

December 31, 2018



## **Illinois Municipal Retirement Fund Quarterly Performance Report**

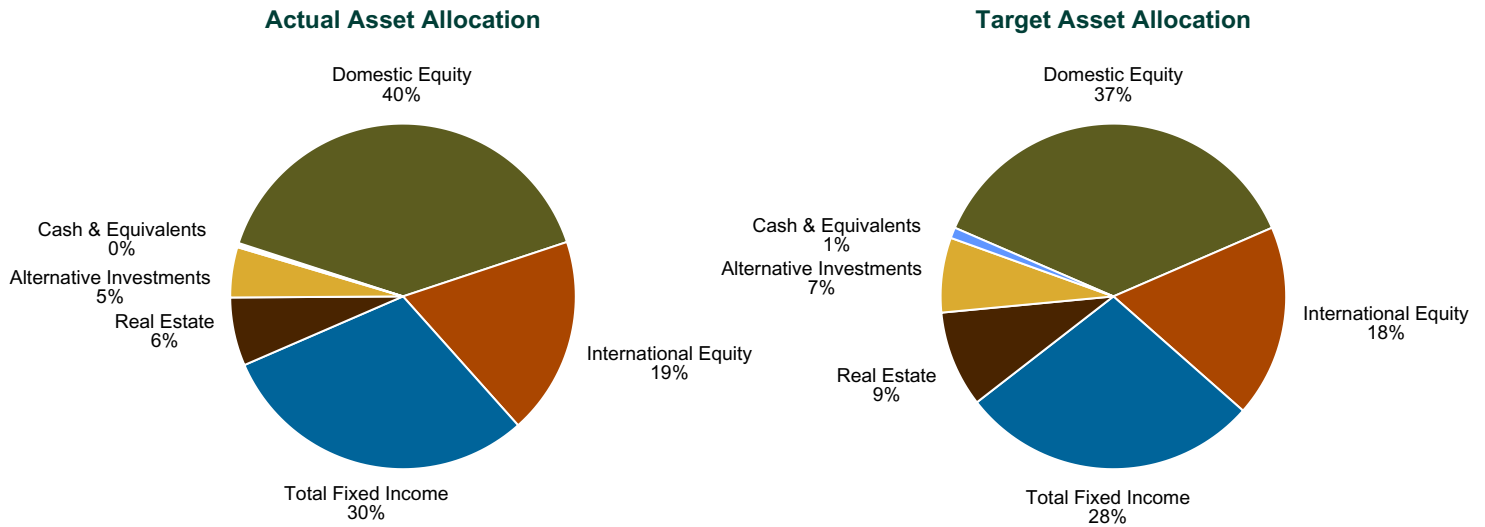
**Investment Measurement Service  
Quarterly Review**

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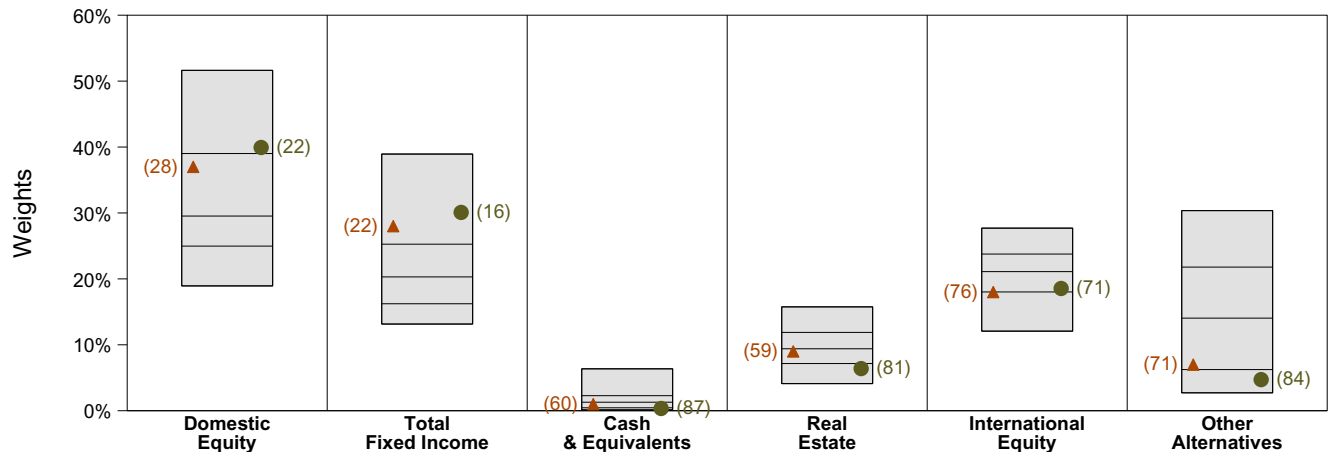
## Actual vs Target Asset Allocation As of December 31, 2018

The top left chart shows the Fund's asset allocation for the period. The bottom pie chart shows the Fund's target asset allocation as outlined in the investment policy statement.



Asset Class	\$Millions Actual	Weight Actual	Target	Percent Difference	\$Millions Difference
Domestic Equity	15,352	39.9%	37.0%	2.9%	1,127
International Equity	7,129	18.5%	18.0%	0.5%	209
Total Fixed Income	11,564	30.1%	28.0%	2.1%	799
Real Estate	2,457	6.4%	9.0%	(2.6%)	(1,003)
Alternative Investments	1,813	4.7%	7.0%	(2.3%)	(878)
Cash & Equivalents	131	0.3%	1.0%	(0.7%)	(254)
<b>Total</b>	<b>38,444</b>	<b>100.0%</b>	<b>100.0%</b>		

### Asset Class Weights vs Callan Public Fund Sponsor - Large (>1B)



10th Percentile	51.64	38.94	6.35	15.76	27.70	30.36
25th Percentile	39.01	25.26	2.28	11.88	23.77	21.79
Median	29.53	20.30	1.29	9.40	21.10	14.04
75th Percentile	24.97	16.22	0.45	7.16	18.02	6.24
90th Percentile	18.93	13.15	0.12	4.11	12.07	2.72
<b>Fund</b> ●	<b>39.93</b>	<b>30.08</b>	<b>0.34</b>	<b>6.39</b>	<b>18.54</b>	<b>4.72</b>
<b>Target</b> ▲	<b>37.00</b>	<b>28.00</b>	<b>1.00</b>	<b>9.00</b>	<b>18.00</b>	<b>7.00</b>
% Group Invested	100.00%	94.83%	87.93%	74.14%	98.28%	63.79%

\* Current Quarter Target = 37.0% Russell 3000 Index, 28.0% Blmbg Aggregate, 18.0% MSCI ACWI ex US, 9.0% NCREIF NFI-ODCE Val Wt Nt, 7.0% 9% Annually and 1.0% 3-month Treasury Bill.

## Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of December 31, 2018, with the distribution as of September 30, 2018. The change in asset distribution is broken down into the dollar change due to Net New Investment and the dollar change due to Investment Return.

### Asset Distribution Across Investment Managers

	December 31, 2018		Net New Inv.	Inv. Return	September 30, 2018	
	Market Value	Weight			Market Value	Weight
<b>Domestic Equity</b>	<b>\$15,351,663,236</b>	<b>39.93%</b>	<b>\$(746,727,732)</b>	<b>\$(2,860,277,862)</b>	<b>\$18,958,668,830</b>	<b>44.71%</b>
<b>Large Cap Growth</b>						
NTGI S&P 500 Growth Idx	1,939,178,208	5.04%	37,798	(333,755,069)	2,272,895,480	5.36%
Piedmont Russell 1000 G Sands	846,386,617	2.20%	0	(159,742,611)	1,006,129,228	2.37%
	1,571,958,078	4.09%	(350,000,000)	(380,762,637)	2,302,720,715	5.43%
<b>Large Cap Value</b>						
Dodge & Cox	1,193,139,294	3.10%	(5,429,835)	(184,030,589)	1,382,599,719	3.26%
BMO	1,202,113,731	3.13%	(8,434,804)	(192,023,965)	1,402,572,500	3.31%
LSV	1,348,605,351	3.51%	(10,930,809)	(216,160,337)	1,575,696,496	3.72%
NTGI S&P 500 Value Idx	1,519,141,144	3.95%	29,918	(208,433,484)	1,727,544,710	4.07%
<b>Large Cap Core</b>						
NTGI MarketCap Index	2,515,871,313	6.54%	0	(420,713,668)	2,936,584,981	6.93%
<b>Small Cap Growth</b>						
Frontier	460,326,283	1.20%	0	(115,319,601)	575,645,884	1.36%
FIAM	664,094,875	1.73%	(250,000,000)	(188,855,603)	1,102,950,477	2.60%
<b>Small Cap Value</b>						
Channing	192,418,255	0.50%	0	(53,677,637)	246,095,892	0.58%
Dimensional Small Cap Value	505,660,219	1.32%	0	(126,675,141)	632,335,361	1.49%
Inv. Counselors of Maryland	571,455,677	1.49%	0	(145,952,908)	717,408,585	1.69%
<b>Micro Cap</b>						
Ativo	2,190,666	0.01%	(122,000,000)	(16,150,802)	140,341,468	0.33%
Dimensional Micro Cap	377,012,845	0.98%	0	(94,804,233)	471,817,078	1.11%
<b>Public Real Assets</b>						
Cohen & St Public Global Infrastru	303,635,365	0.79%	0	(11,416,174)	315,051,539	0.74%
Brookfield Public Global Infrastru	138,475,315	0.36%	0	(11,391,902)	149,867,217	0.35%
<b>International Equity</b>	<b>\$7,128,878,587</b>	<b>18.54%</b>	<b>\$290,621</b>	<b>\$(1,010,039,933)</b>	<b>\$8,138,627,899</b>	<b>19.19%</b>
<b>International Large Cap Growth</b>						
EARNEST Partners	561,556,621	1.46%	0	(86,294,454)	647,851,076	1.53%
William Blair	634,976,094	1.65%	0	(121,151,979)	756,128,073	1.78%
<b>International Large Cap Value</b>						
Brandes	559,795,851	1.46%	332,971	(69,987,162)	629,450,042	1.48%
Mondrian	484,146,031	1.26%	665,255	(43,098,266)	526,579,043	1.24%
Lazard	101,084,244	0.26%	0	(12,002,473)	113,086,717	0.27%
<b>International Large Cap Core</b>						
Arrowstreet	615,555,533	1.60%	0	(86,543,083)	702,098,617	1.66%
Brown	306,266,447	0.80%	0	(48,745,636)	355,012,083	0.84%
GlobeFlex	532,785,032	1.39%	0	(87,600,489)	620,385,521	1.46%
NTGI MSCI EAFE Index	1,972,067,710	5.13%	0	(279,203,673)	2,251,271,383	5.31%
Progress	274,313,309	0.71%	0	(38,022,673)	312,335,982	0.74%
<b>International Small Cap</b>						
Franklin Templeton	166,583,965	0.43%	357,131	(28,737,785)	194,964,619	0.46%
William Blair	231,344,937	0.60%	0	(53,365,005)	284,709,942	0.67%
<b>Emerging Markets</b>						
Genesis	688,402,812	1.79%	(1,064,736)	(55,287,255)	744,754,802	1.76%
<b>Total Fixed Income</b>	<b>\$11,563,685,358</b>	<b>30.08%</b>	<b>\$566,058,747</b>	<b>\$88,589,501</b>	<b>\$10,909,037,110</b>	<b>25.73%</b>
<b>Domestic Fixed Core</b>						
Brandes Core	345,395,292	0.90%	0	3,788,782	341,606,510	0.81%
EARNEST Partners	1,012,164,652	2.63%	250,000,000	22,344,900	739,819,752	1.74%
Piedmont	823,121,826	2.14%	75,000,000	10,833,498	737,288,329	1.74%
Garcia Hamilton	990,483,905	2.58%	250,000,000	15,166,075	725,317,830	1.71%
<b>Domestic Fixed Passive Core</b>						
NTGI Blmbg Agg. Index	1,663,255,569	4.33%	0	26,716,354	1,636,539,215	3.86%
BlackRock US Debt	1,594,104,143	4.15%	0	25,616,869	1,568,487,274	3.70%

## Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of December 31, 2018, with the distribution as of September 30, 2018. The change in asset distribution is broken down into the dollar change due to Net New Investment and the dollar change due to Investment Return.

### Asset Distribution Across Investment Managers

	December 31, 2018				September 30, 2018	
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
<b>Domestic Fixed Core Plus</b>						
LM Capital	848,518,013	2.21%	0	2,388,159	846,129,854	2.00%
Progress Fixed Income	891,210,020	2.32%	0	7,913,950	883,296,070	2.08%
BMO-TCH	877,539,132	2.28%	0	3,553,070	873,986,062	2.06%
Western	1,033,088,613	2.69%	0	14,795,596	1,018,293,017	2.40%
<b>Bank Loans</b>						
Barings Global Loan Fund	562,562,404	1.46%	(7,225,586)	(18,122,997)	587,910,987	1.39%
<b>Emerging Markets Debt</b>						
Standish	196,410,149	0.51%	0	899,053	195,511,096	0.46%
<b>Opportunistic Fixed Income</b>						
Crescent	11,115,633	0.03%	(101,714,915)	(627,364)	113,457,912	0.27%
<b>High Yield</b>						
MacKay Shields	714,382,662	1.86%	96,652,564	(23,332,476)	641,062,574	1.51%
<b>Real Estate</b>	<b>\$2,456,707,565</b>	<b>6.39%</b>	<b>\$(23,421,217)</b>	<b>\$57,280,944</b>	<b>\$2,422,847,838</b>	<b>5.71%</b>
<b>Real Estate Core</b>						
TA Buckhead Ind. Prop.	479,284,513	1.25%	31,601,312	13,356,932	434,326,269	1.02%
Barings Core Property Fund	1,070	0.00%	(94,258,844)	1,490,746	92,769,168	0.22%
Barings European Core Property	29,875,116	0.08%	0	(479,560)	30,354,677	0.07%
INVESCO Core RE	210,160,344	0.55%	(1,340,127)	9,254,634	202,245,837	0.48%
Invesco Euro real estate	57,157,154	0.15%	(455,905)	403,591	57,209,467	0.13%
AEW Core Property	237,342,034	0.62%	(2,189,276)	7,309,474	232,221,836	0.55%
CBRE Core Partners	189,500,154	0.49%	0	7,431,764	182,068,390	0.43%
<b>Real Estate Non-Core</b>						
Artemis MWBE Spruce	173,114,545	0.45%	29,321,230	(2,026,229)	145,819,544	0.34%
Franklin Templeton EMREFF	20,071,732	0.05%	(2,717,170)	336,705	22,452,197	0.05%
Security Capital	52,451,755	0.14%	(553,998)	(80,883)	53,086,636	0.13%
Dune II	28,405,977	0.07%	0	737,333	27,668,644	0.07%
Non-Core Real Estate Funds*	756,683,477	1.97%	10,675,661	19,471,651	726,536,165	1.71%
Non-Core Intl Real Estate Funds**	98,601,669	0.26%	7,502,833	(691,133)	91,789,969	0.22%
Rockwood Fund VIII	262,601	0.00%	0	(42,607)	305,208	0.00%
Almanac ARS V	2,182,612	0.01%	(932,264)	59,778	3,055,098	0.01%
TA Realty IX	28,138	0.00%	(74,668)	(4,574)	107,380	0.00%
<b>Alternative Investments</b>	<b>\$1,812,803,906</b>	<b>4.72%</b>	<b>\$(2,434,910)</b>	<b>\$112,156,980</b>	<b>\$1,703,081,835</b>	<b>4.02%</b>
<b>Absolute Return</b>						
Aurora	737,480	0.00%	(8,985)	(159,403)	905,868	0.00%
<b>Private Equity</b>						
Abbott	348,695,356	0.91%	(11,112,795)	16,548,055	343,260,096	0.81%
Muller & Monroe MPEFF	5,800,581	0.02%	(219,451)	(154,926)	6,174,958	0.01%
Pantheon	257,988,274	0.67%	(1,755,719)	18,718,310	241,025,683	0.57%
Private Equity Funds - Domestic	799,791,897	2.08%	4,646,873	66,879,617	728,265,407	1.72%
Private Equity Funds - International	97,786,947	0.25%	6,764,823	2,417,012	88,605,112	0.21%
<b>Agriculture</b>						
Premiere Partners IV	194,735,562	0.51%	(749,656)	7,983,023	187,502,195	0.44%
<b>Timberland</b>						
Forest Investment Assoc.	73,121,141	0.19%	0	(450,000)	73,571,141	0.17%
<b>Unlisted Infrastructure</b>						
Unlisted Infrastructure	34,146,667	0.09%	0	375,293	33,771,374	0.08%
<b>Cash &amp; Equivalents</b>	<b>\$130,517,820</b>	<b>0.34%</b>	<b>\$(142,933,898)</b>	<b>\$1,580,869</b>	<b>\$271,870,849</b>	<b>0.64%</b>
<b>Total Fund</b>	<b>\$38,444,256,472</b>	<b>100.0%</b>	<b>\$(349,168,388)</b>	<b>\$(3,610,709,501)</b>	<b>\$42,404,134,362</b>	<b>100.0%</b>

\* Non-Core Real Estate Funds funded since September 2011.

\*\* Non-Core International Real Estate Funds funded since August 2014.

## Asset Class Returns

The table below details the rates of return for the fund's asset class composites over various time periods. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized.

### Returns and Rankings for Periods Ended December 31, 2018

	Last Quarter		Year to Date		Last 3 Years	
<b>Domestic Equity</b>	<b>(15.43%)</b>	<b>80</b>	<b>(6.08%)</b>	<b>62</b>	<b>8.22%</b>	<b>73</b>
Custom Benchmark**	(14.30%)	35	(5.24%)	38	8.97%	32
Domestic Equity - Net	(15.47%)	81	(6.26%)	67	8.00%	78
Pub Pln- Dom Equity	(14.70%)		(5.76%)		8.73%	
<b>International Equity</b>	<b>(12.40%)</b>	<b>78</b>	<b>(14.16%)</b>	<b>72</b>	<b>4.39%</b>	<b>75</b>
MSCI ACWI x US (Net)	(11.46%)	63	(14.20%)	73	4.48%	72
International Equity - Net	(12.47%)	80	(14.41%)	74	4.05%	82
Pub Pln- Intl Equity	(11.14%)		(13.44%)		5.09%	
<b>Total Fixed Income</b>	<b>0.74%</b>	<b>62</b>	<b>(0.28%)</b>	<b>68</b>	<b>3.11%</b>	<b>35</b>
Blmbg Aggregate Index	1.64%	9	0.01%	47	2.06%	76
Total Fixed-Inc. - Net	0.71%	62	(0.41%)	75	2.96%	41
Pub Pln- Dom Fixed	0.98%		(0.05%)		2.73%	
<b>Real Estate</b>	<b>2.40%</b>	<b>10</b>	<b>8.36%</b>	<b>30</b>	<b>9.12%</b>	<b>12</b>
Custom Benchmark***	1.52%	48	7.36%	52	7.27%	73
Real Estate - Net	2.40%	10	8.36%	30	9.12%	12
Pub Pln- Real Estate	1.37%		7.50%		7.67%	
<b>Alternative Investments</b>	<b>6.65%</b>		<b>17.32%</b>		<b>11.47%</b>	
Alternatives Custom Benchmark****	2.18%		9.00%		9.00%	
Alternative Investments - Net	6.63%		17.14%		11.24%	
<b>Private Equity</b>	<b>7.51%</b>		<b>21.46%</b>		<b>15.10%</b>	
Alternatives Custom Benchmark****	2.18%		9.00%		9.00%	
Post Venture Cap Idx	(19.38%)		(15.64%)		11.64%	
<b>Agriculture</b>	<b>4.26%</b>		<b>0.28%</b>		<b>(1.61%)</b>	
NCREIF Farmland Index	1.29%		6.82%		7.17%	
NCREIF Total Index	1.67%		7.16%		7.75%	
<b>Timberland</b>	<b>(0.61%)</b>		<b>(3.62%)</b>		<b>(1.26%)</b>	
NCREIF Timberland Index	1.02%		4.00%		3.52%	
<b>Unlisted Infrastructure</b>	<b>1.11%</b>		<b>-</b>		<b>-</b>	
Alternatives Custom Benchmark****	2.18%		9.00%		9.00%	
<b>Total Fund</b>	<b>(8.57%)</b>	<b>76</b>	<b>(4.25%)</b>	<b>58</b>	<b>6.26%</b>	<b>63</b>
Total Fund Benchmark*	(6.72%)	37	(3.12%)	30	6.12%	66
Total Fund - Net	(8.60%)	76	(4.41%)	60	6.05%	69
Callan Public Fund Lg DB	(7.42%)		(3.82%)		6.44%	

\* Current Quarter Target = 37.0% Russell 3000 Index, 28.0% Blmbg Aggregate, 18.0% MSCI ACWI ex US, 9.0% NCREIF NFI-ODCE Val Wt Nt, 7.0% 9% Annually and 1.0% 3-month Treasury Bill.

\*\* The Blended Benchmark is currently Russell 3000 Index. Returns prior to January 1, 2015, reflect those of the Dow Jones U.S. Total Stock Market Index.

\*\*\* The Blended Benchmark is currently ODCE Value Weigh Index. Returns between January 1, 2007 and December 31, 2012 reflect NPI+1%. Returns prior to January 1, 2007, reflect those of the Consumer Price Index +5%.

\*\*\*\* The Alternatives Custom Benchmark is based on an annualized rate of return of 9.0%. Prior to July 1, 2010 the Benchmark was based on an annual return of 12.0%. Prior to 2004, the Benchmark was based on an annual return of 13.0%. Prior to 2003, it was based on an annual return of 15.0%.

Private Equity performance is lagged one quarter.

Agriculture and Timberland performance is lagged one month.

## Asset Class Returns

The table below details the rates of return for the fund's asset class composites over various time periods. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized.

### Returns and Rankings for Periods Ended December 31, 2018

	Last 5 Years		Last 10 Years		Since Inception
<b>Domestic Equity</b>	<b>6.84%</b>	<b>73</b>	<b>13.31%</b>	<b>33</b>	<b>11.23%</b> (1/82)
Custom Benchmark**	7.90%	21	13.24%	35	11.04% (1/82)
Domestic Equity - Net	6.60%	80	13.05%	53	7.51% (1/05)
Pub Pln- Dom Equity	7.44%		13.10%		-
<b>International Equity</b>	<b>1.64%</b>	<b>52</b>	<b>7.95%</b>	<b>32</b>	<b>7.41%</b> (9/86)
MSCI ACWI x US (Net)	0.68%	79	6.57%	77	-
International Equity - Net	1.31%	60	7.61%	49	4.71% (1/05)
Pub Pln- Intl Equity	1.71%		7.58%		-
<b>Total Fixed Income</b>	<b>3.09%</b>	<b>31</b>	<b>5.30%</b>	<b>27</b>	<b>8.16%</b> (1/82)
Blmbg Aggregate Index	2.52%	72	3.48%	70	7.64% (1/82)
Total Fixed-Inc. - Net	2.94%	43	5.14%	33	4.49% (1/05)
Pub Pln- Dom Fixed	2.81%		4.43%		-
<b>Real Estate</b>	<b>10.57%</b>	<b>24</b>	<b>6.44%</b>	<b>70</b>	<b>5.44%</b> (5/85)
Custom Benchmark***	9.41%	66	8.13%	9	-
Real Estate - Net	10.55%	24	6.43%	70	7.37% (1/05)
Pub Pln- Real Estate	9.97%		7.17%		-
<b>Alternative Investments</b>	<b>10.57%</b>		<b>8.45%</b>		<b>10.90%</b> (2/86)
Alternatives Custom Benchmark****	9.00%		9.44%		12.77% (2/86)
Alternative Investments - Net	10.25%		8.15%		8.71% (1/05)
<b>Private Equity</b>	<b>13.46%</b>		<b>9.94%</b>		<b>13.12%</b> (2/86)
Alternatives Custom Benchmark****	9.00%		9.44%		12.77% (2/86)
Post Venture Cap Idx	(1.06%)		10.72%		6.98% (2/86)
<b>Agriculture</b>	<b>7.38%</b>		<b>8.98%</b>		<b>7.60%</b> (10/97)
NCREIF Farmland Index	9.89%		11.64%		-
NCREIF Total Index	9.57%		6.42%		-
<b>Timberland</b>	<b>2.66%</b>		<b>2.18%</b>		<b>7.59%</b> (10/92)
NCREIF Timberland Index	5.99%		4.01%		-
<b>Unlisted Infrastructure</b>	-		-		<b>8.14%</b> (4/18)
Alternatives Custom Benchmark****	9.00%		9.44%		6.68% (4/18)
<b>Total Fund</b>	<b>5.07%</b>	<b>58</b>	<b>9.47%</b>	<b>19</b>	<b>9.64%</b> (1/82)
Total Fund Benchmark*	5.42%	43	8.78%	46	-
Total Fund - Net	4.84%	65	9.24%	28	6.52% (1/05)
Callan Public Fund Lg DB	5.24%		8.66%		-

\* Current Quarter Target = 37.0% Russell 3000 Index, 28.0% Blmbg Aggregate, 18.0% MSCI ACWI ex US, 9.0% NCREIF NFI-ODCE Val Wt Nt, 7.0% 9% Annually and 1.0% 3-month Treasury Bill.

\*\* The Blended Benchmark is currently Russell 3000 Index. Returns prior to January 1, 2015, reflect those of the Dow Jones U.S. Total Stock Market Index.

\*\*\* The Blended Benchmark is currently ODCE Value Weigh Index. Returns between January 1, 2007 and December 31, 2012 reflect NPI+1%. Returns prior to January 1, 2007, reflect those of the Consumer Price Index +5%.

\*\*\*\* The Alternatives Custom Benchmark is based on an annualized rate of return of 9.0%. Prior to July 1, 2010 the Benchmark was based on an annual return of 12.0%. Prior to 2004, the Benchmark was based on an annual return of 13.0%. Prior to 2003, it was based on an annual return of 15.0%.

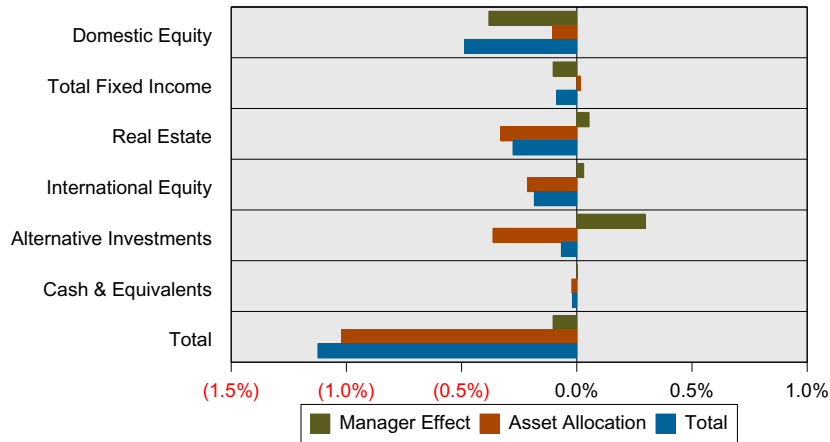
Private Equity performance is lagged one quarter.

Agriculture and Timberland performance is lagged one month.

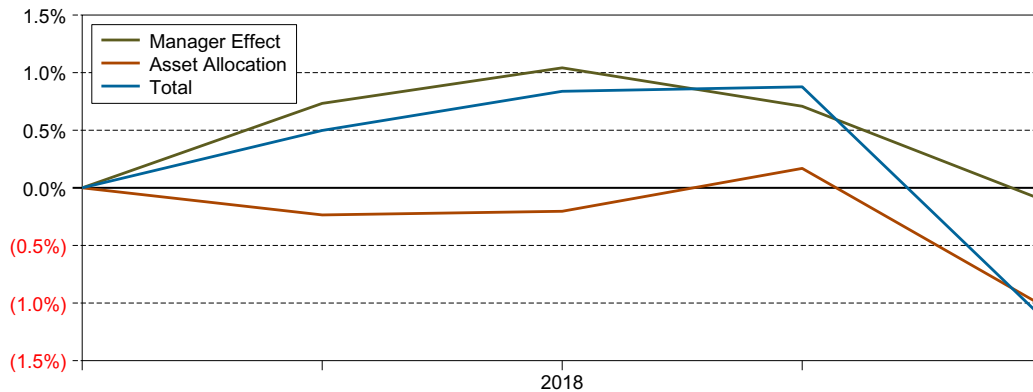
## Cumulative Total Fund Relative Attribution - December 31, 2018

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
Domestic Equity	43%	37%	(6.08%)	(5.24%)	(0.38%)	(0.10%)	(0.49%)
Total Fixed Income	27%	28%	(0.28%)	0.01%	(0.10%)	0.01%	(0.09%)
Real Estate	6%	9%	8.36%	7.36%	0.05%	(0.33%)	(0.28%)
International Equity	20%	18%	(14.16%)	(14.20%)	0.03%	(0.21%)	(0.18%)
Alternative Investments	4%	7%	17.32%	9.00%	0.30%	(0.36%)	(0.07%)
Cash & Equivalents	1%	1%	2.36%	1.87%	0.00%	(0.02%)	(0.02%)
<b>Total</b>			<b>(4.25%)</b>	<b>(3.12%)</b>	<b>(0.10%)</b>	<b>(1.02%)</b>	<b>(1.12%)</b>

\* Current Quarter Target = 37.0% Russell 3000 Index, 28.0% Blmbg Aggregate, 18.0% MSCI ACWI ex US, 9.0% NCREIF NFI-ODCE Val Wt Nt, 7.0% 9% Annually and 1.0% 3-month Treasury Bill.

## Large Cap Equity Returns

The table below details the rates of return for the fund's large cap growth and large cap value managers over various time periods. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized.

### Returns and Rankings for Periods Ended December 31, 2018

	Last Quarter		Year to Date		Last 3 Years	
<b>Large Cap Equity</b>	<b>(14.57%)</b>	<b>58</b>	<b>(5.09%)</b>	<b>52</b>	<b>8.80%</b>	<b>47</b>
Russell 1000 Index	(13.82%)	39	(4.78%)	49	9.09%	42
Callan Large Cap	(14.26%)		(4.84%)		8.56%	
<b>Large Cap Growth</b>	<b>(16.21%)</b>	<b>66</b>	<b>3.25%</b>	<b>23</b>	<b>10.48%</b>	<b>49</b>
Callan Large Cap Growth	(15.38%)		0.62%		10.41%	
<b>NTGI S&amp;P 500 Growth Idx</b>	<b>(14.68%)</b>	<b>44</b>	<b>(0.07%)</b>	<b>58</b>	<b>10.83%</b>	<b>41</b>
S&P/Citi 500 Growth Index	(14.71%)	44	(0.01%)	57	10.85%	41
NTGI S&P 500 Growth Idx - Net	(14.68%)	44	(0.08%)	58	10.83%	41
Callan Large Cap Growth	(15.38%)		0.62%		10.41%	
<b>Piedmont Russell 1000 G</b>	<b>(15.88%)</b>	<b>57</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
Russell 1000 Growth Index	(15.89%)	57	(1.51%)	70	11.15%	34
Piedmont Russell 1000 G - Net	(15.88%)	57	-	-	-	-
Callan Large Cap Growth	(15.38%)		0.62%		10.41%	
<b>Sands</b>	<b>(17.72%)</b>	<b>86</b>	<b>6.97%</b>	<b>6</b>	<b>10.64%</b>	<b>46</b>
LCG Blended Benchmark*	(15.89%)	57	(1.51%)	70	11.15%	34
Russell 1000 Growth Index	(15.89%)	57	(1.51%)	70	11.15%	34
Sands - Net	(17.78%)	86	6.73%	6	10.39%	51
Callan Large Cap Growth	(15.38%)		0.62%		10.41%	
<b>Large Cap Value</b>	<b>(13.18%)</b>	<b>44</b>	<b>(9.66%)</b>	<b>62</b>	<b>7.78%</b>	<b>40</b>
Callan Large Cap Value	(13.35%)		(8.76%)		7.30%	
<b>Dodge &amp; Cox</b>	<b>(13.34%)</b>	<b>48</b>	<b>(6.87%)</b>	<b>26</b>	<b>10.23%</b>	<b>6</b>
LCV Blended Benchmark**	(11.72%)	18	(8.27%)	44	6.95%	59
Russell 1000 Value Index	(11.72%)	18	(8.27%)	44	6.95%	59
Dodge & Cox - Net	(13.39%)	52	(7.07%)	28	10.00%	7
Callan Large Cap Value	(13.35%)		(8.76%)		7.30%	
<b>BMO</b>	<b>(13.73%)</b>	<b>57</b>	<b>(11.05%)</b>	<b>74</b>	<b>6.67%</b>	<b>68</b>
LCV Blended Benchmark**	(11.72%)	18	(8.27%)	44	6.95%	59
Russell 1000 Value Index	(11.72%)	18	(8.27%)	44	6.95%	59
BMO - Net	(13.78%)	58	(11.25%)	76	6.43%	75
Callan Large Cap Value	(13.35%)		(8.76%)		7.30%	
<b>LSV</b>	<b>(13.77%)</b>	<b>57</b>	<b>(11.49%)</b>	<b>77</b>	<b>7.52%</b>	<b>46</b>
LCV Blended Benchmark**	(11.72%)	18	(8.27%)	44	6.95%	59
Russell 1000 Value Index	(11.72%)	18	(8.27%)	44	6.95%	59
LSV - Net	(13.82%)	61	(11.69%)	78	7.26%	52
Callan Large Cap Value	(13.35%)		(8.76%)		7.30%	
<b>NTGI S&amp;P 500 Value Idx</b>	<b>(12.07%)</b>	<b>21</b>	<b>(8.90%)</b>	<b>51</b>	<b>7.32%</b>	<b>49</b>
S&P/Citi 500 Value Index	(12.04%)	21	(8.95%)	51	7.23%	54
NTGI S&P 500 Value Idx - Net	(12.07%)	21	(8.90%)	51	7.31%	50
Callan Large Cap Value	(13.35%)		(8.76%)		7.30%	
<b>Large Cap Passive Core</b>	<b>(14.33%)</b>	<b>53</b>	<b>(5.26%)</b>	<b>45</b>	<b>9.01%</b>	<b>36</b>
NTGI MarketCap Idx	(14.33%)	53	(5.26%)	45	9.01%	36
DJ U.S. Total Stock Market Index	(14.36%)	54	(5.30%)	46	8.92%	41
NTGI MktCap Idx - Net	(14.33%)	53	(5.26%)	45	9.00%	36
Callan Large Cap Core	(14.18%)		(5.44%)		8.45%	

\* The LCG Blended Benchmark is currently the Russell 1000 Growth Index. Returns prior to January 1, 2006, reflect those of the S&P 500/Citigroup Growth Index.

\*\* The LCV Blended Benchmark is currently the Russell 1000 Value Index. Returns prior to January 1, 2006, reflect those of the S&P 500/Citigroup Value Index.



## Large Cap Equity Returns

The table below details the rates of return for the fund's large cap growth and large cap value managers over various time periods. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized.

### Returns and Rankings for Periods Ended December 31, 2018

	Last 5 Years		Last 10 Years		Since Inception
<b>Large Cap Equity</b>	<b>7.83%</b>	<b>54</b>	<b>13.42%</b>	<b>42</b>	<b>10.89%</b> (1/82)
Russell 1000 Index	8.21%	46	13.28%	46	11.24% (1/82)
Callan Large Cap	8.01%		13.09%		-
<b>Large Cap Growth</b>	<b>9.33%</b>	<b>68</b>	<b>15.17%</b>	<b>37</b>	<b>11.53%</b> (1/82)
Callan Large Cap Growth	9.88%		14.94%		-
<b>NTGI S&amp;P 500 Growth Idx</b>	<b>10.53%</b>	<b>30</b>	<b>14.83%</b>	<b>53</b>	<b>7.07%</b> (8/01)
S&P/Citi 500 Growth Index	10.55%	30	14.81%	54	7.04% (8/01)
NTGI S&P 500 Growth Idx - Net	10.53%	30	14.82%	53	8.82% (1/05)
Callan Large Cap Growth	9.88%		14.94%		-
<b>Piedmont Russell 1000 G</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>(15.88%)</b> (10/18)
Russell 1000 Growth Index	10.40%	31	15.29%	33	(15.89%) (10/18)
Piedmont Russell 1000 G - Net	-		-		(15.88%) (10/18)
Callan Large Cap Growth	9.88%		14.94%		-
<b>Sands</b>	<b>8.95%</b>	<b>73</b>	<b>19.92%</b>	<b>2</b>	<b>11.18%</b> (11/03)
LCG Blended Benchmark*	10.40%	31	15.29%	33	8.85% (11/03)
Russell 1000 Growth Index	10.40%	31	15.29%	33	8.90% (11/03)
Sands - Net	8.70%	81	19.64%	2	10.04% (1/05)
Callan Large Cap Growth	9.88%		14.94%		-
<b>Large Cap Value</b>	<b>6.71%</b>	<b>34</b>	<b>12.17%</b>	<b>33</b>	<b>10.02%</b> (10/82)
Callan Large Cap Value	6.23%		11.66%		-
<b>Dodge &amp; Cox</b>	<b>7.41%</b>	<b>18</b>	<b>13.46%</b>	<b>8</b>	<b>8.90%</b> (9/03)
LCV Blended Benchmark**	5.95%	61	11.18%	64	7.57% (9/03)
Russell 1000 Value Index	5.95%	61	11.18%	64	7.74% (9/03)
Dodge & Cox - Net	7.19%	24	13.22%	9	7.15% (1/05)
Callan Large Cap Value	6.23%		11.66%		-
<b>BMO</b>	<b>6.68%</b>	<b>34</b>	<b>11.74%</b>	<b>44</b>	<b>7.47%</b> (2/01)
LCV Blended Benchmark**	5.95%	61	11.18%	64	5.02% (2/01)
Russell 1000 Value Index	5.95%	61	11.18%	64	6.05% (2/01)
BMO - Net	6.45%	42	11.49%	57	7.39% (1/05)
Callan Large Cap Value	6.23%		11.66%		-
<b>LSV</b>	<b>6.72%</b>	<b>34</b>	<b>12.77%</b>	<b>20</b>	<b>10.26%</b> (2/03)
LCV Blended Benchmark**	5.95%	61	11.18%	64	8.55% (2/03)
Russell 1000 Value Index	5.95%	61	11.18%	64	8.56% (2/03)
LSV - Net	6.46%	42	12.48%	25	7.47% (1/05)
Callan Large Cap Value	6.23%		11.66%		-
<b>NTGI S&amp;P 500 Value Idx</b>	<b>6.13%</b>	<b>54</b>	<b>11.29%</b>	<b>60</b>	<b>5.17%</b> (8/99)
S&P/Citi 500 Value Index	6.06%	57	11.21%	64	5.14% (8/99)
NTGI S&P 500 Value Idx - Net	6.13%	54	11.28%	60	6.16% (1/05)
Callan Large Cap Value	6.23%		11.66%		-
<b>Large Cap Passive Core</b>	<b>7.95%</b>	<b>51</b>	<b>13.34%</b>	<b>34</b>	<b>10.76%</b> (1/85)
NTGI MarketCap Idx	7.95%	51	13.35%	33	10.53% (2/85)
DJ U.S. Total Stock Market Index	7.86%	55	13.22%	37	10.47% (2/85)
NTGI MktCap Idx - Net	7.94%	52	13.34%	33	7.66% (1/05)
Callan Large Cap Core	7.97%		12.95%		-

\* The LCG Blended Benchmark is currently the Russell 1000 Growth Index. Returns prior to January 1, 2006, reflect those of the S&P 500/Citigroup Growth Index.

\*\* The LCV Blended Benchmark is currently the Russell 1000 Value Index. Returns prior to January 1, 2006, reflect those of the S&P 500/Citigroup Value Index.

## Small Cap Equity Returns

The table below details the rates of return for the fund's small cap growth, small cap value, and micro cap managers over various time periods. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized.

### Returns and Rankings for Periods Ended December 31, 2018

	Last Quarter		Year to Date		Last 3 Years	
<b>Small Cap Equity</b>	<b>(20.09%)</b>	53	<b>(10.57%)</b>	50	<b>5.93%</b>	73
Russell 2000 Index	(20.20%)	55	(11.01%)	55	7.36%	53
Callan Small Cap	(20.00%)		(10.58%)		7.56%	
<b>Small Cap Growth</b>	<b>(19.44%)</b>	22	<b>(6.14%)</b>	69	<b>5.20%</b>	94
Callan Small Cap Growth	(20.94%)		(3.04%)		9.80%	
<b>Frontier</b>	<b>(20.03%)</b>	31	<b>2.54%</b>	17	<b>10.30%</b>	48
Russell 2000 Growth Index	(21.65%)	60	(9.31%)	86	7.24%	82
Frontier - Net	(20.14%)	35	2.04%	21	9.71%	54
Callan Small Cap Growth	(20.94%)		(3.04%)		9.80%	
<b>FIAM</b>	<b>(19.23%)</b>	19	<b>(9.80%)</b>	87	<b>2.99%</b>	96
Russell 2000 Growth Index	(21.65%)	60	(9.31%)	86	7.24%	82
FIAM - Net	(19.23%)	19	(10.10%)	89	2.55%	96
Callan Small Cap Growth	(20.94%)		(3.04%)		9.80%	
<b>Small Cap Value</b>	<b>(20.45%)</b>	78	<b>(14.28%)</b>	37	<b>6.93%</b>	33
Callan Small Cap Value	(19.63%)		(14.81%)		6.04%	
<b>Channing</b>	<b>(21.81%)</b>	86	<b>(16.53%)</b>	71	<b>5.21%</b>	72
Russell 2000 Value Index	(18.67%)	30	(12.86%)	23	7.37%	27
Channing - Net	(21.93%)	86	(16.95%)	75	4.68%	82
Callan Small Cap Value	(19.63%)		(14.81%)		6.04%	
<b>DFA Small Cap Value</b>	<b>(20.03%)</b>	69	<b>(14.84%)</b>	51	<b>5.79%</b>	54
Russell 2000 Value Index	(18.67%)	30	(12.86%)	23	7.37%	27
DFA Small Cap Value - Net	(20.14%)	71	(15.27%)	52	5.23%	71
Callan Small Cap Value	(19.63%)		(14.81%)		6.04%	
<b>Inv. Counselors of Maryland</b>	<b>(20.34%)</b>	76	<b>(12.99%)</b>	24	<b>9.17%</b>	11
Russell 2000 Value Index	(18.67%)	30	(12.86%)	23	7.37%	27
Inv. Couns. of Maryland - Net	(20.43%)	77	(13.43%)	29	8.57%	14
Callan Small Cap Value	(19.63%)		(14.81%)		6.04%	

## Small Cap Equity Returns

The table below details the rates of return for the fund's small cap growth, small cap value, and micro cap managers over various time periods. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized.

### Returns and Rankings for Periods Ended December 31, 2018

	Last 5 Years		Last 10 Years		Since Inception
<b>Small Cap Equity</b>	<b>3.82%</b>	<b>80</b>	<b>13.34%</b>	<b>61</b>	<b>11.67%</b> <sup>(7/88)</sup>
Russell 2000 Index	4.41%	69	11.97%	88	9.00% <sup>(7/88)</sup>
Callan Small Cap	5.42%		13.84%		-
<b>Small Cap Growth</b>	<b>5.14%</b>	<b>77</b>	<b>13.91%</b>	<b>76</b>	<b>12.41%</b> <sup>(7/88)</sup>
Callan Small Cap Growth	6.61%		15.38%		-
<b>Frontier</b>	<b>6.28%</b>	<b>58</b>	<b>14.67%</b>	<b>68</b>	<b>12.72%</b> <sup>(8/88)</sup>
Russell 2000 Growth Index	5.13%	77	13.52%	83	7.74% <sup>(8/88)</sup>
Frontier - Net	5.70%	65	13.97%	75	8.77% <sup>(1/05)</sup>
Callan Small Cap Growth	6.61%		15.38%		-
<b>FIAM</b>	<b>5.41%</b>	<b>72</b>	<b>14.48%</b>	<b>70</b>	<b>12.92%</b> <sup>(8/88)</sup>
Russell 2000 Growth Index	5.13%	77	13.52%	83	7.74% <sup>(8/88)</sup>
FIAM - Net	4.89%	79	13.90%	76	9.47% <sup>(1/05)</sup>
Callan Small Cap Growth	6.61%		15.38%		-
<b>Small Cap Value</b>	<b>3.93%</b>	<b>60</b>	<b>12.77%</b>	<b>57</b>	<b>11.34%</b> <sup>(9/89)</sup>
Callan Small Cap Value	4.23%		13.10%		-
<b>Channing</b>	<b>3.26%</b>	<b>76</b>	-		<b>8.42%</b> <sup>(7/11)</sup>
Russell 2000 Value Index	3.61%	71	10.40%	95	7.55% <sup>(7/11)</sup>
Channing - Net	2.77%	84	-		7.83% <sup>(7/11)</sup>
Callan Small Cap Value	4.23%		13.10%		-
<b>DFA Small Cap Value</b>	<b>3.16%</b>	<b>77</b>	<b>13.34%</b>	<b>43</b>	<b>11.50%</b> <sup>(2/96)</sup>
Russell 2000 Value Index	3.61%	71	10.40%	95	9.02% <sup>(2/96)</sup>
DFA Small Cap Value - Net	2.65%	86	12.79%	57	6.81% <sup>(1/05)</sup>
Callan Small Cap Value	4.23%		13.10%		-
<b>Inv. Counselors of Maryland</b>	<b>5.70%</b>	<b>21</b>	<b>13.12%</b>	<b>49</b>	<b>10.81%</b> <sup>(5/99)</sup>
Russell 2000 Value Index	3.61%	71	10.40%	95	8.46% <sup>(5/99)</sup>
Inv. Couns. of Maryland - Net	5.18%	30	12.59%	58	7.61% <sup>(1/05)</sup>
Callan Small Cap Value	4.23%		13.10%		-

## Small Cap Equity Returns

The table below details the rates of return for the fund's small cap growth, small cap value, and micro cap managers over various time periods. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized.

### Returns and Rankings for Periods Ended December 31, 2018

	Last Quarter		Year to Date		Last 3 Years	
<b>Micro Cap</b>	<b>(20.33%)</b>	<b>38</b>	<b>(12.22%)</b>	<b>95</b>	<b>4.93%</b>	<b>95</b>
Callan Small Cap Growth	(20.94%)		(3.04%)		9.80%	
<b>DFA Micro Cap</b>	<b>(20.09%)</b>	<b>71</b>	<b>(10.82%)</b>	<b>13</b>	<b>8.40%</b>	<b>16</b>
Russell 2000 Value Index	(18.67%)	30	(12.86%)	23	7.37%	27
Russell 2000 Index	(20.20%)	72	(11.01%)	13	7.36%	27
DFA Micro Cap - Net	(20.20%)	72	(11.28%)	14	7.86%	20
Callan Small Cap Value	(19.63%)		(14.81%)		6.04%	
<b>Public Real Assets</b>	<b>(4.91%)</b>	<b>40</b>	<b>(3.73%)</b>	<b>19</b>	<b>-</b>	
Public Real Assets Benchmark (1)	(3.80%)	29	(5.12%)	31	-	
Callan Publicly List Infr	(5.03%)		(6.85%)		6.90%	
<b>Brookfield Public Global Infrastru</b>	<b>(7.60%)</b>	<b>90</b>	<b>(7.01%)</b>	<b>53</b>	<b>-</b>	
DJ Global Infra Comp Idx	(7.42%)	87	(8.54%)	74	4.81%	92
Brookfield Public Global Infra - Net	(7.73%)	91	(7.51%)	62	-	
Callan Publicly List Infr	(5.03%)		(6.85%)		6.90%	
<b>Cohen &amp; St Public Global Infrastru</b>	<b>(3.62%)</b>	<b>26</b>	<b>(2.16%)</b>	<b>10</b>	<b>-</b>	
FTSE GI Core Infr 50/50 N	(2.60%)	12	(3.99%)	20	8.01%	30
Cohen & St Public Global Infra - Net	(3.73%)	28	(2.59%)	14	-	
Callan Publicly List Infr	(5.03%)		(6.85%)		6.90%	

(1) 1/3 Dow Jones Global Infrastructure Composite Index + 2/3 FTSE Global Core Infrastructure 50/50 Net Tax Index

## Small Cap Equity Returns

The table below details the rates of return for the fund's small cap growth, small cap value, and micro cap managers over various time periods. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized.

### Returns and Rankings for Periods Ended December 31, 2018

	Last 5 Years		Last 10 Years		Since Inception
<b>Micro Cap</b>	<b>0.91%</b>	<b>98</b>	<b>12.94%</b>	<b>90</b>	<b>11.19%</b> <sup>(7/84)</sup>
Callan Small Cap Growth	6.61%		15.38%		-
<b>DFA Micro Cap</b>	<b>5.13%</b>	<b>31</b>	<b>13.86%</b>	<b>27</b>	<b>10.80%</b> <sup>(8/87)</sup>
Russell 2000 Value Index	3.61%	71	10.40%	95	9.46% <sup>(8/87)</sup>
Russell 2000 Index	4.41%	45	11.97%	71	8.40% <sup>(8/87)</sup>
DFA Micro Cap - Net	4.60%	39	13.30%	45	7.11% <sup>(1/05)</sup>
Callan Small Cap Value	4.23%		13.10%		-
<b>Public Real Assets</b>	-		-		<b>(1.10%)</b> <sup>(8/17)</sup>
Public Real Assets Benchmark (1)	-		-		<b>(2.74%)</b> <sup>(8/17)</sup>
Callan Publicly List Infr	5.11%		10.66%		-
<b>Brookfield Public Global Infrastru</b>	-		-		<b>(5.29%)</b> <sup>(8/17)</sup>
DJ Global Infra Comp Idx	2.62%	90	11.01%	47	<b>(6.33%)</b> <sup>(8/17)</sup>
Brookfield Public Global Infra - Net	-		-		<b>(5.72%)</b> <sup>(8/17)</sup>
Callan Publicly List Infr	5.11%		10.66%		-
<b>Cohen &amp; St Public Global Infrastru</b>	-		-		<b>0.97%</b> <sup>(8/17)</sup>
FTSE GI Core Infr 50/50 N	5.81%	43	-		<b>(1.55%)</b> <sup>(8/17)</sup>
Cohen & St Public Global Infra - Net	-		-		0.60% <sup>(8/17)</sup>
Callan Publicly List Infr	5.11%		10.66%		-

(1) 1/3 Dow Jones Global Infrastructure Composite Index + 2/3 FTSE Global Core Infrastructure 50/50 Net Tax Index

## International Equity Returns

The table below details the rates of return for the fund's international large cap growth and international large cap value managers over various time periods. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized.

### Returns and Rankings for Periods Ended December 31, 2018

	Last Quarter		Year to Date		Last 3 Years	
<b>Intl Large Cap Equity</b>	<b>(12.61%)</b>	<b>29</b>	<b>(13.52%)</b>	<b>32</b>	<b>4.15%</b>	<b>34</b>
MSCI ACWI ex-US Index	(11.46%)	17	(14.20%)	40	4.48%	28
Callan NonUS Eq	(13.51%)		(15.13%)		3.24%	
<b>Intl Large Cap Growth</b>	<b>(14.84%)</b>	<b>78</b>	<b>(16.59%)</b>	<b>70</b>	<b>3.79%</b>	<b>39</b>
Callan NonUS Eq	(13.51%)		(15.13%)		3.24%	
<b>EARNEST Partners</b>	<b>(13.32%)</b>	<b>45</b>	<b>(16.11%)</b>	<b>66</b>	<b>5.42%</b>	<b>19</b>
MSCI ACWI ex-US Index	(11.46%)	17	(14.20%)	40	4.48%	28
MSCI ACWI ex-US Growth	(12.16%)	26	(14.10%)	38	4.57%	27
EARNEST Partners - Net	(13.37%)	46	(16.29%)	67	5.21%	20
Callan NonUS Eq	(13.51%)		(15.13%)		3.24%	
<b>William Blair</b>	<b>(16.02%)</b>	<b>89</b>	<b>(16.88%)</b>	<b>74</b>	<b>2.47%</b>	<b>67</b>
MSCI ACWI ex-US Index	(11.46%)	17	(14.20%)	40	4.48%	28
MSCI ACWI ex-US Growth	(12.16%)	26	(14.10%)	38	4.57%	27
William Blair - Net	(16.11%)	90	(17.18%)	78	2.10%	74
Callan NonUS Eq	(13.51%)		(15.13%)		3.24%	
<b>Intl Large Cap Value</b>	<b>(9.85%)</b>	<b>6</b>	<b>(10.82%)</b>	<b>11</b>	<b>4.54%</b>	<b>28</b>
Callan NonUS Eq	(13.51%)		(15.13%)		3.24%	
<b>Brandes</b>	<b>(11.11%)</b>	<b>14</b>	<b>(8.85%)</b>	<b>5</b>	<b>4.94%</b>	<b>23</b>
MSCI ACWI ex-US Index	(11.46%)	17	(14.20%)	40	4.48%	28
MSCI ACWI ex-US Value	(10.63%)	9	(13.44%)	31	5.38%	19
Brandes - Net	(11.11%)	14	(9.00%)	6	4.72%	25
Callan NonUS Eq	(13.51%)		(15.13%)		3.24%	
<b>Mondrian</b>	<b>(8.18%)</b>	<b>1</b>	<b>(12.14%)</b>	<b>19</b>	<b>4.30%</b>	<b>30</b>
MSCI ACWI ex-US Index	(11.46%)	17	(14.20%)	40	4.48%	28
MSCI ACWI ex-US Value	(10.63%)	9	(13.44%)	31	5.38%	19
Mondrian - Net	(8.18%)	1	(12.35%)	20	3.87%	39
Callan NonUS Eq	(13.51%)		(15.13%)		3.24%	
<b>Lazard</b>	<b>(10.61%)</b>	<b>9</b>	<b>(13.91%)</b>	<b>38</b>	<b>3.40%</b>	<b>46</b>
MSCI ACWI ex-US Index	(11.46%)	17	(14.20%)	40	4.48%	28
MSCI ACWI ex-US Value	(10.63%)	9	(13.44%)	31	5.38%	19
Lazard - Net	(10.67%)	10	(14.13%)	38	3.00%	53
Callan NonUS Eq	(13.51%)		(15.13%)		3.24%	

## International Equity Returns

The table below details the rates of return for the fund's international large cap growth and international large cap value managers over various time periods. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized.

### Returns and Rankings for Periods Ended December 31, 2018

	Last 5 Years		Last 10 Years		Since Inception
<b>Intl Large Cap Equity</b>	<b>1.66%</b>	<b>43</b>	<b>7.77%</b>	<b>50</b>	<b>7.43%</b> <sup>(9/86)</sup>
MSCI ACWI ex-US Index	0.68%	72	6.57%	77	-
Callan NonUS Eq	1.43%		7.79%		-
<b>Intl Large Cap Growth</b>	<b>0.93%</b>	<b>66</b>	<b>8.11%</b>	<b>41</b>	<b>7.55%</b> <sup>(9/02)</sup>
Callan NonUS Eq	1.43%		7.79%		-
<b>EARNEST Partners</b>	<b>0.56%</b>	<b>74</b>	<b>8.79%</b>	<b>26</b>	<b>8.30%</b> <sup>(10/04)</sup>
MSCI ACWI ex-US Index	0.68%	72	6.57%	77	5.15% <sup>(10/04)</sup>
MSCI ACWI ex-US Growth	2.06%	29	7.52%	57	5.97% <sup>(10/04)</sup>
EARNEST Partners - Net	0.36%	78	8.43%	34	6.97% <sup>(1/05)</sup>
Callan NonUS Eq	1.43%		7.79%		-
<b>William Blair</b>	<b>1.29%</b>	<b>54</b>	<b>9.47%</b>	<b>14</b>	<b>8.69%</b> <sup>(10/02)</sup>
MSCI ACWI ex-US Index	0.68%	72	6.57%	77	7.48% <sup>(10/02)</sup>
MSCI ACWI ex-US Growth	2.06%	29	7.52%	57	7.72% <sup>(10/02)</sup>
William Blair - Net	0.92%	66	9.06%	21	5.18% <sup>(1/05)</sup>
Callan NonUS Eq	1.43%		7.79%		-
<b>Intl Large Cap Value</b>	<b>1.65%</b>	<b>43</b>	<b>5.80%</b>	<b>93</b>	<b>8.38%</b> <sup>(10/95)</sup>
Callan NonUS Eq	1.43%		7.79%		-
<b>Brandes</b>	<b>1.68%</b>	<b>42</b>	<b>6.21%</b>	<b>84</b>	<b>8.62%</b> <sup>(1/96)</sup>
MSCI ACWI ex-US Index	0.68%	72	6.57%	77	4.67% <sup>(1/96)</sup>
MSCI ACWI ex-US Value	0.18%	81	6.55%	77	-
Brandes - Net	1.44%	50	5.95%	90	3.79% <sup>(1/05)</sup>
Callan NonUS Eq	1.43%		7.79%		-
<b>Mondrian</b>	<b>1.87%</b>	<b>35</b>	<b>-</b>		<b>4.14%</b> <sup>(4/12)</sup>
MSCI ACWI ex-US Index	0.68%	72	6.57%	77	3.39% <sup>(4/12)</sup>
MSCI ACWI ex-US Value	0.18%	81	6.55%	77	3.23% <sup>(4/12)</sup>
Mondrian - Net	1.42%	51	-		3.68% <sup>(4/12)</sup>
Callan NonUS Eq	1.43%		7.79%		-
<b>Lazard</b>	<b>1.02%</b>	<b>62</b>	<b>-</b>		<b>4.75%</b> <sup>(4/12)</sup>
MSCI ACWI ex-US Index	0.68%	72	6.57%	77	3.39% <sup>(4/12)</sup>
MSCI ACWI ex-US Value	0.18%	81	6.55%	77	3.23% <sup>(4/12)</sup>
Lazard - Net	0.55%	74	-		4.20% <sup>(4/12)</sup>
Callan NonUS Eq	1.43%		7.79%		-

## International Equity Returns

The table below details the rates of return for the fund's international large cap core, international small cap, and emerging markets managers over various time periods. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized.

### Returns and Rankings for Periods Ended December 31, 2018

	Last Quarter		Year to Date		Last 3 Years	
<b>Intl Large Cap Active Core</b>	<b>(13.11%)</b>	<b>39</b>	<b>(13.52%)</b>	<b>32</b>	<b>5.22%</b>	<b>20</b>
MSCI ACWI ex-US Index	(11.46%)	17	(14.20%)	40	4.48%	28
Callan NonUS Eq	(13.51%)		(15.13%)		3.24%	
<b>Arrowstreet</b>	<b>(12.33%)</b>	<b>27</b>	<b>(11.88%)</b>	<b>18</b>	<b>6.54%</b>	<b>11</b>
MSCI ACWI ex-US Index	(11.46%)	17	(14.20%)	40	4.48%	28
Arrowstreet - Net	(12.44%)	28	(12.29%)	20	6.05%	13
Callan NonUS Eq	(13.51%)		(15.13%)		3.24%	
<b>Brown</b>	<b>(13.73%)</b>	<b>56</b>	<b>(11.39%)</b>	<b>15</b>	<b>2.13%</b>	<b>73</b>
MSCI ACWI ex-US Index	(11.46%)	17	(14.20%)	40	4.48%	28
Brown - Net	(13.79%)	57	(11.61%)	15	1.35%	86
Callan NonUS Eq	(13.51%)		(15.13%)		3.24%	
<b>GlobeFlex</b>	<b>(14.12%)</b>	<b>63</b>	<b>(17.44%)</b>	<b>80</b>	<b>4.92%</b>	<b>23</b>
MSCI ACWI ex-US Index	(11.46%)	17	(14.20%)	40	4.48%	28
GlobeFlex - Net	(14.21%)	65	(17.74%)	83	4.53%	28
Callan NonUS Eq	(13.51%)		(15.13%)		3.24%	
<b>Progress Intl Equity*</b>	<b>(12.17%)</b>	<b>26</b>	<b>(11.29%)</b>	<b>14</b>	<b>6.49%</b>	<b>11</b>
Custom Benchmark	(11.46%)	17	(14.20%)	40	5.62%	17
Progress Intl Equity - Net	(12.29%)	27	(11.73%)	16	5.96%	14
Callan NonUS Eq	(13.51%)		(15.13%)		3.24%	
<b>Intl Large Cap Pass. Core</b>	<b>(12.40%)</b>	<b>27</b>	<b>(13.18%)</b>	<b>28</b>	<b>3.29%</b>	<b>49</b>
Callan NonUS Eq	(13.51%)		(15.13%)		3.24%	
<b>NTGI MSCI EAFE Idx</b>	<b>(12.40%)</b>	<b>27</b>	<b>(13.18%)</b>	<b>28</b>	<b>3.29%</b>	<b>49</b>
MSCI EAFE Index	(12.54%)	29	(13.79%)	35	2.87%	57
NTGI EAFE Idx - Net	(12.40%)	28	(13.19%)	28	3.28%	49
Callan NonUS Eq	(13.51%)		(15.13%)		3.24%	
<b>International Small Cap</b>	<b>(17.11%)</b>	<b>53</b>	<b>(21.12%)</b>	<b>63</b>	<b>1.51%</b>	<b>84</b>
ACWI Sm Cap ex US	(14.43%)	17	(18.20%)	32	3.82%	35
Callan Intl Small Cap	(16.98%)		(19.66%)		3.20%	
<b>Franklin Templeton</b>	<b>(14.73%)</b>	<b>22</b>	<b>(17.87%)</b>	<b>30</b>	<b>3.70%</b>	<b>36</b>
ACWI Sm Cap ex US	(14.43%)	17	(18.20%)	32	3.82%	35
Franklin Templeton - Net	(14.73%)	22	(18.34%)	34	3.01%	57
Callan Intl Small Cap	(16.98%)		(19.66%)		3.20%	
<b>William Blair</b>	<b>(18.74%)</b>	<b>75</b>	<b>(23.40%)</b>	<b>92</b>	<b>(0.12%)</b>	<b>96</b>
ACWI Sm Cap ex US	(14.43%)	17	(18.20%)	32	3.82%	35
Intl SC Blended Benchmark	(14.43%)	17	(18.20%)	32	3.82%	35
William Blair - Net	(18.92%)	82	(24.01%)	99	(0.89%)	97
Callan Intl Small Cap	(16.98%)		(19.66%)		3.20%	
<b>Emerging Markets</b>	<b>(7.42%)</b>	<b>55</b>	<b>(15.28%)</b>	<b>51</b>	<b>8.78%</b>	<b>68</b>
MSCI Emerging Mkts Idx	(7.39%)	50	(14.24%)	29	9.65%	51
Callan Emerging Core	(7.40%)		(15.24%)		9.70%	
<b>Genesis</b>	<b>(7.42%)</b>	<b>55</b>	<b>(15.28%)</b>	<b>51</b>	<b>8.78%</b>	<b>68</b>
MSCI Emerging Markets Index	(7.39%)	50	(14.24%)	29	9.65%	51
Genesis - Net	(7.57%)	59	(15.79%)	61	8.12%	85
Callan Emerging Core	(7.40%)		(15.24%)		9.70%	

\* Custom benchmark is calculated as a weighted average of each fund's respective benchmark until 201712. after 201712 the benchmark is MSCI ACWI ex US - Net.



## International Equity Returns

The table below details the rates of return for the fund's international large cap core, international small cap, and emerging markets managers over various time periods. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized.

### Returns and Rankings for Periods Ended December 31, 2018

	Last 5 Years		Last 10 Years		Since Inception	
<b>Intl Large Cap Active Core</b>	<b>3.24%</b>	<b>11</b>	<b>10.04%</b>	<b>8</b>	<b>3.80%</b>	(2/08)
MSCI ACWI ex-US Index	0.68%	72	6.57%	77	1.21%	(2/08)
Callan NonUS Eq	1.43%		7.79%		-	
<b>Arrowstreet</b>	<b>3.62%</b>	<b>9</b>	<b>10.28%</b>	<b>6</b>	<b>4.04%</b>	(3/08)
MSCI ACWI ex-US Index	0.68%	72	6.57%	77	0.95%	(3/08)
Arrowstreet - Net	3.14%	12	9.76%	11	3.55%	(3/08)
Callan NonUS Eq	1.43%		7.79%		-	
<b>Brown</b>	<b>3.09%</b>	<b>13</b>	<b>9.92%</b>	<b>10</b>	<b>7.11%</b>	(10/04)
MSCI ACWI ex-US Index	0.68%	72	6.57%	77	5.15%	(10/04)
Brown - Net	2.16%	28	9.14%	19	5.54%	(1/05)
Callan NonUS Eq	1.43%		7.79%		-	
<b>GlobeFlex</b>	<b>2.97%</b>	<b>14</b>	<b>8.84%</b>	<b>25</b>	<b>4.05%</b>	(3/06)
MSCI ACWI ex-US Index	0.68%	72	6.57%	77	2.81%	(3/06)
GlobeFlex - Net	2.57%	21	8.40%	36	3.61%	(3/06)
Callan NonUS Eq	1.43%		7.79%		-	
<b>Progress Intl Equity*</b>	-		-		<b>1.96%</b>	(7/14)
Custom Benchmark	-		-		0.72%	(7/14)
Progress Intl Equity - Net	-		-		1.50%	(7/14)
Callan NonUS Eq	1.43%		7.79%		-	
<b>Intl Large Cap Pass. Core</b>	<b>0.93%</b>	<b>66</b>	<b>6.75%</b>	<b>73</b>	<b>2.80%</b>	(1/00)
Callan NonUS Eq	1.43%		7.79%		-	
<b>NTGI MSCI EAFE Idx</b>	<b>0.93%</b>	<b>66</b>	<b>6.74%</b>	<b>74</b>	<b>3.17%</b>	(2/00)
MSCI EAFE Index	0.53%	74	6.32%	83	2.78%	(2/00)
NTGI EAFE Idx - Net	0.92%	66	6.74%	74	4.09%	(1/05)
Callan NonUS Eq	1.43%		7.79%		-	
<b>International Small Cap</b>	<b>1.35%</b>	<b>88</b>	<b>8.40%</b>	<b>99</b>	<b>3.52%</b>	(12/05)
ACWI Sm Cap ex US	1.96%	82	10.02%	92	5.18%	(12/05)
Callan Intl Small Cap	3.42%		12.25%		-	
<b>Franklin Templeton</b>	<b>2.30%</b>	<b>78</b>	-		<b>4.60%</b>	(8/11)
ACWI Sm Cap ex US	1.96%	82	10.02%	92	3.11%	(8/11)
Franklin Templeton - Net	1.59%	86	-		3.88%	(8/11)
Callan Intl Small Cap	3.42%		12.25%		-	
<b>William Blair</b>	<b>0.64%</b>	<b>91</b>	-		<b>7.07%</b>	(9/10)
ACWI Sm Cap ex US	1.96%	82	10.02%	92	5.70%	(9/10)
Intl SC Blended Benchmark	1.96%	82	8.75%	99	6.09%	(9/10)
William Blair - Net	(0.14%)	100	-		6.25%	(9/10)
Callan Intl Small Cap	3.42%		12.25%		-	
<b>Emerging Markets</b>	<b>1.78%</b>	<b>71</b>	<b>10.71%</b>	<b>25</b>	<b>8.55%</b>	(2/92)
MSCI Emerging Mkts Idx	2.03%	68	8.39%	80	6.78%	(2/92)
Callan Emerging Core	2.43%		9.32%		-	
<b>Genesis</b>	<b>1.78%</b>	<b>71</b>	<b>10.71%</b>	<b>25</b>	<b>10.31%</b>	(5/04)
MSCI Emerging Markets Index	2.03%	68	8.39%	80	8.40%	(5/04)
Genesis - Net	1.16%	89	10.06%	31	8.25%	(1/05)
Callan Emerging Core	2.43%		9.32%		-	

\* Custom benchmark is calculated as a weighted average of each fund's respective benchmark until 201712. after 201712 the benchmark is MSCI ACWI ex US - Net.

## Total Fixed Income Returns

The table below details the rates of return for the fund's domestic fixed core managers over various time periods. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized.

### Returns and Rankings for Periods Ended December 31, 2018

	Last Quarter		Year to Date		Last 3 Years	
<b>Total Fixed Income</b>	<b>0.74%</b>	<b>62</b>	<b>(0.28%)</b>	<b>68</b>	<b>3.11%</b>	<b>35</b>
Blmbg Aggregate Index	1.64%	9	0.01%	47	2.06%	76
Pub Pln- Dom Fixed	0.98%		(0.05%)		2.73%	
<b>Dom. Fixed Active Core</b>	<b>1.57%</b>	<b>33</b>	<b>0.37%</b>	<b>25</b>	<b>2.57%</b>	<b>36</b>
Callan Core Bond FI	1.44%		0.14%		2.46%	
<b>Brandes Core</b>	<b>1.11%</b>	<b>80</b>	<b>0.12%</b>	<b>51</b>	<b>-</b>	
Blmbg Aggregate Index	1.64%	25	0.01%	62	2.06%	90
Brandes Core - Net	1.11%	80	0.12%	51	-	
Callan Core Bond FI	1.44%		0.14%		2.46%	
<b>EARNEST Partners</b>	<b>2.05%</b>	<b>8</b>	<b>0.70%</b>	<b>7</b>	<b>2.33%</b>	<b>63</b>
Blmbg Aggregate Index	1.64%	25	0.01%	62	2.06%	90
EARNEST Partners - Net	2.02%	8	0.56%	12	2.17%	79
Callan Core Bond FI	1.44%		0.14%		2.46%	
<b>Piedmont</b>	<b>1.37%</b>	<b>57</b>	<b>(0.39%)</b>	<b>90</b>	<b>2.70%</b>	<b>27</b>
Blmbg Aggregate Index	1.64%	25	0.01%	62	2.06%	90
Piedmont - Net	1.34%	60	(0.54%)	92	2.55%	38
Callan Core Bond FI	1.44%		0.14%		2.46%	
<b>Garcia Hamilton</b>	<b>1.39%</b>	<b>55</b>	<b>0.85%</b>	<b>4</b>	<b>2.69%</b>	<b>27</b>
Blmbg Aggregate Index	1.64%	25	0.01%	62	2.06%	90
Garcia Hamilton	1.37%	57	0.75%	7	2.58%	35
Callan Core Bond FI	1.44%		0.14%		2.46%	
<b>Dom. Fixed Passive Core</b>	<b>1.63%</b>	<b>25</b>	<b>0.06%</b>	<b>59</b>	<b>2.11%</b>	<b>86</b>
Callan Core Bond FI	1.44%		0.14%		2.46%	
<b>NTGI Blmbg Agg. Index</b>	<b>1.63%</b>	<b>25</b>	<b>0.05%</b>	<b>60</b>	<b>2.07%</b>	<b>89</b>
Blmbg Aggregate Index	1.64%	25	0.01%	62	2.06%	90
NTGI BC Agg. Index - Net	1.63%	28	0.04%	60	2.06%	89
Callan Core Bond FI	1.44%		0.14%		2.46%	
<b>BlackRock US Debt</b>	<b>1.63%</b>	<b>25</b>	<b>0.08%</b>	<b>58</b>	<b>2.16%</b>	<b>80</b>
Blmbg Aggregate Index	1.64%	25	0.01%	62	2.06%	90
BlackRock US Debt -Net	1.63%	26	0.07%	58	2.16%	81
Callan Core Bond FI	1.44%		0.14%		2.46%	

## Total Fixed Income Returns

The table below details the rates of return for the fund's domestic fixed core managers over various time periods. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized.

### Returns and Rankings for Periods Ended December 31, 2018

	Last 5 Years		Last 10 Years		Since Inception
<b>Total Fixed Income</b>	<b>3.09%</b>	<b>31</b>	<b>5.30%</b>	<b>27</b>	<b>8.16%</b> <sup>(1/82)</sup>
Blmbg Aggregate Index	2.52%	72	3.48%	70	7.64% <sup>(1/82)</sup>
Pub Pln- Dom Fixed	2.81%		4.43%		-
<b>Dom. Fixed Active Core</b>	<b>3.02%</b>	<b>30</b>	<b>4.61%</b>	<b>32</b>	<b>4.38%</b> <sup>(4/01)</sup>
Callan Core Bond FI	2.86%		4.35%		-
<b>Brandes Core</b>	<b>-</b>		<b>-</b>		<b>1.17%</b> <sup>(3/16)</sup>
Blmbg Aggregate Index	2.52%	88	3.48%	97	1.43% <sup>(3/16)</sup>
Brandes Core - Net	-		-		1.17% <sup>(3/16)</sup>
Callan Core Bond FI	2.86%		4.35%		-
<b>EARNEST Partners</b>	<b>3.16%</b>	<b>19</b>	<b>4.55%</b>	<b>37</b>	<b>4.34%</b> <sup>(5/05)</sup>
Blmbg Aggregate Index	2.52%	88	3.48%	97	3.86% <sup>(5/05)</sup>
EARNEST Partners - Net	2.98%	37	4.35%	50	4.14% <sup>(5/05)</sup>
Callan Core Bond FI	2.86%		4.35%		-
<b>Piedmont</b>	<b>2.78%</b>	<b>59</b>	<b>4.42%</b>	<b>46</b>	<b>4.07%</b> <sup>(6/05)</sup>
Blmbg Aggregate Index	2.52%	88	3.48%	97	3.80% <sup>(6/05)</sup>
Piedmont - Net	2.63%	82	4.25%	58	3.88% <sup>(6/05)</sup>
Callan Core Bond FI	2.86%		4.35%		-
<b>Garcia Hamilton</b>	<b>-</b>		<b>-</b>		<b>2.28%</b> <sup>(6/15)</sup>
Blmbg Aggregate Index	2.52%	88	3.48%	97	1.59% <sup>(6/15)</sup>
Garcia Hamilton	-		-		2.19% <sup>(6/15)</sup>
Callan Core Bond FI	2.86%		4.35%		-
<b>Dom. Fixed Passive Core</b>	<b>2.61%</b>	<b>83</b>	<b>3.58%</b>	<b>95</b>	<b>5.83%</b> <sup>(1/90)</sup>
Callan Core Bond FI	2.86%		4.35%		-
<b>NTGI Blmbg Agg. Index</b>	<b>2.57%</b>	<b>85</b>	<b>3.57%</b>	<b>96</b>	<b>5.88%</b> <sup>(2/90)</sup>
Blmbg Aggregate Index	2.52%	88	3.48%	97	5.88% <sup>(2/90)</sup>
NTGI BC Agg. Index - Net	2.56%	85	3.56%	96	3.80% <sup>(1/05)</sup>
Callan Core Bond FI	2.86%		4.35%		-
<b>BlackRock US Debt</b>	<b>2.65%</b>	<b>80</b>	<b>-</b>		<b>2.50%</b> <sup>(10/13)</sup>
Blmbg Aggregate Index	2.52%	88	3.48%	97	2.37% <sup>(10/13)</sup>
BlackRock US Debt -Net	2.65%	81	-		2.50% <sup>(10/13)</sup>
Callan Core Bond FI	2.86%		4.35%		-

## Total Fixed Income Returns

The table below details the rates of return for the fund's domestic, international and high yield fixed income managers over various time periods. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized.

### Returns and Rankings for Periods Ended December 31, 2018

	Last Quarter		Year to Date		Last 3 Years	
<b>Domestic Fixed Core Plus</b>	<b>0.79%</b>	<b>46</b>	<b>(0.76%)</b>	<b>72</b>	<b>2.93%</b>	<b>65</b>
Blmbg Aggregate Index	1.64%	8	0.01%	33	2.06%	99
Callan Core Plus FI	0.72%		(0.25%)		3.08%	
<b>LM Capital</b>	<b>0.28%</b>	<b>81</b>	<b>(1.39%)</b>	<b>96</b>	<b>2.21%</b>	<b>93</b>
Blmbg Aggregate Index	1.64%	8	0.01%	33	2.06%	99
LM Capital - Net	0.24%	84	(1.55%)	97	2.05%	99
Callan Core Plus FI	0.72%		(0.25%)		3.08%	
<b>Progress Fixed Income</b>	<b>0.90%</b>	<b>41</b>	<b>(0.10%)</b>	<b>40</b>	<b>2.90%</b>	<b>68</b>
Blmbg Aggregate Index	1.64%	8	0.01%	33	2.06%	99
Progress Fixed Inc. - Net	0.81%	45	(0.43%)	55	2.56%	75
Callan Core Plus FI	0.72%		(0.25%)		3.08%	
<b>BMO-TCH</b>	<b>0.41%</b>	<b>66</b>	<b>(0.54%)</b>	<b>62</b>	<b>4.08%</b>	<b>9</b>
Blmbg Aggregate Index	1.64%	8	0.01%	33	2.06%	99
BMO-TCH - Net	0.37%	67	(0.70%)	71	3.94%	10
Callan Core Plus FI	0.72%		(0.25%)		3.08%	
<b>Western</b>	<b>1.45%</b>	<b>10</b>	<b>(0.99%)</b>	<b>83</b>	<b>3.45%</b>	<b>24</b>
Blmbg Aggregate Index	1.64%	8	0.01%	33	2.06%	99
Western - Net	1.42%	11	(1.13%)	86	3.30%	37
Callan Core Plus FI	0.72%		(0.25%)		3.08%	
<b>Bank Loans</b>	<b>(3.12%)</b>		<b>0.91%</b>		<b>5.58%</b>	
Barings Global Loan Fund	(3.12%)		0.91%		5.58%	
Custom Benchmark*	(2.65%)		1.60%		5.15%	
Barings Global Loan Fund - Net	(3.12%)		0.58%		5.06%	
<b>Emerging Markets</b>	<b>0.46%</b>	<b>37</b>	<b>(6.73%)</b>	<b>75</b>	<b>5.95%</b>	<b>46</b>
Standish	0.46%	37	(6.73%)	75	5.95%	46
Custom Benchmark**	0.87%	33	(4.43%)	32	5.66%	55
Standish - Net	0.37%	39	(7.06%)	78	5.58%	60
Emerging Debt Database	(0.23%)		(5.33%)		5.79%	
<b>High Yield</b>	<b>(3.79%)</b>	<b>20</b>	<b>(1.59%)</b>	<b>28</b>	<b>7.11%</b>	<b>26</b>
Callan High Yield Fix Inc	(4.34%)		(2.23%)		6.46%	
<b>MacKay Shields</b>	<b>(3.34%)</b>	<b>12</b>	<b>(1.15%)</b>	<b>17</b>	<b>7.56%</b>	<b>19</b>
ML High Yield Cash Pay Index	(4.64%)	62	(2.26%)	55	7.22%	24
MacKay Shields - Net	(3.43%)	15	(1.49%)	25	7.18%	24
Callan High Yield Fix Inc	(4.34%)		(2.23%)		6.46%	

Taplin, Canida, Habacht switched from core to core plus effective 10/01/2010.

\* Custom Benchmark is Credit Suisse US Leveraged Loan Index and the Credit Suisse Western European Leveraged Loan Index, weighted by the portfolio's market value to each sector.

\*\* Custom Benchmark is 50% JPM GBI-EM Index, 25% JPM EMBI Global Index and 25% JPM Corporate EMBI Diversified Index.

## Total Fixed Income Returns

The table below details the rates of return for the fund's domestic, international and high yield fixed income managers over various time periods. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized.

### Returns and Rankings for Periods Ended December 31, 2018

	Last 5 Years		Last 10 Years		Since Inception
<b>Domestic Fixed Core Plus</b>	<b>3.17%</b>	<b>40</b>	<b>5.32%</b>	<b>64</b>	<b>8.00%</b> <sup>(1/82)</sup>
Blmbg Aggregate Index	2.52%	97	3.48%	100	7.64% <sup>(1/82)</sup>
Callan Core Plus FI	2.97%		5.84%		-
<b>LM Capital</b>	<b>2.73%</b>	<b>81</b>	<b>4.69%</b>	<b>88</b>	<b>4.54%</b> <sup>(5/05)</sup>
Blmbg Aggregate Index	2.52%	97	3.48%	100	3.86% <sup>(5/05)</sup>
LM Capital - Net	2.57%	96	4.52%	92	4.37% <sup>(5/05)</sup>
Callan Core Plus FI	2.97%		5.84%		-
<b>Progress Fixed Income</b>	<b>3.04%</b>	<b>44</b>	<b>4.51%</b>	<b>92</b>	<b>4.62%</b> <sup>(1/06)</sup>
Blmbg Aggregate Index	2.52%	97	3.48%	100	3.94% <sup>(1/06)</sup>
Progress Fixed Inc. - Net	2.70%	86	4.16%	100	4.28% <sup>(1/06)</sup>
Callan Core Plus FI	2.97%		5.84%		-
<b>BMO-TCH</b>	<b>3.66%</b>	<b>10</b>	<b>5.31%</b>	<b>65</b>	<b>4.73%</b> <sup>(5/05)</sup>
Blmbg Aggregate Index	2.52%	97	3.48%	100	3.86% <sup>(5/05)</sup>
BMO-TCH. - Net	3.53%	15	5.18%	67	4.60% <sup>(5/05)</sup>
Callan Core Plus FI	2.97%		5.84%		-
<b>Western</b>	<b>3.67%</b>	<b>10</b>	<b>6.29%</b>	<b>23</b>	<b>5.21%</b> <sup>(11/01)</sup>
Blmbg Aggregate Index	2.52%	97	3.48%	100	4.08% <sup>(11/01)</sup>
Western - Net	3.52%	16	6.14%	28	4.58% <sup>(1/05)</sup>
Callan Core Plus FI	2.97%		5.84%		-
<b>Bank Loans</b>	-		-		<b>3.86%</b> <sup>(8/14)</sup>
Barings Global Loan Fund	-		-		3.86% <sup>(8/14)</sup>
Custom Benchmark	-		-		3.40% <sup>(8/14)</sup>
Barings Global Loan Fund - Net	-		-		3.32% <sup>(8/14)</sup>
<b>Emerging Markets</b>	-		-		<b>1.12%</b> <sup>(8/14)</sup>
Standish	-		-		1.12% <sup>(8/14)</sup>
Custom Benchmark	1.72%	61	5.83%	65	0.57% <sup>(8/14)</sup>
Standish - Net	-		-		0.78% <sup>(8/14)</sup>
Emerging Debt Database	3.29%		7.90%		-
<b>High Yield</b>	<b>4.64%</b>	<b>11</b>	<b>11.33%</b>	<b>17</b>	<b>9.38%</b> <sup>(4/86)</sup>
Callan High Yield Fix Inc	3.73%		10.42%		-
<b>MacKay Shields</b>	<b>4.82%</b>	<b>9</b>	<b>10.66%</b>	<b>33</b>	<b>8.55%</b> <sup>(11/00)</sup>
ML High Yield Cash Pay Index	3.81%	46	10.89%	27	7.25% <sup>(11/00)</sup>
MacKay Shields - Net	4.45%	17	10.27%	61	6.48% <sup>(1/05)</sup>
Callan High Yield Fix Inc	3.73%		10.42%		-

Taplin, Canida, Habacht switched from core to core plus effective 10/01/2010.

## Real Estate Returns

The table below details the rates of return for the fund's real estate opportunistic, real estate core, and real estate value added managers over various time periods. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized.

### Returns for Periods Ended December 31, 2018

	Last Quarter	Year to Date	Last 3 Years
<b>Real Estate Core</b>	<b>3.07%</b>	<b>8.87%</b>	<b>8.77%</b>
<b>TA Buckhead Ind. Prop.</b> Blended Benchmark**	<b>2.85%</b> 1.52%	<b>14.95%</b> 7.36%	<b>11.78%</b> 7.27%
<b>Barings European Core Property</b> Blended Benchmark**	<b>(1.58%)</b> 1.52%	<b>(2.77%)</b> 7.36%	- 7.27%
<b>INVESCO Core RE</b> Blended Benchmark**	<b>4.60%</b> 1.52%	<b>8.51%</b> 7.36%	<b>8.10%</b> 7.27%
<b>Invesco European real estate</b> Blended Benchmark**	<b>0.71%</b> 1.52%	- 7.36%	- 7.27%
<b>AEW Core Property Trust</b> Blended Benchmark**	<b>3.16%</b> 1.52%	<b>6.88%</b> 7.36%	<b>6.42%</b> 7.27%
<b>Real Estate Non-Core</b>	<b>1.62%</b>	<b>7.74%</b>	<b>9.53%</b>
Artemis MWBE Spruce Blended Benchmark**	<b>(1.16%)</b> 1.52%	2.03% 7.36%	- 7.27%
<b>Franklin Templeton EMREFF</b> Blended Benchmark**	<b>1.59%</b> 1.52%	<b>16.39%</b> 7.36%	<b>16.15%</b> 7.27%
<b>Security Capital</b> Blended Benchmark**	<b>(0.15%)</b> 1.52%	<b>2.60%</b> 7.36%	<b>3.61%</b> 7.27%
<b>Dune II</b> Blended Benchmark**	<b>2.66%</b> 1.52%	<b>12.51%</b> 7.36%	<b>11.38%</b> 7.27%
<b>Non-Core Real Estate Funds</b> Blended Benchmark**	<b>2.65%</b> 1.52%	<b>10.92%</b> 7.36%	<b>11.34%</b> 7.27%
<b>Rockwood Fund VIII</b> Blended Benchmark**	<b>(13.96%)</b> 1.52%	<b>(64.24%)</b> 7.36%	<b>(25.27%)</b> 7.27%
<b>Almanac ARS V</b> Blended Benchmark**	<b>1.98%</b> 1.52%	<b>18.15%</b> 7.36%	<b>19.32%</b> 7.27%
<b>TA Realty IX</b> Blended Benchmark**	<b>(4.26%)</b> 1.52%	<b>6.35%</b> 7.36%	<b>4.58%</b> 7.27%
<b>Non-US Real Estate</b> Blended Benchmark**	<b>(0.82%)</b> 1.52%	<b>(6.75%)</b> 7.36%	<b>(1.97%)</b> 7.27%

Returns are time-weighted and are reported net of fee for all real estate managers.

\*\* The Blended Benchmark is currently ODCE Value Weigh Index+1%. Returns between January 1, 2007 and December 31, 2012 reflect NPI+1%. Returns prior to January 1, 2007, reflect those of the Consumer Price Index +5%.

## Real Estate Returns

The table below details the rates of return for the fund's real estate opportunistic, real estate core, and real estate value added managers over various time periods. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized.

### Returns for Periods Ended December 31, 2018

	Last 5 Years	Last 10 Years	Since Inception
<b>Real Estate Core</b>	<b>9.97%</b>	<b>5.22%</b>	<b>7.28%</b> (4/99)
<b>TA Buckhead Ind. Prop.</b> Blended Benchmark**	<b>11.83%</b> 9.41%	<b>7.52%</b> 8.13%	<b>10.62%</b> (8/95) -
<b>Barings Euro Core Property</b> Blended Benchmark**	- 9.41%	- 8.13%	<b>6.59%</b> (3/17) 7.08% (3/17)
<b>INVESCO Core RE</b> Blended Benchmark**	<b>9.73%</b> 9.41%	- 8.13%	<b>10.17%</b> (4/11) 10.69% (4/11)
<b>Invesco European real estate</b> Blended Benchmark**	- 9.41%	- 8.13%	<b>(5.00%)</b> (4/18) 5.29% (4/18)
<b>AEW Core Property Trust</b> Blended Benchmark**	<b>8.32%</b> 9.41%	- 8.13%	<b>9.18%</b> (10/13) 9.54% (10/13)
<b>Real Estate Non-Core</b>	<b>11.39%</b>	-	<b>12.13%</b> (1/10)
<b>Franklin Templeton EMREFF</b> Blended Benchmark**	<b>15.66%</b> 9.41%	- 8.13%	<b>12.09%</b> (9/11) 10.36% (9/11)
<b>Security Capital</b> Blended Benchmark**	<b>5.61%</b> 9.41%	<b>12.24%</b> 8.13%	<b>10.98%</b> (11/97) -
<b>Dune II</b> Blended Benchmark**	<b>12.64%</b> 9.41%	- 8.13%	<b>7.06%</b> (2/09) 8.47% (2/09)
<b>Non-Core Real Estate Funds</b> Blended Benchmark**	<b>12.46%</b> 9.41%	- 8.13%	<b>11.47%</b> (10/11) 10.31% (10/11)
<b>Rockwood Fund VIII</b> Blended Benchmark**	<b>(5.14%)</b> 9.41%	- 8.13%	<b>(25.44%)</b> (4/09) 9.16% (4/09)
<b>Almanac ARS V</b> Blended Benchmark**	<b>19.69%</b> 9.41%	<b>14.25%</b> 8.13%	<b>10.77%</b> (10/08) 7.05% (10/08)
<b>TA Realty IX</b> Blended Benchmark**	<b>8.22%</b> 9.41%	- 8.13%	<b>8.64%</b> (5/10) 11.36% (5/10)
<b>Non-US Real Estate</b> Blended Benchmark**	- 9.41%	- 8.13%	<b>(4.54%)</b> (8/14) 9.25% (8/14)

Returns are time-weighted and are reported net of fee for all real estate managers.

\*\* The Blended Benchmark is currently ODCE Value Weigh Index+1%. Returns between January 1, 2007 and December 31, 2012 reflect NPI+1%. Returns prior to January 1, 2007, reflect those of the Consumer Price Index +5%.

## Alternative Investments Returns

The table below details the rates of return for the fund's absolute return, private equity, agriculture, and timberland managers over various time periods. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized.

### Returns and Rankings for Periods Ended December 31, 2018

	Last Quarter	Year to Date	Last 3 Years
<b>Private Equity</b>	<b>7.51%</b>	<b>21.46%</b>	<b>15.10%</b>
<b>Abbott</b>	<b>4.94%</b>	<b>21.11%</b>	<b>16.62%</b>
Alternatives Custom Benchmark*	2.18%	9.00%	9.00%
Abbott - Net	4.94%	20.74%	16.23%
<b>Muller &amp; Monroe MPEFF</b>	<b>(2.59%)</b>	<b>7.16%</b>	<b>7.54%</b>
Alternatives Custom Benchmark*	2.18%	9.00%	9.00%
<b>Pantheon</b>	<b>7.85%</b>	<b>18.39%</b>	<b>15.08%</b>
Alternatives Custom Benchmark*	2.18%	9.00%	9.00%
Pantheon - Net	7.74%	17.92%	14.74%
<b>Private Equity Fds- Domestic</b>	<b>9.32%</b>	<b>25.55%</b>	<b>15.25%</b>
Alternatives Custom Benchmark*	2.18%	9.00%	9.00%
Private Eq Fds- Domestic - Net	9.32%	25.55%	15.25%
<b>Private Equity Fds- International</b>	<b>2.74%</b>	<b>6.28%</b>	<b>1.27%</b>
Alternatives Custom Benchmark*	2.18%	9.00%	9.00%
<b>Agriculture</b>	<b>4.26%</b>	<b>0.28%</b>	<b>(1.61%)</b>
<b>Premiere Partners IV</b>	<b>4.26%</b>	<b>0.28%</b>	<b>(1.61%)</b>
NCREIF Farmland Index (1Q lagged)	1.29%	6.82%	7.17%
NCREIF Total Index (1Q lagged)	1.67%	7.16%	7.75%
Callan RE Agri Funds	-	-	-
<b>Timberland</b>	<b>(0.61%)</b>	<b>(3.62%)</b>	<b>(1.26%)</b>
<b>Forest Investment Assoc.</b>	<b>(0.61%)</b>	<b>(3.62%)</b>	<b>(1.26%)</b>
NCREIF Timberland Index	1.02%	4.00%	3.52%
Callan Real Estate Timber	-	-	-
<b>Unlisted Infrastructure</b>	<b>1.11%</b>	<b>-</b>	<b>-</b>
Alternatives Custom Benchmark*	2.18%	9.00%	9.00%

Returns are reported net of fee for all alternative investment managers with the exception of Abbott and Pantheon.

\* The Alternatives Custom Benchmark is based on an annualized rate of return of 9.0%. Prior to July 1, 2010 the Benchmark was based on an annual return of 12.0%. Prior to 2004, the Benchmark was based on an annual return of 13.0%. Prior to 2003, it was based on an annual return of 15.0%.

Private Equity performance is lagged one quarter.

Agriculture and Timberland performance is lagged one month.



## Alternative Investments Returns

The table below details the rates of return for the fund's absolute return, private equity, agriculture, and timberland managers over various time periods. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized.

### Returns and Rankings for Periods Ended December 31, 2018

	Last 5 Years	Last 10 Years	Since Inception
<b>Private Equity</b>	<b>13.46%</b>	<b>9.94%</b>	<b>13.12%</b> (2/86)
<b>Abbott</b>	<b>13.45%</b>	<b>9.98%</b>	-
Alternatives Custom Benchmark*	9.00%	9.44%	-
Abbott - Net	13.45%	9.98%	-
<b>Muller &amp; Monroe MPEFF</b>	<b>12.71%</b>	<b>8.70%</b>	<b>6.35%</b> (5/08)
Alternatives Custom Benchmark*	9.00%	9.44%	9.60% (5/08)
<b>Pantheon</b>	<b>13.36%</b>	<b>10.49%</b>	-
Alternatives Custom Benchmark*	9.00%	9.44%	-
Pantheon - Net	12.92%	-	-
<b>Private Equity Fds- Domestic</b>	<b>15.12%</b>	-	<b>11.42%</b> (6/12)
Alternatives Custom Benchmark*	9.00%	9.44%	9.00% (6/12)
Private Eq Fds- Domestic - Net	15.12%	-	10.22% (6/12)
<b>Private Equity Fds- International</b>	-	-	<b>(16.80%)</b> (7/15)
<b>Agriculture</b>	<b>7.38%</b>	<b>8.98%</b>	<b>7.60%</b> (10/97)
<b>Premiere Partners IV</b>	-	-	<b>3.63%</b> (3/15)
NCREIF Farmland Index	9.89%	11.64%	-
NCREIF Total Index	9.57%	6.42%	-
Callan RE Agri Funds	-	-	-
<b>Timberland</b>	<b>2.66%</b>	<b>2.18%</b>	<b>7.59%</b> (10/92)
<b>Forest Investment Assoc.</b>	<b>2.76%</b>	<b>2.62%</b>	<b>7.76%</b> (10/92)
NCREIF Timberland Index	5.99%	4.01%	-
Callan Real Estate Timber	-	-	-
<b>Unlisted Infrastructure</b>	-	-	<b>8.14%</b> (4/18)
Alternatives Custom Benchmark*	9.00%	9.44%	6.68% (4/18)

Returns are reported net of fee for all alternative investment managers with the exception of Abbott and Pantheon.

\* The Alternatives Custom Benchmark is based on an annualized rate of return of 9.0%. Prior to July 1, 2010 the Benchmark was based on an annual return of 12.0%. Prior to 2004, the Benchmark was based on an annual return of 13.0%. Prior to 2003, it was based on an annual return of 15.0%.

Private Equity performance is lagged one quarter.

Agriculture and Timberland performance is lagged one month.