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August 31, 2017 Illinois Municipal Retirement Fund Monthly Performance Report

Investment Measurement Service Monthly Review

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Market Environment As of August 31, 2017

		Year to		Last 3	Last 5	Last 10
Index	Last Month	Date	Last Year	Years	Years	Years
Russell:3000 Index	0.19	11.20	16.06	9.08	14.27	7.70
S&P:500	0.31	11.93	16.23	9.54	14.34	7.61
Russell:2000 Index	(1.27)	4.42	14.91	7.67	13.15	7.38
MSCI:ACWI ex US	0.52	18.92	18.88	2.36	7.36	1.74
MSCI:EM	2.23	28.29	24.53	2.38	5.30	2.43
Blmbg:Aggregate	0.90	3.64	0.49	2.64	2.19	4.40
NCREIF:Total Index						
Blmbg:Commodity Price Idx	0.31	(3.27)	2.28	(12.55)	(10.33)	(6.49)
Binnby.Commonly Frice lux	0.51	(3.27)	2.20	(12.55)	(10.33)	(0.49)

Volatility reentered the picture in August. The long-slumbering VIX sprang to life on the 8th as a game of brinksmanship between the U.S. and North Korea reached new heights. Tensions with North Korea signaled the beginning of the end for the market rally. Protests in Charlottesville also contributed to negative sentiment. Hurricane Harvey struck an additional blow as it made landfall on August 25th. Amid the turmoil, investors sought safe-haven assets and yields dipped across the curve throughout the month, particularly at the long end. Equity markets across the globe were muted as a result. The Russell 3000 Index rose 0.2% during the month. The MSCI ACWI ex U.S. Index advanced 0.5% and the MSCI Emerging Markets Index surged 2.2%. The U.S. Aggregate gained 0.9% as rates fell modestly.

Nonfarm payroll growth reversed its trend this month and came in weaker than expected, though still within consensus range. U.S. payrolls added 156,000 jobs during August and July's figure was revised downward by 20,000. The unemployment rate ticked upward one tenth of a percent to 4.4%, at the top of the consensus range. The participation rate held steady at 62.9%, meaning the increase in unemployment was likely not from discouraged workers reentering the workforce. Month-over-month average hourly earnings rose only 0.1% while year-over-year growth held steady at 2.5%. The Federal Open Market Committee (FOMC) July meeting minutes released on the 16th did not provide any surprises, nor did the benign comments given by Janet Yellen on the 25th after the conclusion of the Jackson Hole Economic Symposium on Financial Stability.

For the first time since February, core CPI hit the month-over-month consensus with a 0.2% gain. Core CPI excludes food and energy. Headline CPI increased 0.4%, propelled by inflation in the energy sector. Housing, a dominant component, regained strength during the month posting a 0.4% gain. Wireless telephone services has been a weak point this year, but slowed contraction in August, declining 0.1%. The second estimate of second quarter GDP was revised upward four tenths of a percent to 3.0% annualized. Consumer spending continues to be a bright spot and was revised up five tenths to 3.3%.

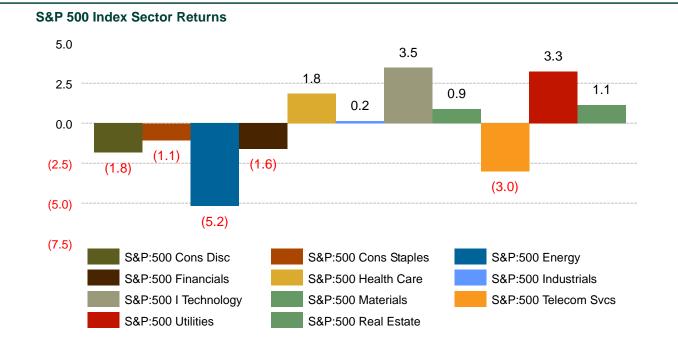
*Due to a lag in the reporting of NCREIF Property Index returns, the monthly return shown is deduced from the most recent quarterly return. This monthly return, when compounded over three months, equates to the quarterly return.

U.S. Equity Overview As of August 31, 2017

						Last 10
Index	Last Month	Year to Date	Last Year	Last 3 Years	Last 5 Years	Years
Russell:3000 Index	0.19	11.20	16.06	9.08	14.27	7.70
Russell:1000 Index	0.31	11.79	16.16	9.21	14.37	7.73
Russell:1000 Growth	1.83	19.17	20.82	11.67	15.41	9.39
Russell:1000 Value	(1.16)	4.81	11.58	6.74	13.25	5.96
Russell:Midcap Index	(0.78)	8.73	12.44	7.32	14.11	8.14
Russell:2000 Index	(1.27)	4.42	14.91	7.67	13.15	7.38
Russell:2000 Growth	(0.12)	10.78	16.39	8.20	13.75	8.21
Russell:2000 Value	(2.46)	(1.31)	13.47	7.07	12.51	6.46

Volatility came roaring back as multiple sources of uncertainty and instability surfaced and disrupted market momentum. Threats to stability were both foreign and domestic. Tensions with North Korea flared at the beginning of the month. On U.S. soil, protests against extremist groups impacted investor confidence and sentiment. Hurricane Harvey came blowing in late in the month causing widespread flooding, destruction, and a pronounced dip in Energy sector performance. Information Technology continued its reign as the top performing sector, pushing growth to outperform the broader market. Large caps continued their dominance over small caps (Russell 1000 Index: +0.3%; Russell 2000 Index: -1.3%). Growth continued its trend of outperforming value (Russell 1000 Growth: +1.8%; Russell 1000 Value: -1.2%). The Russell Midcap Index (-0.8%) outperformed small cap but trailed large cap.

Sector performance was once again a mixed bag for the quarter. Information Technology led for the second month in a row, returning 3.5%, followed by Utilities which rose 3.3%. Health Care returned 1.8%. Five of the 11 sectors fell during August. Consumer Staples ended its winning streak and turned southward, losing 1.1%. Financials gave up 1.6% and Consumer Discretionary dipped 1.8%. Telecommunications continued to struggle during the month and dropped 3.0%. Energy was the worst performing sector again in August, plunging 5.2%.



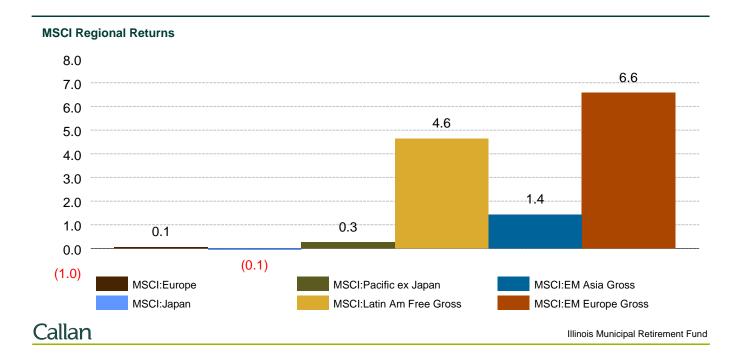
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Non-U.S. Equity Overview As of August 31, 2017

Index	Last Month	Year to Date	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
MSCI:ACWI ex US MSCI:EAFE	0.52	18.92 17.05	18.88 17.64	2.36 2.83	7.36 8.48	1.74 1.62
MSCI:EAFE Hedged Net	0.10	9.24	17.66	2.83 7.41	12.20	2.96
MSCI:EM	2.23	28.29	24.53	2.38	5.30	2.43
MSCI:ACWI ex US Small Cap	1.08	20.94	19.57	5.31	10.30	3.76

Headline risk and economic concerns drove non-U.S. markets throughout the month. A strengthening euro continued to make headlines the first few weeks of August until its momentum was interrupted by the European Central Bank's statements that the currency's strength may start to have negative effects on exports. The dollar made up some lost ground during the euro's pause, but then lost its footing again as the euro surged through the end of August on the back of comments made by Mario Draghi after the Jackson Hole meeting. The dollar still eked out a modest gain for the period causing the MSCI EAFE Hedged Index (+0.1%) to outperform the MSCI EAFE Index by 14 basis points. Emerging market returns benefited from a weaker dollar (MSCI EM Index: +2.2%). U.S. stocks trailed their international counterparts (Russell 3000 Index: +0.2% vs MSCI ACWI ex U.S. Index: +0.5%).

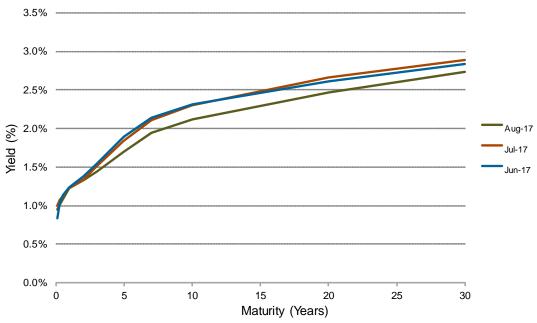
MSCI regional returns were mostly positive with emerging markets outpacing developed. European emerging markets were the runaway victor, up 6.6% (MSCI EM Europe Index). Latin American markets benefitted from less political headlines over the course of the month gaining 4.6% (MSCI Latin America Index). Tensions in the Pacific Rim depressed returns in that region and Pacific ex Japan equities gained only 0.3% during the period (MSCI Pacific ex Japan Index). Returns in developed Europe were also muted (MSCI Europe Index: +0.1%). Japan was the only region with a negative return during August, slipping 0.1% (MSCI Japan Index).



Fixed Income Overview As of August 31, 2017

	Last	Year to		Last 3	Last 5	Last 10
Index	Month	Date	Last Year	Years	Years	Years
Blmbg:Aggregate	0.90	3.64	0.49	2.64	2.19	4.40
Blmbg:US Government	1.06	3.12	(0.84)	2.12	1.37	3.76
Blmbg:Credit	0.84	5.31	1.90	3.46	3.40	5.65
Blmbg:Mortgage Backed Sec	0.73	2.55	0.80	2.46	2.05	4.24
BImbg:US TIPS	1.06	2.38	0.46	0.98	0.25	4.11
ML:US High Yield Cash Pay	(0.02)	6.12	8.79	4.81	6.46	7.82
3 Month T-Bill	0.09	0.48	0.62	0.29	0.20	0.50
CS:Leveraged Loan	(0.14)	2.62	5.85	3.64	4.53	4.49





Amid the equity market turmoil, investors sought safe-haven assets. This drove prices up and yields down as the month progressed. Little news came from the FOMC during the course of the month. The minutes from the July meeting released mid-month did not provide new information or insight as to likelihood of another rate hike or balance sheet unwinding at the September meeting. Comments made by Janet Yellen after the meeting in Jackson Hole did not discuss current economic or monetary policy, but instead touched lightly on the benefits of regulation and the possible upside to simplifying the Volcker Rule. Yields fell across the curve throughout the month. The 1-month Treasury fell five basis points to 0.95%. The 10-year drifted 18 basis points, ending at 2.12%, and the 30-year dropped 16 basis points to wrap up the month at 2.73%.

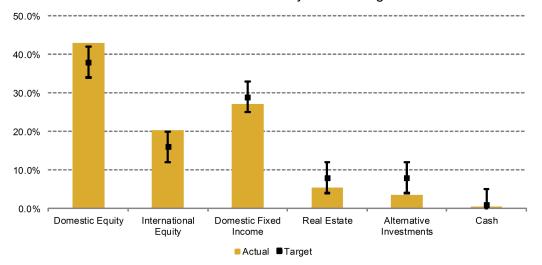
Fixed income returns for most sectors were up in August. The Bloomberg Aggregate Index (+0.9%) posted gains for the second month in a row. Governments and TIPS made a strong showing for the period and were the best performing sectors (Bloomberg U.S. Government Index: +1.1%; Bloomberg U.S. TIPS Index: +1.1%). The Bloomberg Credit and Bloomberg Mortgage Backed Securities Indices also benefited from the environment and were up 0.8% and 0.7%, respectively. High yield (ML High Yield CP Index) backed off its gains after a strong July and was flat. Leveraged loans also struggled and was the only other sector with the negative return for the period (CS Leveraged Loan Index: -0.1%). All fixed income sectors remain positive year to date.

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IMRF Commentary Executive Summary Total Fund

The market value of the Total Fund was \$39.36 billion at the end of August, an increase of \$37.8 million from the prior month. The Fund added 0.34% but fell short of the 0.51% return of the benchmark. The U.S. Equity composite fell 0.23% and missed its benchmark by 0.42% while the International Equity composite's 0.55% return slightly outpaced the 0.52% return of its benchmark. Real Estate grew 1.26% during August and surpassed the 0.49% return of its benchmark. Alternatives gained 0.77% and surpassed the 0.72% return of its benchmark. The Fixed Income composite returned 0.85% relative to the 0.90% return of the Bloomberg Aggregate Index. For the trailing year, the Fund is 1.81% ahead of its benchmark, returning 12.28%.

Current policy states that when actual allocations of the asset classes differ by more than four percentage points from their policy targets, a recommendation for rebalancing will be made to the Board of Trustees. As of August, Alternatives was below target allocation by 4.5%, while Domestic Equity and International Equity were above target by 4.9% and 4.4%, respectively. The Chief Investment Officer and Consultant do not recommend any rebalancing at this time.



U.S. Equity

The U.S. Equity composite fell 0.23% during August, missing the 0.19% return of the Russell 3000 Index. Similar to last month, large cap had the advantage over small while growth outperformed value across the capitalizations.

Large Cap: IMRF's Large Cap managers added 0.05% during August relative to the 0.31% return of the Russell 1000 Index. In aggregate, the growth managers advanced 1.29% relative to the 1.83% return of the Russell 1000 Growth Index. Sands outperformed the benchmark by 40 basis points while Holland underperformed by 325 basis points. Holland's portfolio started the liquidation process during August due to the firm's closure. Collectively, the value managers fell 0.90% but outpaced the -1.16% return of the Russell 1000 Value Index. All value managers posted negative returns during August.

Small Cap: The Small Cap composite declined 1.58% during the month and fell behind the -1.27% return of the Russell 2000 Index. The growth managers collectively fell 0.99% relative to the -0.12% return of the Russell 2000 Growth Index. Both Frontier and FIAM underperformed the benchmark during August. The value managers returned -1.99% but outperformed the -2.46% return of the Russell 2000 Value Index. All value managers outperformed the benchmark during the month. The Micro-Cap composite declined 2.19% in August.

IMRF Commentary Executive Summary

International Equity

The International Equity composite slightly outpaced the 0.52% return of the MSCI ACWI ex-U.S. (Net) Index, returning 0.55%.

Large Cap: International Large Cap managers collectively gained 0.41% but underperformed the MSCI ACWI ex-U.S. (Net) Index by 11 basis points. International Large Cap Growth managers had the edge over the benchmark, gaining 0.58% in aggregate. William Blair outperformed the benchmark during August while EARNEST partners underperformed. The International Large Cap Value managers collectively declined 0.36% as all managers underperformed the benchmark.

International Small Cap and Emerging Markets: The International Small Cap managers missed the 1.08% return of the ACWI Small Cap ex U.S. Index, returning 0.92%. William Blair outperformed the benchmark by 44 basis points while Franklin Templeton underperformed by 87 basis points. The Emerging Markets portfolio, managed by Genesis, had a positive absolute return of 1.65% but missed the 2.27% return of the MSCI Emerging Markets Index.

Fixed Income

The Fixed Income composite was up 0.85% in August relative to the 0.90% return of the Bloomberg Aggregate Index.

Active Core: In aggregate, the Active Core Fixed Income managers outperformed the Bloomberg Aggregate index by 11 basis points in August, returning 1.01%. EARNEST Partners, Piedmont, and Garcia Hamilton all outperformed the Bloomberg Aggregate Index during the month.

Core Plus: The Core Plus managers ended August up 0.85%, but behind the Bloomberg Aggregate Index by 5 basis points. Brandes and Western outpaced the Bloomberg Aggregate Index by 0.09% and 0.07%, respectively. Progress performed approximately in line with the benchmark while LM Capital and Taplin, Canida, Habacht underperformed by 0.18% and 0.15%, respectively.

Bank Loans: The Bank Loans composite, managed by Barings, declined 0.13% in August and missed the -0.08% return of its custom benchmark.

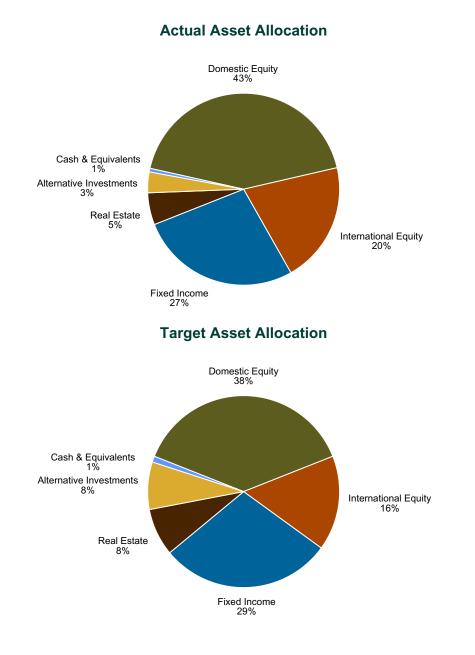
Emerging Markets: The Emerging Market Debt component, managed by Standish, gained 2.09% during August, surpassing the 1.59% return of its custom benchmark.

Opportunistic: The Opportunistic fixed income allocation, managed by Crescent, declined 0.12% during August relative to the -0.04% return of the custom benchmark.

High Yield: The high yield manager, MacKay Shields, returned 0.24% and outpaced the -0.02% return of its benchmark.

Actual vs Target Asset Allocation

The first chart below shows the Fund's asset allocation as of August 31, 2017. 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	16,879	42.9%	38.0%	4.9%	1,922
International Equity	8,016	20.4%	16.0%	4.4%	1,719
Fixed Income	10,698	27.2%	29.0%	(1.8%)	(717)
Real Estate	2,140	5.4%	8.0%	(2.6%)	(1,009)
Alternative Investments	1,373	3.5%	8.0%	(4.5%)	(1,775)
Cash & Equivalents	254	0.6%	1.0%	(0.4%)	(139)
Total	39,361	100.0%	100.0%		. ,

* Current Month Target = 38.0% Russell 3000 Index, 29.0% Blmbg Aggregate, 16.0% MSCI ACWI ex US, 8.0% NCREIF NFI-ODCE Val Wt Nt, 8.0% 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, 2017, with the distribution as of July 31, 2017.

Asset Distribution Across Investment Managers

	August 31, 2017		July 31, 2017		
	Market Value	Percent	Market Value	Percent	
Domestic Equity* Large Cap Growth	\$16,879,245,964	42.88%	\$17,101,046,084	43.49%	
Holland	550,485,678	1.40%	967,687,269	2.46%	
NTGI S&P 500 Growth Idx	1,796,588,710	4.56%	1,770,703,791	4.50%	
Sands	1,716,030,680	4.36%	1,453,805,255	3.70%	
arge Cap Value					
Dodge & Cox	1,375,156,548	3.49%	1,390,763,368	3.54%	
BMO	1,398,724,537	3.55%	1,404,038,581	3.57%	
LSV	1,403,815,792	3.57%	1,417,681,709	3.61%	
NTGI S&P 500 Value Idx	1,610,762,662	4.09%	1,629,285,391	4.14%	
arge Cap Core					
NTGI MarketCap Index	3,277,028,956	8.33%	3,271,012,791	8.32%	
mall Cap Growth					
Frontier	413,887,025	1.05%	416,324,410	1.06%	
FIAM	1,047,637,240	2.66%	1,059,875,412	2.70%	
mall Cap Value					
Channing	212,321,409	0.54%	215,109,479	0.55%	
Dimensional Small Cap Value	534,216,346	1.36%	546,581,522	1.39%	
Inv. Counselors of Maryland	534,216,346 582,422,921	1.36%	546,581,522 594,315,558	1.39%	
licro Cap					
Arial			150	0.00%	
Ariel	-	-	150	0.00%	
Ativo Dimensional Micro Cap	124,199,666 379,325,156	0.32% 0.96%	127,855,913 386,940,894	0.33% 0.98%	
Dimensional Micro Cap	575,525,150	0.50 %	500,540,054	0.50%	
ublic Real Assets					
Brookfield	150,106,410	0.38%	149,554,303	0.38%	
Cohen & Steers	306,536,229	0.78%	299,510,290	0.76%	
nternational Equity hternational Large Cap Growth	\$8,016,401,183	20.37%	\$7,971,208,685	20.27%	
	620 200 726	1 60%	622 070 051	1.61%	
EARNEST Partners William Blair	630,290,736 712,302,736	1.60% 1.81%	633,970,951 700,860,286	1.61%	
nternational Large Cap Value	··-,,· ••		• , , •		
Brandes	583,585,715	1.48%	586,310,648	1.49%	
Lombardia	3,398	0.00%	3,371	0.00%	
Mondrian	561,037,861	1.43%	562,759,710	1.43%	
Lazard	108,619,550	0.28%	108,652,410	0.28%	
ternational Large Cap Core					
Arrowstreet	656,691,562	1.67%	649,451,184	1.65%	
Brown	323,943,934	0.82%	322,229,598	0.82%	
GlobeFlex	658,116,759	1.67%	644,154,670	1.64%	
NTGI MSCI EAFE Index	2,226,206,437	5.66%	2,226,697,673	5.66%	
Progress Intl Equity	287,544,946	0.73%	284,965,885	0.72%	
ternational Small Cap					
Franklin Templeton	233,650,936	0.59%	233,156,664	0.59%	
William Blair	279,233,851	0.71%	275,050,561	0.70%	
merging Markets					
Genesis	755,176,159	1.92%	742,948,447	1.89%	
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* 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, 2017, with the distribution as of July 31, 2017.

Asset Distribution	Across	Investment	Managers
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	August 31,	2017	July 31, 2017		
	Market Value	Percent	Market Value	Percent	
Total Fixed Income	\$10,697,571,980	27.18%	\$10,531,782,793	26.78%	
Domestic Fixed Core					
EARNEST Partners	760,725,983	1.93%	754,316,764	1.92%	
Piedmont Investment	759,583,934	1.93%	755,059,724	1.92%	
Garcia Hamilton	730,836,123	1.86%	725,788,874	1.85%	
Domestic Fixed Passive Core					
NTGI Blmbg Agg. Index	1,564,771,426	3.98%	1,550,572,154	3.94%	
BlackRock US Debt	1,593,782,909	4.05%	1,579,491,216	4.02%	
Domestic Fixed Core Plus					
BlackRock Core Plus	75,672	0.00%	540,796	0.00%	
Transition Account	147,478	0.00%	4,497,261	0.01%	
Brandes Core Plus	248,885,165	0.63%	248,054,672	0.63%	
LM Capital	870,566,656	2.21%	866,148,889	2.20%	
Progress Fixed Income	889,259,043	2.26%	881,209,701	2.24%	
Taplin, Canida, & Habacht	886,379,119	2.25%	881,535,888	2.24%	
Western	1,052,971,550	2.68%	946,212,492	2.41%	
Bank Loans					
Barings Global Loan Fund	381,754,078	0.97%	382,328,089	0.97%	
Emerging Markets Debt					
Standish	208,539,991	0.53%	204,269,825	0.52%	
Opportunistic Fixed Income					
Crescent	117,969,678	0.30%	118,183,495	0.30%	
High Yield					
MacKay Shields	630,998,374	1.60%	632,652,057	1.61%	
FIAM High Yield	324,800	0.00%	920,897	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, 2017, with the distribution as of July 31, 2017.

Asset Distribution Across Investment Managers

	August 31, 2	2017	July 31, 20)17
	Market Value	Percent	Market Value	Percent
Real Estate	\$2,139,541,231	5.44%	\$2,113,668,812	5.38%
Real Estate Core				
TA Buckhead Ind. Prop.	404,866,172	1.03%	394,377,263	1.00%
Barings Core Property Fund	146,316,707	0.37%	143,693,037	0.37%
Barings European Core Property	29,555,715	0.08%	30,174,392	0.08%
INVESCO Core RE	192,926,452	0.49%	192,926,452	0.49%
AEW Core Property Trust	225,364,887	0.57%	227,677,973	0.58%
CBRE US Core Property Trust	165,845,686	0.42%	165,845,686	0.42%
Real Estate Non-Core				
Artemis MWBE Spruce	53,660,231	0.14%	51,491,412	0.13%
Franklin Templeton EMREFF	32,581,970	0.08%	32,956,878	0.08%
Security Capital	52,048,445	0.13%	52,048,445	0.13%
Dune II	30,187,072	0.08%	28,264,391	0.07%
Non-Core Real Estate Funds*	710,379,009	1.80%	692,170,885	1.76%
Non-Core Intl Real Estate Funds**	81,926,062	0.21%	82,921,770	0.21%
Rockwood Fund VIII	2,972,324	0.01%	3,385,813	0.01%
Almanac ARS V	3,582,173	0.01%	7,098,452	0.02%
TA Fund IX	7,328,325	0.02%	8,635,964	0.02%
Alternative Investments	\$1,373,355,353	3.49%	\$1,357,825,034	3.45%
Absolute Return		0.050/		
Aurora	20,510,812	0.05%	20,422,000	0.05%
Private Equity		0.000/		
Abbott	323,335,300	0.82%	323,653,130	0.82%
Muller & Monroe ILPEFF	502,514	0.00%	502,514	0.00%
Muller & Monroe MPEFF	8,739,582	0.02%	8,719,281	0.02%
Pantheon	216,075,783	0.55%	216,130,770	0.55%
Private Equity Fund - Domestic	502,294,750	1.28%	489,676,615	1.25%
Private Equity Fund - International	39,047,392	0.10%	35,847,454	0.09%
Agriculture		0.4557		
Premiere Partners IV	188,215,480	0.48%	188,239,531	0.48%
Timberland		0.400/		
Forest Investment Assoc.	74,633,739	0.19%	74,633,739	0.19%
Cash & Equivalents	\$254,398,924	0.65%	\$247,185,895	0.63%
Total Fund	\$39,360,514,634	100.0%	\$39,322,717,304	100.0%

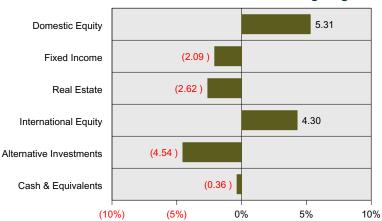
* Non-Core Real Estate Funds funded since September 2011.

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



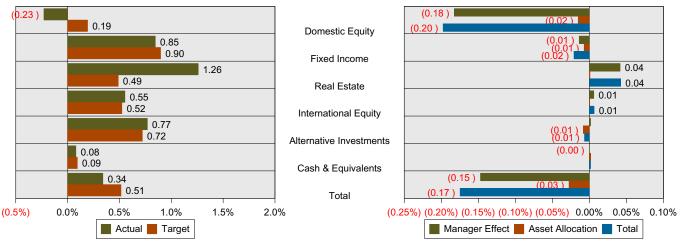
Monthly Total Fund Relative Attribution - August 31, 2017

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 August 31, 2017

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return		Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	43%	38%	(0.23%)	0.19%		(0.18%)	(0.02%)	(0.20%)
Fixed Income	27%	29%	0.85%	0.90%		(0.01%)	(0.01%)	(0.02%) 0.04%
Real Estate	5%	8%	1.26%	0.49%		0.04%	`0.00%	0.04%
International Equity	20%	16%	0.55%	0.52%		0.01%	0.00%	0.01%
Alternative Investments	s 3%	8%	0.77%	0.72%		0.00%	(0.01%)	(0.01%)
Cash & Equivalents	1%	1%	0.08%	0.09%		(0.00%)	0.00%	0.00%
Total			0.34% =	0.51%	+	(0.15%) +	(0.03%)	(0.17%)

* Current Month Target = 38.0% Russell 3000 Index, 29.0% Blmbg Aggregate, 16.0% MSCI ACWI ex US, 8.0% NCREIF NFI-ODCE Val Wt Nt, 8.0% 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 August 31, 2017

		Last	Year	Last	
	Last	3	to	12	
	Month	Months	Date	Months	
Domestic Equity	(0.23%)	3.35%	9.97%	16.64%	
Blended Benchmark**	0.19%	3.00%	11.20%	16.06%	
Domestic Equity - Net	(0.26%)	3.31%	9.82%	16.41%	
International Equity	0.55%	4.23%	19.68%	19.60%	
MSCI ACWI x US (Net)	0.52%	4.55%	18.92%	18.88%	
International Equity - Net	0.51%	4.19%	19.48%	19.25%	
Fixed Income	0.85%	1.39%	4.42%	2.25%	
Blmbg Aggregate Index	0.90%	1.23%	3.64%	0.49%	
Fixed Income - Net	0.83%	1.35%	4.31%	2.10%	
Real Estate	1.26%	2.58%	6.34%	9.28%	
Blended Benchmark***	0.49%	1.47%	4.05%	6.65%	
Real Estate - Net	1.26%	2.58%	6.34%	9.28%	
Alternative Investments	0.77%	0.82%	6.99%	11.52%	
Alternatives Custom Benchmark****	0.72%	2.18%	5.91%	9.00%	
Alternative Investments - Net	0.74%	0.78%	6.85%	11.30%	
Absolute Return	0.43%	3.41%	34.67%	42.01%	
HFR Fund-of-Funds Index	0.97%	1.97%	5.27%	6.53%	
Private Equity	0.97%	0.72%	8.73%	14.60%	
Alternatives Custom Benchmark****	0.72%	2.18%	5.91%	9.00%	
Agriculture	(0.01%)	0.52%	(0.59%)	(1.46%)	
Blended Benchmark***	0.49%	1.47%	4.05%	6.65%	
Timberland	0.00%	2.32%	0.76%	2.79%	
Blended Benchmark***	0.49%	1.47%	4.05%	6.65%	
Total Fund	0.34%	2.84%	9.85%	12.28%	
Total Fund - Net	0.30%	2.80%	9.70%	12.06%	
Total Fund Benchmark	0.51%	2.52%	9.04%	10.47%	

* Current Month Target = 38.0% Russell 3000 Index, 29.0% Blmbg Aggregate, 16.0% MSCI ACWI ex US, 8.0% NCREIF NFI-ODCE Val Wt Nt, 8.0% 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 f	for	Periods	Ended	August	31,	2017
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	Last 36	Last 60	Last 120	Since
	Months	Months	Months	Inception
Domestic Equity	8.42%	14.21%	7.78%	11.60% (1/82)
Blended Benchmark**	9.06%	14.21%	7.78%	11.38% (1/82)
Domestic Equity - Net	8.17%	13.94%	7.52%	8.15% (1/05)
International Equity	4.02%	9.34%	2.75%	8.04% (9/86)
MSCI ACWI x US (Net)	2.36%	7.36%	1.74%	-
International Equity - Net	3.68%	8.99%	2.43%	5.98% (1/05)
Fixed Income	3.28%	3.25%	5.43%	8.47% (1/82)
Blmbg Aggregate Index	2.64%	2.19%	4.40%	7.94% (1/82)
Fixed Income - Net	3.12%	3.10%	5.28%	4.98% (1/05)
Real Estate - Net	10.58%	11.01%	4.95%	7.20% (1/05)
Blended Benchmark***	9.96%	10.76%	6.99%	7.69% (1/05)
Alternative Investments	7.64%	8.98%	5.77%	10.66% (2/86)
Alternatives Custom Benchmark****	9.00%	9.00%	9.84%	12.93% (2/86)
Alternative Investments - Net	7.29%	8.65%	5.49%	7.91% (1/05)
Absolute Return	12.75%	10.46%	5.24%	6.39% (1/02)
HFR Fund-of-Funds Index	2.07%	3.97%	1.26%	3.50% (1/02)
Private Equity	9.49%	10.86%	7.50%	12.79% (2/86)
Alternatives Custom Benchmark****	9.00%	9.00%	9.84%	12.93% (2/86)
Agriculture	11.91%	15.53%	9.58%	8.34% (10/97)
Blended Benchmark***	9.96%	10.76%	6.99%	7.53% (10/97)
Timberland	1.19%	4.14%	4.53%	8.00% (10/92)
Blended Benchmark***	9.96%	10.76%	6.99%	7.55% (10/92)
otal Fund	6.05%	9.65%	6.55%	9.98% (1/82)
Total Fund - Net	5.81%	9.41%	6.32%	7.16% (1/05)
Total Fund Benchmark	6.25%	8.95%	6.33%	6.97% (1/05)

* Current Month Target = 38.0% Russell 3000 Index, 29.0% Blmbg Aggregate, 16.0% MSCI ACWI ex US, 8.0% NCREIF NFI-ODCE Val Wt Nt, 8.0% 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 August 31, 2017

		Last	Year	Last	
	Last	3	to	12	
	Month	Months	Date	Months	
Large Cap Equity	0.05%	3.46%	12.31%	17.45%	
Russell 1000 Index	0.31%	3.01%	11.79%	16.16%	
Large Cap Growth	1.29%	4.90%	22.16%	20.53%	
Holland	(1.42%)	2.04%	16.40%	16.43%	
LCG Blended Benchmark*	1.83%	4.26%	19.17%	20.82%	
Russell 1000 Growth Index	1.83%	4.26%	19.17%	20.82%	
Holland - Net	(1.47%)	1.99%	16.23%	16.14%	
NTGI S&P 500 Growth Idx	1.46%	3.71%	17.91%	19.01%	
S&P/Citi 500 Growth Index	1.48%	3.72%	18.01%	19.05%	
NTGI S&P 500 Growth Idx - Net	1.46%	3.71%	17.91%	19.00%	
Sands	2.23%	7.62%	31.30%	24.49%	
LCG Blended Benchmark*	1.83%	4.26%	19.17%	20.82%	
Russell 1000 Growth Index	1.83%	4.26%	19.17%	20.82%	
Sands - Net	2.18%	7.57%	31.09%	24.22%	
Salus - Net	2.10%	1.51 /6	51.09%	24.2270	
Large Cap Value	(0.90%)	2.70%	6.56%	15.98%	
Dodge & Cox	(1.04%)	2.33%	8.01%	20.58%	
LCV Blended Benchmark**	(1.16%)	1.79%	4.81%	11.58%	
Russell 1000 Value Index	(1.16%)	1.79%	4.81%	11.58%	
Dodge & Cox - Net	(1.09%)	2.27%	7.85%	20.33%	
BMO	(0.41%)	3.13%	7.86%	15.52%	
LCV Blended Benchmark**	(1.16%)	1.79%	4.81%	11.58%	
Russell 1000 Value Index	(1.16%)	1.79%	4.81%	11.58%	
BMO - Net	(0.41%)	3.13%	7.74%	15.34%	
LSV	(0.98%)	3.32%	5.46%	16.06%	
LCV Blended Benchmark**	(1.16%)	1.79%	4.81%	11.58%	
Russell 1000 Value Index	(1.16%)	1.79%	4.81%	11.58%	
LSV - Net	(0.98%)	3.26%	5.28%	15.79%	
NTGI S&P 500 Value Idx	(1.14%)	2.11%	5.19%	12.55%	
S&P/Citi 500 Value Index	(1.16%)	2.10%	5.05%	12.35%	
NTGI S&P 500 Value Idx - Net	(1.14%)	2.11%	5.18%	12.54%	
Large Cap Passive Core	0.18%	3.03%	11.29%	16.16%	
Laige Cap 1 assive COIE	0.1070	5.0570	11.23/0	10.10/0	
NTGI MarketCap Idx	0.18%	3.03%	11.29%	16.16%	
DJ U.S. Total Stock Market Index	0.18%	3.01%	11.23%	16.04%	
NTGI MarketCap Idx - Net	0.18%	3.02%	11.28%	16.15%	

* 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.

Returns for Periods Ended August 31, 2017

	Last 36 Months	Last 60 Months	Last 120		
				Since	
			Months	Inceptio	า
_arge Cap Equity	8.87%	14.49%	7.86%	11.21%	(1/82)
Russell 1000 Index	9.21%	14.37%	7.73%	11.57%	(1/82)
arge Cap Growth	10.00%	14.47%	9.36%	11.71%	(1/82)
Holland	8.93%	13.25%	9.41%	10.28%	(11/94)
LCG Blended Benchmark*	11.67%	15.41%	9.39%	9.96%	(11/94)
Russell 1000 Growth Index	11.67%	15.41%	9.39%	9.22%	(11/94)
Holland - Net	8.71%	13.02%	9.14%	8.18%	(1/05)
NTGI S&P 500 Growth Idx	11.41%	15.24%	9.49%	7.17%	(8/01)
S&P/Citi 500 Growth Index	11.42%	15.23%	9.47%	7.13%	(8/01)
NTGI S&P 500 Growth Idx - Net	11.40%	15.24%	9.48%	9.14%	(1/05)
Sands	8.96%	15.20%	11.97%	11.52%	(11/03)
LCG Blended Benchmark*	11.67%	15.41%	9.39%	9.16%	(11/03)
Russell 1000 Growth Index	11.67%	15.41%	9.39%	9.22%	(11/03)
Sands - Net	8.71%	14.95%	11.70%	10.31%	(1/05)
arge Cap Value	7.60%	14.73%	6.61%	10.40%	(10/82)
Dodge & Cox	8.43%	15.62%	6.96%	9.59%	(9/03)
LCV Blended Benchmark**	6.74%	13.25%	5.96%	8.36%	(9/03)
Russell 1000 Value Index	6.74%	13.25%	5.96%	8.55%	(9/03)
Dodge & Cox - Net	8.20%	15.38%	6.73%	7.75%	(1/05)
ВМО	7.45%	14.26%	7.05%	8.09%	(2/01)
LCV Blended Benchmark**	6.74%	13.25%	5.96%	5.47%	(2/01)
Russell 1000 Value Index	6.74%	13.25%	5.96%	6.59%	(2/01)
BMO - Net	7.24%	14.01%	6.81%	8.22%	(1/05)
LSV	7.51%	15.67%	7.29%	11.25%	(2/03)
LCV Blended Benchmark**	6.74%	13.25%	5.96%	9.40%	(2/03)
Russell 1000 Value Index	6.74%	13.25%	5.96%	9.42%	(2/03)
LSV - Net	7.25%	15.39%	7.00%	8.32%	(1/05)
NTGI S&P 500 Value Idx	7.24%	13.29%	5.61%	5.56%	(8/99)
S&P/Citi 500 Value Index	7.14%	13.18%	5.55%	5.53%	(8/99)
NTGI S&P 500 Value Idx - Net	7.24%	13.28%	5.60%	6.83%	(1/05)
					· · · /
arge Cap Passive Core	9.13%	14.30%	7.70%	11.11%	(1/85)
NTGI MarketCap Idx	9.13%	14.30%	7.72%	10.87%	(2/85)
DJ U.S. Total Stock Market Index	9.02%	14.19%	7.76%	10.82%	(2/85)
NTGI MarketCap Idx - Net	9.12%	14.29%	7.71%	8.23%	(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 August 31, 2017

		Last	Year	Last	
	Last	3	to	12	
	Month	Months	Date	Months	
Small Cap Equity	(1.58%)	2.57%	2.06%	13.24%	
Russell 2000 Index	(1.27%)	2.90%	4.42%	14.91%	
Small Cap Growth	(0.99%)	4.08%	6.59%	12.31%	
Frontier	(0.59%)	5.52%	12.51%	16.27%	
Russell 2000 Growth Index	(0.12%)	4.20%	10.78%	16.39%	
Frontier - Net	(0.59%)	5.40%	12.10%	15.62%	
FIAM	(1.15%)	3.52%	4.41%	10.89%	
Russell 2000 Growth Index	(0.12%)	4.20%	10.78%	16.39%	
FIAM - Net	(1.15%)	3.52%	4.17%	10.38%	
Small Cap Value	(1.99%)	1.34%	(1.27%)	14.51%	
Channing	(1.30%)	1.03%	(0.73%)	14.28%	
Russell 2000 Value Index	(2.46%)	1.59%	(1.31%)	13.47%	
Channing - Net	(1.30%)	0.90%	(1.09%)	13.72%	
DFA Small Cap Value	(2.26%)	1.27%	(3.13%)	13.49%	
Russell 2000 Value Index	(2.46%)	1.59%	(1.31%)	13.47%	
DFA Small Cap Value - Net	(2.45%)	1.07%	(3.56%)	12.85%	
Inv. Counselors of Maryland	(2.00%)	1.46%	0.75%	15.73%	
Russell 2000 Value Index	(2.46%)	1.59%	(1.31%)	13.47%	
Inv. Couns. of Maryland - Net	(2.26%)	1.20%	0.30%	15.10%	
Micro Cap	(2.19%)	2.06%	1.09%	11.74%	
	(,				
Ativo	(2.88%)	0.62%	3.09%	14.51%	
Russell Microcap Index	(0.83%)	3.73%	2.79%	16.44%	
Russell 2000 Growth Index	(0.12%)	4.20%	10.78%	16.39%	
Russell 2000 Index	(1.27%)	2.90%	4.42%	14.91%	
Ativo - Net	(2.88%)	0.47%	2.61%	13.81%	
DFA Micro Cap	(1.97%)	2.31%	0.61%	15.93%	
Russell 2000 Value Index	(2.46%)	1.59%	(1.31%)	13.47%	
Russell 2000 Index	(1.27%)	2.90%	4.42%	14.91%	
DFA Micro Cap - Net	(2.09%)	2.18%	0.24%	15.35%	
Public Real Assets	1.69%	-	-	-	
Public Real Assets Benchmark (1)	1.56%	3.97%	17.23%	14.71%	
Brookfield Public Global Inf	0.37%	-	-	-	
Dow Jones Global Infra Comp Idx	0.43%	2.87%	13.60%	11.27%	
Brookfield Public Global Inf - Net	0.37%	-	-	-	
Cohen & Steers Public Global Inf	2.35%	-	-	-	
FTSE GI Core Infr 50/50 N	1.93%	4.34%	18.46%	15.87%	
Cohen & St Public Global Inf - Net	2.35%	-	-	-	

(1) 1/3 Dow Jones Brookfield 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.	2017
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	Last	Last	Last		
	36	60	120	Since	
	Months	Months	Months	Inceptio	n
Small Cap Equity	6.84%	13.41%	8.18%	12.31%	(7/88)
Russell 2000 Index	7.67%	13.15%	7.38%	9.52%	(7/88)
Small Cap Growth	7.69%	13.95%	8.42%	12.97%	(7/88)
Frontier	6.14%	13.10%	8.52%	12.93%	(8/88)
Russell 2000 Growth Index	8.20%	13.75%	8.21%	8.11%	(8/88)
Frontier - Net	5.52%	12.49%	6.35%	7.15%	(1/05)
FIAM	9.69%	15.28%	9.69%	13.67%	(8/88)
Russell 2000 Growth Index	8.20%	13.75%	8.21%	8.11%	(8/88)
FIAM - Net	9.03%	14.72%	9.09%	10.82%	(1/05)
Small Cap Value	7.35%	13.79%	7.88%	12.09%	(9/89)
Channing	7.85%	15.21%	-	12.11%	(7/11)
Russell 2000 Value Index	7.07%	12.51%	6.46%	10.13%	(7/11)
Channing - Net	7.36%	14.61%	-	11.48%	(7/11)
DFA Small Cap Value	5.95%	13.87%	7.91%	12.53%	(2/96)
Russell 2000 Value Index	7.07%	12.51%	6.46%	9.85%	(2/96)
DFA Small Cap Value - Net	5.44%	13.32%	7.37%	8.07%	(1/05)
Inv. Counselors of Maryland	9.76%	14.47%	8.21%	11.76%	(5/99)
Russell 2000 Value Index	7.07%	12.51%	6.46%	9.39%	(5/99)
Inv. Couns. of Maryland - Net	9.19%	13.94%	7.69%	8.66%	(1/05)
Micro Cap	4.05%	11.48%	6.02%	11.77%	(7/84)
					. ,
Ativo	8.70%	17.16%	-	14.07%	(10/10)
Russell Microcap Index	7.10%	13.21%	6.00%	12.78%	(10/10)
Russell 2000 Growth Index	8.20%	13.75%	8.21%	13.48%	(10/10)
Russell 2000 Index	7.67%	13.15%	7.38%	12.69%	(10/10)
Ativo - Net	7.95%	16.32%	-	13.26%	(10/10)
DFA Micro Cap	8.78%	14.82%	8.31%	11.33%	(8/87)
Russell 2000 Value Index	7.07%	12.51%	6.46%	10.08%	(8/87)
Russell 2000 Index	7.67%	13.15%	7.38%	8.88%	(8/87)
DFA Micro Cap - Net	8.24%	14.25%	7.78%	8.00%	(1/05)
Public Real Assets	_	-	_	1.69%	(8/17)
Public Real Assets Benchmark (1)	-	-	-	1.56%	(8/17)
Brookfield Public Global Inf				0.37%	(8/17)
Dow Jones Global Infra Comp Idx	- 1.65%	9.20%	7.90%	0.43%	(8/17)
Brookfield Public Global Inf - Net	-	-	-	0.43%	(8/17)
Cohen & Steers Public Global Inf	_	_	_	2.35%	(8/17)
FTSE GI Core Infr 50/50 N	6.00%	- 10.70%	-	1.93%	(8/17)
Cohen & St Public Global Inf - Net	-	-	-	2.35%	(8/17)
				2.0070	(0,17)

(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 August 31, 2017

		Last	Year	Last	
	Last	3	to	12	
	Month	Months	Date	Months	
Intl Large Cap Equity	0.41%	3.77%	18.87%	19.41%	
MSCI ACWI ex-US Index	0.52%	4.55%	18.92%	18.88%	
Intl Large Cap Growth	0.58%	6.00%	21.97%	21.88%	
EARNEST Partners	(0.58%)	6.43%	22.07%	23.94%	
MSCI ACWI ex-US Index	0.52%	4.55%	18.92%	18.88%	
MSCI ACWI ex-US Growth	1.02%	4.64%	23.01%	17.86%	
EARNEST Partners - Net	(0.63%)	6.38%	22.02%	23.82%	
William Blair	1.63%	5.63%	21.88%	20.12%	
MSCI ACWI ex-US Index	0.52%	4.55%	18.92%	18.88%	
MSCI ACWI ex-US Growth	1.02%	4.64%	23.01%	17.86%	
William Blair - Net	1.55%	5.54%	21.56%	19.69%	
Intl Large Cap Value	(0.36%)	1.05%	13.34%	14.70%	
Brandes	(0.46%)	0.95%	10.97%	15.05%	
MSCI ACWI ex-US Index	0.52%	4.55%	18.92%	18.88%	
MSCI ACWI ex-US Value	0.07%	4.64%	15.93%	20.98%	
Brandes - Net	(0.46%)	0.95%	10.80%	14.82%	
Mondrian	(0.31%)	0.70%	15.02%	14.23%	
MSCI ACWI ex-US Index	0.52%	4.55%	18.92%	18.88%	
MSCI ACWI ex-US Value	0.07%	4.64%	15.93%	20.98%	
Mondrian - Net	(0.43%)	0.57%	14.60%	13.66%	
Lazard	(0.03%)	3.45%	17.97%	15.34%	
MSCI ACWI ex-US Index	0.52%	4.55%	18.92%	18.88%	
MSCI ACWI ex-US Value	0.07%	4.64%	15.93%	20.98%	
Lazard - Net	(0.09%)	3.39%	17.76%	15.06%	

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	S Ended August	51, 2017	
	Last	Last	Last	
	36	60	120	Since
	Months	Months	Months	Inception
Intl Large Cap Equity	4.00%	9.50%	2.49%	8.04% (9/86)
MSCI ACWI ex-US Index	2.36%	7.36%	1.74%	-
Intl Large Cap Growth	4.05%	9.09%	2.70%	9.09% (9/02)
EARNEST Partners	3.00%	8.44%	4.58%	10.17% (10/04)
MSCI ACWI ex-US Index	2.36%	7.36%	1.74%	6.41% (10/04)
MSCI ACWI ex-US Growth	4.64%	8.61%	2.80%	7.25% (10/04)
EARNEST Partners - Net	2.82%	8.18%	4.19%	8.74% (1/05)
William Blair	5.02%	9.69%	3.52%	10.35% (10/02)
MSCI ACWI ex-US Index	2.36%	7.36%	1.74%	8.79% (10/02)
MSCI ACWI ex-US Growth	4.64%	8.61%	2.80%	9.01% (10/02)
William Blair - Net	4.64%	9.29%	3.13%	6.74% (1/05)
ntl Large Cap Value	2.40%	8.40%	1.41%	9.18% (10/95)
Brandes	2.33%	9.22%	1.69%	9.38% (1/96)
MSCI ACWI ex-US Index	2.36%	7.36%	1.74%	5.38% (1/96)
MSCI ACWI ex-US Value	0.97%	7.03%	1.55%	-
Brandes - Net	2.12%	8.98%	1.44%	4.56% (1/05)
Mondrian	2.53%	7.61%	-	6.36% (4/12)
MSCI ACWI ex-US Index	2.36%	7.36%	1.74%	5.91% (4/12)
MSCI ACWI ex-US Value	0.97%	7.03%	1.55%	5.63% (4/12)
Mondrian - Net	2.02%	7.07%	-	5.84% (4/12)
Lazard	2.83%	8.18%	-	7.37% (4/12)
MSCI ACWI ex-US Index	2.36%	7.36%	1.74%	5.91% (4/12)
MSCI ACWI ex-US Value	0.97%	7.03%	1.55%	5.63% (4/12)
Lazard - Net	2.31%	7.49%	-	6.73% (4/12)

Returns for Periods Ended August 31, 2017

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	Διιαιις	31 2017
Retuins	IOI Fellous	Enueu	Augusi	JI, 2017

		Last	Year	Last	
	Last	3	to	12	
	Month	Months	Date	Months	
Intl Large Cap Active Core	1.34%	5.37%	22.34%	22.53%	
Arrowstreet	1.11%	4.78%	20.85%	23.75%	
MSCI ACWI ex-US Index	0.52%	4.55%	18.92%	18.88%	
Arrowstreet - Net	1.00%	4.66%	20.45%	23.19%	
Brown	0.53%	0.92%	17.55%	14.39%	
MSCI ACWI ex-US Index	0.52%	4.55%	18.92%	18.88%	
Brown - Net	0.53%	0.92%	17.34%	12.96%	
GlobeFlex	2.17%	8.62%	26.52%	26.96%	
MSCI ACWI ex-US Index	0.52%	4.55%	18.92%	18.88%	
GlobeFlex - Net	2.08%	8.53%	26.18%	26.49%	
Progress Intl Equity	0.91%	4.80%	22.16%	19.94%	
Custom Benchmark	0.91%	5.23%	21.62%	20.84%	
MSCI ACWI ex-US Index	0.52%	4.55%	18.92%	18.88%	
Progress Intl Equity - Net	0.78%	4.68%	21.71%	19.36%	
Intl Large Cap Pass. Core	(0.02%)	2.70%	17.45%	18.15%	
NTGI MSCI EAFE Idx	(0.02%)	2.70%	17.45%	18.15%	
MSCI EAFE Index	(0.04%)	2.66%	17.05%	17.64%	
NTGI EAFE ldx - Net	(0.02%)	2.70%	17.45%	18.14%	
International Small Cap	0.92%	5.40%	24.37%	20.60%	
Franklin Templeton	0.21%	5.39%	24.88%	22.41%	
ACWI Small Cap ex US	1.08%	5.09%	20.94%	19.57%	
Franklin Templeton - Net	0.04%	5.21%	24.25%	21.56%	
William Blair	1.52%	5.41%	23.94%	19.12%	
ACWI Small Cap ex US	1.08%	5.09%	20.94%	19.57%	
Intl SC Blended Benchmark	1.08%	5.09%	20.94%	19.57%	
William Blair - Net	1.33%	5.21%	23.25%	18.22%	
Emerging Markets	1.65%	7.78%	24.25%	20.67%	
Genesis	1.65%	7.78%	24.25%	20.67%	
MSCI Emerging Markets Index	2.27%	9.61%	28.62%	24.99%	
Genesis - Net	1.65%	7.78%	24.07%	20.24%	

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. 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.

Returns for Periods Ended August 31, 2017

	Last	Last	Last	
	36	60	120	Since
	Months	Months	Months	Inception
ntl Large Cap Active Core	6.11%	11.45%	•	5.24% (2/08)
Arrowstreet	6.58%	11.69%	_	5.33% (3/08)
MSCI ACWI ex-US Index	2.36%	7.36%	1.74%	2.01% (3/08)
Arrowstreet - Net	6.09%	11.17%	-	4.83% (3/08)
Brown	4.71%	12.20%	4.49%	8.34% (10/04)
MSCI ACWI ex-US Index	2.36%	7.36%	1.74%	6.41% (10/04)
Brown - Net	3.51%	11.12%	3.80%	6.69% (1/05)
GlobeFlex	7.22%	11.31%	3.60%	5.75% (3/06)
MSCI ACWI ex-US Index	2.36%	7.36%	1.74%	3.91% (3/06)
GlobeFlex - Net	6.79%	10.86%	3.15%	5.29% (3/06)
Progress Intl Equity	4.26%	-	-	4.34% (7/14)
Custom Benchmark	3.76%	-	-	3.63% (7/14)
MSCI ACWI ex-US Index	2.36%	7.36%	1.74%	2.09% (7/14)
Progress Intl Equity - Net	3.78%	-	-	3.88% (7/14)
ntl Large Cap Pass. Core	3.23%	8.90%	2.04%	3.47% (1/00)
NTGI MSCI EAFE Idx	3.23%	8.90%	2.03%	3.87% (2/00)
MSCI EAFE Index	2.83%	8.48%	1.62%	3.48% (2/00)
NTGI EAFE ldx - Net	3.22%	8.89%	2.02%	5.18% (1/05)
nternational Small Cap	6.81%	11.51%	2.35%	5.33% (12/05)
Franklin Templeton	6.11%	11.20%	_	7.65% (8/11)
ACWI Small Cap ex US	5.31%	10.30%	3.76%	5.81% (8/11)
Franklin Templeton - Net	5.34%	10.40%	-	6.88% (8/11)
William Blair	7.42%	11.77%	-	11.42% (9/10)
ACWI Small Cap ex US	5.31%	10.30%	3.76%	8.61% (9/10)
Intl SC Blended Benchmark	5.31%	10.30%	3.07%	9.08% (9/10)
William Blair - Net	6.60%	10.91%	-	10.57% (9/10)
	0.0070	10.0170		
Emerging Markets	2.24%	6.17%	5.54%	9.36% (2/92)
Genesis	2.24%	6.17%	5.54%	12.09% (5/04)
MSCI Emerging Markets Index	2.75%	5.67%	2.76%	9.98% (5/04)

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. 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 August 31, 2017

		Last	Year	Last	
	Last	3	to	12	
	Month	Months	Date	Months	
Dom. Fixed Active Core	1.01%	1.33%	3.84%	1.11%	
EARNEST Partners	1.03%	1.52%	4.07%	1.10%	
Blmbg Aggregate Index	0.90%	1.23%	3.64%	0.49%	
EARNEST Partners - Net	1.03%	1.48%	3.95%	0.94%	
Piedmont	1.02%	1.32%	4.07%	1.69%	
Blmbg Aggregate Index	0.90%	1.23%	3.64%	0.49%	
Piedmont - Net	0.99%	1.29%	3.95%	1.54%	
Garcia Hamilton	0.97%	1.14%	3.35%	0.52%	
Blmbg Aggregate Index	0.90%	1.23%	3.64%	0.49%	
Garcia Hamilton	0.97%	1.12%	3.26%	0.41%	
Dom. Fixed Passive Core	0.91%	1.25%	3.73%	0.54%	
BlackRock US Debt	0.90%	1.27%	3.75%	0.61%	
Blmbg Aggregate Index	0.90%	1.23%	3.64%	0.49%	
BlackRock US Debt - Net	0.90%	1.27%	3.75%	0.61%	
NTGI BImbg Agg. Index	0.92%	1.24%	3.71%	0.47%	
Blmbg Aggregate Index	0.90%	1.23%	3.64%	0.49%	
NTGI BImbg Agg. Index - Net	0.91%	1.24%	3.70%	0.47%	

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, 2017

	Last	Last	Last		
	36	60	120	Since	
	Months	Months	Months	Inception	
Dom. Fixed Active Core	3.09%	2.78%	4.87%	4.71% (4/01)	
EARNEST Partners	3.23%	2.83%	4.97%	4.76% (5/05)	
BImbg Aggregate Index	2.64%	2.19%	4.40%	4.30% (5/05)	
EARNEST Partners - Net	3.03%	2.63%	4.76%	4.55% (5/05)	
Piedmont	3.07%	2.80%	4.80%	4.56% (6/05)	
Blmbg Aggregate Index	2.64%	2.19%	4.40%	4.23% (6/05)	
Piedmont - Net	2.92%	2.63%	4.62%	4.36% (6/05)	
Garcia Hamilton	-	-	-	2.98% (6/15)	
Blmbg Aggregate Index	2.64%	2.19%	4.40%	2.58% (6/15)	
Garcia Hamilton	-	-	-	2.88% (6/15)	
Dom. Fixed Passive Core	2.73%	2.23%	4.38%	6.12% (1/90)	
BlackRock US Debt	2.77%	-	-	3.36% (10/13)	
Blmbg Aggregate Index	2.64%	2.19%	4.40%	3.21% (10/13)	
BlackRock US Debt - Net	2.77%	-	-	3.36% (10/13)	
NTGI BImbg Agg. Index	2.69%	2.21%	4.37%	6.18% (2/90)	
Blmbg Aggregate Index	2.64%	2.19%	4.40%	6.17% (2/90)	
NTGI Blmbg Agg. Index - Net	2.68%	2.20%	4.36%	4.22% (1/05)	

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, 2017

		Last Year		Year	Last	
	Last	3	to	12		
	Month	Months	Date	Months		
Domestic Fixed Core Plus	0.85%	1.40%	4.57%	2.14%		
Brandes Core Plus	0.99%	1.20%	4.04%	0.92%		
Blmbg Aggregate Index	0.90%	1.23%	3.64%	0.49%		
Brandes Core Plus - Net	0.99%	1.20%	4.04%	0.92%		
LM Capital	0.72%	1.13%	4.06%	1.65%		
Blmbg Aggregate Index	0.90%	1.23%	3.64%	0.49%		
LM Capital - Net	0.72%	1.09%	3.93%	1.48%		
Progress Fixed Income	0.91%	1.44%	4.34%	1.90%		
Blmbg Aggregate Index	0.90%	1.23%	3.64%	0.49%		
Progress Fixed Inc Net	0.83%	1.36%	4.08%	1.57%		
Taplin, Canida, Habacht	0.75%	1.25%	4.55%	2.87%		
Blmbg Aggregate Index	0.90%	1.23%	3.64%	0.49%		
Taplin, Canida, Hab Net	0.75%	1.21%	4.45%	2.74%		
Western	0.97%	1.99%	5.94%	3.30%		
Blmbg Aggregate Index	0.90%	1.23%	3.64%	0.49%		
Western - Net	0.93%	1.96%	5.87%	3.19%		
Bank Loans	(0.13%)	0.71%	3.09%	7.14%		
Barings Global Loan Fund	(0.13%)	0.71%	3.09%	7.14%		
Custom Benchmark	(0.08%)	0.67%	2.81%	5.97%		
Barings Global Loan Fund - Net	(0.13%)	0.66%	2.80%	6.63%		
Emerging Markets	2.09%	3.96%	13.17%	10.57%		
	2.03 /6	5.50%	13.17 /6	10.57 /6		
Standish	2.09%	3.96%	13.17%	10.57%		
Custom Benchmark	1.59%	3.26%	11.22%	7.52%		
Standish - Net	2.00%	3.88%	12.88%	10.19%		
Opportunistic Fixed Income	(0.12%)	1.14%	4.78%	8.01%		
Creation	(0.409())	4 4 4 0/	4 700/	0.040/		
Crescent Custom Benchmark	(0.12%)	1.14% 0.92%	4.78% 4.32%	8.01% 7.29%		
Crescent - Net	(0.04%)		4.32%			
Greacent - Iner	(0.18%)	0.96%	4.30%	7.27%		
High Yield	0.32%	1.56%	6.05%	8.54%		
MacKay Shields	0.24%	1.48%	5.99%	8.95%		
ML High Yield Cash Pay Index	(0.02%)	1.24%	6.12%	8.79%		
MacKay Shields - Net	0.15%	1.39%	5.72%	8.57%		

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.



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 fo	r Periods	Ended	August	31,	2017
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	Last	Last	Last		
	36	60	120	Since	
	Months	Months	Months	Inceptior	ı
Domestic Fixed Core Plus	3.41%	3.28%	5.25%	8.32%	
Brandes Core Plus	-	-	-	2.59%	(3/16)
Blmbg Aggregate Index	2.64%	2.19%	4.40%	2.78%	(3/16)
Brandes Core Plus - Net	-	-	-	2.59%	(3/16)
LM Capital	3.27%	2.99%	5.32%	5.14%	(5/05)
Blmbg Aggregate Index	2.64%	2.19%	4.40%	4.30%	(5/05)
LM Capital - Net	3.11%	2.83%	5.15%	4.97%	(5/05)
Progress Fixed Income	3.15%	3.09%	5.15%	5.15%	(1/06)
Blmbg Aggregate Index	2.64%	2.19%	4.40%	4.41%	(1/06)
Progress Fixed Inc Net	2.81%	2.74%	4.79%	4.80%	(1/06)
r rogress r ixed inc Net	2.0170	2.7470	4.7370	4.0070	(1/00)
Taplin, Canida, Habacht	3.51%	3.68%	5.52%	5.22%	(5/05)
Blmbg Aggregate Index	2.64%	2.19%	4.40%	4.30%	(5/05)
Taplin, Canida, Hab Net	3.37%	3.55%	5.38%	5.09%	(5/05)
Western	4.18%	3.90%	5.53%	5.70%	(11/01)
Blmbg Aggregate Index	2.64%	2.19%	4.40%	4.44%	(11/01)
Western - Net	4.05%	3.77%	5.38%	5.15%	(1/05)
Bank Loans	4.62%	_	_	4.62%	(8/14)
Dalik Loalis	4.02 /0	-	-	4.02 /8	(6/14)
Barings Global Loan Fund	4.62%	-	-	4.62%	(8/14)
Custom Benchmark	3.88%	-	-	3.84%	(8/14)
Barings Global Loan Fund - Net	4.06%	-	-	4.05%	(8/14)
Emerging Markets	1.44%	-	-	3.60%	(8/14)
Standish	1.44%	-	-	3.60%	(8/14)
Custom Benchmark	1.93%	2.28%	5.83%	2.10%	(8/14)
Standish - Net	1.09%	-	-	3.26%	(8/14)
Opportunistic Fixed Income	3.62%	-	-	3.80%	(8/14)
Crescent	3.62%	-	-	3.62%	(9/14)
Custom Benchmark	4.18%	5.37%	6.39%	4.18%	(9/14)
Crescent - Net	3.18%	-	-		(9/14)
					. /
High Yield	5.77%	6.88%	8.19%	9.80%	(4/86)
MacKay Shields	6.07%	6.98%	7.87%	9.22%	(11/00)
ML High Yield Cash Pay Index	4.81%	6.46%	7.82%	7.91%	(11/00)
MacKay Shields - Net	5.67%	6.59%	7.48%	7.18%	. ,
	-				

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	12.13	2.36	10/31/2003
Franklin	3.94	1.84	07/31/2011
Dodge & Cox	3.20	1.23	08/31/2003
Earnest Int'l Equity	3.15	3.76	09/30/2004
ВМО	3.05	2.62	01/31/2001

Five Worst Performing Portfolio's vs. Benchmarks

Manager	Year-to-Date Underperformance	Since Inception Underperformance	
	(in % points)	(in % points)	
Brandes	-7.95	4.01	12/31/1995
Ativo	-7.69	0.59	09/30/2010
Pyramis SCG	-6.36	5.57	07/31/1988
Genesis	-4.37	2.11	04/30/2004
Mondrian	-3.90	0.45	03/31/2012

Five Highest Returning Portfolios

Manager	Year-to-Date Return	Since Inception Return	
	(in % points)	(in % points)	
Sands	31.30	11.52	10/31/2003
GlobeFlex	26.52	5.71	02/28/2006
Franklin	24.88	7.65	07/31/2011
Genesis	24.25	12.09	04/30/2004
William Blair Int'l SC	23.94	11.42	08/31/2010

Five Lowest Returning Portfolios

Manager	Year-to-Date Return	Since Inception Return	
	(in % points)	(in % points)	
DFA SCV	-3.13	12.53	01/31/1996
Channing	-0.73	12.11	06/30/2011
DFA Micro Cap	0.61	11.33	07/31/1987
Inv Couselors of MD	0.75	11.76	04/30/1999
Ativo	3.09	14.07	09/30/2010

Returns are shown gross of investment management fees.

Excludes Real Estate and Alternative Investments portfolios.