

August 31, 2018



**Illinois Municipal
Retirement Fund
Monthly Performance Report**

**Investment Measurement Service
Monthly Review**

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Market Environment As of August 31, 2018

Index	Last Month	Year to Date	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Russell:3000 Index	3.51	10.39	20.25	15.86	14.25	10.89
S&P:500	3.26	9.94	19.66	16.11	14.52	10.86
Russell:2000 Index	4.31	14.26	25.45	16.11	13.00	10.46
MSCI:ACWI ex US	(2.09)	(3.53)	3.18	8.08	5.43	3.44
MSCI:EM	(2.70)	(7.18)	(0.68)	11.42	5.04	3.45
Blmbg:Aggregate	0.64	(0.96)	(1.05)	1.76	2.49	3.70
NCREIF:Total Index	0.60	4.79	7.27	7.95	9.66	6.36
Blmbg:Commodity Price Idx	(1.94)	(5.03)	(1.09)	(2.71)	(8.48)	(7.86)

Global markets produced mixed results with risk assets outside of the U.S. generally moving lower. U.S. trade policies continued to impact the political landscape, heightening investor concerns over European and emerging markets. Second quarter GDP growth in Europe was 2.1%, down from 2.5% in the first quarter. The region's export-heavy economy is particularly susceptible to global trade barriers with additional headwinds from an appreciating dollar. Government bonds in Europe also declined with the European Central Bank reaffirming intentions to end quantitative easing by the end of the year. Emerging market equities depreciated on the back of a stronger dollar, protectionist trade rhetoric, and U.S.-imposed sanctions on select countries. In August, the U.S. announced sanctions against both Turkey and Iran, the former of which resulted in big depreciation of the lira against the dollar. In contrast, U.S. markets escaped the month relatively unscathed with the S&P 500 index reaching new highs and setting a record for the longest bull run in history. U.S. bond markets also produced gains. The 10-year Treasury yield dropped ten basis points to 2.86%.

Employment figures continued to exceed expectations in August as nonfarm payrolls rose 201,000 during the month. The positive news was partially dampened by a downward revision of the prior two months by a combined 50,000 jobs. Unemployment remained unchanged at 3.9% in August but the labor force participation rate dropped 20 basis points to 62.7%. Perhaps the most significant figure of the report was the year-over-year increase in average hourly earnings of 2.9%. This represents a 20 basis point increase from July.

Inflation figures trickled in below expectations in August. Headline CPI rose a mere 0.2% from July, dropping year-over-year growth down 20 basis points to 2.7% in August. Year-over-year Core CPI came in at 2.2%, a drop of 20 basis points from the prior month's figure. The continuing trend of declining medical costs and lower apparel prices dampened inflation, while food, energy, and housing prices all saw gains.

GDP growth in the second quarter was revised 10 basis points higher from an already-impressive 4.1% to an updated figure of 4.2%. Economic growth was still driven by consumer spending, although consumer spending growth was revised down from 4.0% to 3.8%. Non-residential fixed investment and government spending were both revised up for the quarter, while the negative impact of inventories on GDP growth was found to be less than initially reported.

*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.

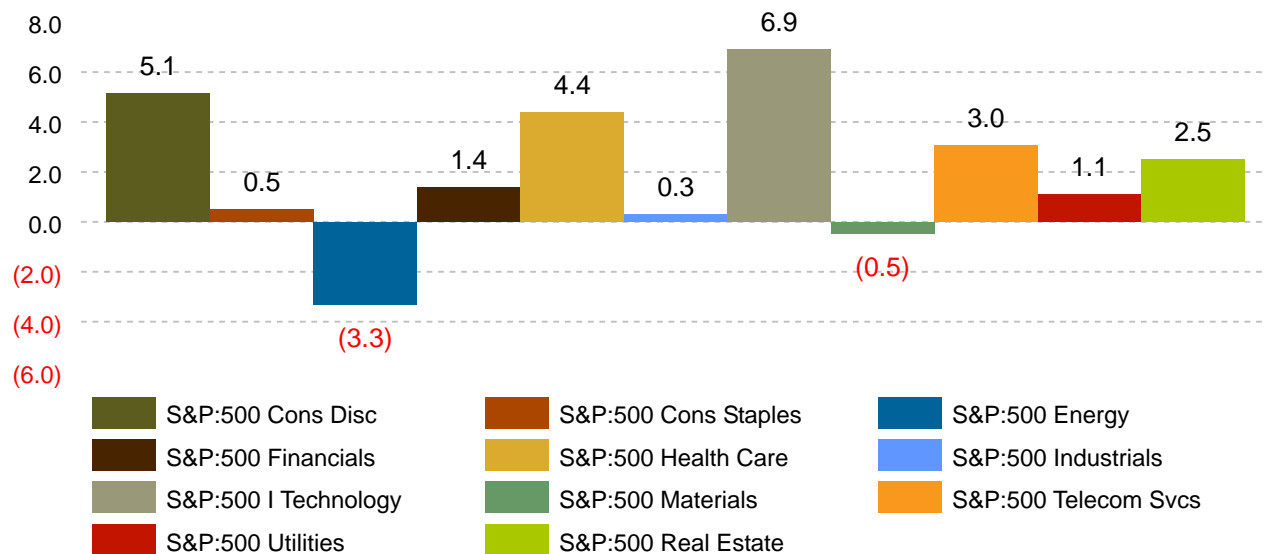
U.S. Equity Overview As of August 31, 2018

Index	Last Month	Year to Date	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Russell:3000 Index	3.51	10.39	20.25	15.86	14.25	10.89
Russell:1000 Index	3.45	10.07	19.82	15.84	14.36	10.93
Russell:1000 Growth	5.47	16.44	27.23	19.33	17.47	12.84
Russell:1000 Value	1.48	3.71	12.47	12.32	11.22	8.93
Russell:Midcap Index	3.11	8.15	17.89	13.37	12.80	10.92
Russell:2000 Index	4.31	14.26	25.45	16.11	13.00	10.46
Russell:2000 Growth	6.23	18.53	30.72	16.36	14.20	11.57
Russell:2000 Value	2.38	9.86	20.05	15.73	11.72	9.27

U.S. equities were the standout performers in August as the Russell 3000 Index returned 3.5% while non-U.S. and emerging market equities declined. A surging U.S. economy helped the S&P 500 Index bull run become the longest on record on August 21. The fact that very strong second quarter GDP growth was driven by consumption and net exports only served to further boost positive sentiment. Coupled with momentum from extremely strong corporate earnings, the U.S. appears almost impervious to trade tensions with China, a plummeting Turkish lira, and sanctions the U.S. reinstated on Iran. Growth continues to meaningfully outperform value (Russell 1000 Growth Index: +5.5% vs. Russell 1000 Value Index: +1.5%) and small caps outperformed large caps (Russell 2000 Index: +4.3% vs. Russell 1000 Index: +3.4%). The Russell Midcap Index fell behind both large and small caps, gaining 3.1%.

Technology (August +6.9%; YTD: +21.0%), Consumer Discretionary (August: +5.1%; YTD: +19.4%), and Health Care (August: +4.4%; YTD: +13.3%) were the best performing sectors both for the month and year-to-date. Early in August, Apple became the first stock to reach a market cap of \$1 trillion, leading the Technology sector higher. Energy (-3.3%) and Materials (-0.5%) were the only two sectors with negative returns as trade concerns weighed on these companies.

S&P 500 Index Sector Returns



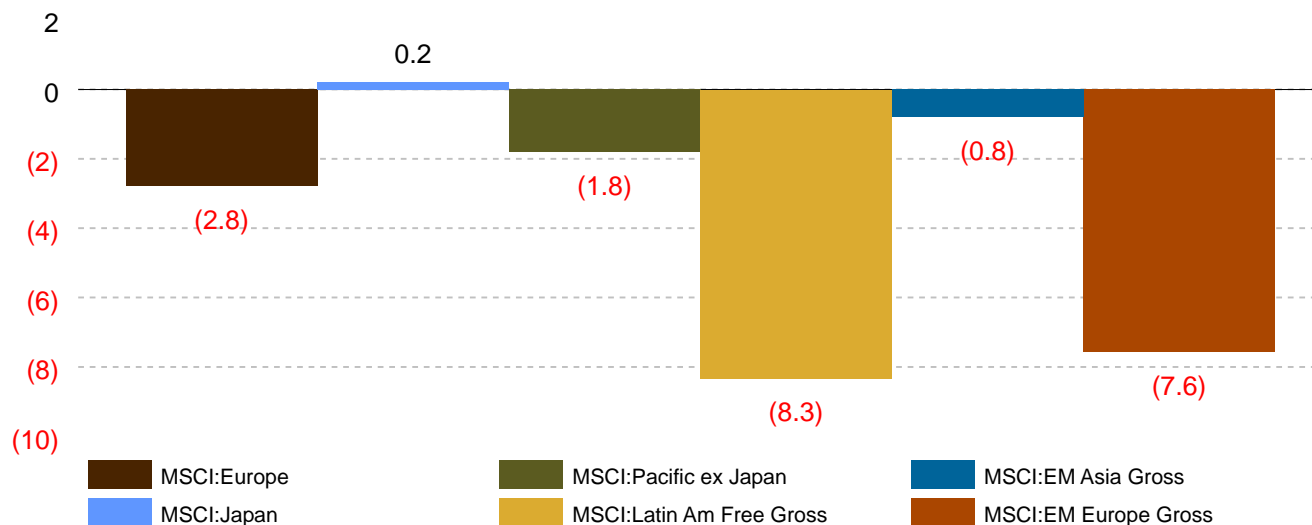
Non-U.S. Equity Overview As of August 31, 2018

Index	Last Month	Year to Date	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
MSCI:ACWI ex US	(2.09)	(3.53)	3.18	8.08	5.43	3.44
MSCI:EAFE	(1.93)	(2.28)	4.39	7.04	5.73	3.66
MSCI:EAFE Hedged Net	(1.49)	1.32	8.37	8.38	9.17	5.84
MSCI:EM	(2.70)	(7.18)	(0.68)	11.42	5.04	3.45
MSCI:ACWI ex US Small Cap	(0.97)	(3.22)	5.35	10.63	8.05	6.70

Outside of the U.S., healthy economic and fundamental data could not overcome fears ignited by political developments and non-U.S. equities declined as a result. The primary catalyst for the selloff was the precipitous decline in the Turkish lira sparked by U.S. sanctions. This development produced fears of contagion to other emerging market economies, driving down returns (MSCI EM Index: -2.7%). As a primary trade partner to Europe, the issues in Turkey also spread to the Eurozone and beyond, lifting the dollar against other currencies. The MSCI EM index of currencies dropped over 2% in August, the fifth monthly loss, while developed markets fell much less (euro lost 0.6%). Problems in Argentina caused the peso to drop to a new low.

Japan was the lone region to post a gain in August, returning 0.2% (MSCI Japan Index). Latin America was the worst performing region, led yet again by Brazil which continues to face political uncertainty (MSCI Latin America Free Gross: -8.3%). Heavily impacted by Turkey, emerging Europe also suffered a significant decline (MSCI EM Europe Gross: -7.6%). Europe (MSCI Europe: -2.8%), the Pacific (MSCI Pacific ex Japan: -1.8%), and emerging Asia (MSCI EM Asia Gross: -0.8%) fared slightly better but still posted notable losses.

MSCI Regional Returns

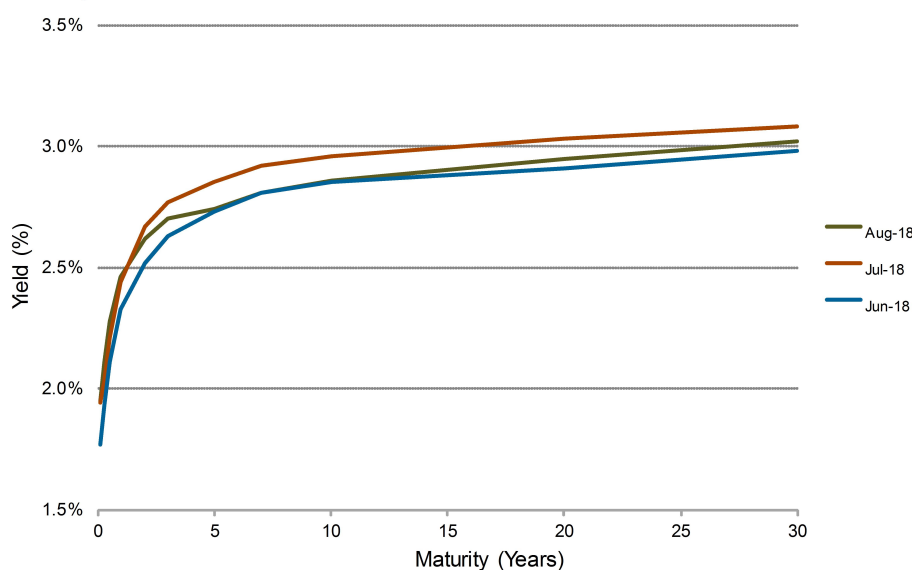


Fixed Income Overview

As of August 31, 2018

Index	Last Month	Year to Date	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Blmbg:Aggregate	0.64	(0.96)	(1.05)	1.76	2.49	3.70
Blmbg:Long Gov/Credit	0.85	(3.93)	(2.15)	4.25	5.61	6.80
Blmbg:US Government	0.76	(0.71)	(1.50)	0.85	1.67	2.80
Blmbg:Credit	0.51	(1.79)	(0.99)	3.27	3.64	5.26
Blmbg:Mortgage Backed Sec	0.61	(0.46)	(0.53)	1.38	2.43	3.48
Blmbg:US TIPS	0.72	0.21	0.83	2.20	1.88	3.03
ML:US High Yield Cash Pay	0.72	1.90	3.22	7.02	5.61	8.29
CS:Leveraged Loan	0.41	3.65	5.29	4.96	4.26	5.17
3 Month T-Bill	0.18	1.15	1.52	0.79	0.49	0.36

Treasury Yield Curve



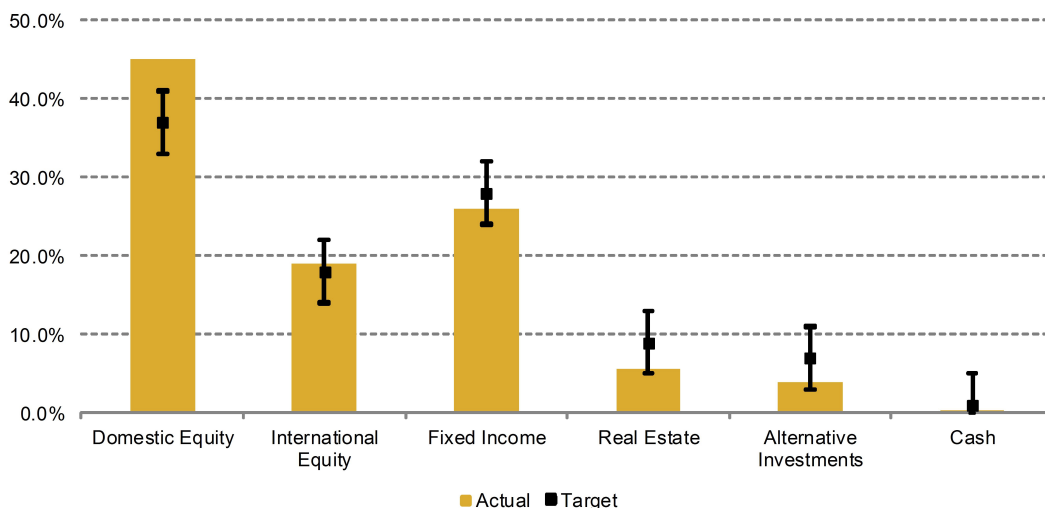
Geopolitical turmoil lead investors to safe haven assets helping to push U.S. bond prices up in August. Coupled with strong economic data, U.S. government bond prices climbed. On the short end, Treasury yields were supported by the expectation of two additional 25 basis point rate hikes by the end of 2018. At its most recent meeting, the Federal Open Market Committee stated that "it would likely soon be appropriate to take another step in removing policy accommodation," assuming economic data comes through as expected. As of the end of August, the market is projecting a near certainty of a 25 basis point hike at its September meeting and a 63% chance of an additional hike in 2018. Over the period, the yield on the 2-year fell five basis points to 2.62%, the 10-year fell 10 basis points to 2.86%, and the 30-year fell six basis points to 3.02%. The spread between the 2-year and 10-year treasuries reached a post crisis low of 19 basis points before finishing the month at 24 basis points.

The Bloomberg Aggregate Index was up narrowly (+0.6%) in August. Investment grade and high yield credit spreads tightened briefly at the beginning of the month before ending five and two bps wider, respectively. Heavier than expected issuance weighed on spreads in a period that saw international investors hungry for safe haven assets. The Bloomberg Credit Index was up 0.5% in August, trailing high yield (ML High Yield Cash Pay Index) which returned 0.7% for the period. The Bloomberg Long Gov/Credit Index benefitted from relatively longer duration and falling rates in August, leading to a return of 0.9%, outperforming all other sectors. In addition, government securities (Bloomberg U.S. Government Index) were up 0.8%. Inflation data released in August was strong and TIPS performed well (+0.7%)

Total Fund

The market value of the Total Fund was \$42.38 billion at the end of August, an increase of \$346 million from the prior month. The Fund returned 1.46% during the month, besting the 1.21% return of its benchmark. Domestic Equity (+3.32%) underperformed its benchmark (+3.51%). International Equity (-1.91%) outperformed its benchmark by 18 basis points. The Fixed Income composite returned 0.51% trailing its benchmark return of 0.64%. Real Estate gained 2.13% in August, outperforming its benchmark by 153 basis points. Over the last three months, Alternatives (+3.86%) outperformed the benchmark return of 2.18%. For the trailing year, the fund is 192 basis points ahead of its benchmark, returning 10.74%.

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 August month end, Domestic Equity was 8.1% 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 returned 3.32% during August, trailing the Russell 3000 Index by 19 basis points. For the month, small caps outperformed large caps.

Large Cap: IMRF's Large Cap managers added 3.23% in August, falling behind the 3.45% return of the Russell 1000 Index. In aggregate, growth managers returned 5.33%, while the Russell 1000 Growth Index returned 5.47%. Value managers added 1.59% collectively, outperforming the 1.48% return of the Russell 1000 Value Index.

Small Cap: The Small Cap composite (+4.08%) lagged the Russell 2000 Index by 23 basis points in August. The growth managers collectively returned 5.74%, relative to the 6.23% return of the Russell 2000 Growth Index. The value managers returned 2.58% during the month, leading the Russell 2000 Value Index by 20 basis points. The Micro Cap composite returned 3.50% in August.

Public Real Assets: The Public Real Assets portfolio managed by Brookfield and Cohen & Steers returned -0.46% in August, 73 basis points ahead of the custom benchmark.

International Equity

The International Equity composite returned -1.91% in August, 18 basis points ahead of its MSCI ACWI ex-U.S. benchmark (-2.09%).

International Large Cap: International Large Cap managers collectively returned -1.72% in August, leading the MSCI ACWI ex-U.S. Index by 37 basis points. International Large Cap Growth managers (-0.93%) outperformed the MSCI ACWI ex-U.S. Growth Index by 18 basis points. International Large Cap Value managers returned -2.76% for the month, 30 basis points ahead of the MSCI ACWI ex-U.S. Value Index.

International Small Cap and Emerging Markets: The International Small Cap managers returned -1.56% in August, 59 basis points behind the MSCI ACWI Small Cap ex-U.S. Index return of -0.97%. The Emerging Markets portfolio, managed by Genesis, returned -3.84% during the month, trailing the MSCI Emerging Markets Index by 117 basis points.

Fixed Income

The Fixed Income composite returned 0.51% in August relative to the 0.64% return of the Bloomberg Aggregate Index.

Active Core: In aggregate, the Domestic Active Core managers returned 0.85% in August, 21 basis points ahead of the Bloomberg Aggregate Index.

Core Plus: Domestic Fixed Core Plus managers ended the month up 0.35%, underperforming the Bloomberg Aggregate Index by 29 basis points.

Bank Loans: The Bank Loans portfolio, managed by Barings, returned 0.46% for the month, outperforming the custom benchmark by one basis point.

Emerging Markets: The Emerging Markets Debt component, managed by Standish, returned -4.46% in August, 71 basis points behind the custom benchmark.

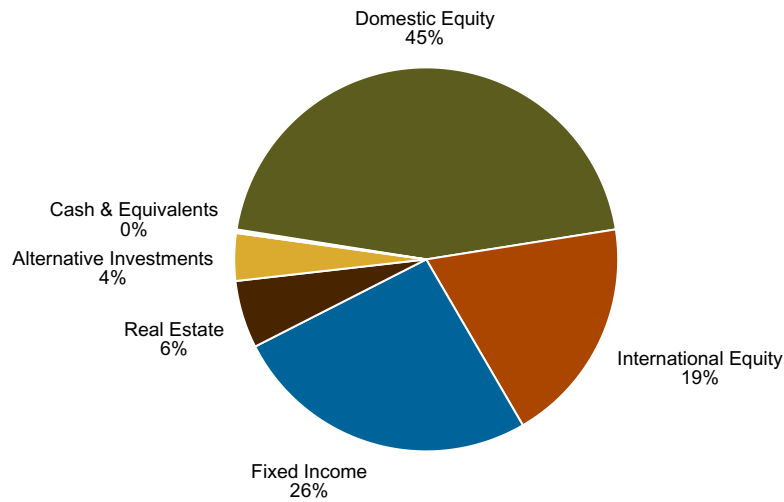
Opportunistic: The Opportunistic Fixed Income allocation, managed by Crescent, returned 0.52% in August, trailing the custom benchmark by four basis points.

High Yield: The High Yield portfolio, managed by Mackay Shields, returned 0.87%, leading the ML High Yield Cash Pay Index return of 0.72%.

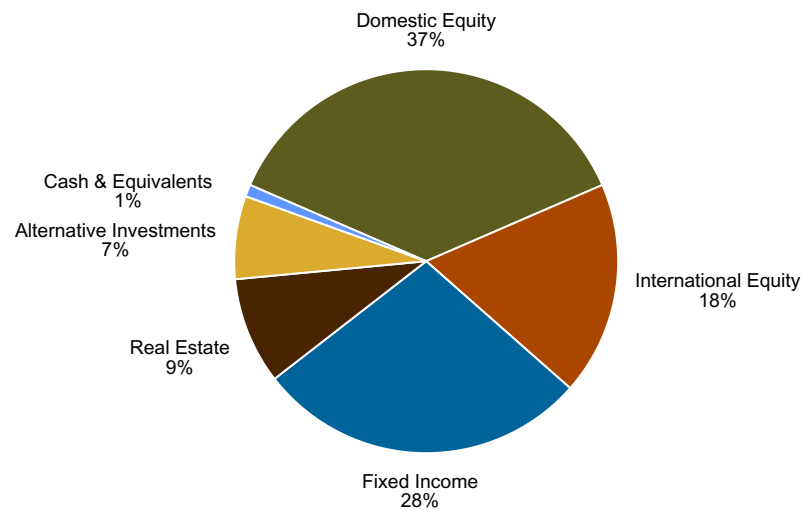
Actual vs Target Asset Allocation

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

Actual Asset Allocation



Target Asset Allocation



Asset Class	\$Millions Actual	Percent Actual	Percent Target	Percent Difference	\$Millions Difference
Domestic Equity	19,100	45.1%	37.0%	8.1%	3,418
International Equity	8,103	19.1%	18.0%	1.1%	474
Fixed Income	10,956	25.9%	28.0%	(2.1%)	(911)
Real Estate	2,415	5.7%	9.0%	(3.3%)	(1,400)
Alternative Investments	1,681	4.0%	7.0%	(3.0%)	(1,286)
Cash & Equivalents	129	0.3%	1.0%	(0.7%)	(295)
Total	42,384	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 August 31, 2018, with the distribution as of July 31, 2018.

Asset Distribution Across Investment Managers

	August 31, 2018		July 31, 2018	
	Market Value	Percent	Market Value	Percent
Domestic Equity*	\$19,099,693,965	45.06%	\$18,590,064,975	44.22%
Large Cap Growth				
NTGI S&P 500 Growth Idx	2,256,474,100	5.32%	2,151,855,873	5.12%
Sands	2,296,052,560	5.42%	2,170,094,117	5.16%
Large Cap Value				
Dodge & Cox	1,383,208,418	3.26%	1,361,740,282	3.24%
BMO	1,415,913,806	3.34%	1,485,048,592	3.53%
LSV	1,592,419,818	3.76%	1,578,136,818	3.75%
NTGI S&P 500 Value Idx	1,721,072,997	4.06%	1,697,533,216	4.04%
Large Cap Core				
NTGI MarketCap Index	3,942,561,155	9.30%	3,810,205,533	9.06%
Small Cap Growth				
Frontier	584,988,418	1.38%	535,148,333	1.27%
FIAM	1,171,627,966	2.76%	1,126,146,412	2.68%
Small Cap Value				
Channing	250,700,122	0.59%	246,744,893	0.59%
Dimensional Small Cap Value	652,164,722	1.54%	635,571,526	1.51%
Inv. Counselors of Maryland	739,570,389	1.74%	717,964,051	1.71%
Micro Cap				
Ativo	143,270,154	0.34%	138,739,823	0.33%
Dimensional Micro Cap	483,863,348	1.14%	467,183,819	1.11%
Public Real Assets				
Brookfield	151,378,339	0.36%	151,865,753	0.36%
Cohen & Steers	314,427,654	0.74%	316,085,935	0.75%
International Equity	\$8,102,728,135	19.12%	\$8,259,554,774	19.65%
International Large Cap Growth				
EARNEST Partners	648,421,525	1.53%	660,739,742	1.57%
William Blair	763,219,613	1.80%	764,216,988	1.82%
International Large Cap Value				
Brandes	618,774,973	1.46%	639,529,164	1.52%
Lombardia	1	0.00%	1	0.00%
Mondrian	522,406,426	1.23%	534,278,558	1.27%
Lazard	111,903,526	0.26%	114,077,526	0.27%
International Large Cap Core				
Arrowstreet	690,452,035	1.63%	697,636,109	1.66%
Brown	359,776,589	0.85%	357,272,817	0.85%
GlobeFlex	618,309,084	1.46%	633,615,407	1.51%
NTGI MSCI EAFE Index	2,227,259,099	5.25%	2,276,602,066	5.42%
Progress Intl Equity	312,901,376	0.74%	315,311,607	0.75%
International Small Cap				
Franklin Templeton	196,342,643	0.46%	199,319,773	0.47%
William Blair	288,583,598	0.68%	292,823,355	0.70%
Emerging Markets				
Genesis	744,377,647	1.76%	774,131,663	1.84%

* 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 August 31, 2018, with the distribution as of July 31, 2018.

Asset Distribution Across Investment Managers

	August 31, 2018		July 31, 2018	
	Market Value	Percent	Market Value	Percent
Total Fixed Income	\$10,956,499,376	25.85%	\$10,901,433,630	25.93%
Domestic Fixed Core				
Brandes Core	343,956,288	0.81%	341,264,015	0.81%
EARNEST Partners	749,154,093	1.77%	739,472,778	1.76%
Piedmont Investment	744,326,462	1.76%	740,167,632	1.76%
Garcia Hamilton	730,512,439	1.72%	725,293,619	1.73%
Domestic Fixed Passive Core				
NTGI Blmbg Agg. Index	1,647,157,650	3.89%	1,636,384,427	3.89%
BlackRock US Debt	1,578,357,844	3.72%	1,568,169,296	3.73%
Domestic Fixed Core Plus				
LM Capital	848,097,019	2.00%	845,430,319	2.01%
Progress Fixed Income	887,371,343	2.09%	881,432,630	2.10%
Taplin, Canida, & Habacht	876,506,281	2.07%	871,896,263	2.07%
Western	1,020,868,627	2.41%	1,021,044,359	2.43%
Bank Loans				
Barings Global Loan Fund	584,006,672	1.38%	581,734,046	1.38%
Emerging Markets Debt				
Standish	191,185,970	0.45%	200,118,669	0.48%
Opportunistic Fixed Income				
Crescent	114,294,832	0.27%	113,765,620	0.27%
High Yield				
Mackay Shields	640,373,111	1.51%	634,868,828	1.51%
FIAM High Yield	330,746	0.00%	391,129	0.00%

* 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 August 31, 2018, with the distribution as of July 31, 2018.

Asset Distribution Across Investment Managers

	August 31, 2018		July 31, 2018	
	Market Value	Percent	Market Value	Percent
Real Estate	\$2,414,975,557	5.70%	\$2,357,580,270	5.61%
Real Estate Core				
TA Buckhead Ind. Prop.	439,413,806	1.04%	408,333,110	0.97%
Barings Core Property Fund	93,703,294	0.22%	93,703,294	0.22%
Barings European Core Property	30,406,943	0.07%	30,578,122	0.07%
Blackstone Property Partners Europe	121,039,408	0.29%	119,176,442	0.28%
INVESCO Core RE	202,245,837	0.48%	202,245,837	0.48%
INVESCO Euro real estate	57,307,971	0.14%	58,096,237	0.14%
AEW Core Property Trust	232,221,836	0.55%	234,559,321	0.56%
CBRE US Core Property Trust	182,068,390	0.43%	182,068,390	0.43%
Real Estate Non-Core				
Artemis MWBE Spruce	146,246,894	0.35%	121,629,395	0.29%
Franklin Templeton EMREFF	24,836,998	0.06%	25,349,671	0.06%
Security Capital	53,897,320	0.13%	51,085,228	0.12%
Dune II	27,668,644	0.07%	27,770,551	0.07%
Non-Core Real Estate Funds*	708,971,688	1.67%	707,815,373	1.68%
Non-Core Intl Real Estate Funds**	91,478,842	0.22%	91,251,255	0.22%
Rockwood Fund VIII	305,208	0.00%	594,321	0.00%
Almanac ARS V	3,055,098	0.01%	3,018,258	0.01%
TA Fund IX	107,380	0.00%	305,466	0.00%
Alternative Investments	\$1,681,076,417	3.97%	\$1,658,442,155	3.95%
Absolute Return				
Aurora	936,446	0.00%	941,479	0.00%
Private Equity				
Abbott	324,880,440	0.77%	325,264,759	0.77%
Muller & Monroe ILPEFF	1	0.00%	1	0.00%
Muller & Monroe MPEFF	6,242,083	0.01%	6,242,083	0.01%
Pantheon	242,368,620	0.57%	222,764,082	0.53%
Private Equity Fund - Domestic	721,192,800	1.70%	722,363,944	1.72%
Private Equity Fund - International	87,795,922	0.21%	84,591,073	0.20%
Agriculture				
Premiere Partners IV	189,001,502	0.45%	189,208,998	0.45%
Timberland				
Forest Investment Assoc.	74,887,229	0.18%	75,059,049	0.18%
Unlisted Infrastructure				
Unlisted Infrastructure Funds	33,771,374	0.08%	32,006,686	0.08%
Cash & Equivalents	\$129,171,920	0.30%	\$271,039,480	0.64%
Total Fund	\$42,384,145,369	100.0%	\$42,038,115,284	100.0%

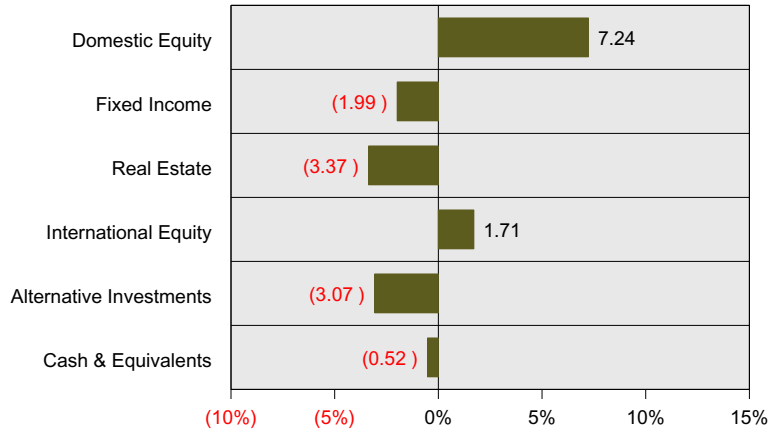
* Non-Core Real Estate Funds funded since September 2011.

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

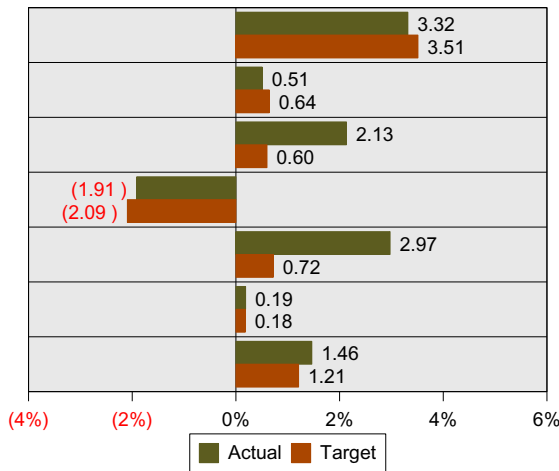
Monthly Total Fund Relative Attribution - August 31, 2018

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.

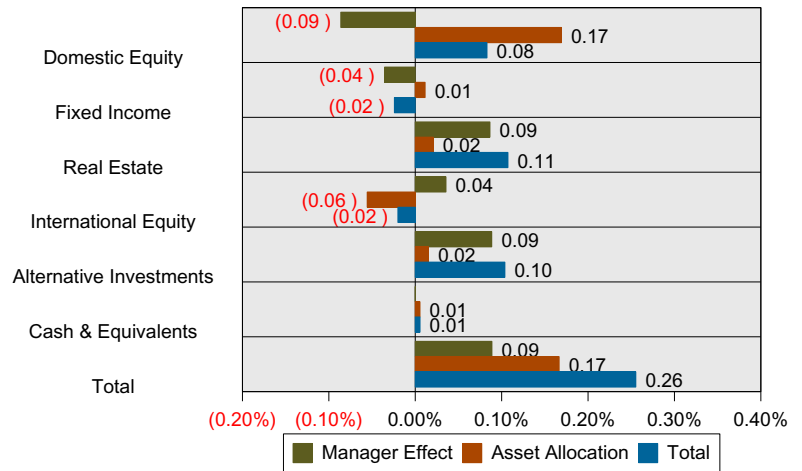
Asset Class Under or Overweighting



Actual vs Target Returns



Relative Attribution by Asset Class



Relative Attribution Effects for Month ended August 31, 2018

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	44%	37%	3.32%	3.51%	(0.09)%	0.17%	0.08%
Fixed Income	26%	28%	0.51%	0.64%	(0.04)%	0.01%	(0.02)%
Real Estate	6%	9%	2.13%	0.60%	0.09%	0.02%	0.11%
International Equity	20%	18%	(1.91)%	(2.09)%	0.04%	(0.06)%	(0.02)%
Alternative Investments	4%	7%	2.97%	0.72%	0.09%	0.02%	0.10%
Cash & Equivalents	0%	1%	0.19%	0.18%	0.00%	0.01%	0.01%
Total			1.46%	1.21%	+ 0.09%	+ 0.17%	0.26%

* 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.

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 August 31, 2018

	Last Month	Last 3 Months	Year to Date	Last 12 Months
Domestic Equity	3.32%	6.78%	11.45%	21.42%
Blended Benchmark**	3.51%	7.65%	10.39%	20.25%
Domestic Equity - Net	3.28%	6.73%	11.29%	21.17%
International Equity	(1.91%)	(1.86%)	(2.43%)	4.24%
MSCI ACWI x US (Net)	(2.09%)	(1.64%)	(3.53%)	3.18%
International Equity - Net	(1.95%)	(1.95%)	(2.66%)	3.90%
Fixed Income	0.51%	0.59%	(0.62%)	(0.25%)
Blmbg Aggregate Index	0.64%	0.54%	(0.96%)	(1.05%)
Fixed Income - Net	0.49%	0.56%	(0.70%)	(0.37%)
Real Estate	2.13%	2.91%	5.72%	9.33%
Blended Benchmark***	0.60%	1.81%	5.06%	7.59%
Real Estate - Net	2.13%	2.91%	5.72%	9.33%
Alternative Investments	2.97%	3.86%	9.11%	14.29%
Alternatives Custom Benchmark****	0.72%	2.18%	5.91%	9.00%
Alternative Investments - Net	2.95%	3.84%	9.01%	14.15%
Private Equity	3.53%	4.76%	11.67%	18.72%
Alternatives Custom Benchmark****	0.72%	2.18%	5.91%	9.00%
Agriculture	(0.11%)	(1.00%)	(3.05%)	(6.94%)
Blended Benchmark***	0.60%	1.81%	5.06%	7.59%
Timberland	(0.23%)	(0.87%)	(1.78%)	2.05%
Blended Benchmark***	0.60%	1.81%	5.06%	7.59%
Unlisted Infrastructure	5.51%	6.95%	-	-
Alternatives Custom Benchmark****	0.72%	2.18%	5.91%	9.00%
Total Fund	1.46%	3.06%	4.88%	10.74%
Total Fund - Net	1.43%	3.01%	4.74%	10.52%
Total Fund Benchmark	1.21%	2.98%	3.77%	8.82%

* 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%. Prior to 2003, it was based on an annual return of 15.0%.

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 August 31, 2018

	Last 36 Months	Last 60 Months	Last 120 Months	Since Inception
Domestic Equity	15.36%	13.87%	11.01%	11.85% ^(1/82)
Blended Benchmark**	15.86%	14.23%	10.95%	11.61% ^(1/82)
Domestic Equity - Net	15.10%	13.61%	10.75%	9.06% ^(1/05)
International Equity	8.89%	6.89%	4.75%	7.92% ^(9/86)
MSCI ACWI x US (Net)	8.08%	5.43%	3.44%	-
International Equity - Net	8.52%	6.54%	4.42%	5.82% ^(1/05)
Fixed Income	2.85%	3.35%	5.02%	8.23% ^(1/82)
Blmbg Aggregate Index	1.76%	2.49%	3.70%	7.68% ^(1/82)
Fixed Income - Net	2.70%	3.20%	4.87%	4.58% ^(1/05)
Real Estate - Net	9.64%	10.75%	5.52%	7.36% ^(1/05)
Blended Benchmark***	7.99%	9.81%	7.01%	7.69% ^(1/05)
Alternative Investments	9.53%	10.10%	6.77%	10.78% ^(2/86)
Alternatives Custom Benchmark****	9.00%	9.00%	9.54%	12.81% ^(2/86)
Alternative Investments - Net	9.30%	9.77%	6.48%	8.36% ^(1/05)
Private Equity	11.95%	12.67%	8.40%	12.97% ^(2/86)
Alternatives Custom Benchmark****	9.00%	9.00%	9.54%	12.81% ^(2/86)
Agriculture	3.66%	8.14%	8.94%	7.56% ^(10/97)
Blended Benchmark***	7.99%	9.81%	7.01%	7.54% ^(10/97)
Timberland	(0.40%)	3.95%	3.55%	7.77% ^(10/92)
Blended Benchmark***	7.99%	9.81%	7.01%	7.55% ^(10/92)
Unlisted Infrastructure	-	-	-	6.96% ^(4/18)
Alternatives Custom Benchmark****	9.00%	9.00%	9.54%	3.66% ^(4/18)
Total Fund	9.90%	9.13%	8.17%	10.01% ^(1/82)
Total Fund - Net	9.66%	8.89%	7.93%	7.40% ^(1/05)
Total Fund Benchmark	9.18%	8.60%	7.54%	7.10% ^(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%. Prior to 2003, it was based on an annual return of 15.0%.

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 August 31, 2018

	Last Month	Last 3 Months	Year to Date	Last 12 Months
Large Cap Equity	3.23%	7.20%	10.97%	21.04%
Russell 1000 Index	3.45%	7.71%	10.07%	19.82%
Large Cap Growth	5.33%	8.60%	22.65%	29.60%
NTGI S&P 500 Growth Idx	4.86%	9.13%	16.28%	25.60%
S&P/Citi 500 Growth Index	4.89%	9.15%	16.39%	25.69%
NTGI S&P 500 Growth Idx - Net	4.86%	9.13%	16.28%	25.59%
Sands	5.80%	8.10%	29.63%	33.80%
LCG Blended Benchmark*	5.47%	9.61%	16.44%	27.23%
Russell 1000 Growth Index	5.47%	9.61%	16.44%	27.23%
Sands - Net	5.75%	8.04%	29.43%	33.52%
Large Cap Value	1.59%	5.91%	4.27%	15.95%
Dodge & Cox	1.69%	7.81%	7.33%	18.13%
LCV Blended Benchmark**	1.48%	5.76%	3.71%	12.47%
Russell 1000 Value Index	1.48%	5.76%	3.71%	12.47%
Dodge & Cox - Net	1.64%	7.76%	7.15%	17.88%
BMO	2.25%	6.15%	3.79%	16.72%
LCV Blended Benchmark**	1.48%	5.76%	3.71%	12.47%
Russell 1000 Value Index	1.48%	5.76%	3.71%	12.47%
BMO - Net	2.19%	6.09%	3.62%	16.40%
LSV	1.14%	3.88%	3.39%	16.52%
LCV Blended Benchmark**	1.48%	5.76%	3.71%	12.47%
Russell 1000 Value Index	1.48%	5.76%	3.71%	12.47%
LSV - Net	1.14%	3.82%	3.21%	16.26%
NTGI S&P 500 Value Idx	1.39%	6.16%	3.21%	13.33%
S&P/Citi 500 Value Index	1.36%	6.13%	3.12%	13.24%
NTGI S&P 500 Value Idx - Net	1.39%	6.15%	3.21%	13.32%
Large Cap Passive Core	3.47%	7.65%	10.43%	20.31%
NTGI MarketCap Idx	3.47%	7.65%	10.43%	20.31%
DJ U.S. Total Stock Market Index	3.48%	7.65%	10.41%	20.27%
NTGI MarketCap Idx - Net	3.47%	7.65%	10.42%	20.30%

* 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 for Periods Ended August 31, 2018

	Last 36 Months	Last 60 Months	Last 120 Months	Since Inception
Large Cap Equity	15.92%	14.52%	11.12%	11.47% ^(1/82)
Russell 1000 Index	15.84%	14.36%	10.93%	11.79% ^(1/82)
Large Cap Growth	19.22%	16.86%	12.90%	12.16% ^(1/82)
NTGI S&P 500 Growth Idx	18.66%	17.24%	12.76%	8.17% ^(8/01)
S&P/Citi 500 Growth Index	18.70%	17.26%	12.75%	8.14% ^(8/01)
NTGI S&P 500 Growth Idx - Net	18.66%	17.23%	12.75%	10.26% ^(1/05)
Sands	20.84%	17.62%	16.07%	12.90% ^(11/03)
LCG Blended Benchmark*	19.33%	17.47%	12.84%	10.29% ^(11/03)
Russell 1000 Growth Index	19.33%	17.47%	12.84%	10.35% ^(11/03)
Sands - Net	20.57%	17.36%	15.80%	11.86% ^(1/05)
Large Cap Value	13.69%	12.91%	9.89%	10.56% ^(10/82)
Dodge & Cox	15.78%	13.87%	10.58%	10.14% ^(9/03)
LCV Blended Benchmark**	12.32%	11.22%	8.93%	8.63% ^(9/03)
Russell 1000 Value Index	12.32%	11.22%	8.93%	8.80% ^(9/03)
Dodge & Cox - Net	15.54%	13.63%	10.35%	8.46% ^(1/05)
BMO	12.91%	13.19%	9.73%	8.57% ^(2/01)
LCV Blended Benchmark**	12.32%	11.22%	8.93%	5.86% ^(2/01)
Russell 1000 Value Index	12.32%	11.22%	8.93%	6.91% ^(2/01)
BMO - Net	12.67%	12.94%	9.48%	8.80% ^(1/05)
LSV	13.82%	13.25%	10.77%	11.60% ^(2/03)
LCV Blended Benchmark**	12.32%	11.22%	8.93%	9.60% ^(2/03)
Russell 1000 Value Index	12.32%	11.22%	8.93%	9.61% ^(2/03)
LSV - Net	13.55%	12.98%	10.48%	8.89% ^(1/05)
NTGI S&P 500 Value Idx	13.04%	11.43%	8.80%	5.95% ^(8/99)
S&P/Citi 500 Value Index	12.92%	11.33%	8.73%	5.92% ^(8/99)
NTGI S&P 500 Value Idx - Net	13.03%	11.42%	8.79%	7.29% ^(1/05)
Large Cap Passive Core	15.93%	14.30%	10.92%	11.38% ^(1/85)
NTGI MarketCap Idx	15.93%	14.30%	10.93%	11.14% ^(2/85)
DJ U.S. Total Stock Market Index	15.83%	14.21%	10.94%	11.09% ^(2/85)
NTGI MarketCap Idx - Net	15.92%	14.30%	10.93%	9.07% ^(1/05)

* 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 for Periods Ended August 31, 2018

	Last Month	Last 3 Months	Year to Date	Last 12 Months
Small Cap Equity	4.08%	5.69%	14.44%	25.51%
Russell 2000 Index	4.31%	6.89%	14.26%	25.45%
Small Cap Growth	5.74%	6.05%	18.40%	27.69%
Frontier	9.31%	9.00%	30.31%	41.34%
Russell 2000 Growth Index	6.23%	8.90%	18.53%	30.72%
Frontier - Net	9.31%	8.87%	29.85%	40.67%
FIAM	4.04%	4.64%	13.50%	22.13%
Russell 2000 Growth Index	6.23%	8.90%	18.53%	30.72%
FIAM - Net	3.92%	4.52%	13.13%	21.59%
Small Cap Value	2.58%	4.78%	10.84%	23.52%
Channing	1.60%	5.37%	8.76%	18.08%
Russell 2000 Value Index	2.38%	4.82%	9.86%	20.05%
Channing - Net	1.60%	5.25%	8.36%	17.51%
DFA Small Cap Value	2.61%	4.19%	9.84%	22.08%
Russell 2000 Value Index	2.38%	4.82%	9.86%	20.05%
DFA Small Cap Value - Net	2.48%	4.06%	9.43%	21.47%
Inv. Counselors of Maryland	2.89%	5.11%	12.48%	26.83%
Russell 2000 Value Index	2.38%	4.82%	9.86%	20.05%
Inv. Couns. of Maryland - Net	2.80%	5.01%	12.15%	26.35%
Micro Cap	3.50%	7.08%	12.88%	24.55%
Ativo	3.26%	6.76%	7.89%	15.35%
Russell Microcap Index	4.30%	5.58%	15.40%	27.05%
Russell 2000 Growth Index	6.23%	8.90%	18.53%	30.72%
Russell 2000 Index	4.31%	6.89%	14.26%	25.45%
Ativo - Net	3.26%	6.60%	7.39%	14.64%
DFA Micro Cap	3.57%	7.18%	14.45%	27.56%
Russell 2000 Value Index	2.38%	4.82%	9.86%	20.05%
Russell 2000 Index	4.31%	6.89%	14.26%	25.45%
DFA Micro Cap - Net	3.44%	7.05%	14.03%	26.93%
Public Real Assets	(0.46%)	3.12%	1.43%	2.01%
Public Real Assets Benchmark (1)	(1.19%)	2.76%	(0.69%)	(0.92%)
Brookfield Public Global Inf	(0.32%)	3.63%	1.65%	0.85%
Dow Jones Global Infra Comp Idx	(1.07%)	3.34%	0.11%	(0.66%)
Brookfield Public Global Inf - Net	(0.45%)	3.50%	1.25%	0.34%
Cohen & Steers Public Global Inf	(0.52%)	2.88%	1.32%	2.57%
FTSE GI Core Infr 50/50 N	(1.24%)	2.57%	(0.97%)	(1.02%)
Cohen & St Public Global Inf - Net	(0.63%)	2.77%	0.98%	2.16%

(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 for Periods Ended August 31, 2018

	Last 36 Months	Last 60 Months	Last 120 Months	Since Inception
Small Cap Equity	14.36%	12.51%	11.38%	12.72% (7/88)
Russell 2000 Index	16.11%	13.00%	10.46%	10.01% (7/88)
Small Cap Growth	13.48%	13.47%	11.73%	13.43% (7/88)
Frontier	18.12%	14.75%	12.61%	13.78% (8/88)
Russell 2000 Growth Index	16.36%	14.20%	11.57%	8.79% (8/88)
Frontier - Net	17.48%	14.13%	11.92%	10.93% (1/05)
FIAM	11.67%	13.87%	12.20%	13.94% (8/88)
Russell 2000 Growth Index	16.36%	14.20%	11.57%	8.79% (8/88)
FIAM - Net	11.07%	13.29%	11.61%	11.57% (1/05)
Small Cap Value	16.16%	12.79%	11.01%	12.47% (9/89)
Channing	14.33%	12.19%	-	12.92% (7/11)
Russell 2000 Value Index	15.73%	11.72%	9.27%	11.46% (7/11)
Channing - Net	13.77%	11.67%	-	12.30% (7/11)
DFA Small Cap Value	14.55%	12.09%	11.71%	12.94% (2/96)
Russell 2000 Value Index	15.73%	11.72%	9.27%	10.28% (2/96)
DFA Small Cap Value - Net	13.95%	11.54%	11.16%	9.00% (1/05)
Inv. Counselors of Maryland	19.36%	14.60%	11.28%	12.49% (5/99)
Russell 2000 Value Index	15.73%	11.72%	9.27%	9.92% (5/99)
Inv. Couns. of Maryland - Net	18.75%	14.06%	10.77%	9.87% (1/05)
Micro Cap	12.04%	9.87%	10.37%	12.12% (7/84)
Ativo	12.56%	12.74%	-	14.24% (10/10)
Russell Microcap Index	15.37%	12.70%	10.29%	14.49% (10/10)
Russell 2000 Growth Index	16.36%	14.20%	11.57%	15.52% (10/10)
Russell 2000 Index	16.11%	13.00%	10.46%	14.23% (10/10)
Ativo - Net	11.84%	11.97%	-	13.43% (10/10)
DFA Micro Cap	17.91%	14.34%	12.30%	11.82% (8/87)
Russell 2000 Value Index	15.73%	11.72%	9.27%	10.39% (8/87)
Russell 2000 Index	16.11%	13.00%	10.46%	9.37% (8/87)
DFA Micro Cap - Net	17.33%	13.77%	11.75%	9.28% (1/05)
Public Real Assets	-	-	-	3.44% (8/17)
Public Real Assets Benchmark (1)	-	-	-	0.58% (8/17)
Brookfield Public Global Inf	-	-	-	1.13% (8/17)
Dow Jones Global Infra Comp Idx	5.73%	6.47%	8.40%	(0.22%) (8/17)
Brookfield Public Global Inf - Net	-	-	-	0.65% (8/17)
Cohen & Steers Public Global Inf	-	-	-	4.59% (8/17)
FTSE GI Core Infr 50/50 N	8.57%	8.13%	-	0.83% (8/17)
Cohen & St Public Global Inf - Net	-	-	-	4.20% (8/17)

(1) 1/3 Dow Jones Brookfield 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 for Periods Ended August 31, 2018

	Last Month	Last 3 Months	Year to Date	Last 12 Months
Intl Large Cap Equity	(1.72%)	(1.13%)	(1.61%)	4.82%
MSCI ACWI ex-US Index	(2.09%)	(1.64%)	(3.53%)	3.18%
Intl Large Cap Growth	(0.93%)	(1.33%)	(1.54%)	5.09%
EARNEST Partners	(1.86%)	(1.34%)	(3.28%)	2.67%
MSCI ACWI ex-US Index	(2.09%)	(1.64%)	(3.53%)	3.18%
MSCI ACWI ex-US Growth	(1.11%)	(0.97%)	(1.43%)	6.15%
EARNEST Partners - Net	(1.86%)	(1.34%)	(3.28%)	2.67%
William Blair	(0.13%)	(1.40%)	(0.09%)	7.15%
MSCI ACWI ex-US Index	(2.09%)	(1.64%)	(3.53%)	3.18%
MSCI ACWI ex-US Growth	(1.11%)	(0.97%)	(1.43%)	6.15%
William Blair - Net	(0.22%)	(1.48%)	(0.35%)	6.78%
Intl Large Cap Value	(2.76%)	(1.17%)	(2.32%)	3.87%
Brandes	(3.25%)	(0.50%)	0.80%	6.03%
MSCI ACWI ex-US Index	(2.09%)	(1.64%)	(3.53%)	3.18%
MSCI ACWI ex-US Value	(3.06%)	(2.14%)	(4.92%)	1.17%
Brandes - Net	(3.25%)	(0.55%)	0.64%	5.80%
Mondrian	(2.35%)	(1.71%)	(5.07%)	1.76%
MSCI ACWI ex-US Index	(2.09%)	(1.64%)	(3.53%)	3.18%
MSCI ACWI ex-US Value	(3.06%)	(2.14%)	(4.92%)	1.17%
Mondrian - Net	(2.35%)	(1.71%)	(5.30%)	1.39%
Lazard	(1.91%)	(2.18%)	(4.70%)	3.02%
MSCI ACWI ex-US Index	(2.09%)	(1.64%)	(3.53%)	3.18%
MSCI ACWI ex-US Value	(3.06%)	(2.14%)	(4.92%)	1.17%
Lazard - Net	(1.97%)	(2.25%)	(4.88%)	2.77%

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 for Periods Ended August 31, 2018

	Last 36 Months	Last 60 Months	Last 120 Months	Since Inception
Intl Large Cap Equity	8.63%	7.01%	4.68%	7.94% ^(9/86)
MSCI ACWI ex-US Index	8.08%	5.43%	3.44%	-
Intl Large Cap Growth	9.80%	7.05%	4.80%	8.83% ^(9/02)
EARNEST Partners	10.26%	5.92%	5.70%	9.61% ^(10/04)
MSCI ACWI ex-US Index	8.08%	5.43%	3.44%	6.17% ^(10/04)
MSCI ACWI ex-US Growth	9.88%	7.23%	4.44%	7.17% ^(10/04)
EARNEST Partners - Net	10.15%	5.77%	5.37%	8.28% ^(1/05)
William Blair	9.40%	8.05%	6.06%	10.15% ^(10/02)
MSCI ACWI ex-US Index	8.08%	5.43%	3.44%	8.43% ^(10/02)
MSCI ACWI ex-US Growth	9.88%	7.23%	4.44%	8.83% ^(10/02)
William Blair - Net	9.01%	7.66%	5.66%	6.74% ^(1/05)
Intl Large Cap Value	6.91%	6.11%	3.44%	8.94% ^(10/95)
Brandes	7.36%	6.51%	3.94%	9.24% ^(1/96)
MSCI ACWI ex-US Index	8.08%	5.43%	3.44%	5.28% ^(1/96)
MSCI ACWI ex-US Value	7.24%	4.54%	3.33%	-
Brandes - Net	7.11%	6.26%	3.68%	4.65% ^(1/05)
Mondrian	6.47%	5.81%	-	5.63% ^(4/12)
MSCI ACWI ex-US Index	8.08%	5.43%	3.44%	5.48% ^(4/12)
MSCI ACWI ex-US Value	7.24%	4.54%	3.33%	4.92% ^(4/12)
Mondrian - Net	5.99%	5.31%	-	5.13% ^(4/12)
Lazard	6.63%	5.85%	-	6.68% ^(4/12)
MSCI ACWI ex-US Index	8.08%	5.43%	3.44%	5.48% ^(4/12)
MSCI ACWI ex-US Value	7.24%	4.54%	3.33%	4.92% ^(4/12)
Lazard - Net	6.21%	5.36%	-	6.10% ^(4/12)

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 for Periods Ended August 31, 2018

	Last Month	Last 3 Months	Year to Date	Last 12 Months
Intl Large Cap Active Core	(1.12%)	(1.35%)	(0.89%)	5.52%
Arrowstreet	(1.03%)	(2.13%)	(1.16%)	5.14%
MSCI ACWI ex-US Index	(2.09%)	(1.64%)	(3.53%)	3.18%
Arrowstreet - Net	(1.15%)	(2.24%)	(1.50%)	4.66%
Brown	0.70%	3.18%	4.09%	11.06%
MSCI ACWI ex-US Index	(2.09%)	(1.64%)	(3.53%)	3.18%
Brown - Net	0.64%	3.11%	3.90%	10.17%
GlobeFlex	(2.42%)	(3.30%)	(4.18%)	1.55%
MSCI ACWI ex-US Index	(2.09%)	(1.64%)	(3.53%)	3.18%
GlobeFlex - Net	(2.51%)	(3.40%)	(4.44%)	1.19%
Progress Intl Equity	(0.76%)	(0.68%)	1.19%	8.82%
Custom Benchmark	(2.09%)	(1.64%)	(3.53%)	3.72%
MSCI ACWI ex-US Index	(2.09%)	(1.64%)	(3.53%)	3.18%
Progress Intl Equity - Net	(0.89%)	(0.81%)	0.82%	8.29%
Intl Large Cap Pass. Core	(2.17%)	(0.87%)	(1.95%)	4.49%
NTGI MSCI EAFE Idx	(2.17%)	(0.87%)	(1.95%)	4.49%
MSCI EAFE Index	(1.93%)	(0.74%)	(2.28%)	4.39%
NTGI EAFE Idx - Net	(2.17%)	(0.87%)	(1.95%)	4.48%
International Small Cap	(1.56%)	(3.94%)	(3.94%)	4.06%
Franklin Templeton	(1.71%)	(4.45%)	(3.21%)	5.06%
ACWI Small Cap ex US	(0.97%)	(3.00%)	(3.22%)	5.35%
Franklin Templeton - Net	(1.71%)	(4.45%)	(3.56%)	4.50%
William Blair	(1.45%)	(3.40%)	(4.45%)	3.35%
ACWI Small Cap ex US	(0.97%)	(3.00%)	(3.22%)	5.35%
Intl SC Blended Benchmark	(0.97%)	(3.00%)	(3.22%)	5.35%
William Blair - Net	(1.64%)	(3.59%)	(4.99%)	2.57%
Emerging Markets	(3.84%)	(6.84%)	(8.62%)	(0.88%)
Genesis	(3.84%)	(6.84%)	(8.62%)	(0.88%)
MSCI Emerging Markets Index	(2.67%)	(4.52%)	(6.93%)	(0.32%)
Genesis - Net	(3.84%)	(6.94%)	(8.95%)	(1.43%)

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.

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 for Periods Ended August 31, 2018

	Last 36 Months	Last 60 Months	Last 120 Months	Since Inception
Intl Large Cap Active Core	10.58%	8.89%	7.09%	5.27% ^(2/08)
Arrowstreet	10.60%	9.17%	7.09%	5.31% ^(3/08)
MSCI ACWI ex-US Index	8.08%	5.43%	3.44%	2.12% ^(3/08)
Arrowstreet - Net	10.09%	8.67%	6.59%	4.82% ^(3/08)
Brown	9.16%	9.20%	7.41%	8.53% ^(10/04)
MSCI ACWI ex-US Index	8.08%	5.43%	3.44%	6.17% ^(10/04)
Brown - Net	8.00%	8.06%	6.65%	6.94% ^(1/05)
GlobeFlex	10.89%	8.54%	5.24%	5.41% ^(3/06)
MSCI ACWI ex-US Index	8.08%	5.43%	3.44%	3.85% ^(3/06)
GlobeFlex - Net	10.47%	8.11%	4.81%	4.96% ^(3/06)
Progress Intl Equity	11.42%	-	-	5.40% ^(7/14)
Custom Benchmark	9.68%	-	-	3.65% ^(7/14)
MSCI ACWI ex-US Index	8.08%	5.43%	3.44%	2.35% ^(7/14)
Progress Intl Equity - Net	10.87%	-	-	4.92% ^(7/14)
Intl Large Cap Pass. Core	7.37%	6.08%	4.04%	3.53% ^(1/00)
NTGI MSCI EAFE Idx	7.37%	6.08%	4.03%	3.90% ^(2/00)
MSCI EAFE Index	7.04%	5.73%	3.66%	3.53% ^(2/00)
NTGI EAFE Idx - Net	7.37%	6.07%	4.03%	5.13% ^(1/05)
International Small Cap	9.57%	7.98%	5.10%	5.23% ^(12/05)
Franklin Templeton	9.69%	8.11%	-	7.28% ^(8/11)
ACWI Small Cap ex US	10.63%	8.05%	6.70%	5.74% ^(8/11)
Franklin Templeton - Net	8.97%	7.37%	-	6.54% ^(8/11)
William Blair	9.50%	7.90%	-	10.38% ^(9/10)
ACWI Small Cap ex US	10.63%	8.05%	6.70%	8.19% ^(9/10)
Intl SC Blended Benchmark	10.63%	8.05%	5.79%	8.61% ^(9/10)
William Blair - Net	8.67%	7.07%	-	9.54% ^(9/10)
Emerging Markets	11.04%	5.03%	5.80%	8.97% ^(2/92)
Genesis	11.04%	5.03%	5.80%	11.15% ^(5/04)
MSCI Emerging Markets Index	11.83%	5.42%	3.80%	9.23% ^(5/04)
Genesis - Net	10.38%	4.44%	5.18%	9.08% ^(1/05)

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.

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 for Periods Ended August 31, 2018

	Last Month	Last 3 Months	Year to Date	Last 12 Months
Dom. Fixed Active Core	0.85%	0.67%	(0.26%)	(0.06%)
Brandes Core*	0.79%	0.75%	(0.30%)	(0.97%)
Blmbg Aggregate Index	0.64%	0.54%	(0.96%)	(1.05%)
Brandes Core - Net	0.79%	0.75%	(0.30%)	(0.97%)
EARNEST Partners	1.31%	1.07%	(0.08%)	(0.10%)
Blmbg Aggregate Index	0.64%	0.54%	(0.96%)	(1.05%)
EARNEST Partners - Net	1.31%	1.04%	(0.19%)	(0.25%)
Piedmont	0.56%	0.35%	(0.80%)	(0.82%)
Blmbg Aggregate Index	0.64%	0.54%	(0.96%)	(1.05%)
Piedmont - Net	0.52%	0.31%	(0.92%)	(0.97%)
Garcia Hamilton	0.72%	0.56%	0.18%	0.81%
Blmbg Aggregate Index	0.64%	0.54%	(0.96%)	(1.05%)
Garcia Hamilton	0.72%	0.56%	0.13%	0.74%
Dom. Fixed Passive Core	0.65%	0.55%	(0.92%)	(1.02%)
BlackRock US Debt	0.65%	0.58%	(0.91%)	(0.97%)
Blmbg Aggregate Index	0.64%	0.54%	(0.96%)	(1.05%)
BlackRock US Debt - Net	0.65%	0.58%	(0.91%)	(0.97%)
NTGI Blmbg Agg. Index	0.66%	0.53%	(0.92%)	(1.06%)
Blmbg Aggregate Index	0.64%	0.54%	(0.96%)	(1.05%)
NTGI Blmbg Agg. Index - Net	0.66%	0.53%	(0.93%)	(1.07%)

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

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 for Periods Ended August 31, 2018

	Last 36 Months	Last 60 Months	Last 120 Months	Since Inception
Dom. Fixed Active Core	2.38%	3.08%	4.51%	4.43% ^(4/01)
Brandes Core *	-	-	-	1.15% ^(3/16)
Blmbg Aggregate Index	1.76%	2.49%	3.70%	1.23% ^(3/16)
Brandes Core - Net	-	-	-	1.15% ^(3/16)
EARNEST Partners	2.26%	3.11%	4.56%	4.39% ^(5/05)
Blmbg Aggregate Index	1.76%	2.49%	3.70%	3.89% ^(5/05)
EARNEST Partners - Net	2.08%	2.92%	4.35%	4.18% ^(5/05)
Piedmont	2.39%	2.95%	4.27%	4.14% ^(6/05)
Blmbg Aggregate Index	1.76%	2.49%	3.70%	3.83% ^(6/05)
Piedmont - Net	2.23%	2.80%	4.10%	3.95% ^(6/05)
Garcia Hamilton	2.51%	-	-	2.31% ^(6/15)
Blmbg Aggregate Index	1.76%	2.49%	3.70%	1.45% ^(6/15)
Garcia Hamilton	2.42%	-	-	2.22% ^(6/15)
Dom. Fixed Passive Core	1.81%	2.56%	3.67%	5.86% ^(1/90)
BlackRock US Debt	1.87%	2.61%	-	2.47% ^(10/13)
Blmbg Aggregate Index	1.76%	2.49%	3.70%	2.33% ^(10/13)
BlackRock US Debt - Net	1.86%	2.61%	-	2.46% ^(10/13)
NTGI Blmbg Agg. Index	1.77%	2.52%	3.66%	5.92% ^(2/90)
Blmbg Aggregate Index	1.76%	2.49%	3.70%	5.91% ^(2/90)
NTGI Blmbg Agg. Index - Net	1.76%	2.51%	3.65%	3.82% ^(1/05)

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

Fixed Income Returns

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 August 31, 2018

	Last Month	Last 3 Months	Year to Date	Last 12 Months
Domestic Fixed Core Plus	0.35%	0.45%	(1.24%)	(0.86%)
LM Capital	0.32%	0.50%	(1.44%)	(1.18%)
Blmbg Aggregate Index	0.64%	0.54%	(0.96%)	(1.05%)
LM Capital - Net	0.32%	0.46%	(1.56%)	(1.34%)
Progress Fixed Income	0.67%	0.68%	(0.53%)	(0.21%)
Blmbg Aggregate Index	0.64%	0.54%	(0.96%)	(1.05%)
Progress Fixed Inc. - Net	0.59%	0.60%	(0.77%)	(0.54%)
BMO-TCH	0.53%	0.71%	(0.65%)	0.25%
Blmbg Aggregate Index	0.64%	0.54%	(0.96%)	(1.05%)
BMO-TCH. - Net	0.50%	0.68%	(0.78%)	0.12%
Western	(0.05%)	(0.00%)	(2.19%)	(1.85%)
Blmbg Aggregate Index	0.64%	0.54%	(0.96%)	(1.05%)
Western - Net	(0.05%)	(0.00%)	(2.26%)	(1.95%)
Bank Loans	0.46%	1.21%	3.13%	4.86%
Barings Global Loan Fund	0.46%	1.21%	3.13%	4.86%
Custom Benchmark	0.45%	1.29%	3.63%	5.26%
Barings Global Loan Fund - Net	0.46%	1.21%	3.13%	4.81%
Emerging Markets	(4.46%)	(4.85%)	(9.21%)	(8.32%)
Standish	(4.46%)	(4.85%)	(9.21%)	(8.32%)
Custom Benchmark	(3.75%)	(3.72%)	(7.03%)	(6.45%)
Standish - Net	(4.55%)	(4.93%)	(9.46%)	(8.65%)
Opportunistic Fixed Income	0.52%	1.74%	1.64%	2.90%
Crescent	0.52%	1.74%	1.64%	2.90%
Custom Benchmark	0.56%	1.73%	2.63%	4.08%
Crescent - Net	0.47%	1.56%	1.17%	2.24%
High Yield	0.87%	2.28%	2.17%	3.94%
Mackay Shields	0.87%	2.27%	2.16%	3.93%
ML High Yield Cash Pay Index	0.72%	2.21%	1.90%	3.22%
Mackay Shields - Net	0.78%	2.09%	1.90%	3.57%

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.

Fixed Income Returns

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 August 31, 2018

	Last 36 Months	Last 60 Months	Last 120 Months	Since Inception	
Domestic Fixed Core Plus	2.69%	3.40%	5.00%	8.06%	(1/82)
LM Capital	2.33%	3.09%	4.68%	4.65%	(5/05)
Blmbg Aggregate Index	1.76%	2.49%	3.70%	3.89%	(5/05)
LM Capital - Net	2.16%	2.92%	4.52%	4.48%	(5/05)
Progress Fixed Income	2.67%	3.21%	4.61%	4.71%	(1/06)
Blmbg Aggregate Index	1.76%	2.49%	3.70%	3.97%	(1/06)
Progress Fixed Inc. - Net	2.34%	2.87%	4.26%	4.37%	(1/06)
BMO-TCH	3.67%	4.05%	5.26%	4.84%	(5/05)
Blmbg Aggregate Index	1.76%	2.49%	3.70%	3.89%	(5/05)
BMO-TCH - Net	3.54%	3.92%	5.13%	4.71%	(5/05)
Western	2.96%	3.76%	5.61%	5.24%	(11/01)
Blmbg Aggregate Index	1.76%	2.49%	3.70%	4.10%	(11/01)
Western - Net	2.83%	3.61%	5.47%	4.61%	(1/05)
Bank Loans	5.50%	-	-	4.68%	(8/14)
Barings Global Loan Fund	5.50%	-	-	4.68%	(8/14)
Custom Benchmark	5.04%	-	-	4.19%	(8/14)
Barings Global Loan Fund - Net	5.11%	-	-	4.24%	(8/14)
Emerging Markets	4.12%	-	-	0.54%	(8/14)
Standish	4.12%	-	-	0.54%	(8/14)
Custom Benchmark	4.11%	1.79%	4.14%	(0.06%)	(8/14)
Standish - Net	3.76%	-	-	0.21%	(8/14)
Opportunistic Fixed Income	5.09%	-	-	3.44%	(9/14)
Crescent	5.09%	-	-	3.44%	(9/14)
Custom Benchmark	5.96%	4.85%	6.90%	4.16%	(9/14)
Crescent - Net	4.45%	-	-	2.95%	(9/14)
High Yield	7.24%	6.29%	8.55%	9.61%	(4/86)
Mackay Shields	7.56%	6.33%	8.17%	8.92%	(11/00)
ML High Yield Cash Pay Index	7.02%	5.61%	8.29%	7.64%	(11/00)
Mackay Shields - Net	7.16%	5.95%	7.78%	6.91%	(1/05)

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.

Five Best Performing Portfolio's vs. Benchmarks

Manager	Year-to-Date Outperformance	Since Inception Outperformance	
	(in % points)	(in % points)	
Sands	13.19	2.60	10/31/2003
Frontier	11.78	4.99	07/31/1988
Brown	7.62	2.36	09/30/2004
DFA Micro Cap	4.59	1.43	07/31/1987
Brandes	4.33	3.96	12/31/1995

Five Worst Performing Portfolio's vs. Benchmarks

Manager	Year-to-Date Underperformance	Since Inception Underperformance	
	(in % points)	(in % points)	
Ativo	-10.64	-1.29	09/30/2010
Pyramis SCG	-5.03	5.15	07/31/1988
Standish	-2.13	0.63	07/31/2014
Genesis	-1.70	1.92	04/30/2004
Mondrian	-1.55	0.15	03/31/2012

Five Highest Returning Portfolios

Manager	Year-to-Date Return	Since Inception Return	
	(in % points)	(in % points)	
Frontier	30.31	13.78	07/31/1988
Sands	29.63	12.90	10/31/2003
NTGI S&P500 Gr	16.28	8.17	07/31/2001
DFA Micro Cap	14.45	11.82	07/31/1987
Pyramis SCG	13.50	13.94	07/31/1988

Five Lowest Returning Portfolios

Manager	Year-to-Date Return	Since Inception Return	
	(in % points)	(in % points)	
Standish	-9.21	0.54	07/31/2014
Genesis	-8.62	11.15	04/30/2004
Mondrian	-5.07	5.63	03/31/2012
Lazard	-4.70	6.68	03/31/2012
William Blair Int'l SC	-4.45	10.38	08/31/2010

Returns are shown gross of investment management fees.

Excludes Real Estate and Alternative Investments portfolios.