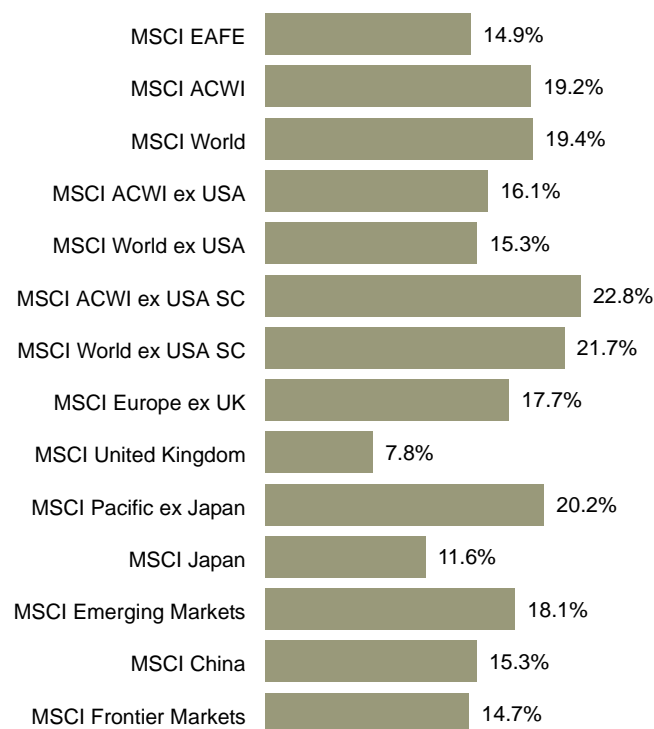
**Emerging Markets**

- Emerging markets produced their strongest quarterly gains in over a decade as fiscal and monetary stimulus from countries aided the second quarter rebound across all countries and sectors.
- Most EM countries ended lockdowns during the period, but Latin America, India, and some parts of Southeast Asia ended the second quarter with cases surging.
- Commodity-linked economies such as South Africa (+27.2%), Brazil (+22.9%), and Russia (+18.7%) recovered on the strength of metals, mining, and oil-related securities after being some of the worst-performing countries in 1Q20.
- China (+15.6%) lagged the index as U.S.-China trade tensions reignited and additional sanctions were imposed.
- Every sector posted positive returns, most in double digits.
- Factor performance reflected a risk-on mentality. Growth outperformed value (EM Growth: +22.1% vs. EM Value: +13.8%)

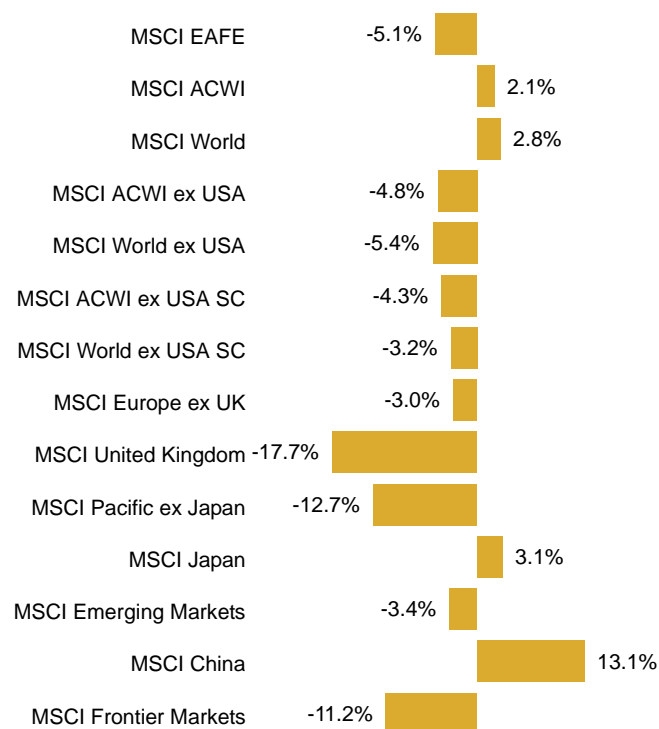
**Global ex-U.S. Small Cap**

- Global ex-U.S. small caps rallied during the second quarter as lockdowns eased and economies reopened.
- A risk-on mindset pervaded the global ex-U.S. small cap market that fueled double-digit returns for every sector in the MSCI ACWI ex-USA Small Cap Index.
- Australia (+47.1%) was the top-performing country; Japan (+12.8%) and the U.K. (+14.8%) were two of the worst-performing countries.

**Global Equity: Quarterly Returns**



**Global Equity: One-Year Returns**



Source: MSCI

**U.S. FIXED INCOME**

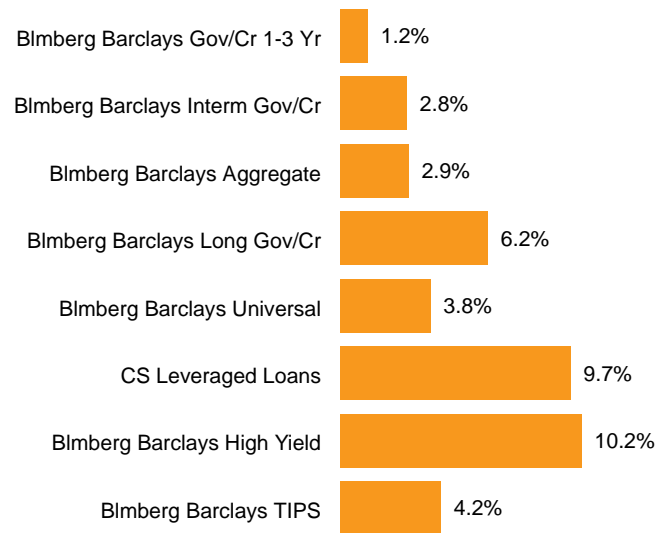
**U.S. Treasury yields were range-bound**

- The 10-year U.S. Treasury yield reached a high of 0.91% in June before closing the quarter at 0.66%, down slightly from the 1Q20 quarter-end level of 0.70%.
- After strong performance in 1Q20, U.S. Treasury returns lagged other “spread” sectors as risk appetites rebounded, fueled by massive Fed stimulus programs as well as improved liquidity.
- The Fed left rates on hold at 0% - 0.25% for the foreseeable future, anchoring the low end of the yield curve.
- TIPS outperformed nominal Treasuries as expectations for inflation rose. The 10-year breakeven spread ended the quarter at 1.34%, up from 0.87% as of the end of 1Q20.

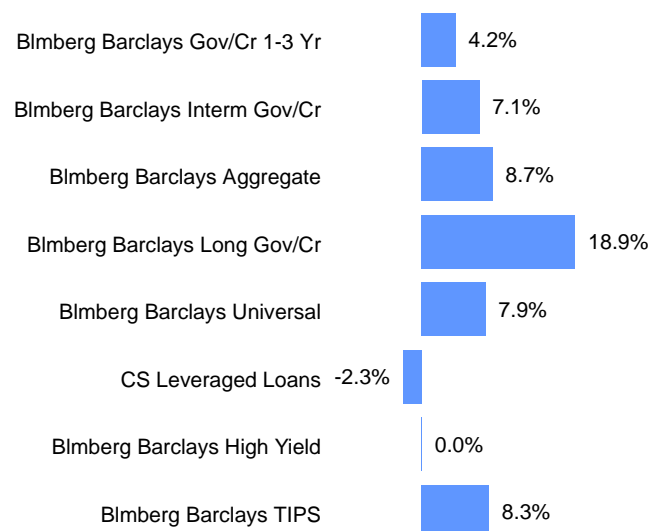
**Corporate credit rallied due to spread widening**

- Corporate credit rebounded amid improving investor confidence and economic data. However, fallen angels continued to spark concern with nearly half the investment grade bond market now rated BBB.
- Investment grade corporate spreads narrowed by 122 bps to 150 bps despite companies issuing record amounts of debt totaling \$1.4 trillion (+9.0%); the Fed provided continued support through the announcements of the Primary and Secondary Market Corporate Credit Facilities.
- In a reversal from 1Q20, lower quality outperformed as BBB-rated credit (+11.2%) outperformed single A (+7.0%), AA (+5.0%), and AAA (+1.7%).
- High yield corporates also posted sharp returns (+10.2%). CCC-rated high yield corporates (+9.1%) lagged BB-rated corporates (+11.5%).
- The high yield default rate reached a 10-year high (6.2%).
- Energy (+40.0%) was the highest-performing high yield bond sub-sector, reflecting sharply higher oil prices.

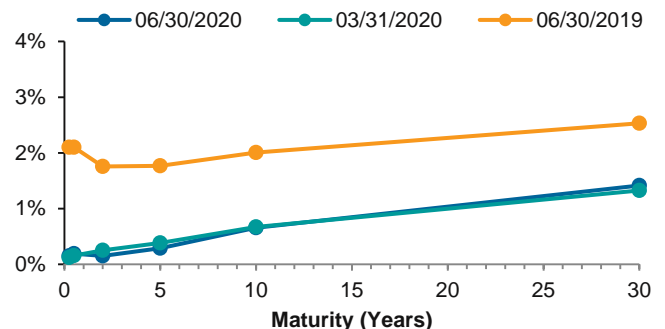
**U.S. Fixed Income: Quarterly Returns**



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



**U.S. Treasury Yield Curves**



Sources: Bloomberg, Bloomberg Barclays, Credit Suisse

**GLOBAL FIXED INCOME**

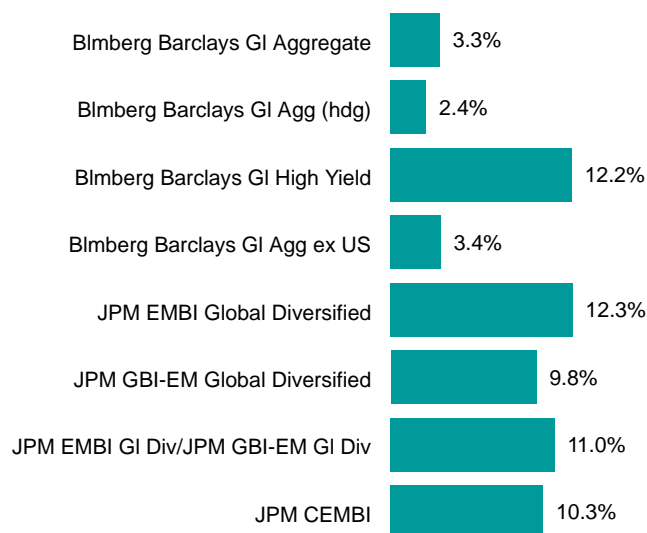
**Global ex-U.S. fixed income rose amid rate cuts**

- Developed market sovereign bond yields ended the quarter lower amid rate cuts overseas, and the unhedged Bloomberg Barclays Global Aggregate ex-US benchmark posted positive returns (+3.4%)
- The ECB expanded the stimulus program announced in March from €750 billion to €1.35 trillion.
- The U.S. dollar depreciated modestly against a basket of developed market currencies, most notably the Australian and New Zealand dollars (-12.5%; -8.4% respectively). The dollar was roughly flat versus the yen.

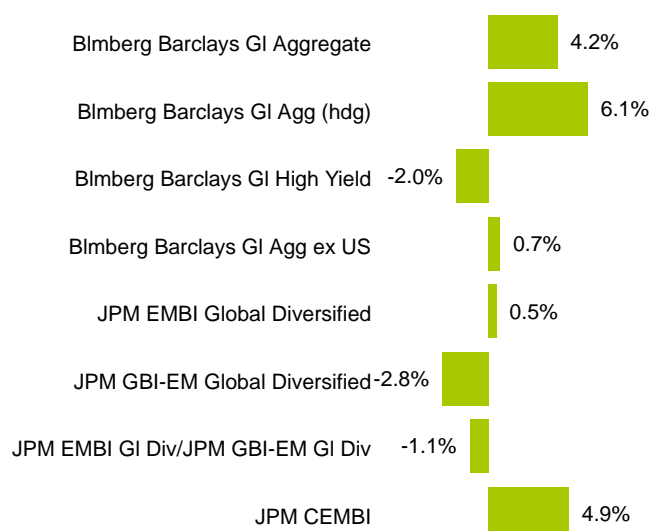
**Emerging market debt made up ground**

- The J.P. Morgan EMBI Global Diversified dollar-denominated benchmark posted strong returns (+12.3%) as oil prices rose and central bank liquidity measures took effect. However, the index remains slightly below year-end 2019 levels.
- Higher-yielding countries led the way in 2Q20 (+16.6%); however they remain down (-12.7%) relative to investment grade constituents year-to-date, according to index data from J.P. Morgan.
- Within the J.P. Morgan GBI-EM Global Diversified local currency-denominated benchmark (+9.8%), returns were positive for the vast majority of constituents. Oil-sensitive economies such as Mexico, Colombia, and South Africa rebounded to some degree, but remained down year-to-date.

**Global Fixed Income: Quarterly Returns**

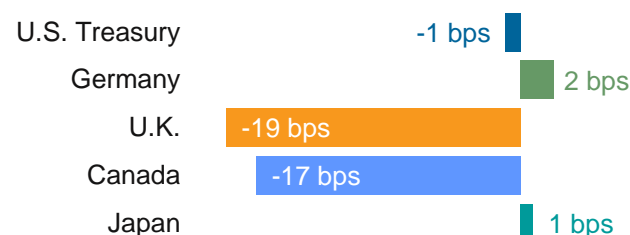


**Global Fixed Income: One-Year Returns**



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

**1Q20 to 2Q20**



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 June 30, 2020, with the distribution as of March 31, 2020.

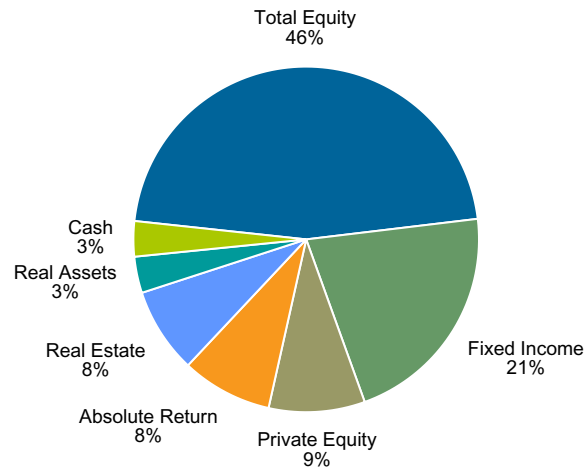
### Asset Distribution Across Investment Managers

	June 30, 2020		March 31, 2020	
	Market Value	Weight	Market Value	Weight
<b>Total Domestic Equity</b>	<b>\$1,031,158,026</b>	<b>21.03%</b>	<b>\$844,541,661</b>	<b>18.63%</b>
BlackRock Russell 1000 Value	124,172,260	2.53%	108,591,316	2.40%
DFA Large Cap Value	121,237,723	2.47%	103,908,236	2.29%
Northern Trust Global	292,116,745	5.96%	242,317,560	5.35%
Polen Capital Management	155,372,326	3.17%	121,784,336	2.69%
Earnest Partners LLC	111,229,856	2.27%	89,841,118	1.98%
DFA Small Cap Value	138,359,238	2.82%	112,334,105	2.48%
CastleArk Management	88,669,878	1.81%	65,764,991	1.45%
<b>Total Global Equity</b>	<b>\$432,886,077</b>	<b>8.83%</b>	<b>\$358,935,033</b>	<b>7.92%</b>
BlackRock Global Alpha Tilts	254,470,163	5.19%	210,377,908	4.64%
MFS Investment Management	178,415,914	3.64%	148,557,125	3.28%
<b>Total International Equity</b>	<b>\$812,831,509</b>	<b>16.57%</b>	<b>\$688,026,602</b>	<b>15.18%</b>
AQR Emerging Markets	94,255,357	1.92%	79,752,469	1.76%
Brandes Investment Partners	299,039,699	6.10%	266,063,570	5.87%
William Blair & Company	271,310,997	5.53%	218,052,974	4.81%
DFA International Small Cap	148,225,456	3.02%	124,157,588	2.74%
<b>Total Fixed Income</b>	<b>\$1,050,137,202</b>	<b>21.41%</b>	<b>\$1,176,759,551</b>	<b>25.96%</b>
Allianz US Fixed Income 250	-	-	374,091,206	8.25%
BlackRock US Debt Idx Fd	362,549,152	7.39%	219,145,658	4.83%
Reams Asset Management	331,997,189	6.77%	252,538,375	5.57%
Loomis, Sayles & Company, L.P.	355,590,860	7.25%	330,984,312	7.30%
<b>Total Private Equity</b>	<b>\$440,939,948</b>	<b>8.99%</b>	<b>\$445,742,605</b>	<b>9.83%</b>
Abbott Capital Management 2010	23,474,749	0.48%	24,971,104	0.55%
Abbott Capital Management 2011	43,602,426	0.89%	45,896,816	1.01%
Abbott Capital Management 2012	36,025,779	0.73%	37,293,069	0.82%
Abbott Capital Management 2013	34,142,219	0.70%	35,618,091	0.79%
Abbott Capital Management 2014	35,473,863	0.72%	36,927,889	0.81%
Abbott Capital Management 2015	21,522,741	0.44%	20,968,697	0.46%
Abbott Capital Management 2016	13,628,020	0.28%	12,702,154	0.28%
Abbott Capital Management 2018	5,843,857	0.12%	5,235,750	0.12%
Abbott Capital Management 2019	1,465,182	0.03%	1,645,000	0.04%
Mesirow V	52,147,048	1.06%	57,835,390	1.28%
Mesirow VI	61,241,577	1.25%	60,742,755	1.34%
Mesirow VII	47,622,501	0.97%	42,652,473	0.94%
NB Secondary Opp Fund III	10,125,423	0.21%	12,245,272	0.27%
NB Secondary Opp Fund IV	11,381,214	0.23%	11,514,246	0.25%
Private Advisors VI	21,975,116	0.45%	22,238,578	0.49%
Private Advisors VII	10,809,868	0.22%	9,826,885	0.22%
Private Advisors VIII	6,136,565	0.13%	4,988,752	0.11%
Private Advisors IX	4,321,800	0.09%	2,439,684	0.05%
<b>Absolute Return</b>	<b>\$415,694,865</b>	<b>8.48%</b>	<b>\$401,397,423</b>	<b>8.86%</b>
Allianz SA 1000	-	-	12,881,097	0.28%
Newton	134,842,520	2.75%	123,598,324	2.73%
UBS A & Q	280,852,345	5.73%	264,918,002	5.84%
<b>Real Assets</b>	<b>\$166,881,533</b>	<b>3.40%</b>	<b>\$150,451,112</b>	<b>3.32%</b>
Principal DRA	166,881,533	3.40%	150,451,112	3.32%
<b>Total Real Estate</b>	<b>\$394,205,976</b>	<b>8.04%</b>	<b>\$405,880,620</b>	<b>8.95%</b>
Real Estate	394,205,976	8.04%	405,880,620	8.95%
<b>Total Cash</b>	<b>\$159,631,965</b>	<b>3.25%</b>	<b>\$61,197,431</b>	<b>1.35%</b>
Cash	159,631,965	3.25%	61,197,431	1.35%
<b>Total Fund</b>	<b>\$4,904,367,101</b>	<b>100.0%</b>	<b>\$4,532,932,037</b>	<b>100.0%</b>

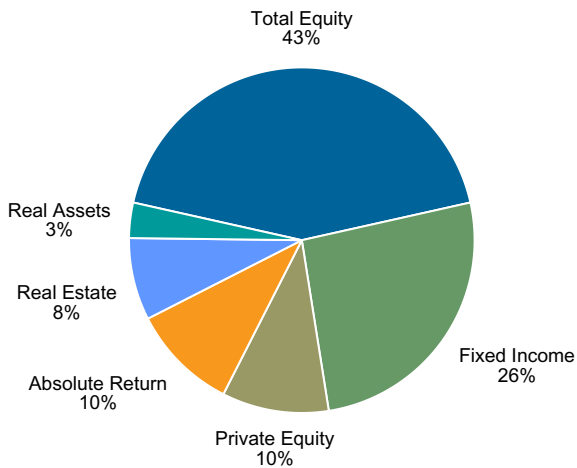
## Actual vs Target Asset Allocation As of June 30, 2020

The first chart below shows the Fund's asset allocation as of June 30, 2020. The second chart shows the Fund's target asset allocation as outlined in the investment policy statement. The last chart shows the average asset allocation for the Callan Public Fund Spons - Large (>1B).

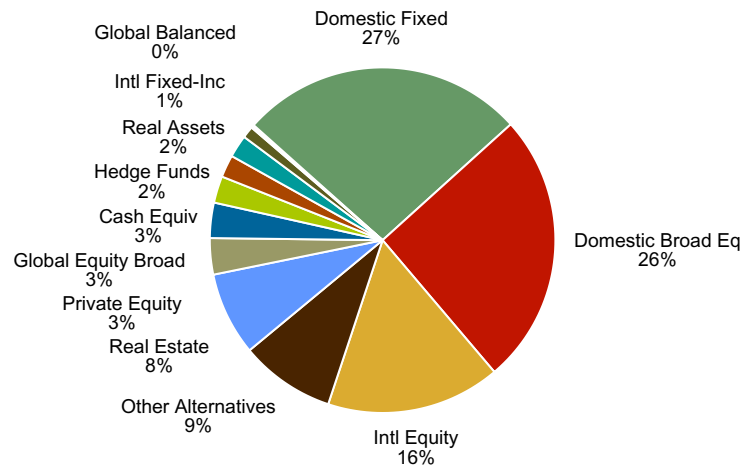
### Actual Asset Allocation



### Target Asset Allocation



### Callan Public Fund Spons - Large (>1B)



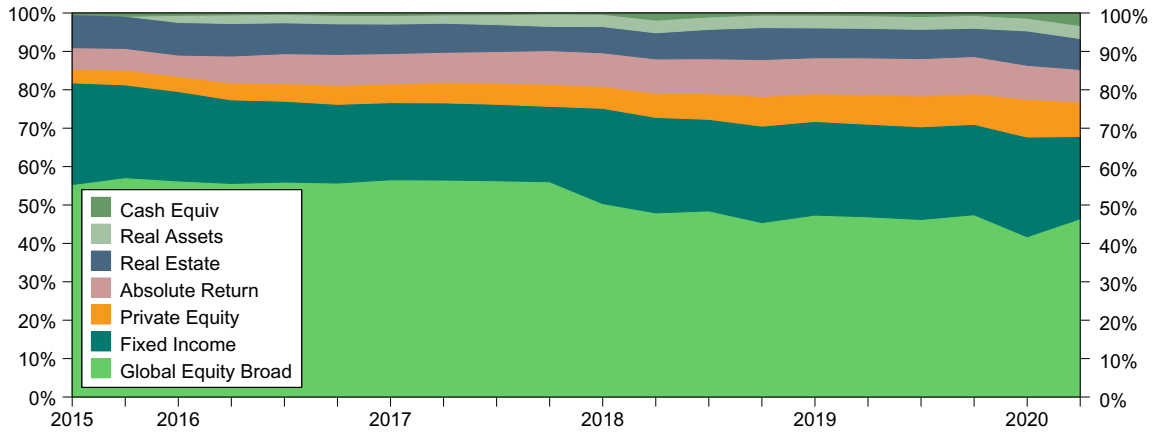
Asset Class	\$Millions Actual	Weight Actual	Target	Percent Difference	\$Millions Difference
Total Equity	2,277	46.4%	43.0%	3.4%	168
Fixed Income	1,050	21.4%	26.0%	(4.6%)	(225)
Private Equity	441	9.0%	10.0%	(1.0%)	(49)
Absolute Return	416	8.5%	10.0%	(1.5%)	(75)
Real Estate	394	8.0%	7.7%	0.3%	17
Real Assets	167	3.4%	3.3%	0.1%	5
Cash	160	3.3%	0.0%	3.3%	160
Total	4,904	100.0%	100.0%		

\* 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.

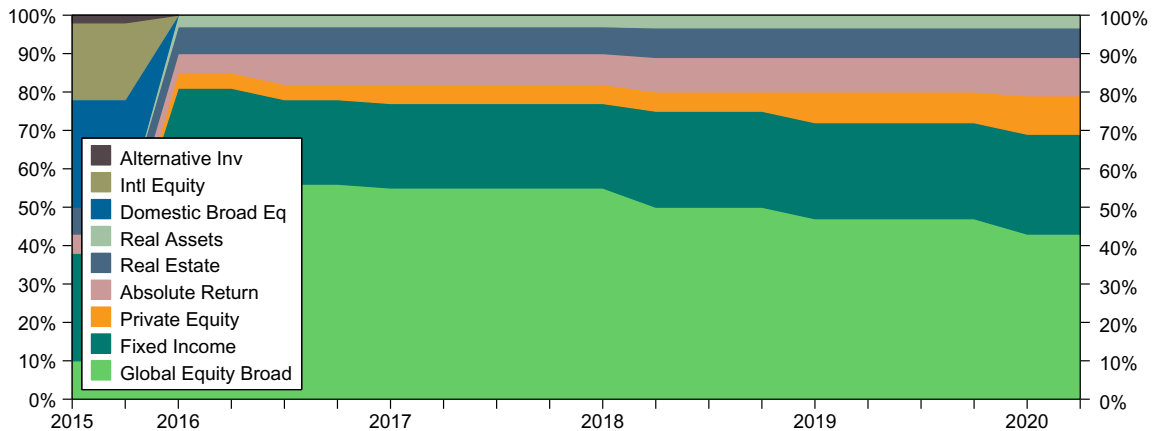
## Actual vs Target Historical Asset Allocation

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.

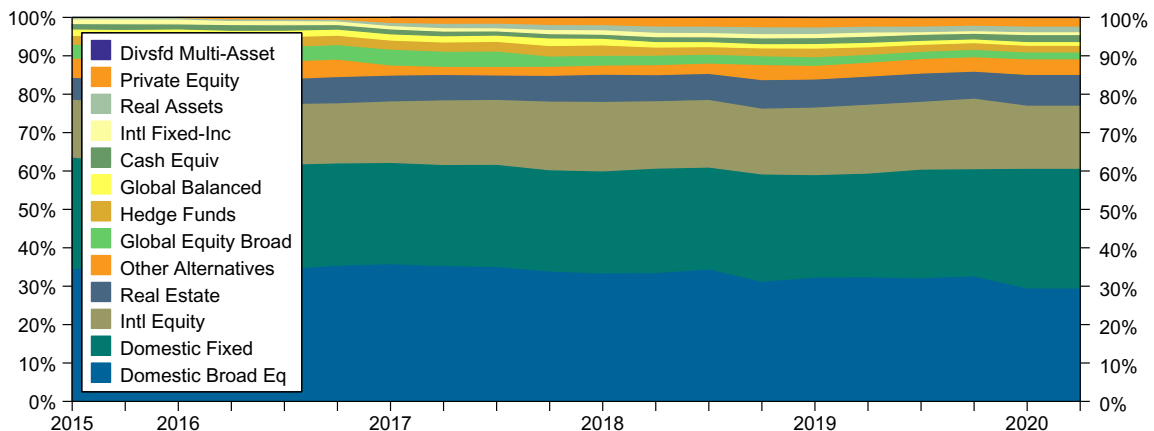
### Actual Historical Asset Allocation



### 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 June 30, 2020

### 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.

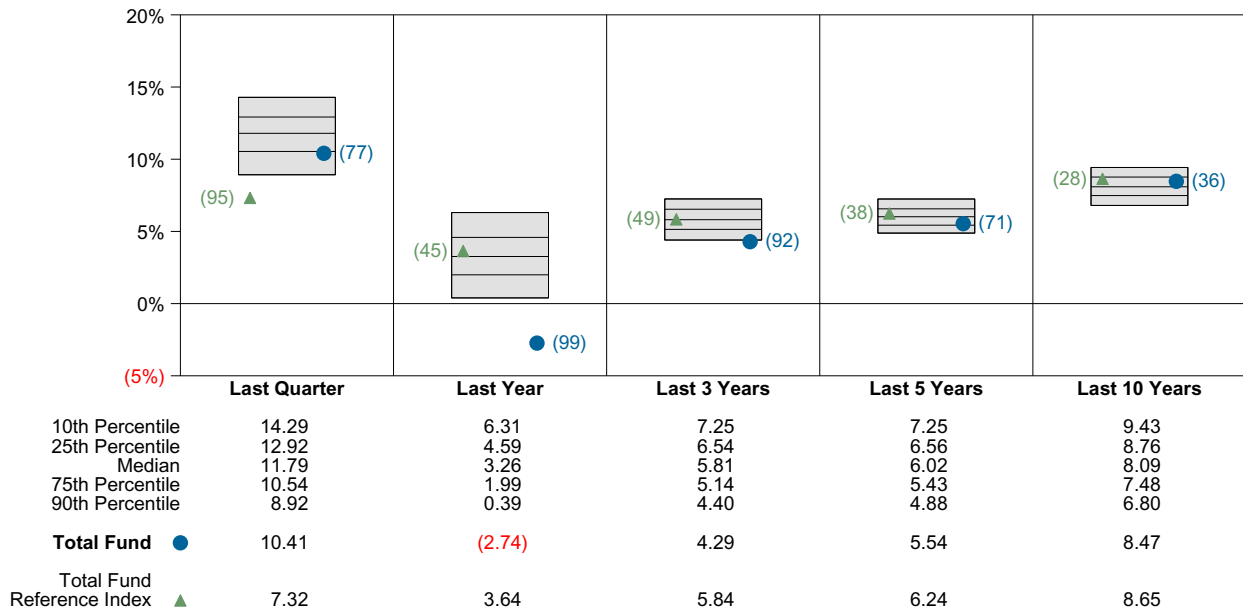
### Quarterly Summary and Highlights

- Total Fund's portfolio posted a 10.41% return for the quarter placing it in the 77 percentile of the Callan Public Fund Sponsor Database group for the quarter and in the 99 percentile for the last year.
- Total Fund's portfolio outperformed the Total Fund Reference Index by 3.09% for the quarter and underperformed the Total Fund Reference Index for the year by 6.38%.

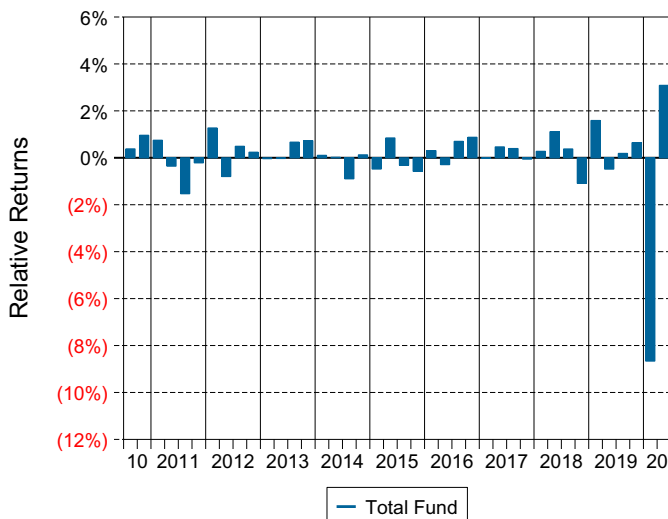
### Quarterly Asset Growth

Beginning Market Value	\$4,532,932,037
Net New Investment	\$-97,734,271
Investment Gains/(Losses)	\$469,169,334
Ending Market Value	\$4,904,367,101

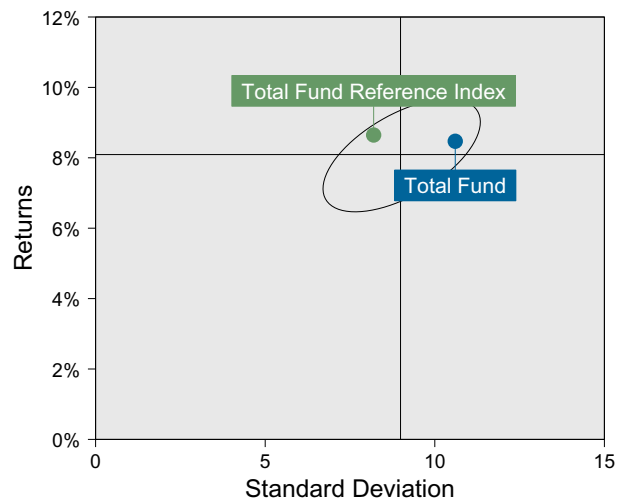
### Performance vs Callan Public Fund Sponsor Database (Gross)



### Relative Return vs Total Fund Reference Index



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

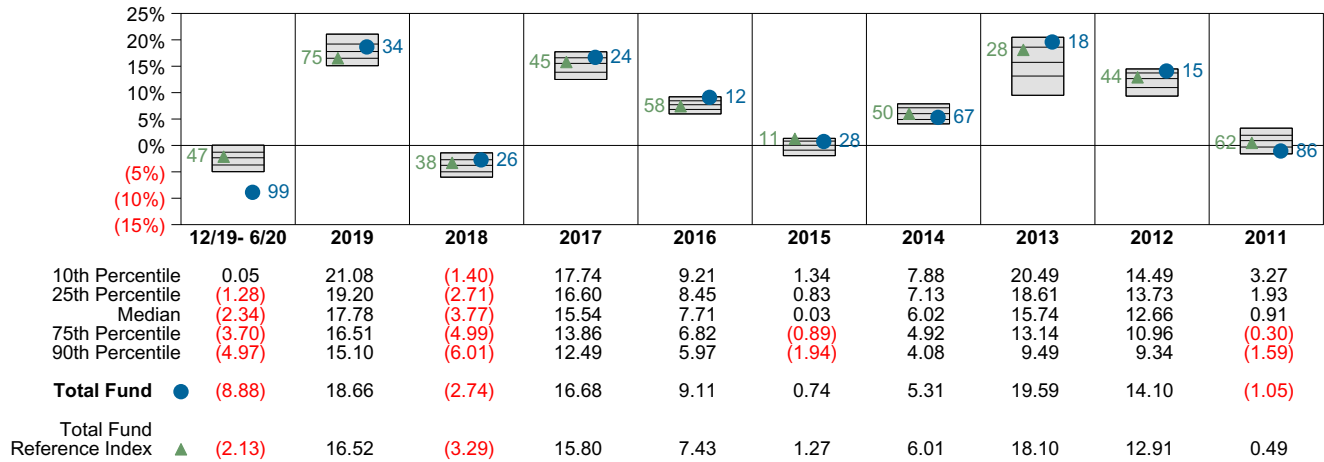


# Total Fund Return Analysis Summary

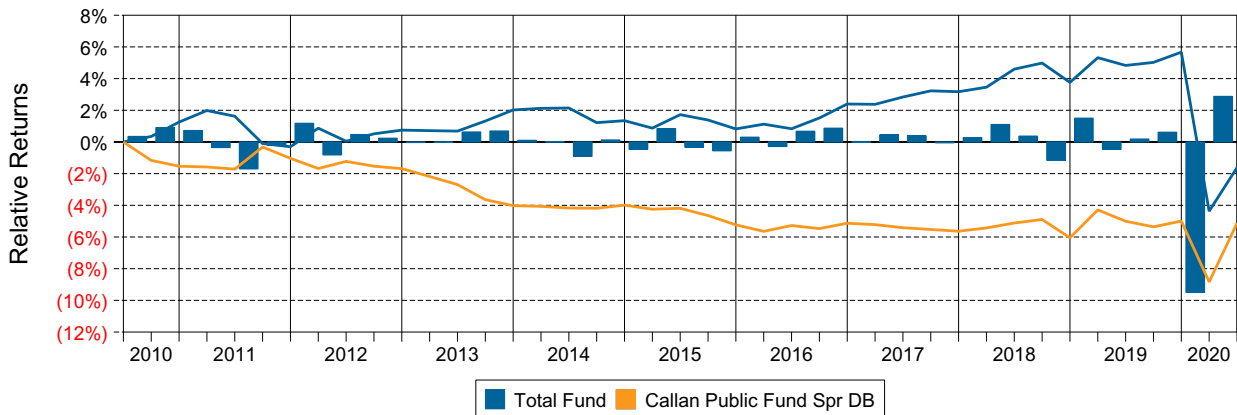
## Return Analysis

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.

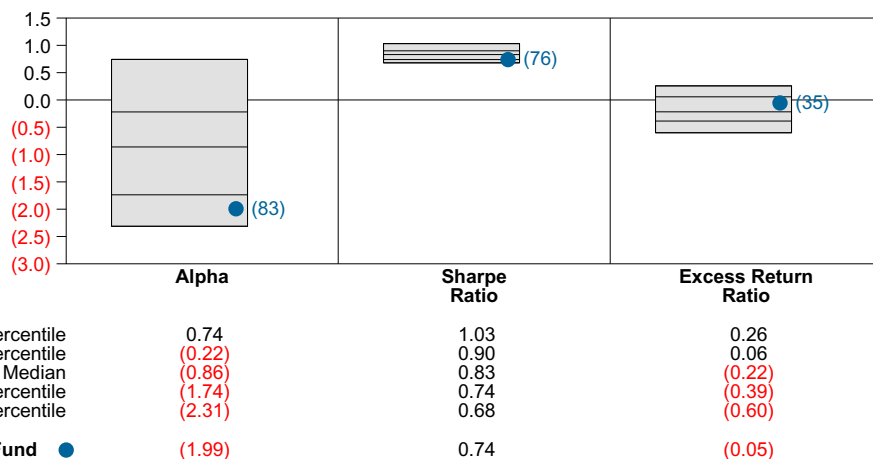
### Performance vs Callan Public Fund Sponsor Database (Gross)



### 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 June 30, 2020



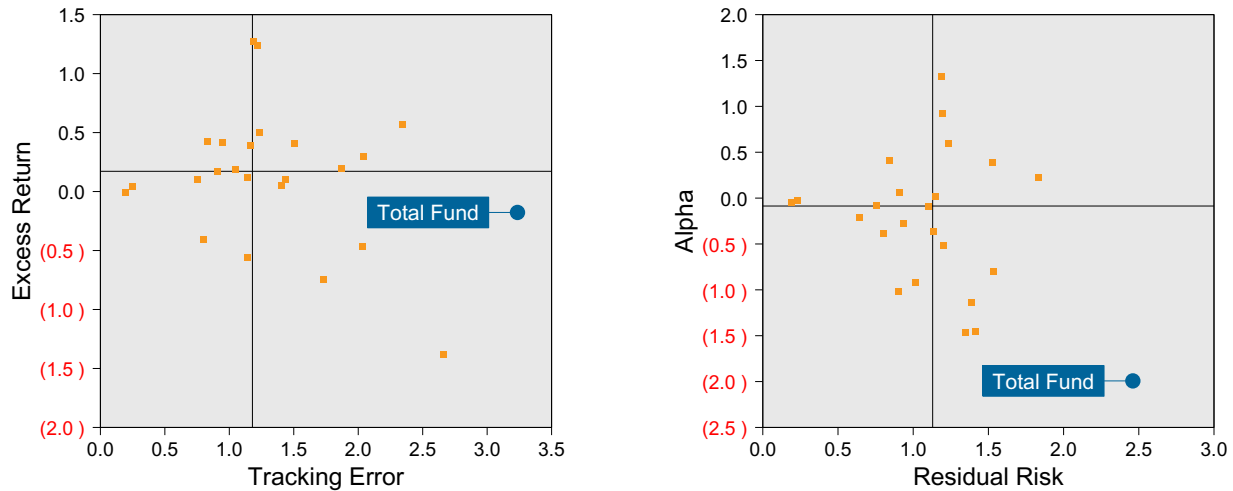
# Total Fund

## Total Fund vs Target Risk Analysis

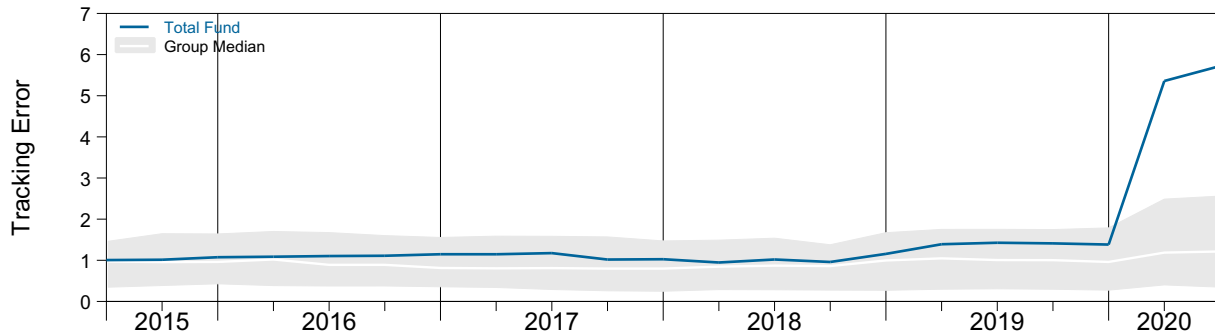
### Risk Analysis

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

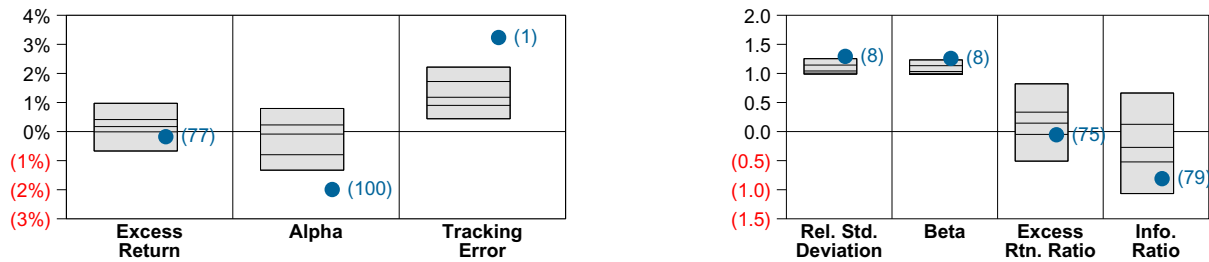
### Risk Analysis vs Callan Public Fund Sponsor Database Ten Years Ended June 30, 2020



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



### Risk Statistics Rankings vs Targets Rankings Against Callan Public Fund Sponsor Database Ten Years Ended June 30, 2020

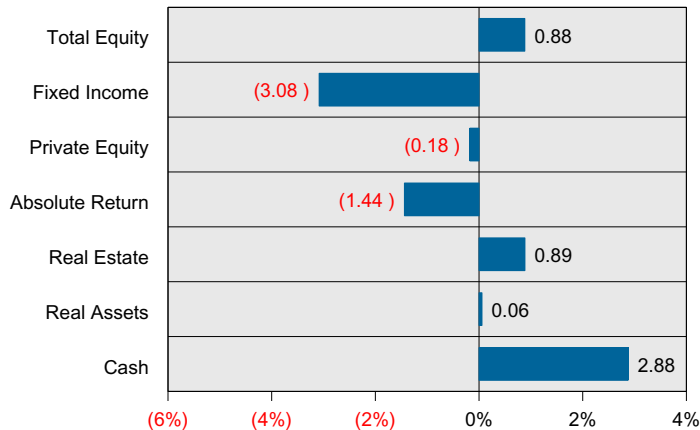


	Excess Return	Alpha	Tracking Error	Rel. Std. Deviation	Beta	Excess Rtn. Ratio	Info. Ratio
10th Percentile	0.97	0.79	2.22	1.25	1.23	0.82	0.66
25th Percentile	0.41	0.23	1.72	1.14	1.13	0.33	0.12
Median	0.17	(0.09)	1.18	1.04	1.03	0.14	(0.27)
75th Percentile	(0.01)	(0.80)	0.90	1.01	1.00	(0.05)	(0.52)
90th Percentile	(0.67)	(1.33)	0.44	0.99	0.98	(0.51)	(1.07)
<b>Total Fund</b>	<b>(0.18)</b>	<b>(1.99)</b>	<b>3.24</b>	<b>1.29</b>	<b>1.26</b>	<b>(0.05)</b>	<b>(0.81)</b>

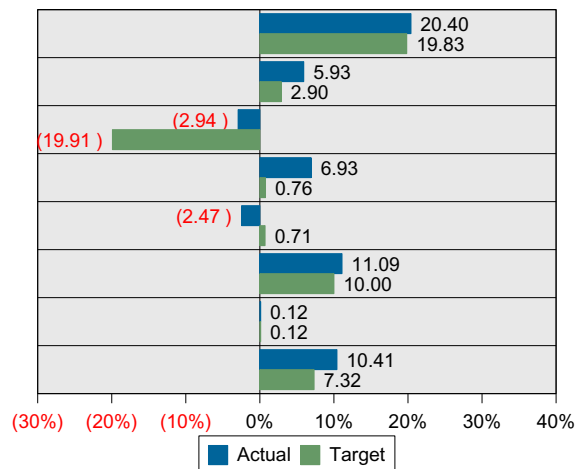
## Quarterly Total Fund Relative Attribution - June 30, 2020

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.

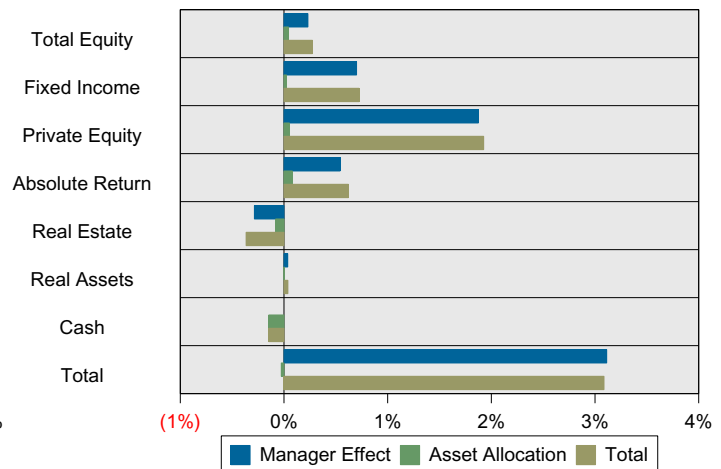
### Asset Class Under or Overweighting



### Actual vs Target Returns



### Relative Attribution by Asset Class



### Relative Attribution Effects for Quarter ended June 30, 2020

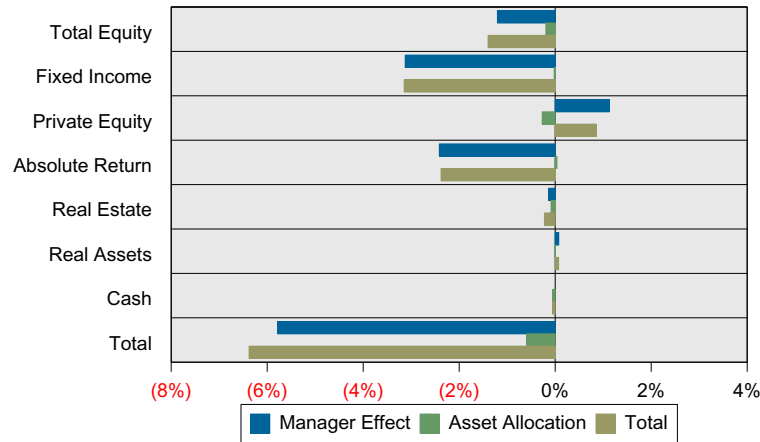
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Total Equity	44%	43%	20.40%	19.83%	0.23%	0.04%	0.27%
Fixed Income	23%	26%	5.93%	2.90%	0.70%	0.02%	0.72%
Private Equity	10%	10%	(2.94%)	(19.91%)	1.87%	0.05%	1.93%
Absolute Return	9%	10%	6.93%	0.76%	0.54%	0.08%	0.62%
Real Estate	9%	8%	(2.47%)	0.71%	(0.29%)	(0.08%)	(0.37%)
Real Assets	3%	3%	11.09%	10.00%	0.04%	0.00%	0.04%
Cash	3%	0%	0.12%	0.12%	0.00%	(0.15%)	(0.15%)
<b>Total</b>			<b>10.41%</b>	<b>7.32%</b>	<b>3.11%</b>	<b>(0.03%)</b>	<b>3.09%</b>

\* 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.

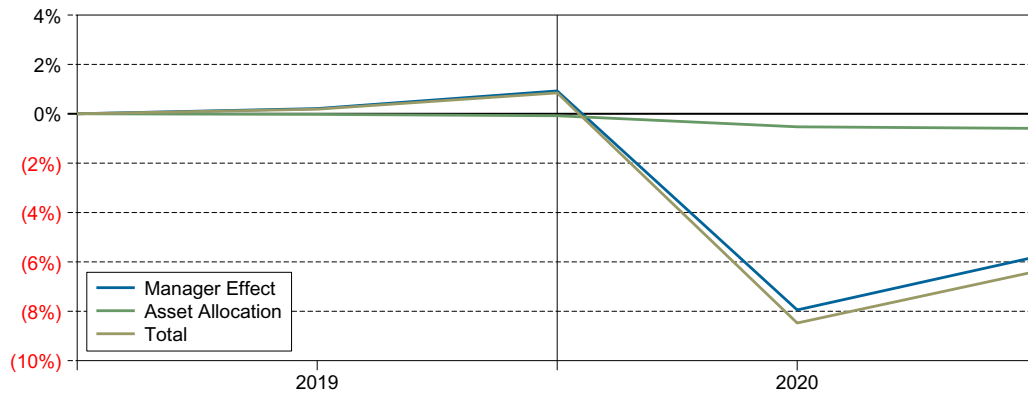
## Cumulative Total Fund Relative Attribution - June 30, 2020

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	45%	45%	(1.75%)	1.17%	(1.20%)	(0.19%)	(1.40%)
Fixed Income	24%	25%	(2.69%)	8.74%	(3.13%)	(0.02%)	(3.15%)
Private Equity	8%	9%	6.02%	(6.42%)	1.13%	(0.27%)	0.86%
Absolute Return	9%	9%	(17.78%)	4.63%	(2.41%)	0.04%	(2.38%)
Real Estate	8%	8%	2.86%	4.38%	(0.14%)	(0.09%)	(0.22%)
Real Assets	3%	3%	(5.72%)	(7.67%)	0.07%	(0.00%)	0.07%
Cash	1%	0%	2.14%	2.14%	0.00%	(0.05%)	(0.05%)
<b>Total</b>			<b>(2.74%)</b>	<b>3.64%</b>	<b>(5.78%)</b>	<b>(0.59%)</b>	<b>(6.38%)</b>

\* 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.



## Investment Manager Returns and Peer Group Rankings

The table below details the rates of return and peer group rankings for the Fund's investment managers over various time periods ended June 30, 2020. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

### Returns and Rankings for Periods Ended June 30, 2020

	Last Quarter		Last Year		Last 3 Years		Last 5 Years		Since Inception	
<b>Total Domestic Equity</b>	<b>22.10%</b>	<b>31</b>	<b>(1.04%)</b>	<b>90</b>	<b>7.06%</b>	<b>83</b>	<b>8.33%</b>	<b>72</b>	<b>6.95%</b>	(7/98)
Russell 3000 Index	22.03%	35	6.53%	15	10.04%	24	10.03%	21	6.90%	(7/98)
Pub Pln- Dom Equity	21.40%		3.18%		8.70%		8.88%		-	
BlackRock Russell 1000 Value	14.35%	75	(8.35%)	58	2.09%	55	-		2.53%	(3/17)
Russell 1000 Value Index	14.29%	75	(8.84%)	60	1.82%	62	4.64%	56	1.74%	(3/17)
Callan Large Cap Value	16.70%		(7.63%)		2.33%		4.90%		-	
DFA Large Cap Value	16.68%	51	(13.03%)	89	-		-		(2.37%)	(11/17)
Russell 1000 Value Index	14.29%	75	(8.84%)	60	1.82%	62	4.64%	56	0.61%	(11/17)
Callan Large Cap Value	16.70%		(7.63%)		2.33%		4.90%		-	
Northern Trust Global	20.55%	57	7.53%	37	10.77%	33	10.77%	26	10.36%	(8/88)
S&P 500 Index	20.54%	57	7.51%	37	10.73%	34	10.73%	27	10.31%	(8/88)
Callan Large Cap Core	20.73%		6.23%		9.86%		9.98%		-	
Polen Capital Management	27.58%	51	23.97%	21	22.56%	12	18.90%	4	18.25%	(7/12)
S&P 500 Index	20.54%	98	7.51%	97	10.73%	99	10.73%	98	13.15%	(7/12)
Callan Large Cap Growth	27.60%		21.14%		18.27%		14.82%		-	
Earnest Partners LLC	23.80%	46	3.20%	33	9.99%	34	11.05%	21	10.51%	(5/05)
Russell MidCap Index	24.61%	41	(2.24%)	49	5.79%	46	6.76%	48	8.94%	(5/05)
Callan Mid Capitalization	23.36%		(2.36%)		4.10%		6.09%		-	
DFA Small Cap Value	23.17%	30	(19.49%)	70	(6.02%)	78	(0.68%)	85	9.88%	(11/96)
Russell 2000 Value Index	18.91%	73	(17.48%)	42	(4.35%)	46	1.26%	46	7.95%	(11/96)
Callan Small Cap Value	20.93%		(17.99%)		(4.50%)		1.15%		-	
CastleArk Management	34.83%	50	(4.53%)	93	10.33%	68	7.06%	83	9.99%	(9/13)
Russell 2000 Growth Index	30.58%	68	3.48%	72	7.86%	82	6.86%	86	9.43%	(9/13)
Callan Small Cap Growth	34.87%		9.03%		13.52%		10.53%		-	
<b>Total Global Equity</b>	<b>20.60%</b>	<b>40</b>	<b>4.80%</b>	<b>40</b>	<b>9.23%</b>	<b>32</b>	<b>9.38%</b>	<b>29</b>	<b>8.52%</b>	(4/10)
MSCI World	19.36%	51	2.84%	49	6.70%	48	6.90%	49	8.26%	(4/10)
Callan Global Equity	19.53%		2.59%		6.29%		6.83%		-	
BlackRock Global Alpha Tilts	20.96%	35	1.82%	53	6.56%	48	-		11.41%	(3/16)
MSCI ACWI Gross	19.39%	51	2.64%	50	6.70%	48	7.03%	46	11.10%	(3/16)
Callan Global Equity	19.53%		2.59%		6.29%		6.83%		-	
MFS Investment Management	20.10%	45	9.53%	21	13.21%	14	11.95%	11	12.30%	(12/12)
MSCI ACWI Gross	19.39%	51	2.64%	50	6.70%	48	7.03%	46	8.93%	(12/12)
Callan Global Equity	19.53%		2.59%		6.29%		6.83%		-	
<b>Total International Equity</b>	<b>18.22%</b>	<b>23</b>	<b>(5.82%)</b>	<b>82</b>	<b>(0.46%)</b>	<b>90</b>	<b>1.73%</b>	<b>87</b>	<b>6.31%</b>	(5/96)
MSCI EAFE	14.88%	94	(5.13%)	74	0.81%	70	2.05%	81	4.11%	(5/96)
Pub Pln- Intl Equity	16.40%		(4.14%)		1.53%		2.94%		-	
AQR Emerging Markets	18.40%	62	(1.99%)	40	(0.01%)	78	-		5.26%	(8/16)
MSCI EM Gross	18.18%	64	(3.05%)	50	2.28%	52	3.24%	66	6.17%	(8/16)
Callan Emerging Broad	18.96%		(3.10%)		2.34%		4.22%		-	
Brandes Investment Partners	12.39%	94	(15.02%)	97	(3.88%)	95	(1.14%)	95	6.65%	(2/98)
MSCI EAFE	14.88%	75	(5.13%)	59	0.81%	59	2.05%	62	4.14%	(2/98)
Callan NonUS Eq	17.13%		(2.48%)		1.93%		2.92%		-	
William Blair & Company	24.51%	5	9.48%	7	7.73%	12	6.12%	17	7.74%	(12/03)
MSCI ACWIxUS Gross	16.30%	62	(4.39%)	57	1.61%	52	2.75%	52	6.15%	(12/03)
Callan NonUS Eq	17.13%		(2.48%)		1.93%		2.92%		-	
DFA International Small Cap	19.57%	70	(11.39%)	86	(6.11%)	94	(0.67%)	90	3.00%	(5/06)
Blended Benchmark	19.88%	69	(3.52%)	49	0.53%	46	3.81%	51	2.82%	(5/06)
Callan Intl Small Cap	21.20%		(3.74%)		0.04%		3.84%		-	

## Investment Manager Returns and Peer Group Rankings

The table below details the rates of return and peer group rankings for the Fund's investment managers over various time periods ended June 30, 2020. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

### Returns and Rankings for Periods Ended June 30, 2020

	Last Quarter		Last Year		Last 3 Years		Last 5 Years		Since Inception	
<b>Total Fixed Income</b>	<b>5.93%</b>		<b>(2.69%)</b>		<b>2.20%</b>		<b>3.08%</b>		<b>7.22%</b>	(12/87)
Bimbg Aggregate	2.90%		8.74%		5.32%		4.30%		6.35%	(12/87)
BlackRock US Debt Idx Fd	3.20%	96	8.95%	62	5.44%	81	-		4.06%	(6/16)
Bimbg Aggregate	2.90%	98	8.74%	74	5.32%	87	4.30%	98	4.26%	(6/16)
Callan Core Bond FI	4.31%		9.22%		5.69%		4.68%		-	
Reams Asset Management	8.99%	2	16.03%	2	8.38%	2	6.31%	2	6.13%	(1/01)
Bimbg Aggregate	2.90%	97	8.74%	39	5.32%	64	4.30%	86	4.89%	(1/01)
Callan Core Plus FI	5.99%		8.37%		5.61%		4.81%		-	
Loomis, Sayles & Company, L.P.	7.43%	13	2.63%	100	4.34%	96	5.26%	16	8.84%	(12/87)
Bimbg Aggregate	2.90%	97	8.74%	39	5.32%	64	4.30%	86	6.35%	(12/87)
Callan Core Plus FI	5.99%		8.37%		5.61%		4.81%		-	
<b>Total Private Equity</b>	<b>(2.94%)</b>		<b>6.02%</b>		<b>14.25%</b>		<b>13.07%</b>		<b>9.27%</b>	(6/10)
Abbott Capital Management 2010	(5.99%)		3.86%		15.92%		14.39%		(3.82%)	(6/10)
Abbott Capital Management 2011	(5.00%)		6.61%		16.61%		14.69%		(0.77%)	(6/11)
Abbott Capital Management 2012	(3.40%)		7.46%		15.79%		13.29%		7.29%	(7/12)
Abbott Capital Management 2013	(4.14%)		7.05%		16.94%		13.07%		7.84%	(5/13)
Abbott Capital Management 2014	(3.94%)		5.75%		14.61%		11.19%		5.81%	(4/14)
Abbott Capital Management 2015	(1.53%)		4.13%		9.57%		7.75%		7.37%	(4/15)
Abbott Capital Management 2016	0.76%		4.11%		6.66%		-		3.98%	(3/16)
Abbott Capital Management 2018	4.64%		11.23%		-		-		4.48%	(7/18)
Mesirow V	(4.76%)		2.66%		12.03%		13.87%		12.78%	(6/10)
Mesirow VI	0.78%		14.60%		17.75%		12.11%		8.41%	(7/13)
Mesirow VII	(2.13%)		(1.66%)		(14.14%)		-		-	
NB Secondary Opp Fund III	(13.66%)		(8.87%)		7.94%		10.23%		9.03%	(12/13)
NB Secondary Opp Fund IV	(5.33%)		0.49%		20.14%		-		18.46%	(4/17)
Private Advisors VI	(0.50%)		12.33%		13.55%		5.37%		4.46%	(4/15)
Private Advisors VII	(4.29%)		2.06%		10.20%		-		5.97%	(1/17)
Private Advisors VIII	1.29%		(4.15%)		-		-		5.38%	(8/18)
Private Advisors IX	18.79%		-		-		-		-	
Russell 3000 (1 Qtr in Arrears) + 3%	(19.43%)		(5.69%)		7.28%		8.96%		-	
<b>Absolute Return</b>	<b>6.93%</b>		<b>(17.78%)</b>		<b>(2.65%)</b>		<b>0.36%</b>		<b>1.40%</b>	(6/14)
Newton	9.10%	6	2.95%	18	5.28%	10	4.80%	5	4.43%	(8/14)
1-month LIBOR + 4%	1.04%	92	5.41%	14	5.80%	9	5.29%	4	5.11%	(8/14)
Callan Abs Rtn Hedge FoF	6.96%		(1.76%)		2.28%		2.18%		-	
UBS A & Q	6.01%	64	7.84%	12	5.92%	8	4.64%	6	4.72%	(12/14)
1-month LIBOR + 4%	1.04%	92	5.41%	14	5.80%	9	5.29%	4	5.17%	(12/14)
Callan Abs Rtn Hedge FoF	6.96%		(1.76%)		2.28%		2.18%		-	
<b>Real Assets</b>	<b>11.09%</b>		<b>(5.72%)</b>		<b>0.56%</b>		<b>-</b>		<b>2.84%</b>	(1/16)
Principal DRA	11.09%	18	(5.72%)	53	0.56%	43	-		2.84%	(1/16)
Principal Blended Benchmark (1)	10.00%	20	(7.67%)	58	0.62%	39	-		2.55%	(1/16)
Callan Alternative Inv DB	1.62%		(4.75%)		(0.01%)		(0.61%)		-	
<b>Total Real Estate</b>	<b>(2.47%)</b>		<b>2.86%</b>		<b>6.60%</b>		<b>8.29%</b>		<b>6.57%</b>	(7/86)
Real Estate	(2.47%)	94	2.86%	54	6.60%	39	8.29%	20	6.57%	(7/86)
Blended Benchmark (2)	0.71%	62	4.38%	38	6.14%	43	7.82%	34	-	
Callan Tot Real Est DB	1.26%		3.17%		5.93%		7.38%		-	
<b>Total Fund</b>	<b>10.41%</b>		<b>(2.74%)</b>		<b>4.29%</b>		<b>5.54%</b>		<b>9.22%</b>	(1/79)
Total Fund Reference Index*	7.32%		3.64%		5.84%		6.24%		-	

\* Current Quarter Target = 43.0% MSCI ACWI IMI, 26.0% Bimbg 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 NFI-ODCE (1 Qtr Arrears) thereafter.

## Investment Manager Returns and Peer Group Rankings

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

	12/2019- 6/2020		2019		2018		2017		2016	
<b>Total Domestic Equity</b>	<b>(9.27%)</b>	<b>88</b>	<b>29.24%</b>	<b>74</b>	<b>(5.80%)</b>	<b>50</b>	<b>20.91%</b>	<b>41</b>	<b>13.91%</b>	<b>29</b>
Russell 3000 Index	(3.48%)	21	31.02%	30	(5.24%)	35	21.13%	39	12.74%	54
Pub Pln- Dom Equity	(5.53%)		30.22%		(5.81%)		20.51%		12.86%	
BlackRock Russell 1000 Value	(15.94%)	54	26.79%	46	(8.12%)	42	-	-	-	
Russell 1000 Value Index	(16.26%)	57	26.54%	49	(8.27%)	44	13.66%	91	17.34%	26
Callan Large Cap Value	(15.68%)		26.47%		(8.76%)		17.10%		15.28%	
DFA Large Cap Value	(21.04%)	90	26.71%	46	(12.40%)	83	-	-	-	
Russell 1000 Value Index	(16.26%)	57	26.54%	49	(8.27%)	44	13.66%	91	17.34%	26
Callan Large Cap Value	(15.68%)		26.47%		(8.76%)		17.10%		15.28%	
Northern Trust Global	(3.06%)	45	31.54%	39	(4.34%)	33	21.87%	48	12.01%	21
S&P 500 Index	(3.08%)	46	31.49%	39	(4.38%)	33	21.83%	49	11.96%	21
Callan Large Cap Core	(3.28%)		30.50%		(5.33%)		21.72%		10.42%	
Polen Capital Management	11.06%	37	38.85%	12	9.14%	4	27.67%	65	1.70%	72
S&P 500 Index	(3.08%)	97	31.49%	77	(4.38%)	91	21.83%	98	11.96%	2
Callan Large Cap Growth	9.74%		34.54%		0.51%		28.84%		3.39%	
Earnest Partners LLC	(5.31%)	38	38.38%	11	(9.80%)	45	26.16%	23	16.52%	29
Russell MidCap Index	(9.13%)	48	30.54%	52	(9.06%)	41	18.52%	55	13.80%	42
Callan Mid Capitalization	(10.38%)		31.00%		(10.60%)		19.58%		12.23%	
DFA Small Cap Value	(25.07%)	71	18.79%	89	(14.84%)	52	7.68%	66	29.36%	32
Russell 2000 Value Index	(23.50%)	43	22.39%	65	(12.86%)	23	7.84%	65	31.74%	14
Callan Small Cap Value	(23.65%)		24.31%		(14.79%)		9.19%		27.86%	
CastleArk Management	(5.09%)	86	23.28%	83	3.29%	15	23.93%	59	6.01%	68
Russell 2000 Growth Index	(3.06%)	77	28.48%	52	(9.31%)	85	22.17%	70	11.32%	36
Callan Small Cap Growth	3.39%		29.79%		(3.04%)		25.74%		8.62%	
<b>Total Global Equity</b>	<b>(4.42%)</b>	<b>45</b>	<b>31.05%</b>	<b>27</b>	<b>(8.18%)</b>	<b>40</b>	<b>31.31%</b>	<b>16</b>	<b>8.65%</b>	<b>27</b>
MSCI World	(5.77%)	54	27.67%	49	(8.71%)	44	22.40%	75	7.51%	39
Callan Global Equity	(5.05%)		27.49%		(9.52%)		25.27%		6.21%	
BlackRock Global Alpha Tilts	(5.71%)	53	26.86%	53	(11.20%)	67	30.12%	22	-	
MSCI ACWI Gross	(5.99%)	55	27.30%	51	(8.93%)	46	24.62%	56	8.48%	28
Callan Global Equity	(5.05%)		27.49%		(9.52%)		25.27%		6.21%	
MFS Investment Management	(2.33%)	34	37.31%	4	(3.75%)	11	33.16%	12	6.06%	52
MSCI ACWI Gross	(5.99%)	55	27.30%	51	(8.93%)	46	24.62%	56	8.48%	28
Callan Global Equity	(5.05%)		27.49%		(9.52%)		25.27%		6.21%	
<b>Total International Equity</b>	<b>(13.79%)</b>	<b>93</b>	<b>21.68%</b>	<b>75</b>	<b>(15.19%)</b>	<b>68</b>	<b>25.03%</b>	<b>94</b>	<b>5.78%</b>	<b>23</b>
MSCI EAFE	(11.34%)	55	22.01%	65	(13.79%)	42	25.03%	94	1.00%	88
Pub Pln- Intl Equity	(11.03%)		22.94%		(14.13%)		29.11%		4.10%	
AQR Emerging Markets	(10.06%)	50	20.54%	63	(18.31%)	86	35.53%	73	-	
MSCI EM Gross	(9.67%)	44	18.90%	72	(14.24%)	28	37.75%	58	11.60%	49
Callan Emerging Broad	(10.00%)		22.16%		(15.34%)		39.31%		11.56%	
Brandes Investment Partners	(21.44%)	99	15.31%	98	(8.79%)	6	16.53%	99	8.50%	4
MSCI EAFE	(11.34%)	57	22.01%	66	(13.79%)	35	25.03%	75	1.00%	57
Callan NonUS Eq	(9.56%)		23.49%		(15.13%)		28.15%		1.48%	
William Blair & Company	0.09%	6	31.58%	9	(16.86%)	72	31.45%	22	(1.45%)	82
MSCI ACWIxUS Gross	(10.76%)	54	22.13%	64	(13.77%)	35	27.77%	56	5.01%	16
Callan NonUS Eq	(9.56%)		23.49%		(15.13%)		28.15%		1.48%	
DFA International Small Cap	(20.58%)	91	21.62%	82	(23.31%)	91	27.98%	92	8.00%	8
Blended Benchmark	(13.11%)	51	24.96%	49	(17.89%)	30	33.01%	74	2.18%	32
Callan Intl Small Cap	(12.92%)		24.94%		(19.66%)		35.27%		(0.03%)	

## Investment Manager Returns and Peer Group Rankings

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

	12/2019- 6/2020		2019		2018		2017		2016	
<b>Total Fixed Income</b>	<b>(5.95%)</b>		<b>11.82%</b>		<b>(0.33%)</b>		<b>5.28%</b>		<b>7.40%</b>	
Bimbg Aggregate	6.14%		8.72%		0.01%		3.54%		2.65%	
BlackRock US Debt Idx Fd	6.32%	56	8.79%	82	0.06%	57	3.68%	76	-	-
Bimbg Aggregate	6.14%	69	8.72%	84	0.01%	62	3.54%	87	2.65%	87
Callan Core Bond FI	6.48%		9.18%		0.11%		3.96%		3.14%	
Reams Asset Management	13.27%	2	8.82%	92	1.91%	1	3.62%	95	4.38%	63
Bimbg Aggregate	6.14%	24	8.72%	93	0.01%	31	3.54%	95	2.65%	100
Callan Core Plus FI	5.24%		10.03%		<b>(0.25%)</b>		4.97%		4.67%	
Loomis, Sayles & Company, L.P.	<b>(1.33%)</b>	100	14.42%	1	<b>(2.11%)</b>	98	8.50%	1	13.97%	1
Bimbg Aggregate	6.14%	24	8.72%	93	0.01%	31	3.54%	95	2.65%	100
Callan Core Plus FI	5.24%		10.03%		<b>(0.25%)</b>		4.97%		4.67%	
<b>Total Private Equity</b>	<b>(2.99%)</b>		<b>16.63%</b>		<b>21.48%</b>		<b>17.27%</b>		<b>9.09%</b>	
Abbott Capital Management 2010	<b>(5.99%)</b>		16.52%		26.90%		19.98%		11.03%	
Abbott Capital Management 2011	<b>(5.00%)</b>		19.64%		25.70%		19.24%		10.43%	
Abbott Capital Management 2012	<b>(3.40%)</b>		17.91%		24.39%		17.97%		9.42%	
Abbott Capital Management 2013	<b>(4.14%)</b>		21.13%		25.17%		18.71%		5.25%	
Abbott Capital Management 2014	<b>(3.94%)</b>		19.74%		22.58%		13.50%		2.86%	
Abbott Capital Management 2015	<b>(1.53%)</b>		15.14%		13.57%		6.87%		<b>(5.11%)</b>	
Abbott Capital Management 2016	0.55%		9.08%		9.43%		<b>(1.13%)</b>		-	
Abbott Capital Management 2018	4.25%		7.26%		-		-		-	
Mesirow V	<b>(4.76%)</b>		16.29%		18.01%		21.00%		12.03%	
Mesirow VI	0.78%		22.73%		24.87%		12.50%		3.32%	
Mesirow VII	<b>(2.61%)</b>		3.33%		<b>(7.82%)</b>		-		-	
NB Secondary Opp Fund III	<b>(13.66%)</b>		12.18%		16.65%		20.63%		12.83%	
Private Advisors VI	<b>(0.46%)</b>		17.98%		15.19%		13.15%		<b>(1.34%)</b>	
Private Advisors VII	<b>(4.29%)</b>		11.23%		19.02%		<b>(3.33%)</b>		-	
Private Advisors VIII	1.37%		<b>(4.08%)</b>		-		-		-	
Russell 3000 (1 Qtr in Arrears) + 3%	<b>(11.63%)</b>		6.19%		20.60%		21.71%		17.97%	
<b>Absolute Return</b>	<b>(21.45%)</b>		<b>12.79%</b>		<b>1.61%</b>		<b>5.96%</b>		<b>5.16%</b>	
Newton	<b>(0.32%)</b>		34		13.15%		2		2.18%	
1-month LIBOR + 4%	2.39%		14		6.26%		29		6.07%	
Callan Abs Rtn Hedge FoF	<b>(2.77%)</b>		4.72%		0.51%		4.97%		3.35%	
UBS A & Q	3.64%		13		9.53%		4		2.65%	
1-month LIBOR + 4%	2.39%		14		6.26%		29		6.07%	
Callan Abs Rtn Hedge FoF	<b>(2.77%)</b>		4.72%		0.51%		4.97%		3.35%	
<b>Real Assets</b>	<b>(9.86%)</b>		<b>15.39%</b>		<b>(7.47%)</b>		<b>10.15%</b>		<b>7.00%</b>	
Principal DRA	<b>(9.86%)</b>		54		15.39%		12		<b>(7.47%)</b>	
Principal Blended Benchmark (1)	<b>(10.76%)</b>		55		14.86%		14		<b>(7.27%)</b>	
Callan Alternative Inv DB	<b>(7.15%)</b>		7.84%		<b>(8.01%)</b>		4.59%		10.52%	
<b>Total Real Estate</b>	<b>(0.58%)</b>		<b>6.21%</b>		<b>9.18%</b>		<b>9.20%</b>		<b>11.38%</b>	
Real Estate	<b>(0.58%)</b>		57		6.21%		62		9.18%	
Blended Benchmark (2)	2.02%		26		5.26%		71		7.89%	
Callan Tot Real Est DB	0.14%		7.39%		7.73%		7.73%		7.73%	
<b>Total Fund</b>	<b>(8.88%)</b>		<b>18.66%</b>		<b>(2.74%)</b>		<b>16.68%</b>		<b>9.11%</b>	
Total Fund Reference Index*	<b>(2.13%)</b>		16.52%		<b>(3.29%)</b>		15.80%		7.43%	

\* Current Quarter Target = 43.0% MSCI ACWI IMI, 26.0% Bimbg 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 NFI-ODCE (1 Qtr Arrears) thereafter.

## Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended June 30, 2020. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

### Returns for Periods Ended June 30, 2020

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
<b>Net of Fee Returns</b>					
Total Domestic Equity Net	22.03%	(1.25%)	6.76%	8.01%	12.15%
Russell 3000 Index	22.03%	6.53%	10.04%	10.03%	13.72%
BlackRock Russell 1000 Value	14.34%	(8.36%)	2.08%	-	-
Russell 1000 Value Index	14.29%	(8.84%)	1.82%	4.64%	10.41%
DFA Large Cap Value	16.61%	(13.23%)	-	-	-
Russell 1000 Value Index	14.29%	(8.84%)	1.82%	4.64%	10.41%
Northern Trust Global	20.55%	7.52%	10.75%	10.75%	14.01%
S&P 500 Index	20.54%	7.51%	10.73%	10.73%	13.99%
Polen Capital Management	27.45%	23.47%	22.00%	18.35%	-
S&P 500 Index	20.54%	7.51%	10.73%	10.73%	13.99%
Earnest Partners LLC	23.64%	2.65%	9.41%	10.46%	13.57%
Russell MidCap Index	24.61%	(2.24%)	5.79%	6.76%	12.35%
DFA Small Cap Value	23.14%	(19.57%)	(6.35%)	(1.10%)	8.06%
Russell 2000 Value Index	18.91%	(17.48%)	(4.35%)	1.26%	7.82%
CastleArk Management	34.65%	(5.18%)	9.60%	6.35%	-
Russell 2000 Growth Index	30.58%	3.48%	7.86%	6.86%	12.92%
Total Global Equity Net	20.52%	4.45%	8.85%	8.99%	9.94%
MSCI World	19.36%	2.84%	6.70%	6.90%	9.95%
BlackRock Global Alpha Tilts	20.91%	1.56%	6.40%	-	-
MFS Investment Management	19.97%	9.05%	12.74%	11.48%	-
MSCI ACWI Gross	19.39%	2.64%	6.70%	7.03%	9.74%
Total International Equity Net	18.08%	(6.29%)	(0.95%)	1.23%	5.84%
MSCI EAFE Index	14.88%	(5.13%)	0.81%	2.05%	5.73%
AQR Emerging Markets	18.18%	(2.72%)	(0.76%)	-	-
MSCI EM Gross	18.18%	(3.05%)	2.28%	3.24%	3.63%
Brandes Investment Partners	12.28%	(15.35%)	(4.27%)	(1.54%)	3.91%
MSCI EAFE Index	14.88%	(5.13%)	0.81%	2.05%	5.73%
William Blair & Company	24.37%	8.98%	7.28%	5.68%	8.49%
MSCI ACWI ex-US Index	16.30%	(4.39%)	1.61%	2.75%	5.45%
DFA International Small Cap	19.38%	(11.98%)	(6.38%)	(0.84%)	5.68%
Blended Benchmark	19.88%	(3.52%)	0.53%	3.81%	7.93%
Total Fixed Income Net	5.90%	(2.81%)	2.06%	2.93%	3.70%
Bimbg Aggregate	2.90%	8.74%	5.32%	4.30%	3.82%
BlackRock US Debt Idx Fd	3.19%	8.93%	5.42%	-	-
Reams Asset Management	8.96%	15.85%	8.22%	6.16%	5.07%
Loomis, Sayles & Company, L.P.	7.40%	2.49%	4.19%	5.12%	6.23%
Bimbg Aggregate	2.90%	8.74%	5.32%	4.30%	3.82%
Total Private Equity	(2.94%)	6.02%	14.25%	13.07%	9.98%
Abbott Capital Management 2010	(5.99%)	3.86%	15.92%	14.39%	(3.83%)
Abbott Capital Management 2011	(5.00%)	6.61%	16.61%	14.69%	-
Abbott Capital Management 2012	(3.40%)	7.46%	15.79%	13.29%	-
Abbott Capital Management 2013	(4.14%)	7.05%	16.94%	13.07%	-
Abbott Capital Management 2014	(3.94%)	5.75%	14.61%	11.19%	-
Abbott Capital Management 2015	(1.53%)	4.13%	9.57%	7.75%	-
Abbott Capital Management 2016	0.76%	4.11%	6.66%	-	-
Abbott Capital Management 2018	4.64%	11.23%	-	-	-
Mesirow V	(4.76%)	2.66%	12.03%	13.87%	13.57%
Mesirow IV	0.78%	14.60%	17.75%	12.11%	-
Mesirow VII	(2.13%)	(1.66%)	(14.14%)	-	-
NB Secondary Opp Fund III	(13.66%)	(8.87%)	7.94%	10.23%	-
NB Secondary Opp Fund IV	(5.33%)	0.49%	20.14%	-	-
Private Advisors VI	(0.50%)	12.33%	13.55%	5.37%	-
Private Advisors VII	(4.29%)	2.06%	10.20%	-	-
Private Advisors VIII	1.29%	(4.15%)	-	-	-
Private Advisors IX	18.79%	-	-	-	-
Russell 3000 (1 Qtr in Arrears) + 3%	(19.43%)	(5.69%)	7.28%	8.96%	-
Absolute Return	6.87%	(18.03%)	(2.76%)	0.29%	-
Newton	8.93%	2.32%	5.01%	4.64%	-
UBS A & Q	6.01%	7.84%	5.92%	4.64%	-
1-month LIBOR + 4%	1.04%	5.41%	5.80%	5.29%	4.75%
Real Assets	10.92%	(6.33%)	0.29%	-	-
Principal DRA	10.92%	(6.33%)	0.29%	-	-
Principal Blended Benchmark (1)	10.00%	(7.67%)	0.62%	-	-
Total Real Estate	(2.56%)	2.52%	6.32%	8.01%	10.66%
Real Estate	(2.56%)	2.52%	6.32%	8.01%	10.66%
Blended Benchmark (2)	0.71%	4.38%	6.14%	7.82%	10.20%
Total Fund Net	10.34%	(2.99%)	4.01%	5.25%	8.16%
Total Fund Reference Index	7.32%	3.64%	5.84%	6.24%	8.65%

\*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.

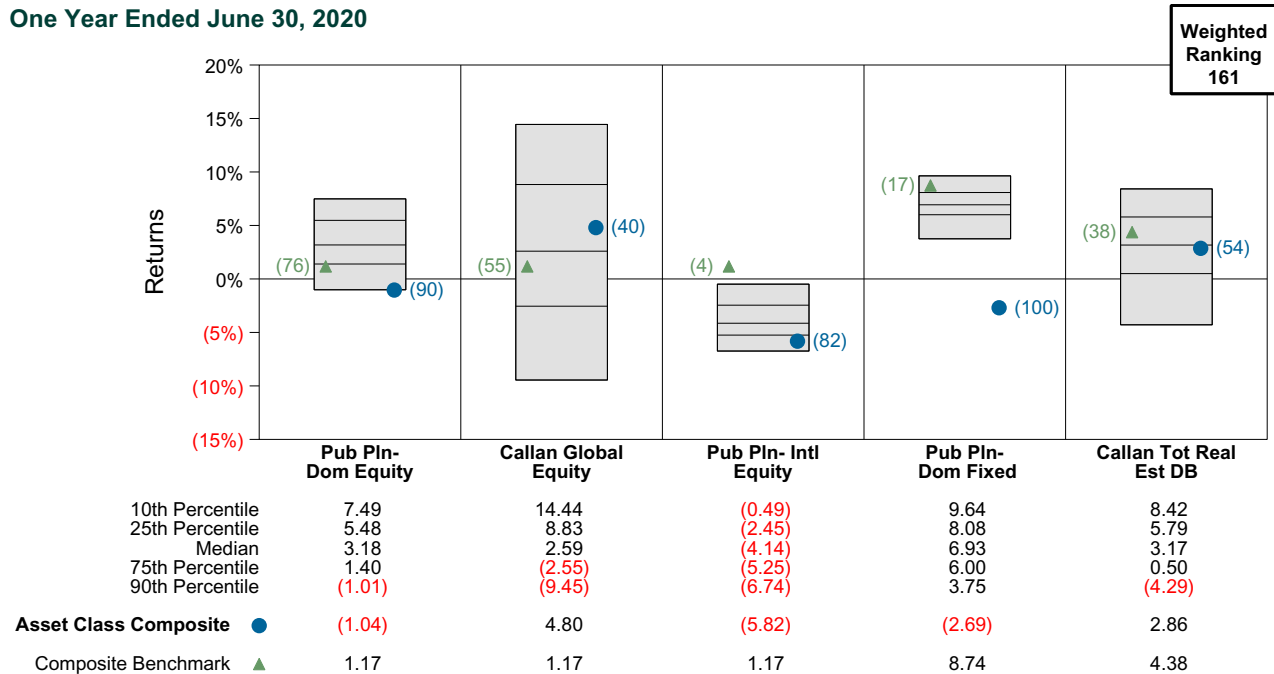
	12/2019- 6/2020	2019	2018	2017	2016
<b>Net of Fee Returns</b>					
Total Domestic Equity Net	(9.37%)	28.94%	(6.10%)	20.53%	13.55%
Russell 3000 Index	(3.48%)	31.02%	(5.24%)	21.13%	12.74%
BlackRock Russell 1000 Value	(15.95%)	26.77%	(8.13%)	-	-
Russell 1000 Value Index	(16.26%)	26.54%	(8.27%)	13.66%	17.34%
DFA Large Cap Value	(21.13%)	26.42%	(12.60%)	-	-
Russell 1000 Value Index	(16.26%)	26.54%	(8.27%)	13.66%	17.34%
Northern Trust Global	(3.07%)	31.53%	(4.37%)	21.83%	11.98%
S&P 500 Index	(3.08%)	31.49%	(4.38%)	21.83%	11.96%
Polen Capital Management	10.83%	38.27%	8.60%	27.05%	1.19%
S&P 500 Index	(3.08%)	31.49%	(4.38%)	21.83%	11.96%
Earnest Partners LLC	(5.56%)	37.65%	(10.29%)	25.50%	15.90%
Russell MidCap Index	(9.13%)	30.54%	(9.06%)	18.52%	13.80%
DFA Small Cap Value	(25.12%)	18.58%	(15.30%)	7.10%	28.68%
Russell 2000 Value Index	(23.50%)	22.39%	(12.86%)	7.84%	31.74%
CastleArk Management	(5.42%)	22.47%	2.60%	23.12%	5.30%
Russell 2000 Growth Index	(3.06%)	28.48%	(9.31%)	22.17%	11.32%
Total Global Equity Net	(4.56%)	30.55%	(8.51%)	30.85%	8.26%
MSCI World	(5.77%)	27.67%	(8.71%)	22.40%	7.51%
BlackRock Global Alpha Tilts	(5.79%)	26.48%	(11.24%)	30.06%	-
MFS Investment Management	(2.54%)	36.74%	(4.16%)	32.62%	5.62%
MSCI ACWI Gross	(5.99%)	27.30%	(8.93%)	24.62%	8.48%
Total International Equity Net	(14.01%)	21.08%	(15.60%)	24.44%	5.27%
MSCI EAFE Index	(11.34%)	22.01%	(13.79%)	25.03%	1.00%
AQR Emerging Markets	(10.40%)	19.64%	(18.93%)	34.55%	-
MSCI EM Gross	(9.67%)	18.90%	(14.24%)	37.75%	11.60%
Brandes Investment Partners	(21.60%)	14.86%	(9.17%)	16.06%	8.05%
MSCI EAFE Index	(11.34%)	22.01%	(13.79%)	25.03%	1.00%
William Blair & Company	(0.15%)	31.01%	(17.20%)	30.94%	(1.84%)
MSCI ACWI ex-US Index	(10.76%)	22.13%	(13.77%)	27.77%	5.01%
DFA International Small Cap	(20.84%)	21.00%	(23.31%)	27.98%	8.00%
Blended Benchmark	(13.11%)	24.96%	(17.89%)	33.01%	2.18%
Total Fixed Income Net	(5.99%)	11.68%	(0.47%)	5.09%	7.21%
Bimbg Aggregate	6.14%	8.72%	0.01%	3.54%	2.65%
BlackRock US Debt Idx Fd	6.31%	8.77%	0.04%	3.66%	-
Reams Asset Management	13.19%	8.65%	1.76%	3.46%	4.22%
Loomis, Sayles & Company, L.P.	(1.40%)	14.25%	(2.24%)	8.36%	13.82%
Bimbg Aggregate	6.14%	8.72%	0.01%	3.54%	2.65%
Total Private Equity	(2.99%)	16.63%	21.48%	17.27%	9.09%
Abbott Capital Management 2010	(5.99%)	16.52%	26.90%	19.98%	11.03%
Abbott Capital Management 2011	(5.00%)	19.64%	25.70%	19.24%	10.43%
Abbott Capital Management 2012	(3.40%)	17.91%	24.39%	17.97%	9.42%
Abbott Capital Management 2013	(4.14%)	21.13%	25.17%	18.71%	5.25%
Abbott Capital Management 2014	(3.94%)	19.74%	22.58%	13.50%	2.86%
Abbott Capital Management 2015	(1.53%)	15.14%	13.57%	6.87%	(5.11%)
Abbott Capital Management 2016	0.55%	9.08%	9.43%	(1.13%)	-
Abbott Capital Management 2018	4.25%	7.26%	-	-	-
Mesirow V	(4.76%)	16.29%	18.01%	20.99%	12.03%
Mesirow IV	0.78%	22.73%	24.87%	12.50%	3.32%
Mesirow VII	(2.61%)	3.33%	(7.82%)	-	-
NB Secondary Opp Fund III	(13.66%)	12.18%	16.65%	20.63%	12.83%
NB Secondary Opp Fund IV	(5.33%)	14.76%	68.26%	-	-
Private Advisors VI	(0.46%)	17.98%	15.19%	13.15%	(1.34%)
Private Advisors VII	(4.29%)	11.23%	19.02%	(3.33%)	-
Private Advisors VIII	1.37%	(4.08%)	-	-	-
Russell 3000 (1 Qtr in Arrears) + 3%	(11.63%)	6.19%	20.60%	21.71%	17.97%
Absolute Return	(21.53%)	12.52%	1.61%	5.96%	5.16%
Newton	(0.64%)	12.64%	2.18%	5.59%	3.31%
UBS A & Q	3.64%	9.53%	2.65%	4.16%	2.42%
1-month LIBOR + 4%	2.39%	6.26%	6.07%	5.11%	4.49%
Real Assets	(10.15%)	14.84%	(7.47%)	10.15%	7.00%
Principal DRA	(10.15%)	14.84%	(7.47%)	10.15%	7.00%
Principal Blended Benchmark (1)	(10.76%)	14.86%	(7.27%)	10.38%	6.77%
Total Real Estate	(0.76%)	5.95%	8.94%	8.89%	11.09%
Real Estate	(0.76%)	5.95%	8.94%	8.89%	11.09%
Blended Benchmark (2)	2.02%	5.26%	7.89%	6.93%	9.69%
Total Fund Net	(8.98%)	18.34%	(3.01%)	16.36%	8.80%
Total Fund Reference Index	(2.13%)	16.52%	(3.29%)	15.80%	7.43%

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

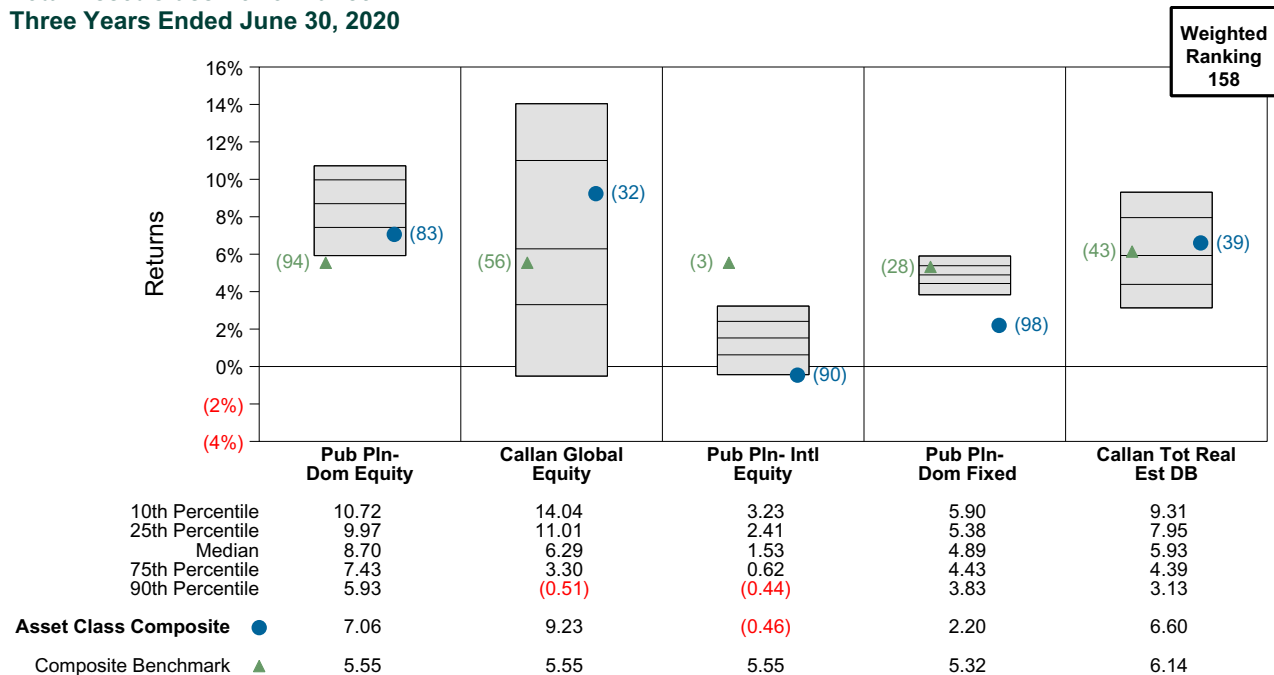
## Asset Class Rankings

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

### Total Asset Class Performance One Year Ended June 30, 2020



### Total Asset Class Performance Three Years Ended June 30, 2020

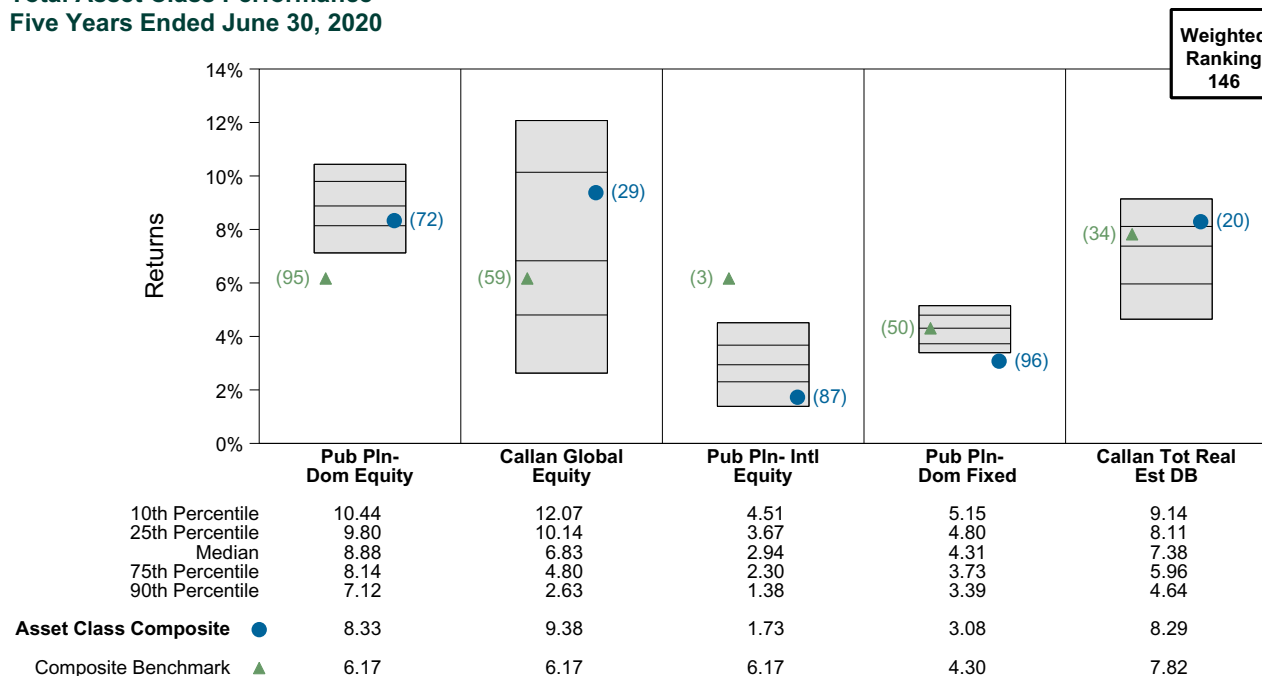


\* Current Quarter Target = 43.0% MSCI ACWI IMI, 26.0% Blmbg Aggregate, 10.0% Russell 3000 Index lagged 3 months+2.0%, 10.0% 3-month Treasury Bill+3.0%, 7.7% NCREIF NFI-ODCE Eq Wt Net lagged 3 months and 3.3% Principal Blended Benchmark.

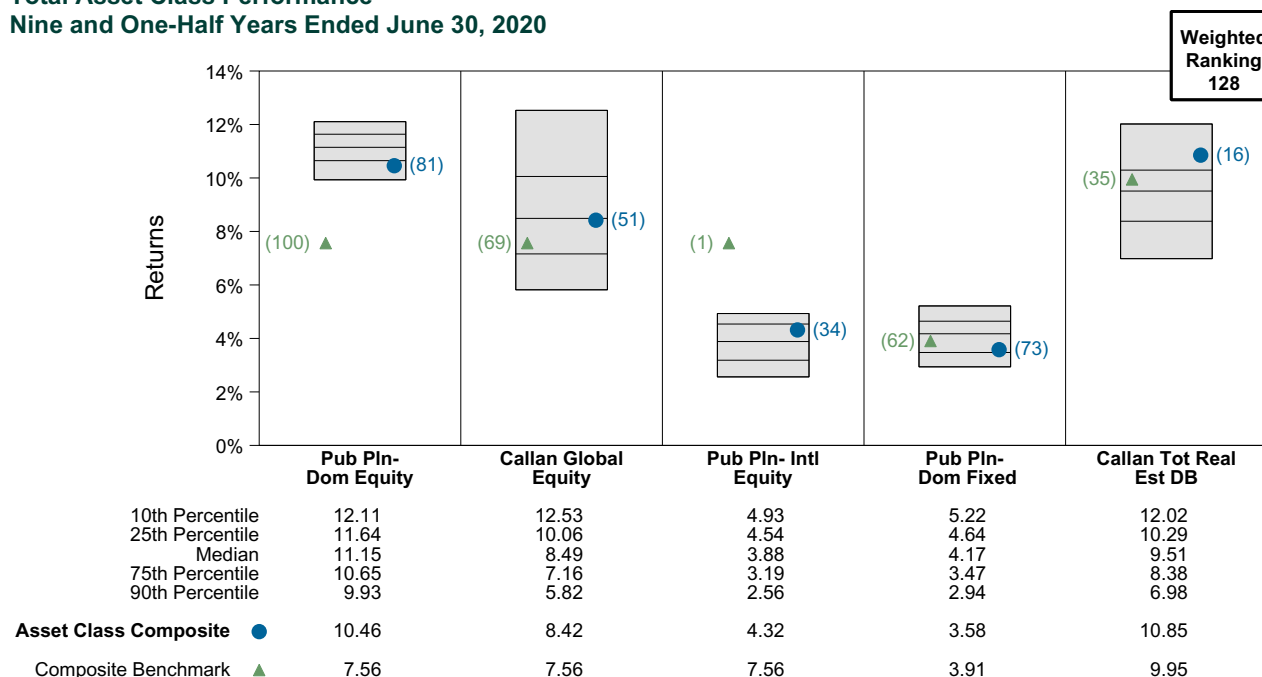
## Asset Class Rankings

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.

### Total Asset Class Performance Five Years Ended June 30, 2020



### Total Asset Class Performance Nine and One-Half Years Ended June 30, 2020



\* 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.





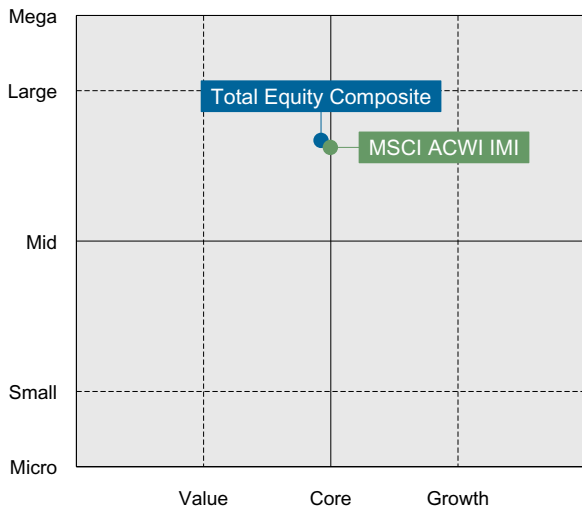
# Current Holdings Based Style Analysis

## Total Equity Composite

### As of June 30, 2020

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

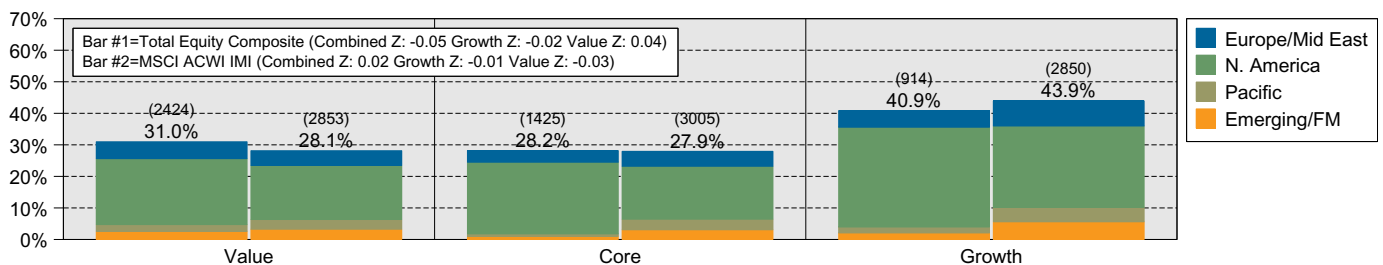
**Style Map vs Callan Public Fund Spr DB Holdings as of June 30, 2020**



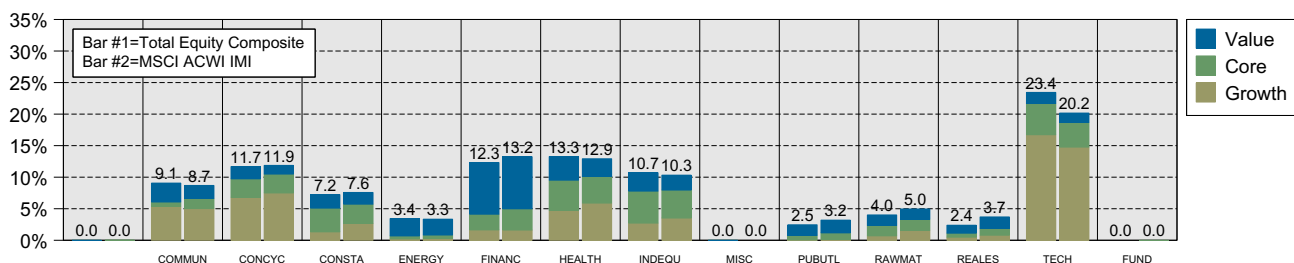
**Style Exposure Matrix Holdings as of June 30, 2020**

	Value	Core	Growth	Total
Europe/ Mid East	5.4% (400) 4.7% (421)	3.7% (313) 4.7% (501)	5.3% (243) 7.9% (519)	14.3% (956) 17.3% (1441)
N. America	20.9% (929) 17.1% (830)	22.7% (677) 16.8% (996)	31.6% (405) 25.8% (781)	75.3% (2011) 59.7% (2607)
Pacific	2.2% (868) 3.1% (587)	0.8% (313) 3.3% (583)	1.9% (124) 4.6% (589)	4.8% (1305) 11.0% (1759)
Emerging/ FM	2.6% (227) 3.2% (1015)	1.0% (122) 3.1% (925)	2.1% (142) 5.6% (961)	5.6% (491) 11.9% (2901)
<b>Total</b>	<b>31.0% (2424)</b> 28.1% (2853)	<b>28.2% (1425)</b> 27.9% (3005)	<b>40.9% (914)</b> 43.9% (2850)	<b>100.0% (4763)</b> 100.0% (8708)

**Combined Z-Score Style Distribution Holdings as of June 30, 2020**



**Sector Weights Distribution Holdings as of June 30, 2020**



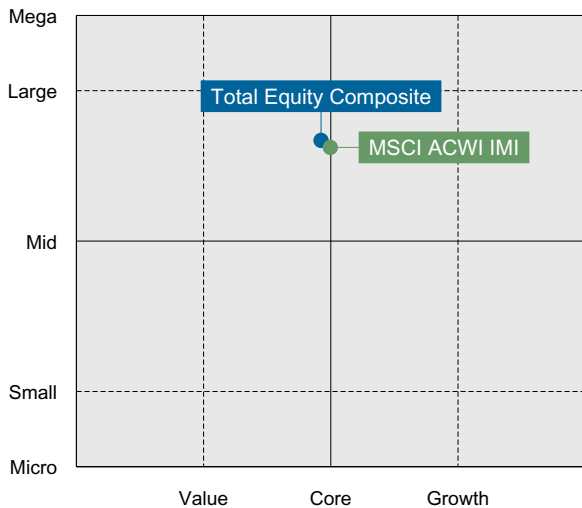
# Current Holdings Based Style Analysis

## Total Equity Composite

### As of June 30, 2020

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 map illustrates the current market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right matrix displays the current portfolio and index weights and stock counts (in parentheses) in each capitalization/style segment of the market. The middle chart illustrates the total exposures and stock counts in the three style segments, with a legend showing the total growth, value, and "combined Z" (growth - value) scores. The bottom chart exhibits the sector weights as well as the style weights within each sector.

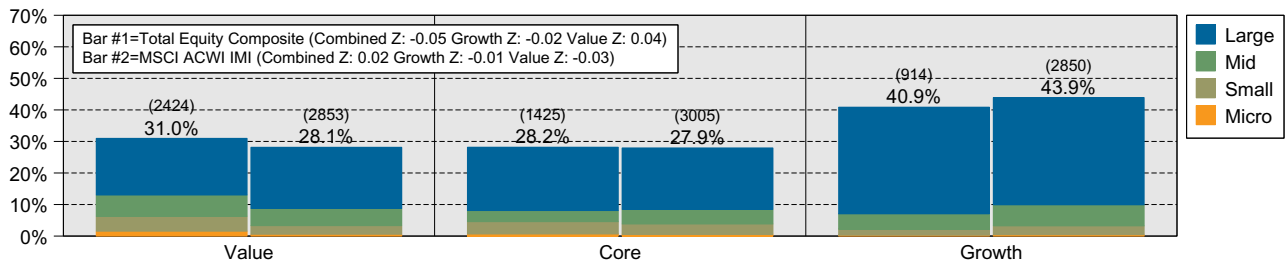
**Style Map vs Callan Public Fund Spr DB Holdings as of June 30, 2020**



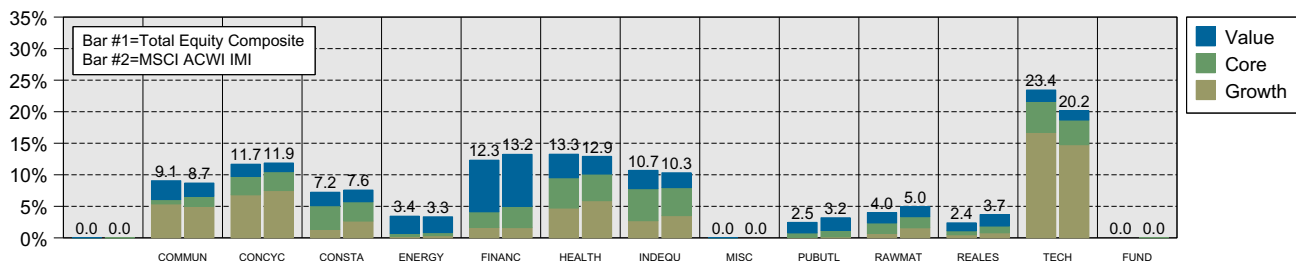
**Style Exposure Matrix Holdings as of June 30, 2020**

	Value	Core	Growth	Total
Large	18.0% (213)	20.1% (178)	33.8% (233)	<b>71.8% (624)</b>
	19.3% (277)	19.4% (262)	34.0% (332)	<b>72.8% (871)</b>
Mid	6.7% (321)	3.5% (245)	4.9% (282)	<b>15.1% (848)</b>
	5.5% (532)	4.7% (513)	6.7% (697)	<b>16.9% (1742)</b>
Small	4.8% (501)	3.9% (464)	1.9% (221)	<b>10.6% (1186)</b>
	2.7% (1091)	3.2% (1268)	2.8% (1123)	<b>8.7% (3482)</b>
Micro	1.5% (1389)	0.7% (538)	0.3% (178)	<b>2.5% (2105)</b>
	0.6% (953)	0.6% (962)	0.4% (698)	<b>1.6% (2613)</b>
<b>Total</b>	<b>31.0% (2424)</b>	<b>28.2% (1425)</b>	<b>40.9% (914)</b>	<b>100.0% (4763)</b>
	28.1% (2853)	27.9% (3005)	43.9% (2850)	100.0% (8708)

**Combined Z-Score Style Distribution Holdings as of June 30, 2020**



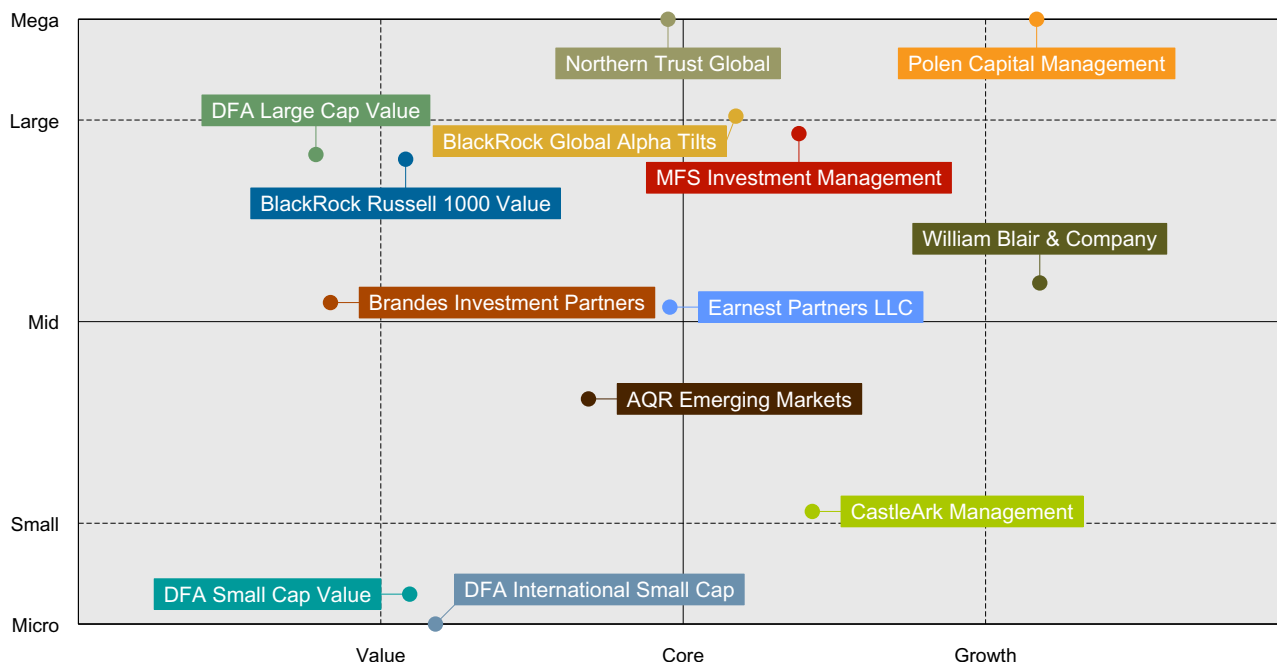
**Sector Weights Distribution Holdings as of June 30, 2020**



## Global Holdings Based Style Analysis For One Quarter Ended June 30, 2020

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

### Style Map Holdings for One Quarter Ended June 30, 2020



	Weight %	Wtd Median Mkt Cap	Combined Z-Score	Growth Z-Score	Value Z-Score	Number of Securities	Security Diversification
BlackRock Russell 1000 Value	5.45%	58.62	(0.92)	(0.47)	0.45	837	64.03
DFA Large Cap Value	5.32%	59.86	(1.22)	(0.48)	0.75	289	28.25
Northern Trust Global	12.83%	138.61	(0.03)	(0.02)	0.01	505	40.35
Polen Capital Management	6.82%	205.30	1.14	0.52	(0.62)	22	7.19
Earnest Partners LLC	4.89%	19.74	(0.02)	(0.03)	(0.01)	58	20.14
DFA Small Cap Value	6.08%	1.72	(0.91)	(0.23)	0.68	941	117.63
CastleArk Management	3.89%	3.43	0.43	0.06	(0.38)	106	37.77
MFS Investment Management	7.84%	65.35	0.39	(0.00)	(0.39)	83	24.50
BlackRock Global Alpha Tilts	11.18%	71.61	0.19	0.07	(0.12)	873	63.38
AQR Emerging Markets	4.14%	10.84	(0.30)	(0.03)	0.27	329	37.09
Brandes Investment Partners	13.13%	20.93	(1.17)	(0.33)	0.84	62	21.02
William Blair & Company	11.92%	26.10	1.15	0.44	(0.72)	275	46.45
DFA International Small Cap	6.51%	1.18	(0.82)	(0.26)	0.56	1994	184.20



## Research and Educational Programs

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/library](http://www.callan.com/library) to see all of our publications, and [www.callan.com/blog](http://www.callan.com/blog) to view our blog “Perspectives.” For more information contact Barb Gerraty at 415-274-3093 / [institute@callan.com](mailto:institute@callan.com).

## New Research from Callan’s Experts

**[Coping with COVID-19: How Work Is Evolving for Investment Managers](#)** | Callan surveyed over 100 investment managers regarding how their firms were responding to the COVID-19 pandemic, focusing on office closures and reopenings, work-from-home approaches, business travel, and meetings. Respondents reflected a wide variety of firms by location, employee size, assets under management, and ownership structure.

**[Breaking Bad: Better Call Hedge Funds?](#)** | In his latest *Hedge Fund Monitor*, Callan’s Jim McKee discusses four opportunities for hedge fund investors arising from the market dislocations stemming from the COVID-19 pandemic.

**[Real Estate Indicators: Too Hot to Touch or Cool Enough to Handle?](#)** | Callan’s Real Assets Consulting group identifies seven indicators, based on spreads in real estate and fixed income markets, that, combined with an understanding of prevailing market dynamics, have helped signal when the institutional real estate market is overheated or cooled.

### Blog Highlights

**[Guidance on Substantial Workforce Cuts and DC Plan Terminations](#)** | Employers that reduce their workforce or discontinue defined contribution (DC) plan eligibility for certain employee groups may experience an inadvertent “partial plan termination.” If not properly managed, this event could result in a disqualification of the entire plan.

**[‘Social Washing’ and How COVID-19 Has Emphasized the ‘S’ in ESG](#)** | While ESG-savvy investors are most likely familiar with “greenwashing,” which refers to the misrepresentation of environmental impact, the term “social washing” has gained new prominence as the investment community evaluates corporations’

responses to the sudden challenges presented by the coronavirus. Social washing refers to statements or policies that make a company appear more socially responsible than it actually is.

**[Nonprofits and the Pandemic: What to Do Now](#)** | For nonprofits, this environment creates unique challenges, with many organizations not only contending with the health crisis but also the impact of portfolio returns on their organization’s ability to fund grants, provide scholarships, and support programs and operations essential to their constituents. At the same time, these organizations face a potential decline in philanthropic contributions.

### Quarterly Periodicals

**[Private Equity Trends, 1Q20](#)** | A high-level summary of private equity activity in the quarter through all the investment stages

**[Active vs. Passive Charts, 1Q20](#)** | A comparison of active managers alongside relevant benchmarks over the long term

**[Market Pulse Flipbook, 1Q20](#)** | A quarterly market reference guide covering trends in the U.S. economy, developments for institutional investors, and the latest data on the capital markets

**[Capital Market Review, 1Q20](#)** | 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, 1Q20](#)** | Commentary on developments for hedge funds and multi-asset class (MAC) strategies

**[Real Assets Reporter, 1Q20](#)** | In this quarter’s edition, we discuss the implications of the COVID-19 pandemic on the prospects for farmland investments. In addition, it includes analysis of the performance of real estate and other real assets in 1Q20.

## Events

Miss out on a Callan conference or workshop? Event summaries and speakers' presentations are available on our website: [www.callan.com/library/](http://www.callan.com/library/)

Please mark your calendar and look forward to upcoming invitations:

### Upcoming Webinars

#### August 20

*Credit Dislocation—Opportunities in Private Credit*

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

## Education: By the Numbers

50+

Unique pieces of research the Institute generates each year

525

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

3,700

Total attendees of the "Callan College" since 1994

## Education

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

### Introduction to Investments—Virtual

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.

**Next Session: October 13-15, 2020**

Additional information including registration can be found at: [www.callan.com/cc-introduction-virtual/](http://www.callan.com/cc-introduction-virtual/)

### Introduction to Investments—In Person

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: [www.callan.com/callan-college-intro-2/](http://www.callan.com/callan-college-intro-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

AEGON USA Investment Management Inc.

AEW Capital Management

AllianceBernstein

Allianz

American Century Investments

Amundi Pioneer Asset Management

AQR Capital Management

Ares Management LLC

Ariel Investments, LLC

Aristotle Capital Management, LLC

Atlanta Capital Management Co., LLC

Aviva Investors Americas

AXA Investment Managers

Baillie Gifford International, LLC

Baird Advisors

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

BrightSphere Investment Group

Brown Brothers Harriman & Company

Cambiar Investors, LLC

CapFinancial Partners, LLC

Capital Group

Carillon Tower Advisers

CastleArk Management, LLC

Causeway Capital Management LLC

Chartwell Investment Partners

ClearBridge Investments, LLC

**Manager Name**

Cohen &amp; Steers Capital Management, Inc.

Columbia Management Investments

Columbus Circle Investors

Credit Suisse Asset Management

D.E. Shaw Investment Management, L.L.C.

DePrince, Race &amp; Zollo, Inc.

Diamond Hill Capital Management, Inc.

Dimensional Fund Advisors LP

Doubleline

Duff &amp; Phelps Investment Management Co.

DWS

EARNEST Partners, LLC

Eaton Vance Management

Epoch Investment Partners, Inc.

Fayez Sarofim &amp; Company

Federated Hermes, Inc.

Fidelity Institutional Asset Management

Fiera Capital Corporation

First Hawaiian Bank Wealth Management Division

First State Investments

Fisher Investments

Fortress Investment Group

Franklin Templeton

Fred Alger Management, Inc.

GAM (USA) Inc.

GCM Grosvenor

Glenmeade Investment Management, LP

GlobeFlex Capital, L.P.

Goldman Sachs

Green Square Capital Advisors, LLC

Guggenheim Investments

GW&amp;K Investment Management

Harbor Capital Group Trust

Hartford Investment Management Co.

Heitman LLC

Hotchkis &amp; Wiley Capital Management, LLC

HPS Investment Partners, LLC

Income Research + Management, Inc.

Insight Investment Management Limited

Intech Investment Management, LLC

**Manager Name**

Intercontinental Real Estate Corporation

Invesco

Investec Asset Management North America, Inc.

Ivy Investments

J.P. Morgan

Janus

Jennison Associates LLC

Jobs Peak Advisors

KeyCorp

Lazard Asset Management

Legal &amp; General Investment Management America

Lincoln National Corporation

Longview Partners

Loomis, Sayles &amp; Company, L.P.

Lord Abbett &amp; Company

Los Angeles Capital Management

LSV Asset Management

MacKay Shields LLC

Macquarie Investment Management (MIM)

Manulife Investment Management

Marathon Asset Management, L.P.

McKinley Capital Management, LLC

Mellon

MetLife Investment Management

MFS Investment Management

MidFirst Bank

Mondrian Investment Partners Limited

Montag &amp; Caldwell, LLC

Morgan Stanley Investment Management

Mountain Pacific Advisors, LLC

MUFU Union Bank, N.A.

Natixis Investment Managers

Neuberger Berman

Newton Investment Management

Nikko Asset Management Co., Ltd.

Nile Capital Group LLC

Northern Trust Asset Management

Nuveen

P/E Investments

Pacific Investment Management Company

**Manager Name**

Parametric Portfolio Associates LLC

Pathway Capital Management

Peregrine Capital Management, LLC

Perkins Investment Management

PFM Asset Management LLC

PGIM Fixed Income

PineBridge Investments

PNC Capital Advisors, LLC

Polen Capital Management

Principal Global Investors

Putnam Investments, LLC

QMA LLC

RBC Global Asset Management

Regions Financial Corporation

Robeco Institutional Asset Management, US Inc.

Rothschild &amp; Co. Asset Management US

S&amp;P Dow Jones Indices

Schroder Investment Management North America Inc.

SLC Management

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

State Street Global Advisors

Stone Harbor Investment Partners L.P.

**Manager Name**

Strategic Global Advisors

T. Rowe Price Associates, Inc.

The TCW Group, Inc.

Thompson, Siegel &amp; Walmsley LLC

Thornburg Investment Management, Inc.

Tri-Star Trust Bank

UBS Asset Management

USAA Real Estate

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 &amp; Company LLC