Callan

April 30, 2018

Illinois Municipal
Retirement Fund
Monthly Performance Report
Investment Measurement Service
Monthly Review

Market Environment As of April 30, 2018

| | | Year to | | Last 3 | Last 5 | Last 10 | |
|------------------------------------|------------|---------|-----------|--------|--------|---------|--|
| Index | Last Month | Date | Last Year | Years | Years | Years | |
| Russell:3000 Index | 0.38 | (0.27) | 13.05 | 10.20 | 12.75 | 9.13 | |
| S&P:500 | 0.38 | (0.38) | 13.27 | 10.57 | 12.96 | 9.02 | |
| Russell:2000 Index | 0.86 | 0.78 | 11.54 | 9.64 | 11.74 | 9.49 | |
| | | | | | | | |
| MSCI:ACWI ex US | 1.60 | 0.40 | 15.91 | 5.01 | 5.46 | 2.26 | |
| MSCI:EM | (0.44) | 0.97 | 21.71 | 6.00 | 4.74 | 2.17 | |
| | | | | | | | |
| Blmbg:Aggregate | (0.74) | (2.19) | (0.32) | 1.07 | 1.47 | 3.57 | |
| | | | | | | | |
| NCREIF:Total Index | 0.56 | 2.27 | 7.10 | 8.55 | 9.91 | 6.13 | |
| Black at October alife Bridge Lake | 0.40 | 4.00 | 0.04 | (4.77) | (7.00) | (0.40) | |
| Blmbg:Commodity Price Idx | 2.42 | 1.62 | 6.64 | (4.77) | (7.68) | (8.10) | |

The return of volatility in the first quarter continued into April as markets struggled to balance the good with the bad. While tensions between the U.S. and China again dominated headlines, increasing pressures with Russia and uncertainty around Iran were added to the mix. Oil prices were up over 7% in April, and commodities were the top performing asset class. Domestically, companies are experiencing a better than expected earnings season; through May 11, 91% of S&P 500 companies had reported actual results for the first quarter, with 78% reporting positive EPS surprises. U.S. equity markets (Russell 3000 Index) rebounded after falling for two consecutive months, but only managed to return 0.38%. The 10-year U.S. Treasury yield briefly hit 3.0% towards the end of the month, before finishing at 2.95%. As a result, the Bloomberg Aggregate Index fell 0.74% in April, and fixed income was down overall.

Nonfarm payroll growth hit 164,000 in April, on the low end of expectations. Revisions to the March and February numbers provided a 30,000 gain, helping to offset the below consensus April figure. Unemployed workers fell 239,000 in April, driving down the unemployment rate 0.2% to 3.9%. These numbers were apparently not substantial enough to entice employers into paying more to attract workers. Average hourly earnings increased only 0.1% during the month to 2.6% on the year, below expectations.

Headline CPI came in below consensus in April, increasing 0.2%. The Core rate, which excludes food and energy, came in below expectations as well, increasing 0.1%. Over the last 12 months, Headline CPI increased 0.1% to 2.5% and Core CPI held steady at 2.1%. Gas prices were a key contributor to Headline CPI in April, up 3.0%.

The first estimate of first quarter GDP was respectable at an annualized 2.3%, 0.3% above consensus expectations, but down 0.6% from the fourth quarter of 2017. Service spending took the lead in the first quarter providing nearly 1.0% to the result, offsetting a sharp decline from spending on durables. Consumer spending rose at a 1.1% pace, positive, but slow compared to the 3.8% pace seen in the previous quarter.

^{*}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.

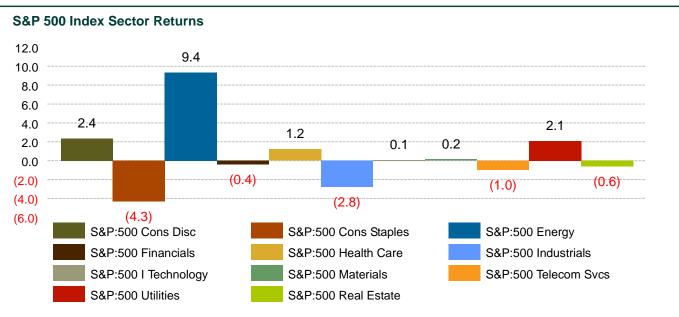


U.S. Equity Overview As of April 30, 2018

| | | | | | | Last 10 |
|----------------------|------------|--------------|-----------|--------------|--------------|---------|
| Index | Last Month | Year to Date | Last Year | Last 3 Years | Last 5 Years | Years |
| Russell:3000 Index | 0.38 | (0.27) | 13.05 | 10.20 | 12.75 | 9.13 |
| Russell:1000 Index | 0.34 | (0.35) | 13.17 | 10.25 | 12.84 | 9.10 |
| Russell:1000 Growth | 0.35 | 1.77 | 18.96 | 12.84 | 15.13 | 10.81 |
| Russell:1000 Value | 0.33 | (2.51) | 7.50 | 7.66 | 10.52 | 7.30 |
| Russell:Midcap Index | (0.15) | (0.61) | 11.17 | 8.28 | 11.77 | 9.48 |
| Russell:2000 Index | 0.86 | 0.78 | 11.54 | 9.64 | 11.74 | 9.49 |
| Russell:2000 Growth | 0.10 | 2.40 | 16.60 | 9.89 | 13.07 | 10.41 |
| Russell:2000 Value | 1.73 | (0.95) | 6.53 | 9.27 | 10.36 | 8.46 |
| | | | | | | |

On April 4, China retaliated against U.S. tariffs on Chinese goods, announcing additional tariffs on 106 U.S. products. China's response caused U.S. markets to react, with the Dow Jones Industrial average falling more than 450 basis points on April 4. With the U.S. again at the center of investor concerns, domestic equities struggled to capitalize on exceptionally strong earnings results. Through April, more than three quarters of reporting companies exceeded expectations, but, despite strong earnings, domestic equities were nearly flat for the month (Russell 3000 Index: +0.38%). Performance was mixed across style and size. Large cap growth (Russell 1000 Growth Index: +0.35%) narrowly beat large cap value (Russell 1000 Value Index: +0.33%) while small cap growth (Russell 2000 Growth Index: +0.10%) trailed small cap value (Russell 2000 Value Index: +1.73%). The Russell Midcap Index trailed for the month, falling 0.15%.

The increase in oil prices boosted the Energy sector to a return of 9.4% in the month, a full 7% higher than the next best performing sector. Consumer Discretionary (+2.4%) came in at a distant second, lifted by significant gains in both Amazon and Netflix. Consumer Staples was the worst performing sector, weighed down by disappointing earnings as these companies deal with competitive pressures from the likes of Amazon.

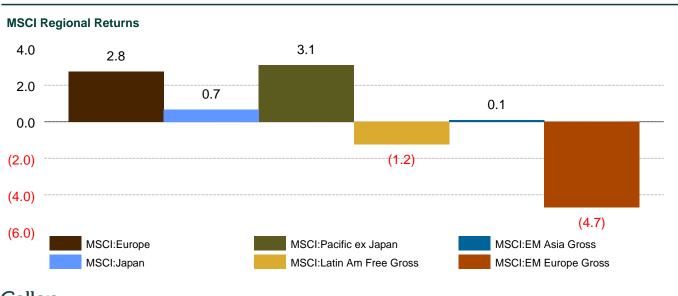


| Non-U.S. | Equity | Overview |
|-----------|---------------|----------|
| As of Apr | il 30, 2 | 018 |

| | Last | Year to | | Last 3 | Last 5 | Last 10 |
|---------------------------|--------|---------|-----------|--------|--------|---------|
| Index | Month | Date | Last Year | Years | Years | Years |
| MSCI:ACWI ex US | 1.60 | 0.40 | 15.91 | 5.01 | 5.46 | 2.26 |
| MSCI:EAFE | 2.28 | 0.72 | 14.51 | 4.94 | 5.90 | 2.43 |
| MSCI:EAFE Hedged Net | 4.57 | 0.63 | 10.28 | 5.42 | 8.92 | 4.75 |
| MSCI:EM | (0.44) | 0.97 | 21.71 | 6.00 | 4.74 | 2.17 |
| MSCI:ACWI ex US Small Cap | 1.16 | 0.80 | 18.44 | 8.70 | 8.24 | 5.33 |

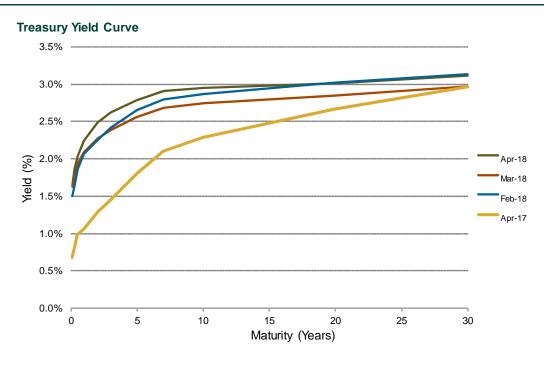
The global recovery continued through April, though a number of factors provided headwinds to performance such as continued uncertainty around international trade policy and a strengthening dollar. In the Eurozone, unemployment fell to 8.5% in April, supporting consumer confidence. As expected, the ECB kept monetary policy unchanged, highlighting subdued inflation; expectations are for rate increases to begin in 2019. In Japan, the month started off with concerns over trade friction between the U.S. and China, but sentiment improved as the likelihood of a full on trade war declined over the month. International equities outperformed relative to domestic equities as the U.S. was the primary source of investor concern (MSCI ACWI ex U.S.: +1.60% vs. Russell 3000 Index: +0.38%). Emerging markets equities fell for the third consecutive month as dollar strengthening proved too much to overcome (MSCI EM Index: -0.44%). Non-U.S. small cap equities trailed large cap (MSCI ACWI ex-U.S. Small Cap: +1.16%). The U.S. dollar strengthening served as a headwind to international stock performance in USD terms (MSCI EAFE Index: +2.28% vs. MSCI EAFE Hedged Index: +4.57%).

Developed regions outperformed emerging regions given emerging markets' relatively high exposure to the U.S. dollar. Pacific ex Japan (MSCI Pacific ex Japan Index) and Europe (MSCI Europe Index) led the way up 3.1% and 2.8%, respectively. EM Europe (MSCI EM Europe Gross) struggled, down 4.7%, followed by Latin America (MSCI Latin America Free Gross Index) down 1.2%. EM Asia (MSCI EM Asia Gross) managed to produce a marginally positive return, up 0.1%.



| Fixed | Income | Overview |
|--------------|----------|----------|
| As of | April 30 | , 2018 |

| | Last | Year to | | Last 3 | Last 5 | Last 10 |
|---------------------------|--------|---------|-----------|--------|--------|---------|
| Index | Month | Date | Last Year | Years | Years | Years |
| Blmbg:Aggregate | (0.74) | (2.19) | (0.32) | 1.07 | 1.47 | 3.57 |
| Blmbg:Long Gov/Credit | (1.94) | (5.45) | 1.47 | 2.29 | 2.89 | 6.58 |
| Blmbg:US Government | (0.80) | (1.94) | (1.04) | 0.37 | 0.74 | 2.77 |
| Blmbg:Credit | (0.91) | (3.02) | 0.65 | 2.05 | 2.27 | 4.99 |
| Blmbg:Mortgage Backed Sec | (0.50) | (1.69) | (0.38) | 0.94 | 1.59 | 3.40 |
| Blmbg:US TIPS | (0.06) | (0.85) | 0.27 | 1.04 | (0.12) | 3.14 |
| ML:US High Yield Cash Pay | 0.66 | (0.28) | 3.18 | 4.98 | 4.73 | 7.68 |
| 3 Month T-Bill | 0.13 | 0.49 | 1.17 | 0.57 | 0.36 | 0.34 |
| CS:Leveraged Loan | 0.49 | 2.08 | 4.69 | 4.19 | 4.11 | 5.00 |
| | | | | | | |



Driven by inflation announcements, rates rose across the curve in April and the 10-year Treasury briefly reached 3.0% toward the end of the month, before closing the month up 21 basis points at 2.95%. This marked the first time since January 2014 that the 10-year Treasury has reached 3.0%. Yield curve flattening continued to be a trend during the month. The 2-year Treasury yield ended the month up 22 basis points at 2.49% and the 30-year Treasury yield ended the month up 14 basis points at 3.11%. At the end of April, the market had priced in two additional rate increases in 2018.

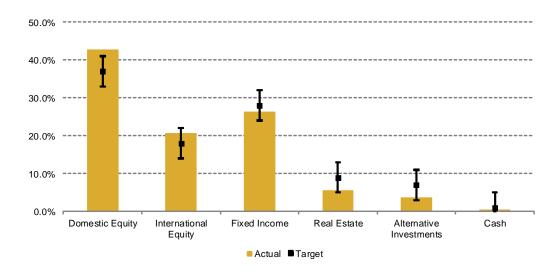
Rising rates dragged on fixed income performance in April. The Bloomberg Aggregate Index fell 0.74% during the month. Long duration felt the most impact from rising rates as the Bloomberg Long Gov/Credit Index fell 1.94%. Investment grade credit fell 0.91% despite spreads tightening, albeit a marginal one basis point. TIPS (Bloomberg U.S. TIPS Index: -0.06%) were nearly flat for the month, performing as expected in an inflation induced rising rate environment. High yield (+0.66%) led the way in April on the back of spreads narrowing by 16 basis points. Bank loans (Credit Suisse Leveraged Loans Index) also provided positive returns, up 0.49% in the month.

IMRF Commentary Executive Summary

Total Fund

The market value of the Total Fund was \$41.18 billion at the end of April, an increase of \$310.8 million from the prior month. The Fund returned 0.53% during the month, leading the 0.33% return of its benchmark. Domestic Equity (+0.81%) outperformed its benchmark (+0.38%). International Equity (+1.31%) trailed its benchmark by 29 basis points. The Fixed Income composite fell 0.54%, ahead of its benchmark return of -0.74%. Real Estate gained 0.72% in April, leading its benchmark by seven basis points. Over the last three months, Alternatives (+2.88%) outperformed the benchmark return of 2.18%. For the trailing year, the fund is 190 basis points ahead of its benchmark, returning 10.57%.

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 April month end, Domestic Equity was 5.8% above the target. The Chief Investment Officer and Consultant do not recommend any rebalancing at this time.



U.S. Equity

The U.S. Equity composite returned 0.81% during April, leading the Russell 3000 Index by 43 basis points. For the month, small caps outperformed large caps.

Large Cap: IMRF's Large Cap managers added 0.70% in April, ahead of the 0.34% return of the Russell 1000 Index. In aggregate, growth managers returned 1.26%, while the Russell 1000 Growth Index increased 0.35%. Value managers added 0.54% collectively, outperforming the 0.33% return of the Russell 1000 Value Index.

Small Cap: The Small Cap composite (+1.01%) led the Russell 2000 Index by 15 basis points in April. The growth managers collectively returned 0.84%, relative to the 0.10% return of the Russell 2000 Growth Index. The value managers returned 1.32% during the month, but trailed the Russell 2000 Value Index by 41 basis points. The Micro Cap composite returned 0.70% in April.

Public Real Assets: The Public Real Assets portfolio managed by Brookfield and Cohen & Steers increased 2.22% in April, 14 basis points ahead of the custom benchmark.

IMRF Commentary Executive Summary

International Equity

The International Equity composite returned 1.31% in April, 29 basis points behind its MSCI ACWI ex-U.S. benchmark (+1.60%).

International Large Cap: International Large Cap managers collectively added 1.63% in April, outperforming the MSCI ACWI ex-U.S. Index by three basis points. International Large Cap Growth (+0.90%) managers beat the MSCI ACWI ex-U.S. Growth Index by seven basis points. International Large Cap Value managers returned 2.94% for the month, 39 basis points ahead of the MSCI ACWI ex-U.S. Value Index.

International Small Cap and Emerging Markets: The International Small Cap managers increased 0.15% in April, 101 basis points behind the MSCI ACWI Small Cap ex-U.S. Index return of 1.16%. The Emerging Markets portfolio, managed by Genesis, lost 0.59% during the month, trailing the MSCI Emerging Markets Index by 17 basis points.

Fixed Income

The Fixed Income composite lost 0.54% in April relative to the -0.74% return of the Bloomberg Aggregate Index.

Active Core: In aggregate, the Domestic Active Core managers were down 0.62% in April, 12 basis points ahead of the Bloomberg Aggregate Index.

Core Plus: Domestic Fixed Core Plus managers ended the month down 0.59%, outperforming the Bloomberg Aggregate Index by 15 basis points.

Bank Loans: The Bank Loans portfolio, managed by Barings, matched the custom benchmark return of 0.69%.

Emerging Markets: The Emerging Markets Debt component, managed by Standish, lost 2.20% in April, 17 basis points behind the custom benchmark.

Opportunistic: The Opportunistic Fixed Income allocation, managed by Crescent, returned 0.46% in April, trailing the custom benchmark by eight basis points.

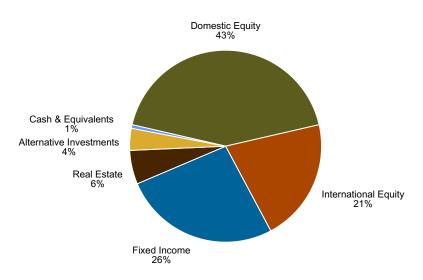
High Yield: The High Yield portfolio, managed by Mackay Shields, returned 0.23%, but trailed the ML High Yield Cash Pay Index return of 0.66%.



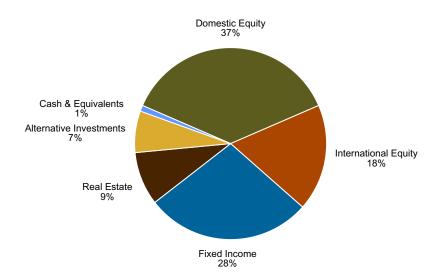
Actual vs Target Asset Allocation

The first chart below shows the Fund's asset allocation as of April 30, 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 | 17,613 | 42.8% | 37.0% | 5.8% | 2,376 |
| International Equity | 8,578 | 20.8% | 18.0% | 2.8% | 1,165 |
| Fixed Income ' ' | 10,862 | 26.4% | 28.0% | (1.6%) | (668) |
| Real Estate | 2,353 | 5.7% | 9.0% | (3.3%) | (1,353) |
| Alternative Investments | 1,507 | 3.7% | 7.0% | (3.3%) | (1,375) |
| Cash & Equivalents | 266 | 0.6% | 1.0% | (0.4%) | ` (146) |
| Total | 41 180 | 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 April 30, 2018, with the distribution as of March 31, 2018.

Asset Distribution Across Investment Managers

| | April 30, 2018 | | March 31, 2018 | | |
|---|---|---|---|---|--|
| | Market Value | Percent | Market Value | Percent | |
| Domestic Equity* Large Cap Growth | \$17,613,237,896 | 42.77% | \$17,481,044,601 | 42.77% | |
| NTGI S&P 500 Growth Idx Sands | 1,982,497,592 1,987,186,777 | 4.81% 4.83% | 1,976,993,097 1,943,304,933 | 4.84% 4.75% | |
| Large Cap Value | | | | | |
| Dodge & Cox BMO LSV NTGI S&P 500 Value Idx | 1,285,830,052 1,513,539,913 1,539,340,049 1,616,462,740 | 3.12% 3.68% 3.74% 3.93% | 1,280,800,382 1,505,702,619 1,536,805,942 1,608,360,578 | 3.13% 3.68% 3.76% 3.94% | |
| Large Cap Core | | | | | |
| NTGI MarketCap Index | 3,561,569,479 | 8.65% | 3,548,767,081 | 8.68% | |
| Small Cap Growth | | | | | |
| Frontier FIAM | 485,577,713 1,160,918,120 | 1.18% 2.82% | 477,218,868 1,155,637,690 | 1.17% 2.83% | |
| Small Cap Value | | | | | |
| Channing Dimensional Small Cap Value Inv. Counselors of Maryland | 230,837,518 589,997,278 655,342,088 | 0.56% 1.43% 1.59% | 227,469,477 580,791,163 648,725,435 | 0.56% 1.42% 1.59% | |
| Micro Cap | | | | | |
| Ativo Dimensional Micro Cap | 129,022,041 425,447,905 | 0.31% 1.03% | 129,830,562 420,728,779 | 0.32% 1.03% | |
| Public Real Assets | | | | | |
| Brookfield Cohen & Steers | 145,426,554 304,242,077 | 0.35% 0.74% | 140,745,011 299,162,982 | 0.34% 0.73% | |
| International Equity International Large Cap Growth | \$8,577,841,956 | 20.83% | \$8,465,865,394 | 20.71% | |
| EARNEST Partners William Blair | 670,266,277 771,845,159 | 1.63% 1.87% | 661,636,224 767,337,245 | 1.62% 1.88% | |
| International Large Cap Value | | | | | |
| Brandes Lombardia Mondrian Lazard | 651,156,112 1 609,048,393 116,826,907 | 1.58% 0.00% 1.48% 0.28% | 627,689,711 1 592,686,757 116,941,694 | 1.54% 0.00% 1.45% 0.29% | |
| International Large Cap Core | | | | | |
| Arrowstreet Brown GlobeFlex NTGI MSCI EAFE Index Progress Intl Equity | 717,810,425 347,513,198 705,611,158 2,290,435,359 313,669,564 | 1.74% 0.84% 1.71% 5.56% 0.76% | 709,453,314 340,684,573 695,100,076 2,252,993,616 313,669,564 | 1.74% 0.83% 1.70% 5.51% 0.77% | |
| International Small Cap | | | | | |
| Franklin Templeton William Blair | 258,921,452 300,774,558 | 0.63% 0.73% | 257,600,217 301,236,306 | 0.63% 0.74% | |
| Emerging Markets Genesis | 823,963,395 | 2.00% | 828,836,097 | 2.03% | |

^{*} includes asset in equity transition account.



Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of April 30, 2018, with the distribution as of March 31, 2018.

Asset Distribution Across Investment Managers

| | April 30, 2 | 018 | March 31, 2018 | | |
|-----------------------------|------------------|---------|------------------|---------|--|
| | Market Value | Percent | Market Value | Percent | |
| Total Fixed Income | \$10,862,280,216 | 26.38% | \$10,929,025,931 | 26.74% | |
| Domestic Fixed Core | | | | | |
| Brandes Core | 338,955,605 | 0.82% | 340,994,844 | 0.83% | |
| EARNEST Partners | 736,493,116 | 1.79% | 741,341,630 | 1.81% | |
| Piedmont Investment | 736,811,729 | 1.79% | 742,411,273 | 1.82% | |
| Garcia Hamilton | 720,820,639 | 1.75% | 724,153,430 | 1.77% | |
| Domestic Fixed Passive Core | | | | | |
| NTGI Blmbg Agg. Index | 1,626,725,676 | 3.95% | 1,638,427,628 | 4.01% | |
| BlackRock US Debt | 1,558,065,824 | 3.78% | 1,569,627,608 | 3.84% | |
| Domestic Fixed Core Plus | | | | | |
| BlackRock Core Plus | -14,125 | (0.00%) | 88,392 | 0.00% | |
| LM Capital | 842,176,170 | 2.05% | 847,271,171 | 2.07% | |
| Progress Fixed Income | 881,224,973 | 2.14% | 881,224,973 | 2.16% | |
| Taplin, Canida, & Habacht | 866,026,595 | 2.10% | 871,386,352 | 2.13% | |
| Western | 1,019,856,143 | 2.48% | 1,030,960,760 | 2.52% | |
| Bank Loans | | | | | |
| Barings Global Loan Fund | 584,123,217 | 1.42% | 585,929,665 | 1.43% | |
| Emerging Markets Debt | | | | | |
| Standish | 209,559,328 | 0.51% | 214,262,691 | 0.52% | |
| Opportunistic Fixed Income | | | | | |
| Crescent | 114,323,862 | 0.28% | 115,230,727 | 0.28% | |
| High Yield | | | | | |
| MacKay Shields | 626,808,124 | 1.52% | 625,391,485 | 1.53% | |
| FIAM High Yield | 323,341 | 0.00% | 323,303 | 0.00% | |
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^{**} Non-Core International Real Estate Funds funded since August 2014.



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

Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of April 30, 2018, with the distribution as of March 31, 2018.

Asset Distribution Across Investment Managers

| | April 30, 2018 | | March 31, 2018 | | |
|-------------------------------------|------------------|---------|------------------|---------|--|
| | Market Value | Percent | Market Value | Percent | |
| Real Estate | \$2,353,431,020 | 5.71% | \$2,314,222,570 | 5.66% | |
| Real Estate Core | | | | | |
| TA Buckhead Ind. Prop. | 408,041,191 | 0.99% | 408,041,191 | 1.00% | |
| Barings Core Property Fund | 111,817,454 | 0.27% | 127,176,653 | 0.31% | |
| Barings European Core Property | 31,575,135 | 0.08% | 32,140,939 | 0.08% | |
| Blackstone Property Partners Europe | 101,132,866 | 0.25% | 102,945,094 | 0.25% | |
| INVESCO Core RE | 200.216.037 | 0.49% | 197,023,975 | 0.48% | |
| INVESCO Euro real estate | 53,262,458 | 0.13% | - | - | |
| AEW Core Property Trust | 229,725,050 | 0.56% | 228,672,438 | 0.56% | |
| CBRE US Core Property Trust | 178,261,183 | 0.43% | 173,565,034 | 0.42% | |
| Real Estate Non-Core | | | | | |
| Artemis MWBE Spruce | 115,324,162 | 0.28% | 114,696,600 | 0.28% | |
| Franklin Templeton EMREFF | 25,044,539 | 0.06% | 26,299,371 | 0.06% | |
| Security Capital | 48,089,578 | 0.12% | 46,674,668 | 0.11% | |
| Dune IÍ | 27,023,006 | 0.07% | 27,023,006 | 0.07% | |
| Non-Core Real Estate Funds* | 726,310,905 | 1.76% | 729,763,489 | 1.79% | |
| Non-Core Intl Real Estate Funds** | 92,103,167 | 0.22% | 94,388,536 | 0.23% | |
| Rockwood Fund VIII | 2,248,182 | 0.01% | 2,555,469 | 0.01% | |
| Almanac ARS V | 2,931,907 | 0.01% | 2,931,907 | 0.01% | |
| TA Fund IX | 324,199 | 0.00% | 324,199 | 0.00% | |
| Alternative Investments | \$1,507,485,750 | 3.66% | \$1,507,769,361 | 3.69% | |
| Absolute Return | 0.007.070 | 0.000/ | 0.004.700 | 0.040/ | |
| Aurora | 2,027,670 | 0.00% | 2,621,788 | 0.01% | |
| rivate Equity | 000 000 040 | 0.700/ | 045 740 004 | 0.770/ | |
| Abbott | 323,308,219 | 0.79% | 315,713,091 | 0.77% | |
| Muller & Monroe ILPEFF | 1 | 0.00% | 1 | 0.00% | |
| Muller & Monroe MPEFF | 6,120,292 | 0.01% | 6,120,292 | 0.01% | |
| Pantheon | 222,029,006 | 0.54% | 225,932,287 | 0.55% | |
| Private Equity Fund - Domestic | 585,601,201 | 1.42% | 589,086,937 | 1.44% | |
| Private Equity Fund - International | 88,827,439 | 0.22% | 87,634,674 | 0.21% | |
| griculture | 404 005 000 | 0.440/ | 404 225 020 | 0.440/ | |
| Premiere Partners IV | 181,235,928 | 0.44% | 181,235,928 | 0.44% | |
| imberland | 75 050 505 | 0.499/ | 75 700 404 | 0.400/ | |
| Forest Investment Assoc. | 75,250,595 | 0.18% | 75,739,184 | 0.19% | |
| Inlisted Infrastructure | 22.005.400 | 0.069/ | 22 605 470 | 0.000/ | |
| Unlisted Infrastructure Funds | 23,085,400 | 0.06% | 23,685,178 | 0.06% | |
| Cash & Equivalents | \$266,118,950 | 0.65% | \$171,722,727 | 0.42% | |
| Total Fund | \$41,180,395,789 | 100.0% | \$40,869,650,584 | 100.0% | |

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

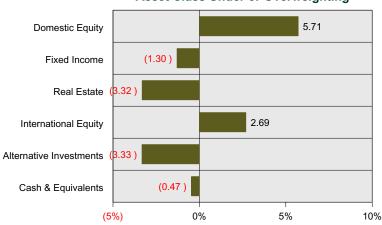


^{*} Non-Core Real Estate Funds funded since September 2011.

Monthly Total Fund Relative Attribution - April 30, 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.





Actual vs Target Returns

0.81 0.38 **Domestic Equity** 0.05 (0.54) (0.74) 0.07 Fixed Income 0.72 0.65 Real Estate (0.06)1.31 0.03 1.60 International Equity 0.57 0.72 Alternative Investments (0.00)0.13 0.13 Cash & Equivalents 0.53 0.03 0.33 Total 1.5% (1.5%) (1.0%) (0.5%) 0.0% (0.10%)0.5% 1.0% 2.0% 2.5% (0.20%)0.00% 0.10% Actual Target Manager Effect Asset Allocation Total

Relative Attribution Effects for Month ended April 30, 2018

| Asset Class | Effective Actual Weight | Effective Target Weight | Actual Return | Target Return | Manager Effect | Asset Allocation | Total Relative Return |
|------------------------|-------------------------------|-------------------------------|------------------|------------------|-------------------|---------------------|-----------------------------|
| Domestic Equity | 43% | 37% | 0.81% | 0.38% | 0.18% | 0.00% | 0.18% |
| Fixed Income | 27% | 28% | (0.54%) | (0.74%) | 0.05% | 0.01% | 0.07% |
| Real Estate | 6% | 9% | `0.72%´ | `0.65%´ | 0.00% | (0.01%) | (0.01%) |
| International Equity | 21% | 18% | 1.31% | 1.60% | (0.06%) | 0.03% | (0.02%) |
| Alternative Investment | | 7% | 0.57% | 0.72% | (0.01%) | (0.01%) | (0.02%) |
| Cash & Equivalents | 1% | 1% | 0.13% | 0.13% | (0.00%) | 0.00% | 0.00% |
| | | | | | | | |
| Total | | | 0.53% = | 0.33% + | · 0.17% + | 0.03% | 0.20% |

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



Relative Attribution by Asset Class

0.18

0.17

0.20%

0.20

0.30%

0.18

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.

| | | Last | Year | Last |
|-----------------------------------|---------|---------|---------|---------|
| | Last | 3 | to | 12 |
| | Month | Months | Date | Months |
| Domestic Equity | 0.81% | (3.99%) | 1.06% | 14.15% |
| Blended Benchmark** | 0.38% | (5.26%) | (0.27%) | 13.05% |
| Domestic Equity - Net | 0.79% | (4.03%) | 1.01% | 13.93% |
| International Equity | 1.31% | (4.16%) | 1.35% | 17.01% |
| MSCI ACWI x US (Net) | 1.60% | (4.90%) | 0.40% | 15.91% |
| International Equity - Net | 1.30% | (4.24%) | 1.25% | 16.65% |
| Fixed Income | (0.54%) | (0.89%) | (1.55%) | 1.01% |
| Blmbg Aggregate Index | (0.74%) | (1.05%) | (2.19%) | (0.32%) |
| Fixed Income - Net | (0.55%) | (0.91%) | (1.59%) | 0.88% |
| Real Estate | 0.72% | 1.67% | 2.05% | 9.78% |
| Blended Benchmark*** | 0.65% | 1.97% | 2.64% | 7.29% |
| Real Estate - Net | 0.72% | 1.67% | 2.05% | 9.78% |
| Alternative Investments | 0.57% | 2.88% | 2.78% | 12.03% |
| Alternatives Custom Benchmark**** | 0.72% | 2.18% | 2.91% | 9.00% |
| Alternative Investments - Net | 0.53% | 2.81% | 2.70% | 11.83% |
| Private Equity | 0.75% | 3.59% | 3.55% | 15.16% |
| Alternatives Custom Benchmark**** | 0.72% | 2.18% | 2.91% | 9.00% |
| Agriculture | 0.00% | (0.06%) | (0.54%) | (3.98%) |
| Blended Benchmark*** | 0.65% | 1.97% | 2.64% | 7.29% |
| Timberland | (0.89%) | (0.82%) | (1.06%) | 5.18% |
| Blended Benchmark*** | 0.65% | 1.97% | 2.64% | 7.29% |
| Unlisted Infrastructure | 0.00% | - | - | - |
| Alternatives Custom Benchmark**** | 0.72% | 2.18% | 2.91% | 9.00% |
| otal Fund | 0.53% | (2.66%) | 0.54% | 10.57% |
| Total Fund - Net | 0.52% | (2.71%) | 0.48% | 10.34% |
| Total Fund Benchmark | 0.33% | (2.75%) | (0.15%) | 8.67% |

^{*} 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.

| | Last 36 Months | 36 60 | Last 120 | Since |
|-----------------------------------|----------------------|--------|-------------|---------------|
| | | | Months | Inception |
| Domestic Equity | 10.03% | 12.93% | 9.33% | 11.67% (1/82) |
| Blended Benchmark** | 10.20% | 12.71% | 9.20% | 11.41% (1/82) |
| Domestic Equity - Net | 9.79% | 12.68% | 9.07% | 8.50% (1/05) |
| International Equity | 6.49% | 7.08% | 3.62% | 8.14% (9/86) |
| MSCI ACWI x US (Net) | 5.01% | 5.46% | 2.26% | - |
| International Equity - Net | 6.14% | 6.73% | 3.30% | 6.29% (1/05) |
| Fixed Income | 2.15% | 2.37% | 4.79% | 8.28% (1/82) |
| Blmbg Aggregate Index | 1.07% | 1.47% | 3.57% | 7.72% (1/82) |
| Fixed Income - Net | 2.00% | 2.22% | 4.65% | 4.62% (1/05) |
| Real Estate - Net | 10.14% | 10.71% | 5.12% | 7.27% (1/05) |
| Blended Benchmark*** | 8.81% | 10.30% | 6.82% | 7.71% (1/05) |
| Alternative Investments | 8.28% | 9.34% | 6.06% | 10.69% (2/86) |
| Alternatives Custom Benchmark**** | 9.00% | 9.00% | 9.64% | 12.85% (2/86) |
| Alternative Investments - Net | 7.98% | 9.01% | 5.77% | 8.09% (1/05) |
| Private Equity | 11.07% | 12.35% | 7.54% | 12.85% (2/86) |
| Alternatives Custom Benchmark**** | 9.00% | 9.00% | 9.64% | 12.85% (2/86) |
| Agriculture | 4.45% | 8.96% | 9.22% | 7.82% (10/97) |
| Blended Benchmark*** | 8.81% | 10.30% | 6.82% | 7.54% (10/97) |
| Timberland | 0.85% | 4.81% | 4.76% | 7.90% (10/92) |
| Blended Benchmark*** | 8.81% | 10.30% | 6.82% | 7.56% (10/92) |
| Unlisted Infrastructure | - | - | - | 0.00% (4/18) |
| Alternatives Custom Benchmark**** | 9.00% | 9.00% | 9.64% | 0.72% (4/18) |
| 「otal Fund | 6.93% | 8.44% | 7.17% | 9.97% (1/82) |
| Total Fund - Net | 6.70% | 8.20% | 6.94% | 7.26% (1/05) |
| Total Fund Benchmark | 6.53% | 7.76% | 6.68% | 6.98% (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 April 30, 2018

| | Last | Last | Year to | Last | |
|----------------------------------|--------|----------|------------|---------|--|
| | | 3 | | 12 | |
| | Month | Months | Date | Months | |
| Large Cap Equity | 0.70% | (4.84%) | 0.96% | 15.14% | |
| Russell 1000 Index | 0.34% | (5.54%) | (0.35%) | 13.17% | |
| Large Cap Growth | 1.26% | (2.17%) | 6.95% | 21.83% | |
| NTGI S&P 500 Growth Idx | 0.28% | (4.70%) | 2.16% | 17.65% | |
| S&P/Citi 500 Growth Index | 0.28% | (4.68%) | 2.21% | 17.72% | |
| NTGI S&P 500 Growth ldx - Net | 0.28% | (4.70%) | 2.16% | 17.65% | |
| Sands | 2.26% | 0.50% | 12.19% | 28.78% | |
| LCG Blended Benchmark* | 0.35% | (4.96%) | 1.77% | 18.96% | |
| Russell 1000 Growth Index | 0.35% | (4.96%) | 1.77% | 18.96% | |
| Sands - Net | 2.26% | 0.45% | 12.13% | 28.51% | |
| Large Cap Value | 0.54% | (6.23%) | (1.86%) | 11.94% | |
| Laige oup value | 0.0470 | (0.2070) | (1.0070) | 11.5470 | |
| Dodge & Cox | 0.71% | (6.28%) | (0.92%) | 11.60% | |
| LCV Blended Benchmark** | 0.33% | (6.14%) | (2.51%) | 7.50% | |
| Russell 1000 Value Index | 0.33% | (6.14%) | (2.51%) | 7.50% | |
| Dodge & Cox - Net | 0.71% | (6.32%) | (0.97%) | 11.37% | |
| ВМО | 0.67% | (5.97%) | (2.22%) | 14.22% | |
| LCV Blended Benchmark** | 0.33% | (6.14%) | (2.51%) | 7.50% | |
| Russell 1000 Value Index | 0.33% | (6.14%) | (2.51%) | 7.50% | |
| BMO - Net | 0.67% | (6.02%) | (2.27%) | 13.97% | |
| LSV | 0.32% | (5.55%) | (0.97%) | 14.26% | |
| LCV Blended Benchmark** | 0.33% | (6.14%) | (2.51%) | 7.50% | |
| Russell 1000 Value Index | 0.33% | (6.14%) | (2.51%) | 7.50% | |
| LSV - Net | 0.26% | (5.61%) | (1.08%) | 14.00% | |
| NTGI S&P 500 Value Idx | 0.50% | (6.95%) | (3.06%) | 8.37% | |
| S&P/Citi 500 Value Index | 0.50% | (6.95%) | (3.09%) | 8.31% | |
| NTGI S&P 500 Value Idx - Net | 0.50% | (6.95%) | (3.06%) | 8.37% | |
| Large Cap Passive Core | 0.36% | (5.27%) | (0.25%) | 13.12% | |
| NTGI MarketCap Idx | 0.36% | (5.27%) | (0.25%) | 13.12% | |
| DJ U.S. Total Stock Market Index | 0.36% | (5.27%) | (0.25%) | 13.07% | |
| NTGI MarketCap Idx - Net | 0.36% | (5.27%) | (0.25%) | 13.12% | |

^{**} 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.



^{*} 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.

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 April 30, 2018

| | Last 36 | Last 60 | Last 120 | Since |
|----------------------------------|------------|------------|-------------|-----------------------|
| | Months | Months | Months | Inception |
| Large Cap Equity | 10.55% | 13.38% | 9.34% | 11.29% (1/82) |
| Russell 1000 Index | 10.25% | 12.84% | 9.10% | 11.60% (1/82) |
| Large Cap Growth | 12.51% | 14.86% | 10.78% | 11.86% (1/82) |
| NTGI S&P 500 Growth Idx | 12.56% | 14.96% | 10.76% | 7.50% (8/01) |
| S&P/Citi 500 Growth Index | 12.58% | 14.97% | 10.74% | 7.47% (8/01) |
| NTGI S&P 500 Growth Idx - Net | 12.55% | 14.95% | 10.75% | 9.47% (1/05) |
| Sands | 13.17% | 16.09% | 13.69% | 12.09% (11/03) |
| LCG Blended Benchmark* | 12.84% | 15.13% | 10.81% | 9.52% (11/03) |
| Russell 1000 Growth Index | 12.84% | 15.13% | 10.81% | 9.57% (11/03) |
| Sands - Net | 12.91% | 15.84% | 13.42% | 10.98% (1/05) |
| Large Cap Value | 9.33% | 12.53% | 8.29% | 10.47% (10/82) |
| Large Oap Value | 3.3370 | 12.55 /0 | 0.2370 | 10.47 /0 (10/62) |
| Dodge & Cox | 10.53% | 13.31% | 8.82% | 9.78% (9/03) |
| LCV Blended Benchmark** | 7.66% | 10.52% | 7.30% | 8.37% (9/03) |
| Russell 1000 Value Index | 7.66% | 10.52% | 7.30% | 8.55% (9/03) |
| Dodge & Cox - Net | 10.32% | 13.09% | 8.59% | 8.04% (1/05) |
| BMO | 8.90% | 12.52% | 8.28% | 8.36% (2/01) |
| LCV Blended Benchmark** | 7.66% | 10.52% | 7.30% | 5.59% (2/01) |
| Russell 1000 Value Index | 7.66% | 10.52% | 7.30% | 6.67% (2/01) |
| BMO - Net | 8.66% | 12.28% | 8.03% | 8.55% (1/05) |
| LSV | 10.18% | 13.57% | 9.29% | 11.55% (2/03) |
| LCV Blended Benchmark** | 7.66% | 10.52% | 7.30% | 9.37% (2/03) |
| Russell 1000 Value Index | 7.66% | 10.52% | 7.30% | 9.38% (2/03) |
| LSV - Net | 9.92% | 13.29% | 9.00% | 8.78% (1/05) |
| NTGI S&P 500 Value ldx | 8.14% | 10.70% | 7.14% | 5.70% (8/99) |
| S&P/Citi 500 Value Index | 8.04% | 10.59% | 7.08% | 5.68% (8/99) |
| NTGI S&P 500 Value ldx - Net | 8.14% | 10.70% | 7.13% | 6.98% (1/05) |
| Large Cap Passive Core | 10.27% | 12.79% | 9.17% | 11.16% (1/85) |
| NITOLIN L. 10 | 40.070/ | 40.700/ | 0.400/ | 40.000/ |
| NTGI MarketCap Idx | 10.27% | 12.79% | 9.18% | 10.92% (2/85) |
| DJ U.S. Total Stock Market Index | 10.16% | 12.69% | 9.19% | 10.87% (2/85) |
| NTGI MarketCap Idx - Net | 10.26% | 12.78% | 9.17% | 8.47% (1/05) |

^{**} 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.



^{*} 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.

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 April 30, 2018

| | | Last 3 Months | Year to Date | Last 12 Months | |
|------------------------------------|---------------|---------------------|--------------------|----------------------|--|
| | Last Month | | | | |
| | | | | | |
| Small Cap Equity | 1.01% | (0.83%) | 1.78% | 11.90% | |
| Russell 2000 Index | 0.86% | (1.79%) | 0.78% | 11.54% | |
| Small Cap Growth | 0.84% | 0.36% | 4.46% | 15.61% | |
| Frontier | 1.75% | 3.19% | 8.16% | 23.37% | |
| Russell 2000 Growth Index | 0.10% | (1.44%) | 2.40% | 16.60% | |
| Frontier - Net | 1.63% | 3.06% | 7.90% | 22.77% | |
| FIAM | 0.46% | (0.78%) | 2.98% | 12.65% | |
| Russell 2000 Growth Index | 0.10% | (1.44%) | 2.40% | 16.60% | |
| FIAM - Net | 0.37% | (0.86%) | 2.90% | 12.29% | |
| Small Cap Value | 1.32% | (1.71%) | (0.33%) | 9.30% | |
| Channing | 1.48% | (1.33%) | 0.14% | 8.04% | |
| Russell 2000 Value Index | 1.73% | (2.16%) | (0.95%) | 6.53% | |
| Channing - Net | 1.35% | (1.45%) | (0.11%) | 7.51% | |
| DFA Small Cap Value | 1.59% | (1.98%) | (0.63%) | 7.79% | |
| Russell 2000 Value Index | 1.73% | (2.16%) | (0.95%) | 6.53% | |
| DFA Small Cap Value - Net | 1.59% | (2.10%) | (0.76%) | 7.18% | |
| Inv. Counselors of Maryland | 1.02% | (1.61%) | (0.22%) | 11.39% | |
| Russell 2000 Value Index | 1.73% | (2.16%) | (0.95%) | 6.53% | |
| Inv. Couns. of Maryland - Net | 1.02% | (1.70%) | (0.32%) | 10.78% | |
| Micro Cap | 0.70% | (1.93%) | (0.20%) | 9.57% | |
| · | (0.000) | | | | |
| Ativo | (0.65%) | (3.67%) | (2.86%) | 3.30% | |
| Russell Microcap Index | 1.25% | (0.50%) | 1.94% | 13.76% | |
| Russell 2000 Growth Index | 0.10% | (1.44%) | 2.40% | 16.60% | |
| Russell 2000 Index | 0.86% | (1.79%) | 0.78% | 11.54% | |
| Ativo - Net | (0.81%) | (3.98%) | (3.17%) | 2.65% | |
| DFA Micro Cap | 1.12% | (1.39%) | 0.63% | 11.46% | |
| Russell 2000 Value Index | 1.73% | (2.16%) | (0.95%) | 6.53% | |
| Russell 2000 Index | 0.86% | (1.79%) | 0.78% | 11.54% | |
| DFA Micro Cap - Net | 1.12% | (1.51%) | 0.51% | 10.91% | |
| Public Real Assets | 2.22% | (3.10%) | (2.09%) | _ | |
| Public Real Assets Benchmark (1) | 2.08% | (3.26%) | (2.95%) | - | |
| Brookfield Public Global Inf | 3.33% | (3.66%) | (2.35%) | <u>-</u> | |
| Dow Jones Global Infra Comp Idx | 2.51% | (4.61%) | (3.84%) | (0.01%) | |
| Brookfield Public Global Inf - Net | 3.33% | (3.79%) | (2.48%) | - | |
| Cohen & Steers Public Global Inf | 1.70% | (2.82%) | (1.96%) | - | |
| FTSE GI Core Infr 50/50 N | 1.94% | (2.81%) | (2.66%) | 5.01% | |
| Cohen & St Public Global Inf - Net | 1.70% | (2.93%) | (2.07%) | | |



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 April 30, 2018

| | Last 36 Months | Last 60 Months | Last 120 Months | |
|---|-----------------------|----------------------|-----------------------|---|
| | | | | Since |
| | | | | Inception |
| Small Con Equity | | 11.95% | 10.01% | • |
| Small Cap Equity Russell 2000 Index | 8.74% 9.64% | 11.95% 11.74% | 9.49% | 12.43% (7/88) 9.67% (7/88) |
| Nussell 2000 Illuex | 9.04 /6 | 11.74/0 | 9.4970 | 9.07 /6 (7/66) |
| Small Cap Growth | 8.28% | 12.73% | 10.13% | 13.11% (7/88) |
| Frontier | 8.69% | 13.02% | 10.77% | 13.23% (8/88) |
| Russell 2000 Growth Index | 9.89% | 13.07% | 10.41% | 8.36% (8/88) |
| Frontier - Net | 8.09% | 12.41% | 10.10% | 9.68% (1/05) |
| FIAM | 9.09% | 13.38% | 10.71% | 13.74% (8/88) |
| Russell 2000 Growth Index | 9.89% | 13.07% | 10.41% | 8.36% (8/88) |
| FIAM - Net | 8.50% | 12.83% | 10.13% | 11.09% (1/05) |
| | 2.22,0 | | | (,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |
| Small Cap Value | 10.23% | 12.07% | 9.98% | 12.20% (9/89) |
| Channing | 9.67% | 12.04% | = | 12.23% (7/11) |
| Russell 2000 Value Index | 9.27% | 10.36% | 8.46% | 10.37% (7/11) |
| Channing - Net | 9.13% | 11.51% | - | 11.60% (7/11) |
| DFA Small Cap Value | 8.68% | 11.58% | 10.53% | 12.64% (2/96) |
| Russell 2000 Value Index | 9.27% | 10.36% | 8.46% | 9.93% (2/96) |
| DFA Small Cap Value - Net | 8.11% | 11.04% | 9.99% | 8.44% (1/05) |
| Inv. Counselors of Maryland | 13.04% | 13.49% | 10.20% | 12.02% (5/99) |
| Russell 2000 Value Index | 9.27% | 10.36% | 8.46% | |
| Inv. Couns. of Maryland - Net | 12.45% | 12.99% | 9.67% | 9.50% (5/99) 9.16% (1/05) |
| | | | | |
| Micro Cap | 6.21% | 9.96% | 8.78% | 11.84% (7/84) |
| Ativo | 7.31% | 12.84% | = | 13.33% (10/10) |
| Russell Microcap Index | 9.35% | 12.05% | 9.10% | 13.30% (10/10) |
| Russell 2000 Growth Index | 9.89% | 13.07% | 10.41% | 14.04% (10/10) |
| Russell 2000 Index | 9.64% | 11.74% | 9.49% | 13.01% (10/10) |
| Ativo - Net | 6.61% | 12.06% | - | 12.52% (10/10) |
| DFA Micro Cap | 11.48% | 13.54% | 11.12% | 11.49% (8/87) |
| Russell 2000 Value Index | 9.27% | 10.36% | 8.46% | 10.13% (8/87) |
| Russell 2000 Index | 9.64% | 11.74% | 9.49% | 9.03% (8/87) |
| DFA Micro Cap - Net | 10.92% | 12.98% | 10.58% | 8.49% (1/05) |
| Public Real Assets | _ | _ | _ | 0.13% (8/17) |
| Public Real Assets Public Real Assets Benchmark (1) | - | <u>-</u> | <u>-</u> | (1.67%) (8/17) |
| Table Real Access Denominary (1) | | | | (1.0770) (0/17) |
| Brookfield Public Global Inf | - | - | - | (2.76%) (8/17) |
| Dow Jones Global Infra Comp Idx | 0.39% | 4.38% | 7.02% | (4.17%) (8/17) |
| Brookfield Public Global Inf - Net | - | - | - | (3.00%) (8/17) |
| Cohen & Steers Public Global Inf | - | - | - | 1.58% (8/17) |
| FTSE GI Core Infr 50/50 N | 4.92% | 6.00% | - | (0.83%) (8/17) |
| Cohen & St Public Global Inf - Net | - | - | - | 1.39% (8/17) |

^{(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.

| | Last Month | Last | Year to | Last 12 | |
|------------------------|---------------|---------|------------|------------|--|
| | | 3 | | | |
| | | Months | Date | Months | |
| Intl Large Cap Equity | 1.63% | (3.92%) | 1.46% | 16.37% | |
| MSCI ACWI ex-US Index | 1.60% | (4.90%) | 0.40% | 15.91% | |
| Intl Large Cap Growth | 0.90% | (4.70%) | 0.57% | 17.99% | |
| EARNEST Partners | 1.25% | (4.72%) | 0.03% | 16.41% | |
| MSCI ACWI ex-US Index | 1.60% | (4.90%) | 0.40% | 15.91% | |
| MSCI ACWI ex-US Growth | 0.83% | (4.94%) | 0.02% | 17.81% | |
| EARNEST Partners - Net | 1.25% | (4.72%) | 0.03% | 16.36% | |
| William Blair | 0.59% | (4.67%) | 1.04% | 19.39% | |
| MSCI ACWI ex-US Index | 1.60% | (4.90%) | 0.40% | 15.91% | |
| MSCI ACWI ex-US Growth | 0.83% | (4.94%) | 0.02% | 17.81% | |
| William Blair - Net | 0.50% | (4.76%) | 0.87% | 18.98% | |
| Intl Large Cap Value | 2.94% | (2.59%) | 3.22% | 15.28% | |
| Brandes | 3.68% | (0.40%) | 5.96% | 16.60% | |
| MSCI ACWI ex-US Index | 1.60% | (4.90%) | 0.40% | 15.91% | |
| MSCI ACWI ex-US Value | 2.55% | (4.52%) | 1.15% | 15.12% | |
| Brandes - Net | 3.68% | (0.40%) | 5.96% | 16.60% | |
| Mondrian | 2.76% | (4.27%) | 1.15% | 13.90% | |
| MSCI ACWI ex-US Index | 1.60% | (4.90%) | 0.40% | 15.91% | |
| MSCI ACWI ex-US Value | 2.55% | (4.52%) | 1.15% | 15.12% | |
| Mondrian - Net | 2.76% | (4.27%) | 1.15% | 13.62% | |
| Lazard | (0.10%) | (5.59%) | (0.51%) | 15.30% | |
| MSCI ACWI ex-US Index | 1.60% | (4.90%) | 0.40% | 15.91% | |
| MSCI ACWI ex-US Value | 2.55% | (4.52%) | 1.15% | 15.12% | |
| Lazard - Net | (0.10%) | (5.65%) | (0.56%) | 15.03% | |



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.

| | Last | Last 60 | Last 120 | |
|------------------------|--------|------------|-------------|----------------|
| | 36 | | | Since |
| | Months | Months | Months | Inception |
| Intl Large Cap Equity | 6.21% | 7.10% | 3.46% | 8.13% (9/86) |
| MSCI ACWI ex-US Index | 5.01% | 5.46% | 2.26% | - |
| Intl Large Cap Growth | 6.32% | 6.70% | 3.37% | 9.18% (9/02) |
| EARNEST Partners | 6.19% | 5.77% | 4.78% | 10.13% (10/04) |
| MSCI ACWI ex-US Index | 5.01% | 5.46% | 2.26% | 6.64% (10/04) |
| MSCI ACWI ex-US Growth | 6.39% | 6.73% | 3.12% | 7.47% (10/04) |
| EARNEST Partners - Net | 6.07% | 5.59% | 4.45% | 8.77% (1/05) |
| William Blair | 6.43% | 7.55% | 4.28% | 10.45% (10/02) |
| MSCI ACWI ex-US Index | 5.01% | 5.46% | 2.26% | 8.90% (10/02) |
| MSCI ACWI ex-US Growth | 6.39% | 6.73% | 3.12% | 9.13% (10/02) |
| William Blair - Net | 6.02% | 7.14% | 3.87% | 7.01% (1/05) |
| Intl Large Cap Value | 5.34% | 6.70% | 2.80% | 9.34% (10/95) |
| Brandes | 5.61% | 7.58% | 3.24% | 9.62% (1/96) |
| MSCI ACWI ex-US Index | 5.01% | 5.46% | 2.26% | 5.55% (1/96) |
| MSCI ACWI ex-US Value | 4.54% | 5.08% | 2.29% | - |
| Brandes - Net | 5.45% | 7.37% | 3.00% | 5.18% (1/05) |
| Mondrian | 5.16% | 5.91% | - | 7.04% (4/12) |
| MSCI ACWI ex-US Index | 5.01% | 5.46% | 2.26% | 6.48% (4/12) |
| MSCI ACWI ex-US Value | 4.54% | 5.08% | 2.29% | 6.28% (4/12) |
| Mondrian - Net | 4.72% | 5.43% | - | 6.57% (4/12) |
| Lazard | 5.02% | 5.98% | - | 7.82% (4/12) |
| MSCI ACWI ex-US Index | 5.01% | 5.46% | 2.26% | 6.48% (4/12) |
| MSCI ACWI ex-US Value | 4.54% | 5.08% | 2.29% | 6.28% (4/12) |
| Lazard - Net | 4.49% | 5.30% | - | 7.22% (4/12) |



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 April 30, 2018

| | Last | Last | Year to | Last 12 | |
|-----------------------------|---------|---------|------------|------------|--|
| | | 3 | | | |
| | Month | Months | Date | Months | |
| Intl Large Cap Active Core | 1.25% | (4.11%) | 1.64% | 18.08% | |
| Arrowstreet | 1.18% | (3.51%) | 2.76% | 18.28% | |
| MSCI ACWI ex-US Index | 1.60% | (4.90%) | 0.40% | 15.91% | |
| Arrowstreet - Net | 1.18% | (3.61%) | 2.65% | 17.75% | |
| Brown | 2.00% | (2.91%) | 0.54% | 13.64% | |
| MSCI ACWI ex-US Index | 1.60% | (4.90%) | 0.40% | 15.91% | |
| Brown - Net | 1.94% | (3.03%) | 0.42% | 12.72% | |
| GlobeFlex | 1.51% | (5.02%) | 1.16% | 19.94% | |
| MSCI ACWI ex-US Index | 1.60% | (4.90%) | 0.40% | 15.91% | |
| GlobeFlex - Net | 1.51% | (5.09%) | 1.08% | 19.53% | |
| Progress Intl Equity | 0.00% | (4.72%) | 1.44% | 18.67% | |
| Custom Benchmark | 1.60% | (4.90%) | 0.40% | 17.46% | |
| MSCI ACWI ex-US Index | 1.60% | (4.90%) | 0.40% | 15.91% | |
| Progress Intl Equity - Net | 0.00% | (4.83%) | 1.32% | 18.11% | |
| Intl Large Cap Pass. Core | 1.66% | (4.04%) | 0.83% | 14.52% | |
| NTGI MSCI EAFE Idx | 1.66% | (4.04%) | 0.83% | 14.52% | |
| MSCI EAFE Index | 2.28% | (4.09%) | 0.72% | 14.51% | |
| NTGI EAFE Idx - Net | 1.66% | (4.04%) | 0.83% | 14.51% | |
| International Small Cap | 0.15% | (4.43%) | 0.65% | 18.97% | |
| Franklin Templeton | 0.51% | (3.43%) | 1.91% | 19.77% | |
| ACWI Small Cap ex US | 1.16% | (3.92%) | 0.80% | 18.44% | |
| Franklin Templeton - Net | 0.51% | (3.43%) | 1.91% | 19.16% | |
| William Blair | (0.15%) | (5.27%) | (0.41%) | 18.28% | |
| ACWI Small Cap ex US | 1.16% | (3.92%) | 0.80% | 18.44% | |
| Intl SC Blended Benchmark | 1.16% | (3.92%) | 0.80% | 18.44% | |
| William Blair - Net | (0.35%) | (5.46%) | (0.78%) | 17.41% | |
| Emerging Markets | (0.59%) | (6.02%) | 0.84% | 21.43% | |
| Genesis | (0.59%) | (6.02%) | 0.84% | 21.43% | |
| MSCI Emerging Markets Index | (0.42%) | (6.74%) | 1.04% | 22.14% | |
| Genesis - Net | (0.59%) | (6.02%) | 0.79% | 20.88% | |

Brown and GlobeFlex moved to International Large Cap Active Core April 1, 2011. Progress Custom Benchmark is a comprised of each manager's weighted benchmark until 201712. after 201712 the benchmark is MSCI ACWI ex US - Net.

Intl SC Blended Benchmark consists of the S&P Developed Ex-U.S. Small Cap Index through May 31, 2011 and the MSCI ACWI Ex-U.S. Small Cap Index thereafter.



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

Returns for Periods Ended April 30, 2018

| 36 Months 7.94% 8.04% 5.01% 7.54% | 60 Months 8.91% 9.34% | 120 <u>Months</u> 5.66% | Since Inception 5.70% (2/08) |
|--|---|---|---|
| 7.94% 8.04% 5.01% | 8.91% 9.34% | 5.66% | • |
| 8.04% 5.01% | 9.34% | | 5.70% (2/08) |
| 5.01% | | | |
| | | 5.80% | 5.89% (3/08) |
| 7 54% | 5.46% | 2.26% | 2.59% (3/08) |
| 1.U-T/U | 8.84% | 5.31% | 5.41% (3/08) |
| 5.78% | 8.78% | 5.85% | 8.47% (10/04) |
| 5.01% | 5.46% | 2.26% | 6.64% (10/04) |
| 4.66% | 7.63% | 5.10% | 6.84% (1/05) |
| 9.29% | 8.90% | 4.12% | 6.04% (3/06) |
| 5.01% | 5.46% | 2.26% | 4.30% (3/06) |
| 8.87% | 8.47% | 3.69% | 5.59% (3/06) |
| 7.23% | - | _ | 5.95% (7/14) |
| | _ | _ | 5.06% (7/14) |
| | 5.46% | 2.26% | 3.63% (7/14) |
| 6.74% | - | - | 5.49% (7/14) |
| 5.23% | 6.22% | 2.80% | 3.75% (1/00) |
| E 220/ | 6 220/ | 2.700/ | 4 420/ |
| | | | 4.13% (2/00) |
| | | | 3.77% (2/00) |
| 5.22% | 6.21% | 2.79% | 5.48% (1/05) |
| 9.22% | 9.10% | 4.10% | 5.77% (12/05) |
| 8.38% | 9.19% | _ | 8.48% (8/11) |
| 8.70% | 8.24% | 5.33% | 6.67% (8/11) |
| 7.67% | 8.44% | - | 7.75% (8/11) |
| 9.97% | 9.03% | - | 11.46% (9/10) |
| 8.70% | 8.24% | 5.33% | 9.14% (9/10) |
| 8.70% | 8.24% | 4.67% | 9.58% (9/10) |
| 9.07% | 8.15% | - | 10.59% (9/10) |
| 7.29% | 5.34% | 5.41% | 9.50% (2/92) |
| 7.29% | 5.34% | 5.41% | 12.22% (5/04) |
| | 5.11% | 2.51% | 10.10% (5/04) |
| 6.69% | 4.77% | 4.80% | 10.15% (1/05) |
| | 7.54% 5.78% 5.01% 4.66% 9.29% 5.01% 8.87% 7.23% 6.47% 5.01% 6.74% 5.23% 4.94% 5.22% 9.22% 8.38% 8.70% 7.67% 9.97% 8.70% 8.70% 9.07% 7.29% 6.39% | 5.01% 5.46% 7.54% 8.84% 5.78% 8.78% 5.01% 5.46% 4.66% 7.63% 9.29% 8.90% 5.01% 5.46% 8.87% 8.47% 7.23% - 6.47% - 5.01% 5.46% 6.74% - 5.23% 6.22% 4.94% 5.90% 5.22% 6.21% 9.22% 9.10% 8.38% 9.19% 8.70% 8.24% 7.67% 8.44% 9.97% 9.03% 8.70% 8.24% 8.70% 8.24% 8.70% 8.24% 9.07% 8.15% 7.29% 5.34% 6.39% 5.11% | 5.01% 5.46% 2.26% 7.54% 8.84% 5.31% 5.78% 8.78% 5.85% 5.01% 5.46% 2.26% 4.66% 7.63% 5.10% 9.29% 8.90% 4.12% 5.01% 5.46% 2.26% 8.87% 8.47% 3.69% 7.23% - - 6.47% - - 5.01% 5.46% 2.26% 6.74% - - 5.23% 6.22% 2.79% 4.94% 5.90% 2.43% 5.22% 6.21% 2.79% 9.22% 9.10% 4.10% 8.38% 9.19% - 8.70% 8.24% 5.33% 7.67% 8.44% - 9.97% 9.03% - 8.70% 8.24% 5.33% 8.70% 8.24% 5.33% 8.70% 8.24% 5.33% 8.70% 8.24% 4.67% 9.07% 8.15% - 7.29% |

Brown and GlobeFlex moved to International Large Cap Active Core April 1, 2011. Progress Custom Benchmark is a comprised of each manager's weighted benchmark until 201712. after 201712 the benchmark is MSCI ACWI ex US - Net.

Intl SC Blended Benchmark consists of the S&P Developed Ex-U.S. Small Cap Index through May 31, 2011 and the MSCI ACWI Ex-U.S. Small Cap Index thereafter.



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

Returns for Periods Ended April 30, 2018

| | Last | Last 3 | Year to | Last 12 | |
|-----------------------------|----------|-----------|------------|------------|--|
| | Month | Months | Date | Months | |
| Dom. Fixed Active Core | (0.62%) | (0.67%) | (1.61%) | 0.62% | |
| Brandes Core* | (0.60%) | (0.65%) | (1.75%) | (0.50%) | |
| Blmbg Aggregate Index | (0.74%) | (1.05%) | (2.19%) | (0.32%) | |
| Brandes Core - Net | (0.60%) | (0.65%) | (1.75%) | (0.50%) | |
| EARNEST Partners | (0.65%) | (0.73%) | (1.77%) | 0.55% | |
| Blmbg Aggregate Index | (0.74%) | (1.05%) | (2.19%) | (0.32%) | |
| EARNEST Partners - Net | (0.69%) | (0.77%) | (1.84%) | 0.40% | |
| Piedmont | (0.75%) | (0.88%) | (1.81%) | 0.19% | |
| Blmbg Aggregate Index | (0.74%) | (1.05%) | (2.19%) | (0.32%) | |
| Piedmont - Net | (0.79%) | (0.91%) | (1.88%) | 0.05% | |
| Garcia Hamilton | (0.46%) | (0.42%) | (1.15%) | 1.23% | |
| Blmbg Aggregate Index | (0.74%) | (1.05%) | (2.19%) | (0.32%) | |
| Garcia Hamilton | (0.48%) | (0.45%) | (1.20%) | 1.13% | |
| David Baratina Com | (0.700() | (4.000/) | (0.470/) | (0.05%) | |
| Dom. Fixed Passive Core | (0.73%) | (1.03%) | (2.17%) | (0.25%) | |
| BlackRock US Debt | (0.74%) | (1.04%) | (2.19%) | (0.22%) | |
| Blmbg Aggregate Index | (0.74%) | (1.05%) | (2.19%) | (0.32%) | |
| BlackRock US Debt - Net | (0.74%) | (1.04%) | (2.19%) | (0.22%) | |
| NTGI Blmbg Agg. Index | (0.72%) | (1.02%) | (2.15%) | (0.28%) | |
| Blmbg Aggregate Index | (0.74%) | (1.05%) | (2.19%) | (0.32%) | |
| NTGI Blmbg Agg. Index - Net | (0.72%) | (1.02%) | (2.15%) | (0.28%) | |

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



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

Returns for Periods Ended April 30, 2018

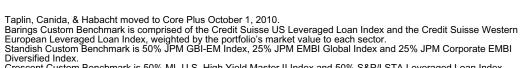
| | Last 36 Months | Last 60 Months | Last 120 Months | Since Inception |
|-----------------------------|----------------------|----------------------|-----------------------|-----------------------|
| Dom. Fixed Active Core | 1.65% | 1.97% | 4.31% | 4.44% (4/01) |
| Brandes Core * | - | - | - | 0.65% (3/16) |
| Blmbg Aggregate Index | 1.07% | 1.47% | 3.57% | 0.84% (3/16) |
| Brandes Core - Net | - | - | - | 0.65% (3/16) |
| EARNEST Partners | 1.57% | 1.93% | 4.32% | 4.37% (5/05) |
| Blmbg Aggregate Index | 1.07% | 1.47% | 3.57% | 3.89% (5/05) |
| EARNEST Partners - Net | 1.40% | 1.73% | 4.11% | 4.16% (5/05) |
| Piedmont | 1.59% | 1.93% | 4.15% | 4.17% (6/05) |
| Blmbg Aggregate Index | 1.07% | 1.47% | 3.57% | 3.83% (6/05) |
| Piedmont - Net | 1.43% | 1.78% | 3.98% | 3.98% (6/05) |
| Garcia Hamilton | - | - | - | 2.11% (6/15) |
| Blmbg Aggregate Index | 1.07% | 1.47% | 3.57% | 1.18% (6/15) |
| Garcia Hamilton | - | - | - | 2.01% (6/15) |
| Dom. Fixed Passive Core | 1.11% | 1.52% | 3.53% | 5.89% (1/90) |
| Dom. I ixed I assive core | 1.11/0 | 1.32 /0 | 3.33 /6 | 3.09 /6 (1/90) |
| BlackRock US Debt | 1.15% | - | - | 2.36% (10/13) |
| Blmbg Aggregate Index | 1.07% | 1.47% | 3.57% | 2.22% (10/13) |
| BlackRock US Debt - Net | 1.15% | - | - | 2.36% (10/13) |
| NTGI Blmbg Agg. Index | 1.08% | 1.49% | 3.52% | 5.94% (2/90) |
| Blmbg Aggregate Index | 1.07% | 1.47% | 3.57% | 5.94% (2/90) |
| NTGI Blmbg Agg. Index - Net | 1.08% | 1.49% | 3.51% | 3.82% (1/05) |

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



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

| | Last Month | | Year to | Last 12 Months | |
|--------------------------------|---------------|---------|------------|----------------------|--|
| | | | | | |
| | | | Date | | |
| Domestic Fixed Core Plus | (0.59%) | (1.12%) | (1.87%) | 0.75% | |
| LM Capital | (0.60%) | (1.34%) | (2.13%) | 0.01% | |
| Blmbg Aggregate Index | (0.74%) | (1.05%) | (2.19%) | (0.32%) | |
| LM Capital - Net | (0.64%) | (1.38%) | (2.20%) | (0.15%) | |
| Progress Fixed Income | 0.00% | (0.33%) | (1.22%) | 1.34% | |
| Blmbg Aggregate Index | (0.74%) | (1.05%) | (2.19%) | (0.32%) | |
| Progress Fixed Inc Net | 0.00% | (0.42%) | (1.30%) | 1.01% | |
| BMO-TCH | (0.62%) | (1.17%) | (1.84%) | 1.09% | |
| Blmbg Aggregate Index | (0.74%) | (1.05%) | (2.19%) | (0.32%) | |
| BMO-TCH Net | (0.62%) | (1.17%) | (1.91%) | 0.99% | |
| Western | (1.08%) | (1.58%) | (2.26%) | 1.15% | |
| Blmbg Aggregate Index | (0.74%) | (1.05%) | (2.19%) | (0.32%) | |
| Western - Net | (1.08%) | (1.61%) | (2.29%) | 1.04% | |
| Bank Loans | 0.69% | 1.01% | 1.87% | 4.81% | |
| Barings Global Loan Fund | 0.69% | 1.01% | 1.87% | 4.81% | |
| Custom Benchmark | 0.69% | 1.21% | 2.26% | 5.01% | |
| Barings Global Loan Fund - Net | 0.69% | 1.01% | 1.87% | 4.66% | |
| Emerging Markets | (2.20%) | (3.12%) | (0.49%) | 5.93% | |
| Standish | (2.20%) | (3.12%) | (0.49%) | 5.93% | |
| Custom Benchmark | (2.03%) | (2.70%) | (0.56%) | 4.67% | |
| Standish - Net | (2.20%) | (3.20%) | (0.58%) | 5.57% | |
| Opportunistic Fixed Income | 0.46% | (0.95%) | (0.38%) | 2.65% | |
| Crescent | 0.46% | (0.95%) | (0.38%) | 2.65% | |
| Custom Benchmark | 0.54% | 0.01% | 0.81% | 3.82% | |
| Crescent - Net | 0.46% | (0.95%) | (0.38%) | 2.23% | |
| High Yield | 0.23% | (0.62%) | (0.00%) | 4.32% | |
| MacKay Shields | 0.23% | (0.62%) | (0.00%) | 4.25% | |
| ML High Yield Cash Pay Index | 0.66% | (0.91%) | (0.28%) | 3.18% | |
| MacKay Shields - Net | 0.23% | (0.70%) | (0.09%) | 3.88% | |
| | | | | | |

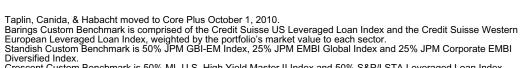






The table below details the rates of return for the fund's domestic fixed core plus and high yield managers over various time periods. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized.

| | Last | Last | Last | Oin an |
|--------------------------------|---------|-----------------|--------------|---------------------|
| | 36 | 60 | 120 | Since |
| B | Months | Months 2.40% | Months | Inception |
| Domestic Fixed Core Plus | 2.10% | 2.40% | 4.64% | 8.12% (1/82) |
| LM Capital | 1.85% | 2.07% | 4.48% | 4.71% (5/05) |
| Blmbg Aggregate Index | 1.07% | 1.47% | 3.57% | 3.89% (5/05) |
| LM Capital - Net | 1.68% | 1.91% | 4.31% | 4.54% (5/05) |
| Progress Fixed Income | 2.11% | 2.36% | 4.51% | 4.78% (1/06) |
| Blmbg Aggregate Index | 1.07% | 1.47% | 3.57% | 3.97% (1/06) |
| Progress Fixed Inc Net | 1.81% | 2.03% | 4.16% | 4.44% (1/06) |
| BMO-TCH | 2.51% | 2.71% | 5.04% | 4.87% (5/05) |
| Blmbg Aggregate Index | 1.07% | 1.47% | 3.57% | 3.89% (5/05) |
| BMO-TCH - Net | 2.38% | 2.59% | 4.91% | 4.74% (5/05) |
| Western | 2.63% | 2.85% | 5.09% | 5.34% (11/01) |
| Blmbg Aggregate Index | 1.07% | 1.47% | 3.57% | 4.11% (11/01) |
| Western - Net | 2.49% | 2.71% | 4.94% | 4.72% (1/05) |
| | 2 | ,0 | | = 70 (1,00) |
| Bank Loans | 4.83% | - | - | 4.76% (8/14) |
| Barings Global Loan Fund | 4.83% | - | - | 4.76% (8/14) |
| Custom Benchmark | 4.42% | - | - | 4.20% (8/14) |
| Barings Global Loan Fund - Net | 4.38% | - | - | 4.28% (8/14) |
| Emerging Markets | 4.76% | - | - | 3.08% (8/14) |
| Standish | 4.76% | _ | _ | 3.08% (8/14) |
| Custom Benchmark | 3.94% | 0.72% | 4.92% | 1.74% (8/14) |
| Standish - Net | 4.40% | 0.7270 | 4.52 /0 - | 2.76% (8/14) |
| Standish Net | 4.40 // | | | 2.7070 (0/14) |
| Opportunistic Fixed Income | 3.84% | - | | 3.35% (8/14) |
| Crescent | 3.84% | - | - | 3.19% (9/14) |
| Custom Benchmark | 4.53% | 4.32% | 6.53% | 4.03% (9/14) |
| Crescent - Net | 3.34% | - | - | 2.79% (9/14) |
| High Yield | 5.89% | 5.33% | 8.13% | 9.64% (4/86) |
| MacKay Shields | 6.22% | 5.60% | 7.84% | 8.96% (11/00) |
| ML High Yield Cash Pay Index | 4.98% | 4.73% | 7.68% | 7.66% (11/00) |
| MacKay Shields - Net | 5.85% | 5.23% | 7.45% | 6.93% (1/05) |
| | 3.33,0 | 20,0 | | (1100) |







Five Best Performing Portfolio's vs. Benchmarks

| Manager | Year-to-Date Outperformance | Since Inception Outperformance | |
|-------------|-----------------------------|--------------------------------|------------|
| | (in % points) | (in % points) | |
| Sands | 10.42 | 2.57 | 10/31/2003 |
| Frontier | 5.76 | 4.87 | 07/31/1988 |
| Brandes | 5.57 | 4.07 | 12/31/1995 |
| Arrowstreet | 2.36 | 2.99 | 02/29/2008 |
| Dodge & Cox | 1.59 | 1.41 | 08/31/2003 |

Five Worst Performing Portfolio's vs. Benchmarks

| Manager | Year-to-Date Underperformance | Since Inception Underperformance | |
|------------------------|-------------------------------|----------------------------------|------------|
| | (in % points) | (in % points) | |
| Blackrock Core Plus | -48.98 | -6.30 | 03/31/2007 |
| Ativo | -5.26 | -0.71 | 09/30/2010 |
| William Blair Int'l SC | -1.21 | 2.31 | 08/31/2010 |
| Crescent | -1.19 | -0.83 | 07/31/2014 |
| Lazard | -0.90 | 1.34 | 03/31/2012 |

Five Highest Returning Portfolios

| Manager | Year-to-Date Return | Since Inception Return | |
|-------------|---------------------|------------------------|------------|
| | (in % points) | (in % points) | |
| Sands | 12.19 | 12.09 | 10/31/2003 |
| Frontier | 8.16 | 13.23 | 07/31/1988 |
| Brandes | 5.96 | 9.62 | 12/31/1995 |
| Pyramis SCG | 2.98 | 13.74 | 07/31/1988 |
| Arrowstreet | 2.76 | 5.84 | 02/29/2008 |

Five Lowest Returning Portfolios

| Manager | Year-to-Date Return | Since Inception Return | |
|---------------------|---------------------|------------------------|------------|
| | (in % points) | (in % points) | |
| Blackrock Core Plus | -51.18 | -2.44 | 03/31/2007 |
| Ativo | -2.86 | 13.33 | 09/30/2010 |
| Western | -2.26 | 5.34 | 10/31/2001 |
| ВМО | -2.22 | 8.36 | 01/31/2001 |
| Blackrock US Debt | -2.19 | 2.35 | 09/01/2013 |

Returns are shown gross of investment management fees.

Excludes Real Estate and Alternative Investments portfolios.