# Callan

March 31, 2018 Illinois Municipal Retirement Fund Monthly Performance Report

Investment Measurement Service Monthly Review

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# Market Environment As of March 31, 2018

		Last		Last 3	Last 5	Last 10
Index	Last Month	Quarter	Last Year	Years	Years	Years
Russell:3000 Index	(2.01)	(0.64)	13.81	10.22	13.03	9.62
S&P:500	(2.54)	(0.76)	13.99	10.78	13.31	9.49
Russell:2000 Index	1.29	(80.0)	11.79	8.39	11.47	9.84
MSCI:ACWI ex US	(1.76)	(1.18)	16.53	6.18	5.89	2.70
MSCI:EM	(1.86)	1.42	24.93	8.81	4.99	3.02
Blmbg:Aggregate	0.64	(1.46)	1.20	1.20	1.82	3.63
NCREIF:Total Index	0.59	1.80	7.22	8.76	10.02	6.10
BImbg:Commodity Price Idx	(0.76)	(0.79)	2.49	(3.76)	(8.65)	(8.01)

Volatility continued through March in the form of geopolitical tension between the United States and China. The Trump administration announced a 25% tariff on \$60 billion worth of Chinese imports, and the Chinese responded with increased tariffs on \$3 billion worth of U.S. imports. In turn, equity markets fell for a second consecutive month (S&P 500 Index: -2.5%) for the first time since February 2016. The sell off of risk assets put downward pressure on Treasury rates across the curve, and fixed income returns were muted for the month. The Fed voted at its March meeting to increase the Federal Funds target a quarter point to a range of 1.50-1.75%. The market-implied probability of two additional rate hikes before year end is 71%.

Job growth reverted after an exceptionally strong start to 2018. Nonfarm payroll growth came in well below expectations in March, adding 103,000 vs a consensus 175,000. That being said, average hourly earnings did show signs of life, up 0.3% on the month and 2.7% year-on-year. The labor participation rate fell 0.1% to 62.9%, above expectations, and the unemployment rate held steady at 4.1%.

Headline CPI fell 0.1% in March and Core CPI, which excludes food and energy prices, advanced 0.2% for the second consecutive month. The headline number came in one tenth below expectations, while the core number was in line with consensus. Over the last 12 months, Headline CPI increased two tenths to 2.4% and Core CPI increased three tenths to 2.1%. The increase in the yearly rates reflect falling wireless prices in March 2017. Energy was a significant weak point in the month, down 2.8% with gasoline down 4.8%.

Fourth quarter GDP was revised up 0.4% in the third estimate to a 2.9% annualized rate, 0.2% ahead of consensus estimates. Consumer spending was upgraded 0.2% after remaining at 3.8% through the second estimate. Spending on services received a 0.2% bump while nondurable spending was upgraded 0.5% to 4.8%. Nonresidential fixed investment (a business spending component) was also upgraded reaching a healthy 6.8% following the third estimate.

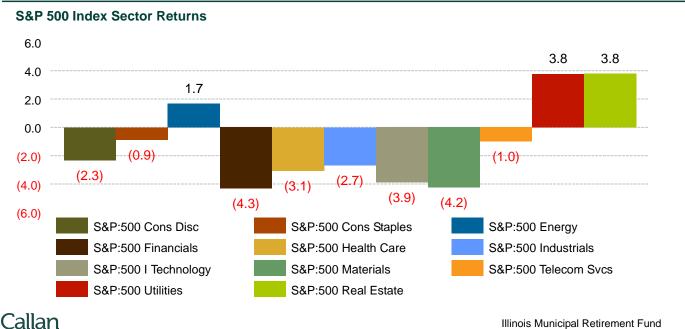
<sup>\*</sup>Due to a lag in the reporting of NCREIF Property Index returns, the monthly return shown is deduced from the most recent quarterly return. This monthly return, when compounded over three months, equates to the quarterly return.

# U.S. Equity Overview As of March 31, 2018

		Last				Last 10
Index	Last Month	Quarter	Last Year	Last 3 Years	Last 5 Years	Years
Russell:3000 Index	(2.01)	(0.64)	13.81	10.22	13.03	9.62
Russell:1000 Index	(2.27)	(0.69)	13.98	10.39	13.17	9.61
Russell:1000 Growth	(2.74)	1.42	21.25	12.90	15.53	11.34
Russell:1000 Value	(1.76)	(2.83)	6.95	7.88	10.78	7.78
Russell:Midcap Index	0.06	(0.46)	12.20	8.01	12.09	10.21
Russell:2000 Index	1.29	(0.08)	11.79	8.39	11.47	9.84
Russell:2000 Growth	1.35	2.30	18.63	8.77	12.90	10.95
Russell:2000 Value	1.24	(2.64)	5.13	7.87	9.96	8.61

After rebounding to start the month, an array of concerning news had U.S. equities drifting lower through the middle of the month. Key events included the departure of free-trade proponent Gary Cohn as President Trump's top economic advisor followed by the firing of Secretary of State Rex Tillerson, both of which prompted concerns over trade policy. These concerns were substantiated on March 22 when President Trump announced tariffs on \$60 billion in Chinese goods, causing the S&P 500 to fall by over 4.5% over the subsequent two days. All told, U.S. equities finished in negative territory for the second consecutive month (S&P 500 Index: -2.5%). Value outperformed growth in March (Russell 1000 Value Index: -1.8% vs. Russell 1000 Growth Index: -2.7%). Small cap stocks outperformed large caps for the month as these companies tend to generate more revenue domestically, shielding them from trade concerns (Russell 1000 Index: -2.3% vs. Russell 2000 Index: +1.3%). The Russell Midcap Index landed in the middle, returning +0.1%.

The only sectors to post gains in March were Energy (+1.7%), which followed oil prices higher, and Real Estate (+3.8%) and Utilities (+3.8%), which rose as interest rates fell. All other sectors were negatively impacted by the budding trade war with China and the associated decline in interest rates. Financials (-4.3%) and Materials (-4.2%) were the worst performers.



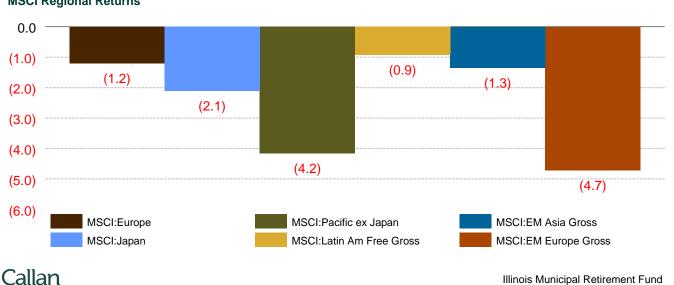
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# Non-U.S. Equity Overview As of March 31, 2018

Index	Last Month	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
MSCI:ACWI ex US	(1.76)	(1.18)	16.53	6.18	5.89	2.70
MSCI:EAFE	(1.80)	(1.53)	14.80	5.55	6.50	2.74
MSCI:EAFE Hedged Net	(2.04)	(3.76)	7.07	4.26	8.90	5.02
MSCI:EM	(1.86)	1.42	24.93	8.81	4.99	3.02
MSCI:ACWI ex US Small Cap	(1.13)	(0.35)	20.60	10.40	8.57	5.51

Non-U.S. equities were pulled down by the prospective global impact of a trade war between the U.S. and China. Eurozone consumer confidence is high and unemployment is still declining while inflation remains low, allowing the European Central Bank to delay raising interest rates. In the U.K., real wages have been ticking up. In Japan, the reappointment of Haruhiko Kuroda as Governor of the Bank of Japan removed potential monetary policy uncertainty. However, these strong fundamentals and positive economic policy developments could not overcome the negative sentiment spurred by geopolitical tensions. International equities outperformed relative to domestic equities given the U.S. was the primary source of investor concern (MSCI ACWI ex U.S. Index: -1.8% vs. Russell 3000 Index: -2.0%). Emerging markets equities also fared better than domestic equities (MSCI Emerging Markets Index: -1.9%). Non-U.S. small cap equities outperformed large cap (MSCI ACWI ex U.S. Small Cap Index: -1.1%). The U.S. dollar depreciated, benefitting international stock performance in USD terms (MSCI EAFE Index: -1.8%; MSCI EAFE Hedged Net Index: -2.0%).

All regions posted negative returns as none were spared from global trade tensions. MSCI EM Europe Gross (-4.7%) and MSCI Pacific ex Japan (-4.2%) saw the largest losses. MSCI Latin America Free (-0.9%) was the best performing region for the month despite the negative return in absolute terms.

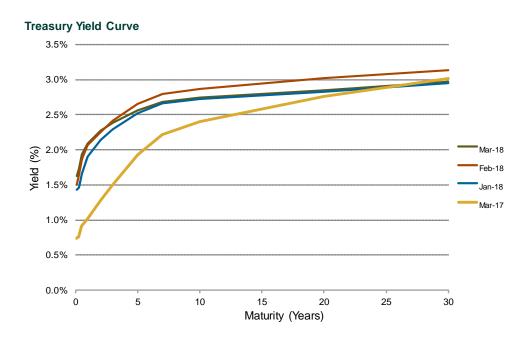




Illinois Municipal Retirement Fund

# Fixed Income Overview As of March 31, 2018

Index	Last Month	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Index	WORT		Last rear			
Blmbg:Aggregate	0.64	(1.46)	1.20	1.20	1.82	3.63
Blmbg:Long Gov/Credit	1.65	(3.58)	5.09	2.13	4.09	6.79
Blmbg:US Government	0.93	(1.15)	0.44	0.48	1.07	2.70
Blmbg:Credit	0.31	(2.13)	2.59	2.16	2.83	5.15
Blmbg:Mortgage Backed Sec	0.64	(1.19)	0.77	1.12	1.80	3.46
BImbg:US TIPS	1.05	(0.79)	0.92	1.30	0.05	2.93
ML:US High Yield Cash Pay	(0.63)	(0.94)	3.67	5.17	4.98	8.04
3 Month T-Bill	0.14	0.35	1.11	0.53	0.34	0.34
CS:Leveraged Loan	0.32	1.58	4.64	4.33	4.16	5.29



Risk assets fell out of favor in March, and rates fell on the long end of the curve. On the short end, rates rose modestly as The Fed voted to increase the Fed Funds target range a quarter point to 1.50-1.75%. The Fed's median expectation is for three additional rate increases in 2018 though only two are currently priced in by the market. The market implied probability of two and three additional rate hikes sat at 71% and 32% at the end of the month. The 2-year Treasury increased two basis points in March, while all longer dated Treasuries fell during the month. After climbing 18 basis points in February, the 30-year Treasury gave almost all of that back falling 16 basis points in March to 2.97%.

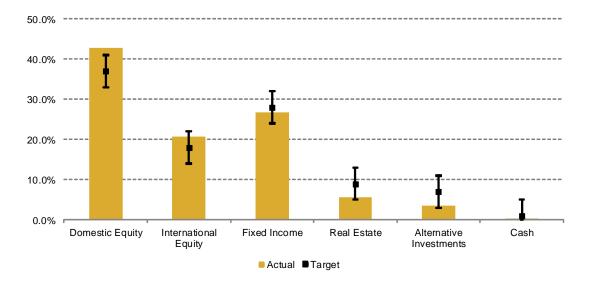
Falling rates were mostly additive for the month, and all fixed income sectors provided positive returns with the exception of high yield (ML U.S. High Yield CP Index: -0.6%). Investment grade credit (Bloomberg Credit Index) managed to return 0.3%. High yield spread widened 18 basis points on the month and investment grade spreads widened 13 basis points. Long bonds (Bloomberg Long Gov/Credit Index) benefited the most from the environment returning 1.7% in March. TIPS (Bloomberg U.S. TIPS Index) and governments (Bloomberg U.S. Government Index) followed returning 1.1% and 0.9% respectively. The Bloomberg Aggregate Index fell in the middle of the pack alongside mortgages (Bloomberg Mortgage Backed Securities Index) both returning 0.6%.

# IMRF Commentary Executive Summary

# **Total Fund**

The market value of the Total Fund was \$40.87 billion at the end of March, a decrease of \$503.6 million from the prior month. The Fund fell 0.63% during the month, leading the -0.77% return of its benchmark. Domestic Equity (-1.45%) outperformed its benchmark (-2.01%). International Equity (-1.17%) beat its benchmark by 59 basis points. The Fixed Income composite returned 0.52%, behind its benchmark return of 0.64%. Real Estate gained 0.59% in March, trailing its benchmark by two basis points. Over the last 3 months, Alternatives (+2.19%) narrowly outperformed the benchmark (+2.18%). For the trailing year, the fund is 1.89% ahead of its benchmark, returning 11.34%.

Current policy states that when actual allocations of the asset classes differ by more than four percentage points from their policy target, a recommendation for rebalancing will be made to the Board of Trustees. As of March month end, Domestic Equity was 5.8% above the target. The Chief Investment Officer and Consultant do not recommend any rebalancing at this time.



# **U.S. Equity**

The U.S. Equity composite lost 1.45% during March, leading the Russell 3000 by 56 basis points. For the month, small caps outperformed large caps.

Large Cap: IMRF's Large Cap managers fell 2.21% in March, ahead of the -2.27% return of the Russell 1000 Index. In aggregate, growth managers fell 2.27%, while the Russell 1000 Growth Index fell 2.74%. Value managers lost 2.31% collectively, trailing the -1.76% return of the Russell 1000 Value Index.

Small Cap: The Small Cap composite (+1.22%) trailed the Russell 2000 Index by seven basis points in March. The growth managers collectively returned 1.10% relative to the 1.35% return of the Russell 2000 Growth Index. The value managers returned 0.98% during the month, but trailed the Russell 2000 Value Index by 26 basis points. The Micro Cap composite returned 2.22% in March.

Public Real Assets: The Public Real Assets portfolio, managed by Brookfield and Cohen & Steers, increased 0.59% in March, one basis points ahead of the custom benchmark.

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# IMRF Commentary Executive Summary

# **International Equity**

The International Equity composite lost 1.17% in March, 59 basis points ahead of its MSCI ACWI ex-U.S. benchmark (-1.76%).

International Large Cap: International Large Cap managers collectively fell 1.20%, but outperformed the MSCI ACWI ex-U.S. Index by 56 basis points. International Large Cap Growth (-1.23%) managers beat the MSCI ACWI ex-U.S. Growth Index by eight basis points. International Large Cap Value managers returned -1.80% in March, 27 basis points ahead of the MSCI ACWI ex-U.S. Value Index.

International Small Cap and Emerging Markets: The International Small Cap managers fell 0.40% in March, 73 basis points ahead of the MSCI ACWI Small Cap ex-U.S. return of -1.13%. The Emerging Markets porfolio, managed by Genesis, lost 1.43% during the month, but outperformed the MSCI Emerging Markets Index by 40 basis points.

# Fixed Income

The Fixed Income composite returned 0.52% in March relative to the 0.64% return of the Bloomberg Aggregate Index.

Active Core: In aggregate, the Domestic Active Core managers were up 0.66% in March, two basis points ahead of the Bloomberg Aggregate Index.

Core Plus: Domestic Fixed Core Plus managers ended the month up 0.55%, nine basis points behind the Bloomberg Aggregate Index.

Bank Loans: The Bank Loans portfolio, managed by Barings, trailed the custom benchmark by nine basis points, returning 0.23%.

Emerging Markets: The Emerging Markets Debt component, managed by Standish, returned 0.43% in March, 14 basis points behind the custom benchmark.

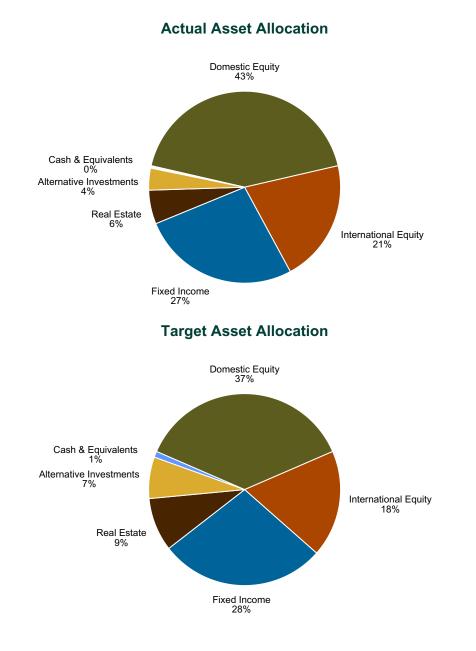
Opportunistic: The Opportunistic Fixed Income allocation, managed by Crescent, returned -0.64% in March, trailing the custom benchmark by 48 basis points.

High Yield: The High Yield portfolio, managed by Mackay Shields, fell 0.27%, but outperformed the ML High Yield Cash Pay Index return of -0.63%.

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# **Actual vs Target Asset Allocation**

The first chart below shows the Fund's asset allocation as of March 31, 2018. The second chart shows the Fund's target asset allocation as outlined in the investment policy statement.



Asset Class	\$Millions Actual	Percent Actual	Percent Target	Percent Difference	\$Millions Difference
Domestic Equity	17,481	42.8%	37.0%	5.8%	2,359
International Equity	8,466	20.7%	18.0%	2.7%	1,109
Fixed Income	10,929	26.7%	28.0%	(1.3%)	(514)
Real Estate	2,314	5.7%	9.0%	(3.3%)	(1,364)
Alternative Investments	1,508	3.7%	7.0%	(3.3%)	(1,353) (237)
Cash & Equivalents	172	0.4%	1.0%	(0.6%)	(237)
Total	40,870	100.0%	100.0%		

\* Current Month 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 March 31, 2018, with the distribution as of February 28, 2018.

#### Asset Distribution Across Investment Managers

	March 31, 2018		February 28, 2018		
	Market Value	Percent	Market Value	Percent	
omestic Equity* arge Cap Growth	\$17,481,044,601	42.77%	\$17,951,573,687	43.39%	
NTGI S&P 500 Growth Idx Sands	1,976,993,097 1,943,304,933	4.84% 4.75%	2,037,686,760 1,973,842,409	4.93% 4.77%	
arge Cap Value					
Dodge & Cox BMO LSV NTGI S&P 500 Value Idx	1,280,800,382 1,505,702,619 1,536,805,942 1,608,360,578	3.13% 3.68% 3.76% 3.94%	1,528,541,456 1,535,660,391 1,579,413,861 1,642,074,997	3.69% 3.71% 3.82% 3.97%	
arge Cap Core					
NTGI MarketCap Index	3,548,767,081	8.68%	3,620,527,893	8.75%	
mall Cap Growth					
Frontier FIAM	477,218,868 1,155,637,690	1.17% 2.83%	463,617,179 1,151,475,468	1.12% 2.78%	
mall Cap Value					
Channing Dimensional Small Cap Value Inv. Counselors of Maryland	227,469,477 580,791,163 648,725,435	0.56% 1.42% 1.59%	225,998,692 574,287,434 642,499,017	0.55% 1.39% 1.55%	
licro Cap					
Ativo Dimensional Micro Cap	129,830,562 420,728,779	0.32% 1.03%	125,507,377 413,117,614	0.30% 1.00%	
ublic Real Assets					
Brookfield Cohen & Steers	140,745,011 299,162,982	0.34% 0.73%	140,853,557 296,469,582	0.34% 0.72%	
iternational Equity iternational Large Cap Growth	\$8,465,865,394	20.71%	\$8,565,637,883	20.70%	
EARNEST Partners William Blair	661,636,224 767,337,245	1.62% 1.88%	670,624,647 776,207,464	1.62% 1.88%	
ternational Large Cap Value					
Brandes Lombardia Mondrian Lazard	627,689,711 1 592,686,757 116,941,694	1.54% 0.00% 1.45% 0.29%	639,103,638 1 604,488,506 118,214,570	1.54% 0.00% 1.46% 0.29%	
ternational Large Cap Core					
Arrowstreet Brown GlobeFlex NTGI MSCI EAFE Index Progress Intl Equity	709,453,314 340,684,573 695,100,076 2,252,993,616 313,669,564	1.74% 0.83% 1.70% 5.51% 0.77%	717,739,887 338,146,871 712,599,678 2,270,698,964 316,348,207	1.73% 0.82% 1.72% 5.49% 0.76%	
ternational Small Cap					
Franklin Templeton William Blair	257,600,217 301,236,306	0.63% 0.74%	257,070,800 303,558,909	0.62% 0.73%	
merging Markets Genesis	828,836,097	2.03%	840,835,741	2.03%	

\* includes asset in equity transition account.



# **Investment Manager Asset Allocation**

The table below contrasts the distribution of assets across the Fund's investment managers as of March 31, 2018, with the distribution as of February 28, 2018.

	March 31, 2018		February 28, 2018	
	Market Value	Percent	Market Value	Percent
Total Fixed Income	\$10,929,025,931	26.74%	\$10,872,192,101	26.28%
Domestic Fixed Core				
Brandes Core	340,994,844	0.83%	338,447,978	0.82%
EARNEST Partners	741,341,630	1.81%	736,575,884	1.78%
Piedmont Investment	742,411,273	1.82%	738,461,504	1.78%
Garcia Hamilton	724,153,430	1.77%	718,689,898	1.74%
Domestic Fixed Passive Core				
NTGI Blmbg Agg. Index	1,638,427,628	4.01%	1,628,056,853	3.94%
BlackRock US Debt	1,569,627,608	3.84%	1,559,441,862	3.77%
Domestic Fixed Core Plus				
BlackRock Core Plus	88,392	0.00%	88,794	0.00%
LM Capital	847,271,171	2.07%	844,728,131	2.04%
Progress Fixed Income	881,224,973	2.16%	876,713,717	2.12%
Taplin, Canida, & Habacht	871,386,352	2.13%	867,603,922	2.10%
Western	1,030,960,760	2.52%	1,022,063,299	2.47%
Bank Loans				
Barings Global Loan Fund	585,929,665	1.43%	584,589,398	1.41%
Emerging Markets Debt				
Standish	214,262,691	0.52%	213,345,387	0.52%
Opportunistic Fixed Income				
Crescent	115,230,727	0.28%	115,970,402	0.28%
High Yield				
MacKay Shields	625,391,485	1.53%	627,091,807	1.52%
FIAM High Yield	323,303	0.00%	323,265	0.00%
0	,		,	

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

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



## **Investment Manager Asset Allocation**

The table below contrasts the distribution of assets across the Fund's investment managers as of March 31, 2018, with the distribution as of February 28, 2018.

#### Asset Distribution Across Investment Managers

	March 31, 2018		February 28, 2018		
	Market Value	Percent	Market Value	Percent	
Real Estate	\$2,314,222,570	5.66%	\$2,269,590,754	5.49%	
Real Estate Core					
TA Buckhead Ind. Prop.	408,041,191	1.00%	409,637,205	0.99%	
Barings Core Property Fund	127,176,653	0.31%	128,435,525	0.31%	
Barings European Core Property	32,140,939	0.08%	31,593,972	0.08%	
Blackstone Property Partners Europe	102,945,094	0.25%	65,314,842	0.16%	
INVESCO Core RE	197,023,975	0.48%	197,023,975	0.48%	
AEW Core Property Trust	228,672,438	0.56%	228,672,438	0.55%	
CBRE US Core Property Trust	173,565,034	0.42%	173,565,034	0.42%	
eal Estate Non-Core					
Artemis MWBE Spruce	114,696,600	0.28%	114,069,058	0.28%	
Franklin Templeton EMREFF	26,299,371	0.06%	26,385,574	0.06%	
Security Capital	46,674,668	0.11%	52,847,679	0.13%	
Dune II	27,023,006	0.07%	27,023,006	0.13%	
Non-Core Real Estate Funds*	729,763,489	1.79%	719,878,691	1.74%	
Non-Core Intl Real Estate Funds**	94,388,536	0.23%	89,594,001	0.22%	
Rockwood Fund VIII				0.22%	
	2,555,469	0.01%	2,555,469		
Almanac ARS V	2,931,907	0.01%	2,717,811	0.01%	
TA Fund IX	324,199	0.00%	276,474	0.00%	
Iternative Investments	\$1,507,769,361	3.69%	\$1,451,135,922	3.51%	
bsolute Return					
Aurora	2,621,788	0.01%	2,813,781	0.01%	
rivate Equity					
Abbott	315,713,091	0.77%	315,213,728	0.76%	
Muller & Monroe ILPEFF	1	0.00%	1	0.00%	
Muller & Monroe MPEFF	6,120,292	0.01%	6,802,385	0.02%	
Pantheon	225,932,287	0.55%	228,573,839	0.55%	
Private Equity Fund - Domestic	589,086,937	1.44%	561,045,779	1.36%	
Private Equity Fund - International	87,634,674	0.21%	76,968,888	0.19%	
griculture					
Premiere Partners IV	181,235,928	0.44%	183,734,694	0.44%	
mberland					
Forest Investment Assoc.	75,739,184	0.19%	75,982,828	0.18%	
nlisted Infrastructure					
Unlisted Infrastructure Funds	23,685,178	0.06%	-	-	
ash & Equivalents	\$171,722,727	0.42%	\$263,153,200	0.64%	
otal Fund	\$40,869,650,584	100.0%	\$41,373,283,547	100.0%	

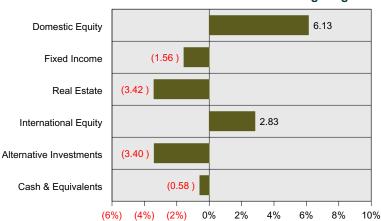
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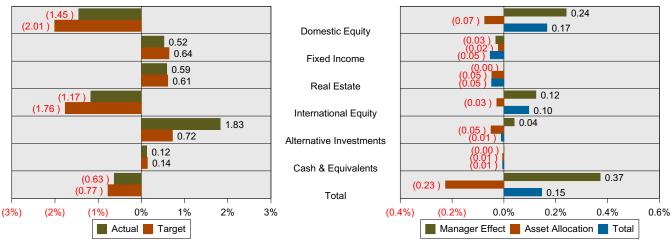
# Monthly Total Fund Relative Attribution - March 31, 2018

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 Effects for Month ended March 31, 2018**

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	43%	37%	(1.45%)	(2.01%)	0.24%	(0.07%)	0.17%
Fixed Income	26%	28%	0.52%	0.64%	(0.03%)	(0.02%)	(0.05%)
Real Estate	6%	9%	0.59%	0.61%	(0.00%)	(0.05%)	(0.05%)
International Equity	21%	18%	(1.17%)	(1.76%)	0.12%	(0.03%)	0.10%
Alternative Investments	s 4%	7%	`1.83%´	0.72%	0.04%	(0.05%)	(0.01%)
Cash & Equivalents	0%	1%	0.12%	0.14%	(0.00%)	(0.01%)	(0.01%)
Total			(0.63%) =	(0.77%) +	0.37% +	(0.23%)	0.15%

\* Current Month 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.

**Relative Attribution by Asset Class** 

## **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 for Periods Ended March 31, 2018**

		Last	Last	
	Last	3	12	
	Month	Months	Months	
Domestic Equity	(1.45%)	0.25%	14.31%	
Blended Benchmark**	(2.01%)	(0.64%)	13.81%	
Domestic Equity - Net	(1.45%)	0.22%	14.09%	
International Equity	(1.17%)	0.04%	18.46%	
MSCI ACWI x US (Net)	(1.76%)	(1.18%)	16.53%	
International Equity - Net	(1.17%)	(0.05%)	18.10%	
Fixed Income	0.52%	(1.02%)	2.43%	
Blmbg Aggregate Index	0.64%	(1.46%)	1.20%	
Fixed Income - Net	0.52%	(1.05%)	2.29%	
Real Estate	0.59%	1.32%	10.38%	
Blended Benchmark***	0.61%	1.85%	6.98%	
Real Estate - Net	0.59%	1.32%	10.38%	
Alternative Investments	1.83%	2.19%	12.13%	
Alternatives Custom Benchmark****	0.72%	2.18%	9.00%	
Alternative Investments - Net	1.83%	2.15%	11.97%	
Private Equity	2.23%	2.77%	14.99%	
Alternatives Custom Benchmark****	0.72%	2.18%	9.00%	
Agriculture	0.00%	(0.54%)	(4.61%)	
Blended Benchmark***	0.61%	1.85%	6.98%	
Timberland	0.07%	(0.17%)	4.50%	
Blended Benchmark***	0.61%	1.85%	6.98%	
Unlisted Infrastructure	1.61%	-	-	
Alternatives Custom Benchmark****	0.72%	2.18%	9.00%	
Total Fund	(0.63%)	0.01%	11.34%	
Total Fund - Net	(0.63%)	(0.04%)	11.12%	
Total Fund Benchmark	(0.77%)	(0.49%)	9.45%	

\* Current Month 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 Weighted 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%.
Given that ODCE returns are updated quarterly, an approximation of the Index is used in the monthly reports.
\*\*\*\* 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%.



## **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 for Periods Ended March 31, 2018**

	Last	Last	Last			
	36	60	120	Since		
	Months	Months	Months	Inception		
Domestic Equity	9.75%	12.96%	9.83%	11.67% (1/82)		
Blended Benchmark**	10.22%	13.00%	9.70%	11.43% (1/82)		
Domestic Equity - Net	9.50%	12.70%	9.57%	8.49% (1/05)		
International Equity	7.62%	7.71%	4.08%	8.11% (9/86)		
MSCI ACWI x US (Net)	6.18%	5.89%	2.70%	-		
International Equity - Net	7.26%	7.36%	3.75%	6.22% (1/05)		
Fixed Income	2.32%	2.71%	4.93%	8.31% (1/82)		
Blmbg Aggregate Index	1.20%	1.82%	3.63%	7.76% (1/82)		
Fixed Income - Net	2.17%	2.57%	4.78%	4.70% (1/05)		
Real Estate - Net	10.23%	10.78%	5.31%	7.26% (1/05)		
Blended Benchmark***	8.96%	10.39%	6.77%	7.69% (1/05)		
Alternative Investments	8.10%	9.28%	6.07%	10.70% (2/86)		
Alternatives Custom Benchmark****	9.00%	9.00%	9.67%	12.86% (2/86)		
Alternative Investments - Net	7.82%	8.95%	5.78%	8.10% (1/05)		
Private Equity	10.99%	12.29%	7.54%	12.86% (2/86)		
Alternatives Custom Benchmark****	9.00%	9.00%	9.67%	12.86% (2/86)		
Agriculture	4.43%	8.98%	9.22%	7.85% (10/97)		
Blended Benchmark***	8.96%	10.39%	6.77%	7.54% (10/97)		
Timberland	1.45%	5.26%	4.86%	7.97% (10/92)		
Blended Benchmark***	8.96%	10.39%	6.77%	7.55% (10/92)		
Alternatives Custom Benchmark****	9.00%	9.00%	9.67%	-		
otal Fund	7.09%	8.68%	7.48%	<b>9.98%</b> (1/82)		
Total Fund - Net	6.86%	<b>8</b> .44%	7.25%	<b>9.90%</b> (1/82) <b>7.27%</b> (1/05)		
Total Fund - Net Total Fund Benchmark	6.80%	8.44% 8.07%	7.25% 6.94%	<b>6.99%</b> (1/05)		
	0.00%	0.07 %	0.94%	0.9970 (1/05)		

\* Current Month 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 Weighted 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%.
Given that ODCE returns are updated quarterly, an approximation of the Index is used in the monthly reports.
\*\*\*\* 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%.



# 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 for Periods Ended March 31, 2018**

		Last	Last	
	Last	3	12	
	Month	Months	Months	
Large Cap Equity	(2.21%)	0.26%	15.55%	
Russell 1000 Index	(2.27%)	(0.69%)	13.98%	
Large Cap Growth	(2.27%)	5.62%	23.55%	
NTGI S&P 500 Growth Idx	(2.98%)	1.88%	19.60%	
S&P/Citi 500 Growth Index	(2.98%)	1.93%	19.69%	
NTGI S&P 500 Growth Idx - Net	(2.98%)	1.88%	19.59%	
Sands	(1.55%)	9.72%	30.42%	
LCG Blended Benchmark*	(2.74%)	1.42%	21.25%	
Russell 1000 Growth Index	(2.74%)	1.42%	21.25%	
Sands - Net	(1.55%)	9.66%	30.15%	
Large Cap Value	(2.31%)	(2.39%)	11.29%	
Dodge & Cox	(3.30%)	(1.62%)	11.31%	
LCV Blended Benchmark**	(1.76%)	(2.83%)	6.95%	
Russell 1000 Value Index	(1.76%)	(2.83%)	6.95%	
Dodge & Cox - Net	(3.30%)	(1.67%)	11.08%	
ВМО	(1.62%)	(2.88%)	12.85%	
LCV Blended Benchmark**	(1.76%)	(2.83%)	6.95%	
Russell 1000 Value Index	(1.76%)	(2.83%)	6.95%	
BMO - Net	(1.62%)	(2.93%)	12.61%	
LSV	(2.34%)	(1.28%)	13.85%	
LCV Blended Benchmark**	(1.76%)	(2.83%)	6.95%	
Russell 1000 Value Index	(1.76%)	(2.83%)	6.95%	
LSV - Net	(2.34%)	(1.34%)	13.60%	
NTGI S&P 500 Value Idx	(2.05%)	(3.54%)	7.78%	
S&P/Citi 500 Value Index	(2.04%)	(3.57%)	7.69%	
NTGI S&P 500 Value Idx - Net	(2.05%)	(3.55%)	7.77%	
Large Cap Passive Core	(1.98%)	(0.60%)	13.90%	
NTGI MarketCap Idx	(1.98%)	(0.60%)	13.90%	
DJ U.S. Total Stock Market Index	(1.98%)	(0.61%)	13.84%	
NTGI MarketCap Idx - Net	(1.98%)	(0.60%)	13.90%	

\* The LCG Blended Benchmark is currently the Russell 1000 Growth Index. Returns prior to January 1, 2006, reflect those 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.

	Last	Last Last 36 60	Last 120	Since
	Months	Months	Months	Inception
Large Cap Equity	10.61%	13.55%	9.86%	11.29% (1/82)
Russell 1000 Index	10.39%	13.17%	9.61%	11.62% (1/82)
Large Cap Growth	12.29%	14.85%	11.35%	<b>11.85%</b> (1/82)
NTGI S&P 500 Growth Idx	12.64%	15.36%	11.37%	7.53% (8/01)
S&P/Citi 500 Growth Index	12.66%	15.37%	11.35%	7.49% (8/01)
NTGI S&P 500 Growth Idx - Net	12.63%	15.36%	11.36%	9.50% (1/05)
Sands	12.52%	15.94%	14.34%	11.99% (11/03)
LCG Blended Benchmark*	12.90%	15.53%	11.34%	9.55% (11/03)
Russell 1000 Growth Index	12.90%	15.53%	11.34%	9.60% (11/03)
Sands - Net	12.26%	15.69%	14.07%	10.86% (1/05)
Large Cap Value	9.60%	12.77%	8.75%	<b>10.48%</b> (10/82)
Dodge & Cox	11.24%	13.57%	9.38%	9.79% (9/03)
LCV Blended Benchmark**	7.88%	10.78%	9.38% 7.78%	8.40% (9/03)
Russell 1000 Value Index	7.88%	10.78%	7.78%	8.58% (9/03)
Dodge & Cox - Net	11.02%	13.34%	9.14%	8.03% (1/05)
BMO	8.77%	12.64%	8.88%	8.36% (2/01)
LCV Blended Benchmark**	7.88%	10.78%	7.78%	5.60% (2/01)
Russell 1000 Value Index	7.88%	10.78%	7.78%	<b>6.68%</b> (2/01)
BMO - Net	8.53%	12.40%	8.63%	8.56% (1/05)
LSV	10.38%	13.87%	9.86%	11.59% (2/03)
LCV Blended Benchmark**	7.88%	10.78%	7.78%	9.40% (2/03)
Russell 1000 Value Index	7.88%	10.78%	7.78%	9.40 % (2/03) 9.41% (2/03)
LSV - Net	10.12%	13.60%	9.58%	8.81% (1/05)
NTGI S&P 500 Value Idx	8.50%	10.99%	7.48%	5.70% (8/99)
S&P/Citi 500 Value Index	8.40%	10.87%	7.48%	5.67% (8/99)
NTGI S&P 500 Value Idx - Net	8.49%	10.98%	7.42%	6.98% (1/05)
NTGI S&P 500 Value lux - Net	0.49%	10.98%	1.4170	0.90 % (1/05)
Large Cap Passive Core	10.31%	13.09%	9.67%	<b>11.17%</b> (1/85)
NTGI MarketCap Idx	10.31%	13.09%	9.68%	10.94% (2/85)
DJ U.S. Total Stock Market Index	10.20%	12.99%	9.69%	10.88% (2/85)
NTGI MarketCap Idx - Net	10.30%	13.08%	9.68%	8.50% (1/05)

\* The LCG Blended Benchmark is currently the Russell 1000 Growth Index. Returns prior to January 1, 2006, reflect those 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 for Periods Ended March 31, 2018**

		Last	Last	
	Last	3	12	
	Month	Months	Months	
Small Cap Equity	1.22%	0.76%	11.41%	
Russell 2000 Index	1.29%	(0.08%)	11.79%	
Small Cap Growth	1.10%	3.59%	14.78%	
Frontier	2.93%	6.30%	23.38%	
Russell 2000 Growth Index	1.35%	2.30%	18.63%	
Frontier - Net	2.93%	6.17%	22.78%	
FIAM	0.36%	2.52%	11.57%	
Russell 2000 Growth Index	1.35%	2.30%	18.63%	
FIAM - Net	0.36%	2.52%	11.19%	
Small Cap Value	0.98%	(1.62%)	8.66%	
Channing	0.65%	(1.32%)	6.07%	
Russell 2000 Value Index	1.24%	(2.64%)	5.13%	
Channing - Net	0.65%	(1.44%)	5.55%	
DFA Small Cap Value	1.13%	(2.18%)	6.92%	
Russell 2000 Value Index	1.24%	(2.64%)	5.13%	
DFA Small Cap Value - Net	1.13%	(2.31%)	6.31%	
Inv. Counselors of Maryland	0.97%	(1.23%)	11.37%	
Russell 2000 Value Index	1.24%	(2.64%)	5.13%	
Inv. Couns. of Maryland - Net	0.97%	(1.32%)	10.76%	
Micro Cap	2.22%	(0.90%)	10.16%	
		. ,		
Ativo	3.44%	(2.23%)	6.59%	
Russell Microcap Index	1.48%	0.68%	13.50%	
Russell 2000 Growth Index	1.35%	2.30%	18.63%	
Russell 2000 Index	1.29%	(0.08%)	11.79%	
Ativo - Net	3.44%	(2.39%)	5.93%	
DFA Micro Cap	1.84%	(0.48%)	12.10%	
Russell 2000 Value Index	1.24%	(2.64%)	5.13%	
Russell 2000 Index	1.29%	(0.08%)	11.79%	
DFA Micro Cap - Net	1.84%	(0.61%)	11.54%	
Public Real Assets	0.59%	(4.21%)	-	
Public Real Assets Benchmark (1)	0.58%	(4.93%)	-	
Brookfield Public Global Inf	(0.08%)	(5.49%)	-	
Dow Jones Global Infra Comp Idx	(0.06%)	(6.20%)	(1.36%)	
Brookfield Public Global Inf - Net	(0.08%)	(5.62%)	-	
Cohen & Steers Public Global Inf	0.91%	(3.60%)	-	
FTSE GI Core Infr 50/50 N	0.79%	(4.51%)	4.61%	
Cohen & St Public Global Inf - Net	0.91%	(3.71%)	-	

(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.

	Last	Last	Last	
	36	60	120	Since
	Months	Months	Months	Inception
Small Cap Equity	7.65%	11.58%	10.45%	<b>12.43%</b> (7/88)
Russell 2000 Index	8.39%	11.47%	9.84%	9.66% (7/88)
Small Cap Growth	7.20%	12.50%	10.69%	<b>13.12%</b> (7/88)
Frontier	6.86%	12.64%	11.24%	13.20% (8/88)
Russell 2000 Growth Index	8.77%	12.90%	10.95%	8.38% (8/88)
Frontier - Net	6.27%	12.03%	8.95%	7.96% (1/05)
FIAM	8.52%	13.23%	11.24%	13.76% (8/88)
Russell 2000 Growth Index	8.77%	12.90%	10.95%	8.38% (8/88)
FIAM - Net	7.97%	12.67%	10.65%	11.13% (1/05)
Small Cap Value	9.07%	11.52%	10.23%	<b>12.19%</b> (9/89)
Channing	7.64%	11.57%	-	12.14% (7/11)
Russell 2000 Value Index	7.87%	9.96%	8.61%	10.22% (7/11)
Channing - Net	7.11%	11.02%	-	11.53% (7/11)
DFA Small Cap Value	7.58%	10.98%	10.47%	12.61% (2/96)
Russell 2000 Value Index	7.87%	9.96%	8.61%	9.88% (2/96)
DFA Small Cap Value - Net	7.02%	10.44%	9.93%	8.36% (1/05)
Inv. Counselors of Maryland	11.94%	12.89%	10.60%	12.01% (5/99)
Russell 2000 Value Index	7.87%	9.96%	8.61%	9.45% (5/99)
Inv. Couns. of Maryland - Net	11.36%	12.36%	10.06%	9.13% (1/05)
Micro Cap	5.30%	9.67%	9.07%	<b>11.85%</b> (7/84)
Ativo	7.25%	12.98%	_	13.58% (10/10)
Russell Microcap Index	8.04%	12.98%	- 9.19%	13.27% (10/10)
Russell 2000 Growth Index	8.77%	12.90%	10.95%	14.19% (10/10)
Russell 2000 Index	8.39%	11.47%	9.84%	13.04% (10/10)
Ativo - Net	6.54%	12.18%	-	12.78% (10/10)
DFA Micro Cap	10.35%	13.11%	11.20%	11.48% (8/87)
Russell 2000 Value Index	7.87%	9.96%	8.61%	10.10% (8/87)
Russell 2000 Index	8.39%	11.47%	9.84%	9.03% (8/87)
DFA Micro Cap - Net	9.80%	12.55%	10.66%	8.46% (1/05)
Public Real Assets		-		(2.04%) (8/17)
Public Real Assets Benchmark (1)	-	-	-	(3.68%) (8/17)
Brookfield Public Global Inf	_	_	_	(5.89%) (8/17)
Dow Jones Global Infra Comp Idx	0.89%	- 4.67%	7.26%	(6.52%) (8/17)
Brookfield Public Global Inf - Net	-	-	-	(6.12%) (8/17)
Cohen & Steers Public Global Inf	_	-	_	(0.12%) (8/17)
FTSE GI Core Infr 50/50 N	5.28%	6.67%	-	(2.72%) (8/17)
Cohen & St Public Global Inf - Net	-	-	-	(0.30%) (8/17)
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(1) 1/3 Dow Jones Brookfield Global Infrastructure Composite Index + 2/3 FTSE Global Core Infrastructure 50/50 Net Tax Index



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	for	Periods	Ended	March	31.	2018
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		Last	Last	
	Last	3	12	
	Month	Months	Months	
Intl Large Cap Equity	(1.20%)	(0.16%)	17.34%	
MSCI ACWI ex-US Index	(1.76%)	(1.18%)	16.53%	
Intl Large Cap Growth	(1.23%)	(0.32%)	20.50%	
EARNEST Partners	(1.34%)	(1.21%)	18.23%	
MSCI ACWI ex-US Index	(1.76%)	(1.18%)	16.53%	
MSCI ACWI ex-US Growth	(1.31%)	(0.80%)	20.32%	
EARNEST Partners - Net	(1.34%)	(1.21%)	18.18%	
William Blair	(1.14%)	0.45%	22.52%	
MSCI ACWI ex-US Index	(1.76%)	(1.18%)	16.53%	
MSCI ACWI ex-US Growth	(1.31%)	(0.80%)	20.32%	
William Blair - Net	(1.14%)	0.37%	22.10%	
Intl Large Cap Value	(1.80%)	0.27%	13.52%	
Brandes	(1.79%)	2.20%	13.42%	
MSCI ACWI ex-US Index	(1.76%)	(1.18%)	16.53%	
MSCI ACWI ex-US Value	(2.07%)	(1.36%)	13.90%	
Brandes - Net	(1.79%)	2.20%	13.42%	
Mondrian	(1.95%)	(1.56%)	12.55%	
MSCI ACWI ex-US Index	(1.76%)	(1.18%)	16.53%	
MSCI ACWI ex-US Value	(2.07%)	(1.36%)	13.90%	
Mondrian - Net	(1.95%)	(1.56%)	12.28%	
Lazard	(1.08%)	(0.41%)	19.28%	
MSCI ACWI ex-US Index	(1.76%)	(1.18%)	16.53%	
MSCI ACWI ex-US Value	(2.07%)	(1.36%)	13.90%	
Lazard - Net	(1.08%)	(0.47%)	19.00%	

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 for Period			
	Last	Last	Last	
	36	60	120	Since
	Months	Months	Months	Inception
Intl Large Cap Equity	7.18%	7.76%	3.89%	<b>8.10%</b> (9/86)
MSCI ACWI ex-US Index	6.18%	5.89%	2.70%	-
Intl Large Cap Growth	7.58%	7.15%	3.80%	9.16% (9/02)
EARNEST Partners	7.68%	5.99%	5.40%	10.09% (10/04)
MSCI ACWI ex-US Index	6.18%	5.89%	2.70%	6.56% (10/04)
MSCI ACWI ex-US Growth	7.65%	7.22%	3.61%	7.45% (10/04)
EARNEST Partners - Net	7.54%	5.82%	5.07%	8.73% (1/05)
William Blair	7.50%	8.21%	4.73%	10.47% (10/02)
MSCI ACWI ex-US Index	6.18%	5.89%	2.70%	8.84% (10/02)
MSCI ACWI ex-US Growth	7.65%	7.22%	3.61%	9.12% (10/02)
William Blair - Net	7.11%	7.82%	4.34%	7.02% (1/05)
Intl Large Cap Value	5.97%	7.24%	3.28%	<b>9.24%</b> (10/95)
Brandes	6.36%	8.23%	3.64%	9.48% (1/96)
MSCI ACWI ex-US Index	6.18%	5.89%	2.70%	5.50% (1/96)
MSCI ACWI ex-US Value	5.64%	5.46%	2.68%	-
Brandes - Net	6.17%	8.01%	3.41%	4.93% (1/05)
Mondrian	5.47%	6.35%	-	6.65% (4/12)
MSCI ACWI ex-US Index	6.18%	5.89%	2.70%	6.29% (4/12)
MSCI ACWI ex-US Value	5.64%	5.46%	2.68%	5.92% (4/12)
Mondrian - Net	5.03%	5.87%	-	6.18% (4/12)
Lazard	6.29%	6.70%	-	7.95% (4/12)
MSCI ACWI ex-US Index	6.18%	5.89%	2.70%	<b>6.29%</b> (4/12)
MSCI ACWI ex-US Value	5.64%	5.46%	2.68%	5.92% (4/12)
Lazard - Net	5.76%	6.01%	-	7.34% (4/12)

#### **Returns for Periods Ended March 31, 2018**

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.

		Last	Last	
	Last	3	12	
	Month	S Months	Months	
Intl Large Cap Active Core	(1.24%)	0.39%	19.69%	
In Large oup Active Core	(1.2470)	0.00 /0	10.00 /0	
Arrowstreet	(1.15%)	1.56%	19.92%	
MSCI ACWI ex-US Index	(1.76%)	(1.18%)	16.53%	
Arrowstreet - Net	(1.15%)	1.45%	19.39%	
Brown	0.75%	(1.43%)	15.06%	
MSCI ACWI ex-US Index	(1.76%)	(1.18%)	16.53%	
Brown - Net	0.75%	(1.49%)	14.14%	
GlobeFlex	(2.46%)	(0.35%)	20.90%	
MSCI ACWI ex-US Index	(1.76%)	(1.18%)	16.53%	
GlobeFlex - Net	(2.46%)	(0.43%)	20.48%	
Globel lex - Net	(2.4070)	(0.4570)	20.4070	
Progress Intl Equity	(0.85%)	1.44%	21.79%	
Custom Benchmark	(1.76%)	(1.18%)	18.75%	
MSCI ACWI ex-US Index	(1.76%)	(1.18%)	16.53%	
Progress Intl Equity - Net	(0.85%)	1.32%	21.22%	
Intl Large Cap Pass. Core	(0.78%)	(0.81%)	15.61%	
NTGI MSCI EAFE Idx	(0.78%)	(0.81%)	15.61%	
MSCI EAFE Index	(1.80%)	(1.53%)	14.80%	
NTGI EAFE Idx - Net	(0.78%)	(0.82%)	15.60%	
International Small Cap	(0.40%)	0.49%	24.28%	
Franklin Templeton	0.03%	1.39%	24.87%	
ACWI Small Cap ex US	(1.13%)	(0.35%)	20.60%	
Franklin Templeton - Net	0.03%	1.39%	24.24%	
William Blair	(0.77%)	(0.26%)	23.78%	
ACWI Small Cap ex US	(1.13%)	(0.20%)	20.60%	
Intl SC Blended Benchmark	(1.13%)	(0.35%)	20.60%	
William Blair - Net	(0.77%)	(0.44%)	22.88%	
	(0.777/0)	(0.4470)	22.00 /0	
Emerging Markets	(1.43%)	1.44%	24.78%	
Genesis	(1.43%)	1.44%	24.78%	
MSCI Emerging Markets Index	(1.83%)	1.47%	25.37%	
Genesis - Net	(1.43%)	1.38%	24.15%	
	(		2	

#### **Returns for Periods Ended March 31, 2018**

Brown and GlobeFlex moved to International Large Cap Active Core April 1, 2011. Progress Custom Benchmark is a comprised of each manager's weighted benchmark until 201712. after 201712 the benchmark is MSCI ACWI ex US - Net. Intl SC Blended Benchmark consists of the S&P Developed Ex-U.S. Small Cap Index through May 31, 2011 and the MSCI ACWI Ex-U.S. Small Cap Index thereafter.



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.

	Last	Last	Last	
	36	60	120	Since Inception
	Months	Months	Months	
Intl Large Cap Active Core	9.09%	9.58%	6.03%	5.62% (2/08)
Arrowstreet	9 OF9/	10.24%	6.18%	E 920/
	8.95%			5.82% (3/08)
MSCI ACWI ex-US Index	6.18%	5.89%	2.70%	2.45% (3/08)
Arrowstreet - Net	8.45%	9.73%	5.68%	5.33% (3/08)
Brown	6.23%	9.07%	6.00%	8.37% (10/04)
MSCI ACWI ex-US Index	6.18%	5.89%	2.70%	6.56% (10/04)
Brown - Net	5.11%	7.93%	5.25%	6.73% (1/05)
GlobeFlex	10.64%	9.43%	4.56%	5.95% (3/06)
MSCI ACWI ex-US Index	6.18%	5.89%	2.70%	4.19% (3/06)
GlobeFlex - Net				
GIODEFIEX - INEL	10.21%	9.00%	4.12%	5.49% (3/06)
Progress Intl Equity	9.32%	-	-	6.08% (7/14)
Custom Benchmark	7.83%	-	-	4.73% (7/14)
MSCI ACWI ex-US Index	6.18%	5.89%	2.70%	3.27% (7/14)
Progress Intl Equity - Net	8.78%	-	-	5.62% (7/14)
ntl Large Cap Pass. Core	6.08%	6.98%	3.18%	<b>3.68%</b> (1/00)
NTGI MSCI EAFE Idx	6.08%	6.98%	3.17%	4.06% (2/00)
MSCI EAFE Index	5.55%	6.50%	2.74%	3.65% (2/00)
NTGI EAFE Idx - Net	6.08%	6.97%	3.17%	5.39% (1/05)
nternational Small Cap	10.89%	9.64%	4.54%	<b>5.79%</b> (12/05)
Franklin Templeton	10.32%	9.53%	-	8.51% (8/11)
ACWI Small Cap ex US	10.40%	8.57%	5.51%	6.58% (8/11)
Franklin Templeton - Net	9.59%	8.78%	-	7.77% (8/11)
William Blair	11.38%	9.74%	-	11.61% (9/10)
ACWI Small Cap ex US	10.40%	8.57%	5.51%	9.08% (9/10)
Intl SC Blended Benchmark	10.40%	8.57%	4.71%	9.52% (9/10)
William Blair - Net	10.54%	8.90%	4.7170	10.77% (9/10)
	10.04 %	0.90%	-	IU. / / 70 (9/10)
Emerging Markets	9.46%	5.70%	6.16%	<b>9.56%</b> (2/92)
Genesis	9.46%	5.70%	6.16%	12.34% (5/04)
MSCI Emerging Markets Index	9.21%	5.37%	3.36%	10.20% (5/04)
Genesis - Net	8.84%	5.11%	5.54%	10.27% (1/05)

Returns for Periods Ended March 31, 2018

Brown and GlobeFlex moved to International Large Cap Active Core April 1, 2011. Progress Custom Benchmark is a comprised of each manager's weighted benchmark until 201712. after 201712 the benchmark is MSCI ACWI ex US - Net. Intl SC Blended Benchmark consists of the S&P Developed Ex-U.S. Small Cap Index through May 31, 2011 and the MSCI ACWI Ex-U.S. Small Cap Index thereafter.

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 for Periods Ended March 31, 2018**

		Last	Last	
	Last	3	12	
	Month	Months	Months	
Dom. Fixed Active Core	0.66%	(1.00%)	1.99%	
Brandes Core*	0.75%	(1.16%)	1.00%	
Blmbg Aggregate Index	0.64%	(1.46%)	1.20%	
Brandes Core - Net	0.75%	(1.16%)	1.00%	
EARNEST Partners	0.65%	(1.12%)	2.03%	
Blmbg Aggregate Index	0.64%	(1.46%)	1.20%	
EARNEST Partners - Net	0.65%	(1.16%)	1.88%	
Piedmont	0.53%	(1.06%)	1.75%	
Blmbg Aggregate Index	0.64%	(1.46%)	1.20%	
Piedmont - Net	0.53%	(1.10%)	1.60%	
Garcia Hamilton	0.76%	(0.70%)	2.31%	
Blmbg Aggregate Index	0.64%	(1.46%)	1.20%	
Garcia Hamilton	0.76%	(0.72%)	2.21%	
Dom. Fixed Passive Core	0.64%	(1.45%)	1.26%	
Dom. Fixed Passive Core	0.04 %	(1.4570)	1.20%	
BlackRock US Debt	0.65%	(1.46%)	1.32%	
Blmbg Aggregate Index	0.64%	(1.46%)	1.20%	
BlackRock US Debt - Net	0.65%	(1.46%)	1.31%	
NTGI BImbg Agg. Index	0.64%	(1.45%)	1.21%	
Blmbg Aggregate Index	0.64%	(1.46%)	1.20%	
NTGI Blmbg Agg. Index - Net	0.64%	(1.45%)	1.20%	

\* Brandes changed to a Core mandate from Core Plus on 01/01/2018. Performance shown is Brandes full SI history.

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 for Periods Ended March 31, 2018**

	Last 36 Months	Last 60 Months	Last 120 Months	Since Inception
Dom. Fixed Active Core	1.81%	2.31%	4.43%	<b>4.50%</b> (4/01)
Brandes Core *	-	-	-	0.97% (3/16)
BImbg Aggregate Index	1.20%	1.82%	3.63%	1.23% (3/16)
Brandes Core - Net	-	-	-	0.97% (3/16)
EARNEST Partners	1.67%	2.27%	4.37%	4.45% (5/05)
Blmbg Aggregate Index	1.20%	1.82%	3.63%	3.97% (5/05)
EARNEST Partners - Net	1.49%	2.07%	4.17%	4.24% (5/05)
Piedmont	1.86%	2.29%	4.18%	4.26% (6/05)
Blmbg Aggregate Index	1.20%	1.82%	3.63%	3.91% (6/05)
Piedmont - Net	1.71%	2.14%	4.01%	4.07% (6/05)
Garcia Hamilton	-	-	_	2.34% (6/15)
Blmbg Aggregate Index	1.20%	1.82%	3.63%	1.49% (6/15)
Garcia Hamilton	-	-	-	2.24% (6/15)
Dom. Fixed Passive Core	1.25%	1.87%	3.59%	5.93% (1/90)
	1.000/			
BlackRock US Debt	1.30%	-	-	2.57% (10/13)
Blmbg Aggregate Index	1.20%	1.82%	3.63%	2.44% (10/13)
BlackRock US Debt - Net	1.30%	-	-	2.57% (10/13)
NTGI Blmbg Agg. Index	1.20%	1.84%	3.58%	5.99% (2/90)
BImbg Aggregate Index	1.20%	1.82%	3.63%	5.98% (2/90)
NTGI BImbg Agg. Index - Net	1.20%	1.84%	3.57%	3.90% (1/05)

\* Brandes changed to a Core mandate from Core Plus on 01/01/2018. Performance shown is Brandes full SI history.

The table below details the rates of return for the fund's domestic fixed core plus and high yield 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 March 31, 2018**

		Last	Last	
	Last	3	12	
	Month	Months	Months	
Domestic Fixed Core Plus	0.55%	(1.29%)	2.26%	
LM Capital	0.30%	(1.53%)	1.50%	
Blmbg Aggregate Index	0.64%	(1.46%)	1.20%	
LM Capital - Net	0.30%	(1.57%)	1.33%	
Progress Fixed Income	0.51%	(1.22%)	2.18%	
Blmbg Aggregate Index	0.64%	(1.46%)	1.20%	
Progress Fixed Inc Net	0.51%	(1.30%)	1.85%	
BMO-TCH	0.44%	(1.23%)	2.76%	
Blmbg Aggregate Index	0.64%	(1.46%)	1.20%	
BMO-TCH Net	0.44%	(1.30%)	2.62%	
Western	0.87%	(1.19%)	3.16%	
BImbg Aggregate Index	0.64%	(1.46%)	1.20%	
Western - Net	0.87%	(1.23%)	3.02%	
Bank Loans	0.23%	1.17%	4.62%	
Barings Global Loan Fund	0.23%	1.17%	4.62%	
Custom Benchmark	0.32%	1.57%	4.74%	
Barings Global Loan Fund - Net	0.23%	1.17%	4.42%	
Emerging Markets	0.43%	1.74%	9.97%	
Standish	0.43%	1.74%	9.97%	
Custom Benchmark	0.57%	1.50%	8.16%	
Standish - Net	0.43%	1.66%	9.60%	
Opportunistic Fixed Income	(0.64%)	(0.84%)	3.18%	
Crescent	(0.64%)	(0.84%)	3.18%	
Custom Benchmark	(0.16%)	0.27%	4.07%	
Crescent - Net	(0.64%)	(0.84%)	2.70%	
High Yield	(0.27%)	(0.23%)	5.37%	
MacKay Shields	(0.27%)	(0.23%)	5.28%	
ML High Yield Cash Pay Index	(0.63%)	(0.94%)	3.67%	
MacKay Shields - Net	(0.36%)	(0.31%)	4.91%	

Taplin, Canida, & Habacht moved to Core Plus October 1, 2010. Barings Custom Benchmark is comprised of the 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. Standish Custom Benchmark is 50% JPM GBI-EM Index, 25% JPM EMBI Global Index and 25% JPM Corporate EMBI Diversified Index.

Crescent Custom Benchmark is 50% ML U.S. High Yield Master II Index and 50% S&P/LSTA Leveraged Loan Index.



The table below details the rates of return for the fund's domestic fixed core plus and high yield 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 March 31, 2018**

	Last	Last	Last		
	36 Months	60 Months	120 Months	Since	
				Inception	า
Domestic Fixed Core Plus	2.24%	2.75%	4.84%	8.16%	
LM Capital	1.98%	2.40%	4.57%	4.79%	(5/05)
Blmbg Aggregate Index	1.20%	1.82%	3.63%	3.97%	(5/05)
LM Capital - Net	1.82%	2.24%	4.40%	4.63%	(5/05)
Progress Fixed Income	2.02%	2.57%	4.45%	4.82%	(1/06)
Blmbg Aggregate Index	1.20%	1.82%	3.63%	4.06%	(1/06)
Progress Fixed Inc Net	1.68%	2.23%	4.10%	4.47%	(1/06)
BMO-TCH	2.72%	3.14%	5.24%	4.95%	(5/05)
Blmbg Aggregate Index	1.20%	1.82%	3.63%	3.97%	(5/05)
BMO-TCH - Net	2.59%	3.01%	5.11%	4.82%	(5/05)
Western	2.94%	3.29%	5.49%	5.44%	(11/01)
Blmbg Aggregate Index	1.20%	1.82%	3.63%	4.18%	
Western - Net	2.80%	3.15%	5.35%	4.84%	
Bank Loans	4.98%	-	-	4.67%	(8/14)
Barings Global Loan Fund	4.98%	-	-	4.67%	(8/14)
Custom Benchmark	4.50%	-	-	4.10%	(8/14)
Barings Global Loan Fund - Net	4.51%	-	-	4.18%	(8/14)
Emerging Markets	6.22%	-	-	3.78%	(8/14)
Standish	6.22%	-	-	3.78%	(8/14)
Custom Benchmark	5.50%	1.68%	5.28%	2.35%	(8/14)
Standish - Net	5.86%	-	-	3.44%	(8/14)
Opportunistic Fixed Income	4.03%	-		3.30%	(8/14)
	4.020/			2 4 2 9/	
Crescent	4.03%	-	-	3.13%	(9/14)
Custom Benchmark	4.71%	4.47%	6.89%	3.97%	(9/14)
Crescent - Net	3.53%	-	-	2.72%	(9/14)
ligh Yield	6.28%	5.65%	8.52%	9.66%	(4/86)
MacKay Shields	6.60%	5.86%	8.14%	8.99%	(11/00)
ML High Yield Cash Pay Index	5.17%	4.98%	8.04%	7.65%	(11/00)
MacKay Shields - Net					

Taplin, Canida, & Habacht moved to Core Plus October 1, 2010. Barings Custom Benchmark is comprised of the 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. Standish Custom Benchmark is 50% JPM GBI-EM Index, 25% JPM EMBI Global Index and 25% JPM Corporate EMBI Diversified Index.

Crescent Custom Benchmark is 50% ML U.S. High Yield Master II Index and 50% S&P/LSTA Leveraged Loan Index.

