



Wilshire Consulting



Illinois Municipal Retirement Fund

Fourth Quarter 2019 and 2019 Annual Report

December 31, 2019

IMRF Performance Highlights

As of December 31, 2019

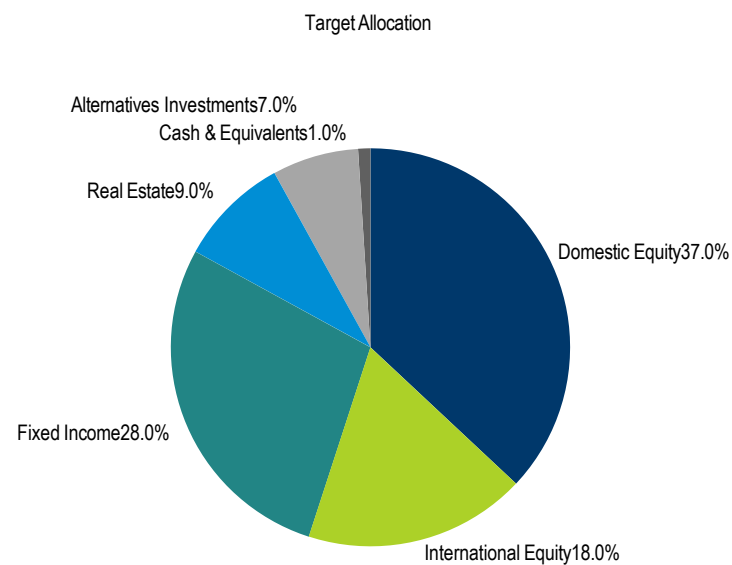
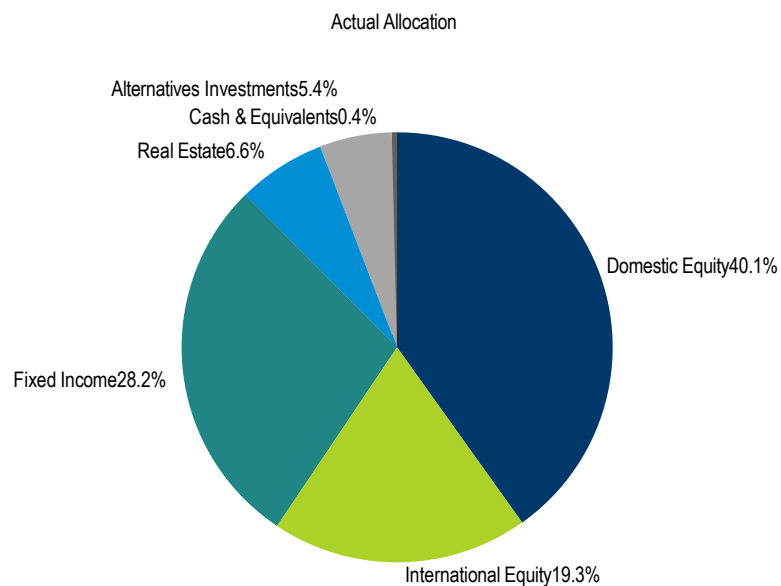
- IMRF ended 2019 on a strong note with the fund returning 5.77% (NOF) and beating the benchmark which returned 5.25% for the fourth quarter. Overall the fund assets total \$44.7 billion, which is up from the previous quarter value of \$42.7 billion
 - IMRF annual return for 2019 was 19.57% vs 18.68% for the benchmark
- The fund's 4th quarter and calendar year 2019 returns rank at the 18th and 16th percentile respectively, and remain at or above the top quartile over longer time horizons
- The Domestic Equity composite (9.04%) slightly underperformed the Russell 3000 benchmark (9.10%) for the fourth quarter. The source of underperformance was driven by its small cap tilt. The managers collectively added value compared to their respective benchmarks
 - Domestic Equity annual return for 2019 was 29.0% (ranked at the 46th percentile) vs 31.02% for the benchmark
- The International Equity composite (9.34%) outperformed the MSCI ACWI ex-US benchmark (8.92%) for the quarter. The composite's slight underweight to emerging markets, as well as manager performance contributed to the outperformance
 - International Equity annual return for 2019 was 23.39% (ranked at the 43rd percentile) vs 21.51% for the benchmark
- The Fixed Income composite returns were modest in the fourth quarter relative to the rest of the year. However the composite (0.52%) beat the Bloomberg Barclays US Aggregate Index benchmark (0.18%), aided by the tailwind of strong credit markets
 - Fixed Income annual return for 2019 was 9.37% (ranked at the 26th percentile) vs 8.72% for the benchmark
- The Real Estate portfolio returned 2.86% during the 4th quarter and 9.79% for the calendar year 2019, beating the NFI ODCE benchmark returns for both periods. The Alternatives portfolio (private equity, agriculture, and timber) returned 2.57% for the quarter and 9.43% for the year (Note: these returns are lagged).
- The asset classes allocations are within the rebalancing range of +/- 4%.

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Asset Allocation

Total Fund

Periods Ended As of December 31, 2019

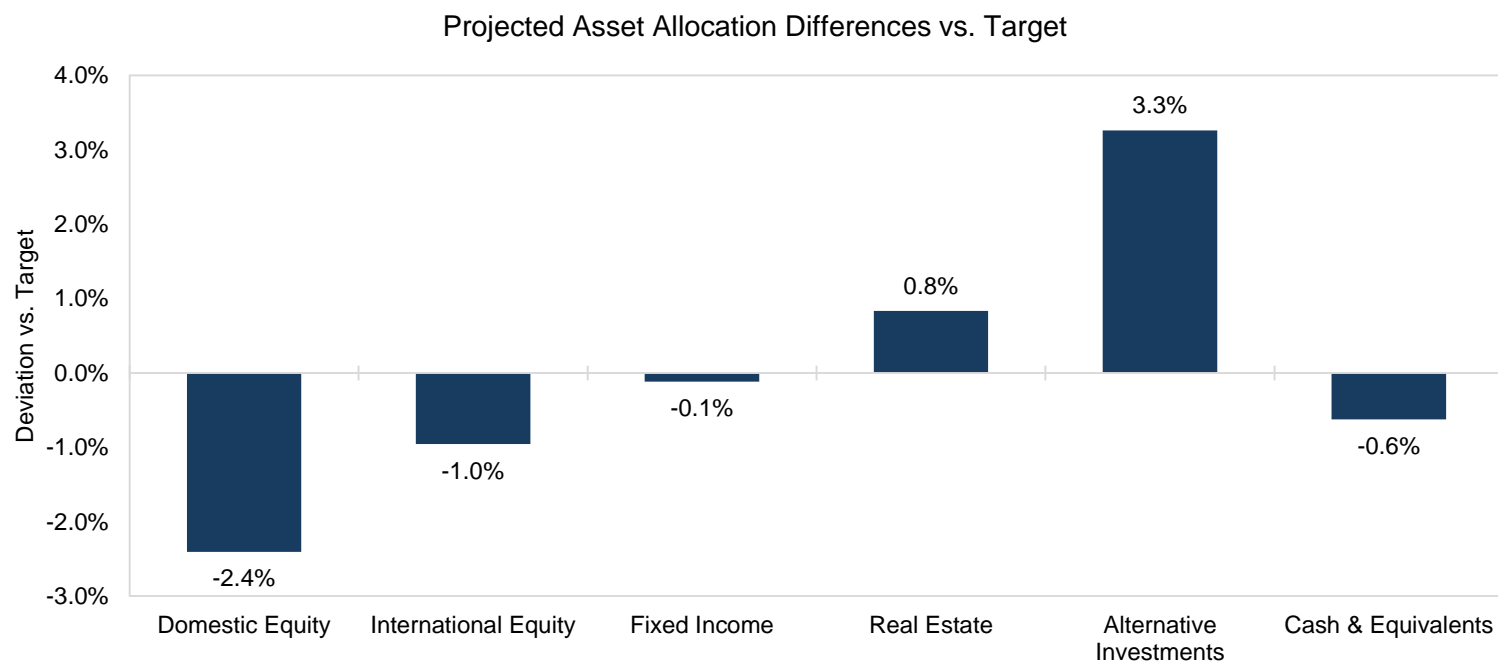


■ Domestic Equity
 ■ International Equity
 ■ Fixed Income
 ■ Real Estate
 ■ Alternatives Investments
 ■ Cash & Equivalents

| | Actual Allocation \$Millions | Actual Allocation % | Target Allocation % | Differences % | Differences \$Millions |
|----------------------------|---------------------------------|------------------------|------------------------|------------------|---------------------------|
| Total Fund | 44,672 | 100.0 | 100.0 | 0.0 | |
| ■ Domestic Equity | 17,935 | 40.1 | 37.0 | 3.1 | 1,407 |
| ■ International Equity | 8,600 | 19.3 | 18.0 | 1.3 | 559 |
| ■ Fixed Income | 12,576 | 28.2 | 28.0 | 0.2 | 68 |
| ■ Real Estate | 2,964 | 6.6 | 9.0 | -2.4 | -1,056 |
| ■ Alternatives Investments | 2,427 | 5.4 | 7.0 | -1.6 | -700 |
| ■ Cash & Equivalents | 169 | 0.4 | 1.0 | -0.6 | -278 |

Projected Deviation From Benchmark

Periods Ended As of December 31, 2019



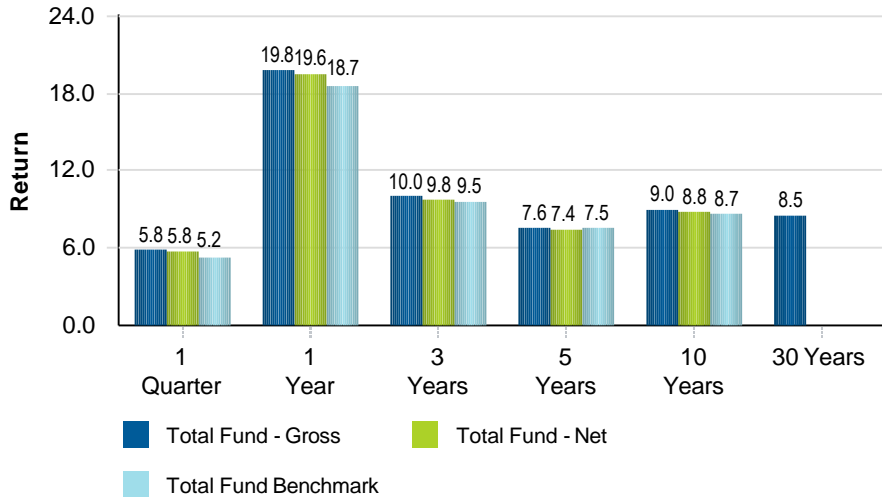
- Includes committed, but unfunded amounts for real estate (\$1,419.5 million) and alternatives (\$2,168.9 million). Assumes real estate and alternatives allocations are fully funded as of quarter end.
- Assumes that outstanding commitments are funded from the overweight asset classes (U.S. equity, non-U.S. equity, and fixed income) in proportion to their respective overweighting relative to the target.

Composite Performance Summary

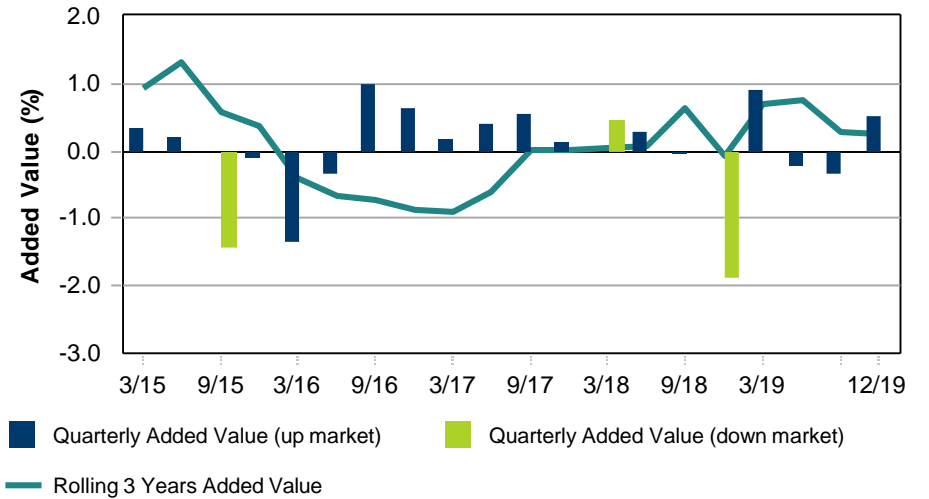
Total Fund

Periods Ended December 31, 2019

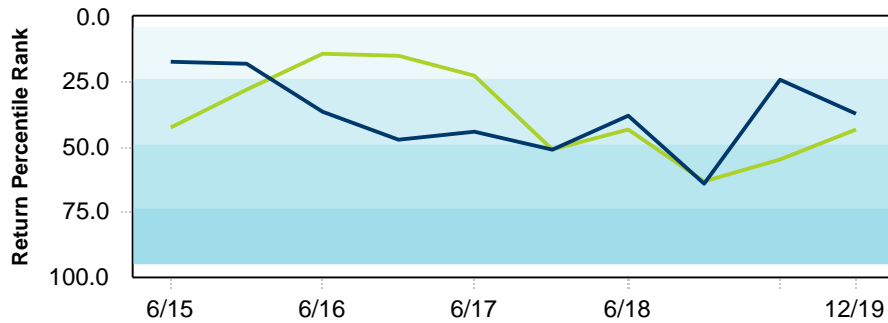
Comparative Performance



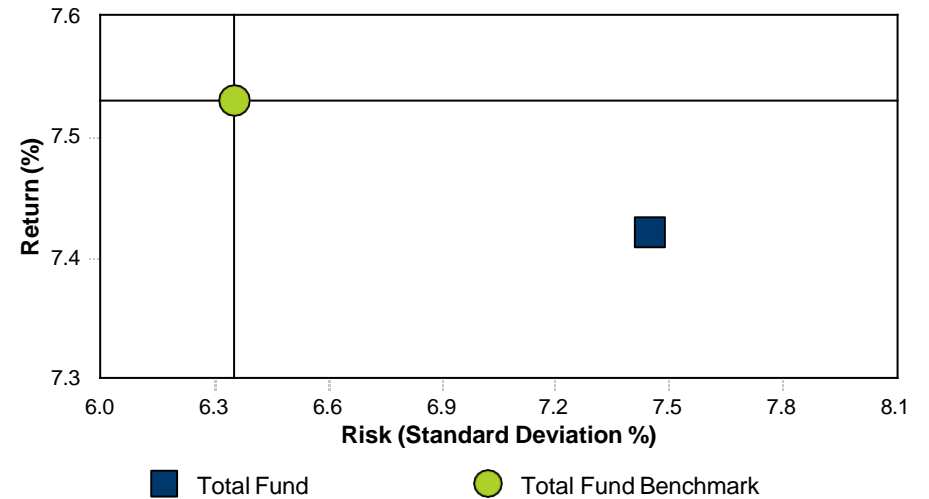
Added Value History



Rolling Percentile Rank : All Public Plans > \$1B - Total Fund



Risk and Return

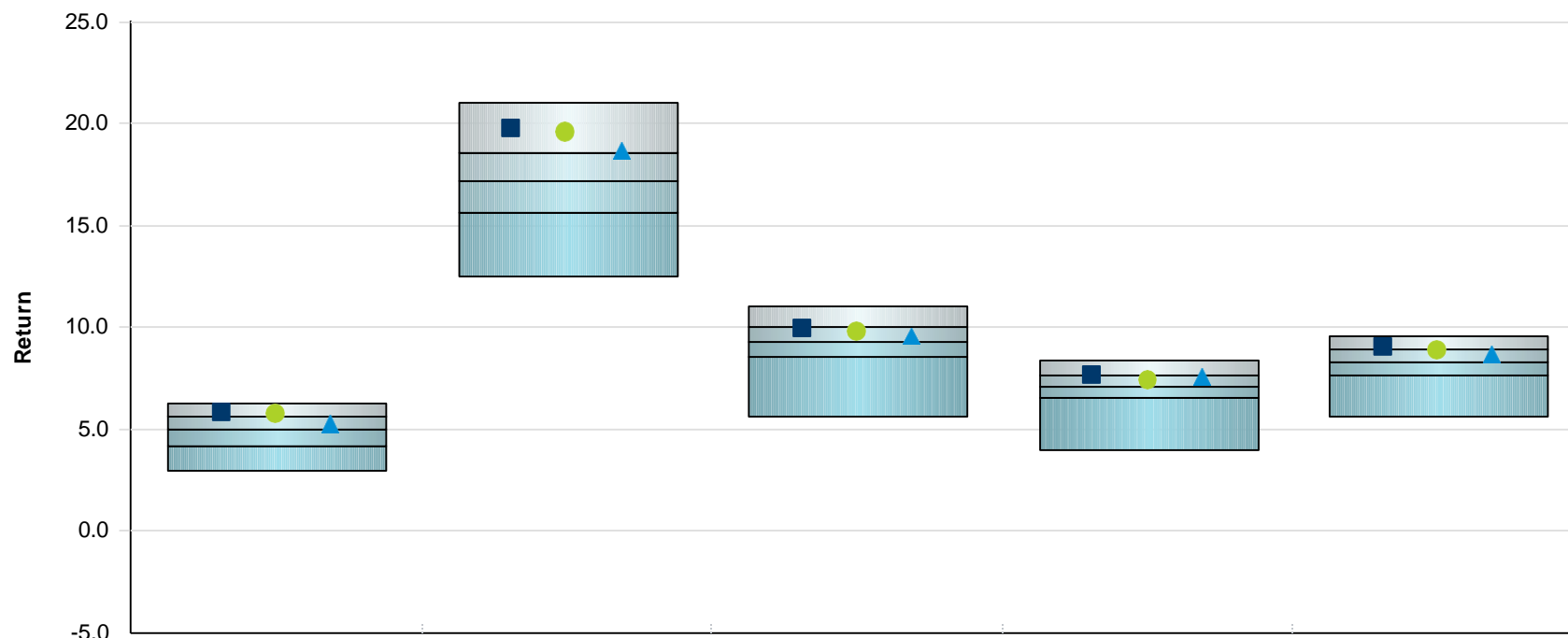


| | Total Period | 5-25 Count | 25-Median Count | Median-75 Count | 75-95 Count |
|----------------------|--------------|------------|-----------------|-----------------|-------------|
| Total Fund | 10 | 3 (30%) | 5 (50%) | 2 (20%) | 0 (0%) |
| Total Fund Benchmark | 10 | 3 (30%) | 4 (40%) | 3 (30%) | 0 (0%) |

Plan Sponsor Peer Group Analysis

Total Fund vs All Public Plans > \$1B-Total Fund(Gross)

Periods Ended December 31, 2019



| | QTD | 1 Year | 3 Years | 5 Years | 10 Years |
|------------------------|-----------|------------|-----------|-----------|-----------|
| ■ Total Fund | 5.81 (18) | 19.77 (16) | 9.99 (27) | 7.64 (27) | 9.05 (20) |
| ● Total Fund - Net | 5.77 (22) | 19.57 (17) | 9.79 (37) | 7.42 (38) | 8.82 (28) |
| ▲ Total Fund Benchmark | 5.25 (38) | 18.68 (26) | 9.55 (44) | 7.55 (34) | 8.67 (35) |
| 5th Percentile | 6.30 | 21.07 | 11.05 | 8.38 | 9.54 |
| 1st Quartile | 5.66 | 18.55 | 10.02 | 7.68 | 8.90 |
| Median | 4.97 | 17.22 | 9.35 | 7.09 | 8.29 |
| 3rd Quartile | 4.17 | 15.65 | 8.60 | 6.60 | 7.69 |
| 95th Percentile | 2.98 | 12.50 | 5.61 | 4.02 | 5.60 |
| Population | 154 | 153 | 151 | 150 | 140 |

Total Fund Benchmark = 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

Periods Ended December 31, 2019

| | Sep-2019 | | Dec-2019 | |
|----------------------------------|----------------|-------|----------------|-------|
| | \$ | % | \$ | % |
| Domestic Equity | 16,654,424,996 | 39.03 | 17,935,493,093 | 40.15 |
| Large Cap Growth | 5,291,019,129 | 12.40 | 5,800,672,059 | 12.99 |
| NTGI S&P 500 Growth | 2,347,912,126 | 5.50 | 2,543,433,185 | 5.69 |
| Sands Capital | 1,899,806,232 | 4.45 | 2,103,278,133 | 4.71 |
| Piedmont Russell 1000 G | 1,043,300,770 | 2.45 | 1,153,960,741 | 2.58 |
| Large Cap Value | 5,567,184,850 | 13.05 | 5,850,014,935 | 13.10 |
| Dodge & Cox | 1,325,525,813 | 3.11 | 1,447,795,289 | 3.24 |
| BMO | 1,158,391,244 | 2.71 | 1,028,690,135 | 2.30 |
| LSV Asset | 1,525,607,691 | 3.58 | 1,661,390,635 | 3.72 |
| NTGI S&P 500 Value | 1,557,660,103 | 3.65 | 1,712,138,876 | 3.83 |
| Large Cap Pass. Core | 2,455,205,435 | 5.75 | 2,622,330,010 | 5.87 |
| NTGI MarketCap Idx. | 2,455,205,435 | 5.75 | 2,622,330,010 | 5.87 |
| Quantitative Factor Strategies | 200,205,771 | 0.47 | 263,662,873 | 0.59 |
| Quantitative US Equity - SciBeta | 200,205,771 | 0.47 | 263,662,873 | 0.59 |
| Small Cap Growth | 716,970,101 | 1.68 | 804,509,812 | 1.80 |
| Frontier Capital | 549,779,686 | 1.29 | 617,718,712 | 1.38 |
| FIAM Small Cap | 167,190,415 | 0.39 | 186,791,100 | 0.42 |
| Small Cap Value | 1,458,030,021 | 3.42 | 1,572,731,557 | 3.52 |
| Channing | 224,415,464 | 0.53 | 242,270,534 | 0.54 |
| DFA Small Cap Val. | 552,839,990 | 1.30 | 602,828,903 | 1.35 |
| Inv. Couns. Maryland | 680,774,567 | 1.60 | 727,632,120 | 1.63 |
| Micro Cap | 419,553,571 | 0.98 | 458,553,936 | 1.03 |
| DFA Micro Cap (9-10) | 419,553,571 | 0.98 | 458,553,936 | 1.03 |

Investment Manager Asset Allocation

Periods Ended December 31, 2019

| | Sep-2019 | | Dec-2019 | |
|------------------------------------|---------------|-------|---------------|-------|
| | \$ | % | \$ | % |
| Public Real Assets | 546,256,119 | 1.28 | 563,017,911 | 1.26 |
| Brookfield Public Global Infrastru | 171,137,397 | 0.40 | 176,273,741 | 0.39 |
| Cohen & St Public Global Infrastru | 375,118,722 | 0.88 | 386,744,170 | 0.87 |
| International Equity | 7,933,894,320 | 18.59 | 8,600,379,064 | 19.25 |
| Intl Large Cap Growth | 1,381,611,229 | 3.24 | 1,443,495,588 | 3.23 |
| EARNEST Part. Intl | 627,517,107 | 1.47 | 605,966,756 | 1.36 |
| William Blair | 754,094,122 | 1.77 | 837,528,831 | 1.87 |
| Intl Large Cap Value | 1,243,305,945 | 2.91 | 1,353,041,434 | 3.03 |
| Brandes Investment | 597,158,672 | 1.40 | 646,970,266 | 1.45 |
| Mondrian | 530,808,199 | 1.24 | 582,363,658 | 1.30 |
| Lazard | 115,339,075 | 0.27 | 123,707,510 | 0.28 |
| Intl Large Cap Core | 3,752,182,190 | 8.79 | 4,075,816,999 | 9.12 |
| Arrowstreet Capital | 690,820,493 | 1.62 | 758,679,892 | 1.70 |
| Brown Capital | 351,962,518 | 0.82 | 378,026,609 | 0.85 |
| GlobeFlex Capital | 533,378,387 | 1.25 | 579,991,613 | 1.30 |
| NTGI MSCI EAFE | 1,860,725,488 | 4.36 | 2,010,705,163 | 4.50 |
| Progress Intl Equity | 315,295,304 | 0.74 | 348,413,722 | 0.78 |
| Intl All Cap Developed | 137,997,260 | 0.32 | 148,654,168 | 0.33 |
| Ativo International | 137,997,260 | 0.32 | 148,654,168 | 0.33 |
| International Small Cap | 462,322,589 | 1.08 | 521,086,414 | 1.17 |
| Franklin Templeton | 188,344,495 | 0.44 | 206,833,333 | 0.46 |
| William Blair IntSC | 273,978,093 | 0.64 | 314,253,082 | 0.70 |

Investment Manager Asset Allocation

Periods Ended December 31, 2019

| | Sep-2019 | | Dec-2019 | |
|----------------------|-------------|------|---------------|------|
| | \$ | % | \$ | % |
| Emerging Mkt Equity | 956,475,108 | 2.24 | 1,058,284,461 | 2.37 |
| Genesis Asset Mngrs. | 956,475,108 | 2.24 | 1,058,284,461 | 2.37 |

Investment Manager Asset Allocation

Periods Ended December 31, 2019

| | Sep-2019 | | Dec-2019 | |
|-----------------------------|----------------|-------|----------------|-------|
| | \$ | % | \$ | % |
| Fixed Income | 12,579,942,289 | 29.48 | 12,576,451,532 | 28.15 |
| Domestic Fixed Core | 3,508,475,430 | 8.22 | 3,474,931,690 | 7.78 |
| Brandes FI Core | 366,947,213 | 0.86 | 365,347,188 | 0.82 |
| EARNEST Partners | 1,008,533,131 | 2.36 | 998,040,790 | 2.23 |
| Piedmont Investment | 1,070,579,524 | 2.51 | 1,060,171,256 | 2.37 |
| Garcia Hamilton | 1,062,415,563 | 2.49 | 1,051,372,456 | 2.35 |
| Domestic Fixed Passive Core | 3,537,342,209 | 8.29 | 3,543,519,109 | 7.93 |
| NTGI Blmbg Agg. | 1,806,186,515 | 4.23 | 1,809,158,439 | 4.05 |
| BlackRock US Debt I | 1,731,155,694 | 4.06 | 1,734,360,670 | 3.88 |
| Domestic Fixed Core Plus | 3,960,446,561 | 9.28 | 3,963,965,751 | 8.87 |
| LM Capital Group FI | 915,417,555 | 2.15 | 912,793,939 | 2.04 |
| Progress Inv. FI | 972,497,037 | 2.28 | 975,964,038 | 2.18 |
| BMO - TCH | 942,703,197 | 2.21 | 941,707,150 | 2.11 |
| Western Asset | 1,129,828,773 | 2.65 | 1,133,500,624 | 2.54 |
| Bank Loans | 572,585,272 | 1.34 | 575,673,744 | 1.29 |
| Barings Global Loan Fund | 572,585,272 | 1.34 | 575,673,744 | 1.29 |
| Emerging Markets Debt | 216,368,843 | 0.51 | 225,668,765 | 0.51 |
| Standish Emerging Markets | 216,368,843 | 0.51 | 225,668,765 | 0.51 |
| High Yield | 784,723,973 | 1.84 | 792,692,472 | 1.77 |
| Mackay Shields | 784,396,985 | 1.84 | 792,364,020 | 1.77 |
| FIAM High Yield | 326,988 | 0.00 | 328,452 | 0.00 |

Investment Manager Asset Allocation

Periods Ended December 31, 2019

| | Sep-2019 | | Dec-2019 | |
|------------------------------|---------------|------|---------------|------|
| | \$ | % | \$ | % |
| Real Estate | 2,878,846,374 | 6.75 | 2,964,215,006 | 6.64 |
| Real Estate Core Cmp | 1,524,804,303 | 3.57 | 1,571,332,424 | 3.52 |
| TA Assoc. Buckhead | 582,181,439 | 1.36 | 605,428,300 | 1.36 |
| Barings Core Property | 1,070 | 0.00 | 1,070 | 0.00 |
| Barings Euro Core Property | 120,073,619 | 0.28 | 126,969,573 | 0.28 |
| Blackstone Property Euro | 123,681,138 | 0.29 | 130,685,873 | 0.29 |
| INVESCO Core Real Estate | 209,185,978 | 0.49 | 211,508,105 | 0.47 |
| INVESCO European real estate | 54,726,527 | 0.13 | 56,923,207 | 0.13 |
| AEW Core Property Tr | 237,519,445 | 0.56 | 239,085,694 | 0.54 |
| CBRE Core Partners | 197,435,087 | 0.46 | 200,730,602 | 0.45 |
| RE Non-Core Cmp | 1,354,042,071 | 3.17 | 1,392,882,581 | 3.12 |
| Artemis MWBE Spruce | 246,078,082 | 0.58 | 240,731,549 | 0.54 |
| Franklin T. EMREFF | 13,998,139 | 0.03 | 14,756,093 | 0.03 |
| Security Capital | 58,006,135 | 0.14 | 59,648,554 | 0.13 |
| Dune II | 24,452,942 | 0.06 | 21,982,160 | 0.05 |
| Non-Core Real Estate Funds | 869,329,739 | 2.04 | 893,638,295 | 2.00 |
| Non-Core Intl Real Estate | 141,458,231 | 0.33 | 161,583,067 | 0.36 |
| Rockwood Fund VIII | 188,953 | 0.00 | 168,181 | 0.00 |
| Almanac ARS V | 529,848 | 0.00 | 374,681 | 0.00 |
| TA Assoc. - Fund IX | 1 | 0.00 | 1 | 0.00 |
| Alternatives Investments | 2,334,098,504 | 5.47 | 2,426,795,465 | 5.43 |
| Absolute Return | 615,766 | 0.00 | 550,758 | 0.00 |
| Aurora Investment | 615,766 | 0.00 | 550,758 | 0.00 |

Investment Manager Asset Allocation

Periods Ended December 31, 2019

| | Sep-2019 | | Dec-2019 | |
|-------------------------------------|-----------------------|---------------|-----------------------|---------------|
| | \$ | % | \$ | % |
| Private Equity | 1,998,151,144 | 4.68 | 1,968,686,105 | 4.41 |
| Abbott S/A Comp. | 335,260,049 | 0.79 | 359,027,403 | 0.80 |
| Muller Monroe MPEFF | 5,139,236 | 0.01 | 5,104,385 | 0.01 |
| Pantheon S/A Comp. | 258,175,653 | 0.61 | 256,760,283 | 0.57 |
| Private Equity Fund - Domestic | 1,097,286,582 | 2.57 | 1,010,187,362 | 2.26 |
| Private Equity Fund - International | 299,190,016 | 0.70 | 332,244,607 | 0.74 |
| Oakbrook Opportunities Fund | 3,099,607 | 0.01 | 5,362,066 | 0.01 |
| Private Credit | | 0.00 | 128,930,696 | 0.29 |
| Private Credit Fund - Domestic | | 0.00 | 128,930,696 | 0.29 |
| Agriculture | 216,995,812 | 0.51 | 208,323,624 | 0.47 |
| Premiere Partners IV | 216,995,812 | 0.51 | 208,323,624 | 0.47 |
| Timberland | 73,516,408 | 0.17 | 73,900,301 | 0.17 |
| Forest Investment | 73,516,408 | 0.17 | 73,900,301 | 0.17 |
| Unlisted Infrastructure | 44,819,374 | 0.11 | 46,403,981 | 0.10 |
| Unlisted Infrastructure Funds | 44,819,374 | 0.11 | 46,403,981 | 0.10 |
| Cash & Equivalents | 287,013,845 | 0.67 | 168,699,071 | 0.38 |
| Total Fund | 42,668,220,327 | 100.00 | 44,672,033,231 | 100.00 |

Asset Class Returns

Periods Ended December 31, 2019

| | Performance (%) | | | | | | | |
|--|-----------------|--------------|--------------|--------------|--------------|--------------|-----------------|------------------|
| | 1 Quarter | 1 Year | 3 Years | 5 Years | 10 Years | 30 Years | Since Inception | Inception Date |
| Domestic Equity | 9.08 | 29.23 | 13.30 | 10.38 | 13.12 | 10.43 | 11.67 | 1/1/1982 |
| Domestic Equity - Net | 9.04 | 29.00 | 13.09 | 10.15 | 12.86 | | | |
| Blended Benchmark (U.S. Equity) | 9.10 | 31.02 | 14.57 | 11.24 | 13.46 | 10.00 | | |
| U.S. Equity IMRF Custom Benchmark | 8.74 | | | | | | | |
| International Equity | 9.42 | 23.76 | 10.78 | 6.68 | 6.66 | 6.85 | 7.87 | 9/1/1986 |
| International Equity - Net | 9.34 | 23.39 | 10.43 | 6.33 | 6.33 | | | |
| MSCI AC World ex USA (Net) | 8.92 | 21.51 | 9.87 | 5.51 | 4.97 | | | |
| International Equity IMRF Custom Benchmark | 9.22 | | | | | | | |
| Fixed Income | 0.56 | 9.50 | 4.62 | 3.78 | 4.76 | 6.60 | 8.20 | 1/1/1982 |
| Fixed Income - Net | 0.52 | 9.37 | 4.47 | 3.63 | 4.60 | | | |
| Blmbg. Barc. U.S. Aggregate | 0.18 | 8.72 | 4.03 | 3.05 | 3.75 | 5.91 | 7.67 | |
| Fixed Income IMRF Custom Benchmark | 0.45 | | | | | | | |
| Real Estate | 2.86 | 9.81 | 9.40 | 9.93 | 10.51 | 5.04 | 5.56 | 5/1/1985 |
| Blended Benchmark (Real Estate) | 1.27 | 4.39 | 6.13 | 7.98 | 10.49 | 7.58 | 7.69 | |
| Alternatives Investments | 2.57 | 9.48 | 12.92 | 10.14 | 9.53 | 11.57 | 10.86 | 2/1/1986 |
| Alternatives Investments - Net | 2.57 | 9.43 | 12.78 | 9.91 | 9.27 | | | |
| Alternatives Custom Benchmark | 2.18 | 9.00 | 9.00 | 9.00 | 9.15 | 12.35 | 12.66 | |
| Private Equity | 3.39 | 11.78 | 16.22 | 13.07 | 12.61 | 14.13 | 13.08 | 2/1/1986 |
| Alternatives Custom Benchmark | 2.18 | 9.00 | 9.00 | 9.00 | 9.15 | 12.35 | 12.66 | |
| Agriculture | -3.54 | -5.82 | -3.41 | 1.51 | 8.01 | | 6.96 | 10/1/1997 |
| NCREIF Farmland Index | 2.34 | 4.81 | 5.91 | 7.02 | 11.00 | | 11.81 | |
| Timberland | 0.55 | 1.00 | 0.63 | 0.41 | 2.59 | | 7.34 | 10/1/1992 |
| NCREIF Timberland Index | -0.04 | 1.30 | 2.71 | 3.13 | 4.45 | | 8.62 | |

Benchmark definitions on page 15-16.

Real Estate, Private Equity, Agriculture, Timberland, Unlisted Infrastructure returns shown are gross of fees

Asset Class Returns

Periods Ended December 31, 2019

| | Performance (%) | | | | | | | |
|-------------------------------|-----------------|--------------|-------------|-------------|-------------|-------------|-----------------|-----------------|
| | 1 Quarter | 1 Year | 3 Years | 5 Years | 10 Years | 30 Years | Since Inception | Inception Date |
| Unlisted Infrastruct | 2.66 | 9.65 | | | | | 10.23 | 4/1/2018 |
| Alternatives Custom Benchmark | 2.18 | 9.00 | | | | | 9.00 | |
| Total Fund | 5.81 | 19.77 | 9.99 | 7.64 | 9.05 | 8.47 | 9.90 | 1/1/1982 |
| Total Fund - Net | 5.77 | 19.57 | 9.79 | 7.42 | 8.82 | | | |
| Total Fund Benchmark | 5.25 | 18.68 | 9.55 | 7.55 | 8.67 | | | |

Benchmark definitions on page 15-16.

Real Estate, Private Equity, Agriculture, Timberland, Unlisted Infrastructure returns shown are gross of fees

Benchmark Definitions

| Account Name | From Date | To Date | Benchmark |
|--|-----------|------------|---|
| Domestic Equity Blended | 1/1/2015 | Present | 100% Russell 3000 Index |
| Benchmark | 1/1/1982 | 12/31/2014 | 100% Dow Jones US Total Stock Market Index |
| Real Estate Blended | 1/1/2013 | Present | 100% NCREIF Fund Index-ODCE (VW) (Net)** 100% |
| Benchmark | 1/1/2007 | 12/31/2012 | 100% NPI + 1% |
| | 1/1/2005 | 12/31/2016 | 100% Consumer Price Index + 5% |
| Alternatives Custom | 7/1/2010 | Present | 100% Annualized rate of 9.0% |
| Benchmark | 1/1/2004 | 6/30/2010 | 100% Annualized rate of 12.0% |
| | 1/1/2003 | 12/31/2003 | 100% Annualized rate of 13.0% |
| | 2/1/1986 | 12/31/2002 | 100% Annualized rate of 15.0% |
| U.S. Equity IMRF Custom Benchmark | | | Blend of the U.S. Equity Style benchmarks returns, dollar weighted by the actual allocation at pervious month end. |
| International Equity IMRF Custom Benchmark | | | Blend of the the International Equity Style benchmarks returns, dollar weighted by the actual allocation at previous month end. |
| Fixed Income IMRF Custom Benchmark | | | Blend of the the Fixed Income Style benchmarks returns, dollar weighted by the actual allocation at previous month end. |

**ODCE returns are updated quarterly.

Benchmark Definitions

| Account Name | From Date | To Date | Benchmark |
|----------------------|-----------|---------|--|
| Total Fund Benchmark | | | <p>The total fund benchmark is a blend of the asset class benchmark returns weighted by the target allocation for each asset class, currently:</p> <p>37% Russell 3000 Index, 28% Blmbg. Barc. U.S. Aggregate, 18% MSCI AC World ex USA (Net), 9% NCREIF Fund Index-ODCE (VW) (Net), 7% Alternatives Custom Benchmark, 1% 90 Day US Treasury Bill.</p> |

Asset Class Returns

Periods Ended December 31, 2019

| | Performance (%) | | | | | | | | | | |
|---------------------------------|-----------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|--------------|---------------|
| | YTD | 2018 | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 |
| Domestic Equity | 29.23 | -6.08 | 19.83 | 12.62 | 0.04 | 9.81 | 37.65 | 17.39 | -0.74 | 18.92 | 31.39 |
| Domestic Equity - Net | 29.00 | -6.25 | 19.59 | 12.35 | -0.22 | 9.54 | 37.32 | 17.09 | -0.99 | 18.62 | 31.12 |
| Blended Benchmark (U.S. Equity) | 31.02 | -5.24 | 21.13 | 12.74 | 0.48 | 12.47 | 33.47 | 16.38 | 1.08 | 17.49 | 28.59 |
| International Equity | 23.76 | -14.13 | 27.95 | 3.56 | -1.90 | -2.80 | 20.24 | 19.11 | -12.27 | 12.98 | 39.51 |
| International Equity - Net | 23.39 | -14.41 | 27.52 | 3.21 | -2.23 | -3.10 | 19.87 | 18.70 | -12.50 | 12.68 | 39.06 |
| MSCI AC World ex USA (Net) | 21.51 | -14.20 | 27.19 | 4.50 | -5.66 | -3.87 | 15.29 | 16.83 | -13.71 | 11.15 | 41.45 |
| Fixed Income | 9.50 | -0.24 | 4.82 | 4.87 | 0.25 | 5.97 | -0.59 | 7.41 | 7.60 | 8.59 | 15.32 |
| Fixed Income - Net | 9.37 | -0.39 | 4.66 | 4.71 | 0.10 | 5.81 | -0.75 | 7.24 | 7.44 | 8.43 | 15.21 |
| Blmbg. Barc. U.S. Aggregate | 8.72 | 0.01 | 3.54 | 2.65 | 0.55 | 5.97 | -2.02 | 4.21 | 7.84 | 6.54 | 5.93 |
| Real Estate | 9.81 | 8.36 | 10.03 | 8.97 | 12.54 | 13.02 | 10.82 | 12.85 | 12.29 | 6.56 | -24.52 |
| Real Estate - Net | 9.78 | 8.36 | 10.03 | 8.97 | 12.46 | 13.02 | 10.82 | 12.85 | 12.29 | 6.56 | -24.52 |
| Blended Benchmark (Real Estate) | 4.39 | 7.36 | 6.66 | 7.79 | 13.95 | 11.46 | 12.90 | 11.54 | 15.26 | 14.11 | -15.85 |
| Alternatives Investments | 9.48 | 17.32 | 12.09 | 5.32 | 6.90 | 11.63 | 12.11 | 6.24 | 5.05 | 9.76 | -0.82 |
| Alternative Investments - Net | 9.43 | 17.14 | 11.91 | 5.00 | 6.47 | 11.16 | 11.86 | 6.00 | 4.84 | 9.50 | -1.23 |
| Alternatives Custom Benchmark | 9.00 | 9.00 | 9.00 | 9.00 | 9.00 | 9.00 | 9.00 | 9.00 | 9.00 | 10.49 | 12.00 |
| Private Equity | 11.78 | 21.46 | 15.61 | 8.60 | 8.41 | 13.72 | 14.13 | 5.61 | 12.33 | 15.24 | -12.08 |
| Alternatives Custom Benchmark | 9.00 | 9.00 | 9.00 | 9.00 | 9.00 | 9.00 | 9.00 | 9.00 | 9.00 | 10.49 | 12.00 |
| Agriculture | -5.82 | 0.28 | -4.58 | -0.47 | 20.18 | 24.73 | 25.68 | 13.55 | 9.70 | 2.68 | 2.94 |
| NCREIF Farmland Index | 4.81 | 6.74 | 6.19 | 7.09 | 10.35 | 12.63 | 20.91 | 18.58 | 15.16 | 8.81 | 6.32 |
| Timberland | 1.00 | -3.62 | 4.68 | -4.58 | 4.99 | 12.83 | 9.14 | -3.59 | 3.20 | 3.21 | -2.87 |
| NCREIF Timberland Index | 1.30 | 3.21 | 3.63 | 2.59 | 4.97 | 10.48 | 9.69 | 7.75 | 1.57 | -0.15 | -4.75 |
| Unlisted Infrastruct | 9.65 | | | | | | | | | | |
| Alternatives Custom Benchmark | 9.00 | | | | | | | | | | |
| Total Fund | 19.77 | -4.23 | 16.02 | 8.01 | 0.53 | 6.15 | 20.20 | 13.84 | -0.29 | 13.61 | 24.51 |
| Total Fund - Net | 19.57 | -4.40 | 15.78 | 7.77 | 0.29 | 5.90 | 19.94 | 13.58 | -0.50 | 13.37 | 24.28 |
| Total Fund Benchmark | 18.65 | -3.12 | 14.37 | 7.89 | 1.37 | 7.33 | 15.84 | 12.19 | 1.47 | 12.72 | 20.10 |

Benchmark definitions on page 15-16.

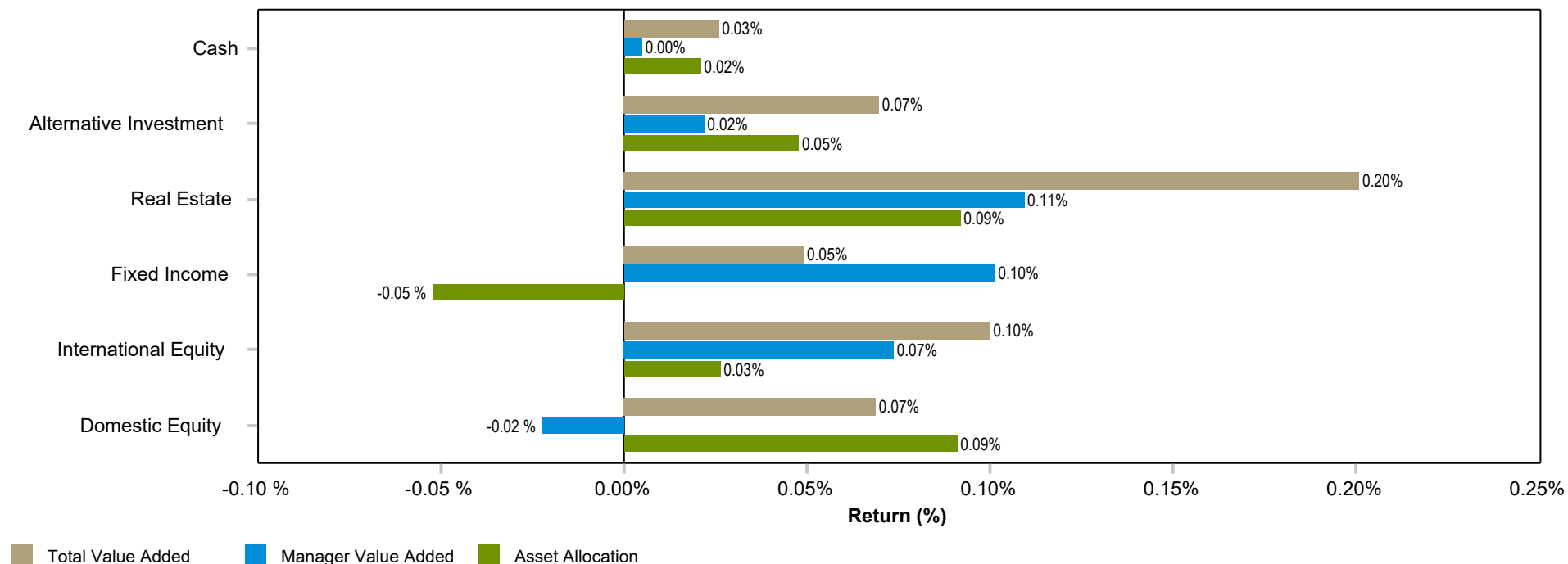
Private Equity, Agriculture, Timberland, Unlisted Infrastructure returns shown are gross of fees

Total Fund Attribution

Total Fund

1 Quarter Ending December 31, 2019

Relative Attribution by Asset Class



Relative Attribution Effects

| | Effective Actual Weight | Effective Target Weight | Actual Return | Target Return | Manager Effect | Asset Allocation | Total Relative Return |
|------------------------|-------------------------|-------------------------|---------------|---------------|----------------|------------------|-----------------------|
| Domestic Equity | 39.4 | 37.0 | 9.04 | 9.10 | -0.02 | 0.09 | 0.07 |
| International Equity | 18.7 | 18.0 | 9.34 | 8.92 | 0.07 | 0.03 | 0.10 |
| Fixed Income | 29.1 | 28.0 | 0.52 | 0.18 | 0.10 | -0.05 | 0.05 |
| Real Estate | 6.7 | 9.0 | 2.86 | 1.27 | 0.11 | 0.09 | 0.20 |
| Alternative Investment | 5.5 | 7.0 | 2.57 | 2.18 | 0.02 | 0.05 | 0.07 |
| Cash | 0.6 | 1.0 | 1.20 | 0.46 | 0.00 | 0.02 | 0.03 |
| Total Fund | 100.0 | 100.0 | 5.77 | 5.25 | 0.29 | 0.23 | 0.52 |

Total Fund Benchmark = 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.

Wilshire Consulting Performance

Domestic Equity

Periods Ended December 31, 2019

| | Performance (%) | | | | | | |
|---------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--------------------|-------------------|
| | 1 Quarter | 1 Year | 3 Years | 5 Years | 10 Years | Since Inception | Inception Date |
| Domestic Equity | 9.08 (34) | 29.23 (46) | 13.30 (44) | 10.38 (46) | 13.12 (51) | 11.67 (85) | 1/1/1982 |
| Domestic Equity - Net | 9.04 (36) | 29.00 (47) | 13.09 (46) | 10.15 (49) | 12.86 (56) | | |
| Blended Benchmark (U.S. Equity) | 9.10 (33) | 31.02 (35) | 14.57 (37) | 11.24 (36) | 13.46 (44) | | |
| Russell 3000 Index | 9.10 (33) | 31.02 (35) | 14.57 (37) | 11.24 (36) | 13.42 (45) | 11.59 (86) | |
| IM U.S. Equity (SA+CF) Median | 8.26 | 28.53 | 12.32 | 10.02 | 13.18 | 12.94 | |
| Large Cap Equity | 9.36 (18) | 29.75 (55) | 14.70 (34) | 11.03 (36) | 13.42 (15) | 11.35 (42) | 1/1/1982 |
| Large Cap Equity - Net | 9.33 (19) | 29.64 (56) | 14.58 (37) | 10.90 (40) | 13.27 (23) | | |
| Russell 1000 Index | 9.04 (33) | 31.43 (25) | 15.05 (23) | 11.48 (18) | 13.54 (8) | 11.73 (28) | |
| Large Blend Median | 8.83 | 30.17 | 14.03 | 10.44 | 12.52 | 11.00 | |
| Large Cap Growth | 9.63 (49) | 33.12 (44) | 21.07 (26) | 13.58 (35) | 14.59 (24) | 12.05 (17) | 1/1/1982 |
| Large Cap Growth - Net | 9.61 (50) | 33.00 (45) | 20.94 (27) | 13.44 (38) | 14.42 (28) | | |
| LCG Blended Benchmark* | 10.62 (26) | 36.39 (18) | 20.49 (31) | 14.63 (17) | 15.22 (12) | | |
| Russell 1000 Growth Index | 10.62 (26) | 36.39 (18) | 20.49 (31) | 14.63 (17) | 15.22 (12) | 11.32 (45) | |
| Large Growth Median | 9.56 | 32.39 | 18.89 | 12.67 | 13.68 | 11.12 | |
| NTGI S&P 500 Growth | 8.33 (78) | 31.16 (63) | 18.63 (53) | 13.51 (37) | 14.79 (20) | 8.26 (30) | 8/1/2001 |
| NTGI S&P 500 Growth - Net | 8.33 (78) | 31.15 (63) | 18.62 (53) | 13.50 (37) | 14.78 (20) | | |
| S&P 500 Growth | 8.32 (78) | 31.13 (64) | 18.66 (53) | 13.52 (36) | 14.78 (20) | 8.23 (31) | |
| Large Growth Median | 9.56 | 32.39 | 18.89 | 12.67 | 13.68 | 7.70 | |
| Piedmont Russell 1000 G | 10.61 (26) | 36.34 (19) | | | | 11.59 (23) | 10/1/2018 |
| Piedmont Russell 1000 G - Net | 10.60 (27) | 36.31 (20) | | | | 11.57 (24) | |
| Russell 1000 Growth Index | 10.62 (26) | 36.39 (18) | | | | 11.61 (23) | |
| Large Growth Median | 9.56 | 32.39 | | | | 9.45 | |

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

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

*** Public Real Assets benchmark is 1/3 Dow Jones Global Infrastructure Composite Index + 2/3 FTSE Global Core Infrastructure 50/50 Net Tax Index.

Wilshire Consulting Performance

Domestic Equity

Periods Ended December 31, 2019

| | Performance (%) | | | | | | |
|---------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--------------------|-------------------|
| | 1 Quarter | 1 Year | 3 Years | 5 Years | 10 Years | Since Inception | Inception Date |
| Sands Capital | 10.71 (24) | 33.80 (37) | 24.71 (3) | 13.37 (40) | 16.93 (3) | 12.46 (2) | 11/1/2003 |
| Sands Capital - Net | 10.65 (25) | 33.51 (39) | 24.44 (3) | 13.11 (44) | 16.66 (3) | | |
| LCG Blended Benchmark* | 10.62 (26) | 36.39 (18) | 20.49 (31) | 14.63 (17) | 15.22 (12) | 10.38 (28) | |
| Russell 1000 Growth Index | 10.62 (26) | 36.39 (18) | 20.49 (31) | 14.63 (17) | 15.22 (12) | 10.43 (26) | |
| Large Growth Median | 9.56 | 32.39 | 18.89 | 12.67 | 13.68 | 9.68 | |
| Large Cap Value | 9.23 (14) | 26.42 (38) | 10.63 (35) | 9.11 (23) | 12.58 (8) | 10.43 (75) | 10/1/1982 |
| Large Cap Value - Net | 9.19 (15) | 26.22 (41) | 10.46 (38) | 8.93 (27) | 12.40 (11) | | |
| LCV Blended Benchmark** | 7.41 (46) | 26.54 (36) | 9.68 (55) | 8.29 (44) | 11.80 (24) | | |
| Russell 1000 Value Index | 7.41 (46) | 26.54 (36) | 9.68 (55) | 8.29 (44) | 11.80 (24) | 11.93 (2) | |
| Large Value Median | 7.29 | 25.48 | 9.81 | 8.06 | 10.96 | 10.78 | |
| Dodge & Cox | 9.80 (8) | 24.27 (66) | 11.23 (25) | 9.89 (9) | 12.87 (5) | 9.78 (8) | 9/1/2003 |
| Dodge & Cox - Net | 9.75 (8) | 24.01 (69) | 10.99 (30) | 9.66 (12) | 12.63 (7) | | |
| LCV Blended Benchmark** | 7.41 (46) | 26.54 (36) | 9.68 (55) | 8.29 (44) | 11.80 (24) | 8.64 (36) | |
| Russell 1000 Value Index | 7.41 (46) | 26.54 (36) | 9.68 (55) | 8.29 (44) | 11.80 (24) | 8.80 (31) | |
| Large Value Median | 7.29 | 25.48 | 9.81 | 8.06 | 10.96 | 8.33 | |
| BMO | 6.99 (59) | 20.81 (91) | 9.25 (64) | 7.68 (61) | 12.14 (16) | 8.14 (7) | 2/1/2001 |
| BMO - Net | 6.93 (61) | 20.54 (92) | 9.01 (68) | 7.44 (67) | 11.89 (22) | | |
| LCV Blended Benchmark** | 7.41 (46) | 26.54 (36) | 9.68 (55) | 8.29 (44) | 11.80 (24) | 6.06 (68) | |
| Russell 1000 Value Index | 7.41 (46) | 26.54 (36) | 9.68 (55) | 8.29 (44) | 11.80 (24) | 7.05 (35) | |
| Large Value Median | 7.29 | 25.48 | 9.81 | 8.06 | 10.96 | 6.58 | |
| LSV Asset | 9.71 (8) | 27.01 (30) | 10.19 (43) | 9.14 (23) | 12.91 (4) | 11.18 (2) | 2/1/2003 |
| LSV Asset - Net | 9.65 (9) | 26.71 (33) | 9.94 (47) | 8.88 (29) | 12.63 (7) | | |
| LCV Blended Benchmark** | 7.41 (46) | 26.54 (36) | 9.68 (55) | 8.29 (44) | 11.80 (24) | 9.54 (30) | |
| Russell 1000 Value Index | 7.41 (46) | 26.54 (36) | 9.68 (55) | 8.29 (44) | 11.80 (24) | 9.55 (30) | |
| Large Value Median | 7.29 | 25.48 | 9.81 | 8.06 | 10.96 | 9.10 | |

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

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

*** Public Real Assets benchmark is 1/3 Dow Jones Global Infrastructure Composite Index + 2/3 FTSE Global Core Infrastructure 50/50 Net Tax Index.

Wilshire Consulting

Performance

Domestic Equity

Periods Ended December 31, 2019

| | Performance (%) | | | | | | |
|--|-----------------|------------|------------|------------|-------------|--------------------|-------------------|
| | 1 Quarter | 1 Year | 3 Years | 5 Years | 10 Years | Since Inception | Inception Date |
| NTGI S&P 500 Value | 9.92 (6) | 31.93 (3) | 11.55 (19) | 9.59 (13) | 12.23 (14) | 6.34 (62) | 8/1/1999 |
| NTGI S&P 500 Value - Net | 9.92 (7) | 31.92 (3) | 11.54 (19) | 9.59 (13) | 12.22 (14) | | |
| S&P 500 Value | 9.93 (6) | 31.93 (3) | 11.49 (20) | 9.52 (15) | 12.16 (15) | 6.31 (63) | |
| Large Value Median | 7.29 | 25.48 | 9.81 | 8.06 | 10.96 | 6.65 | |
| Large Cap Pass. Core | 9.04 (38) | 30.98 (38) | 14.59 (41) | 11.27 (31) | 13.49 (22) | 11.29 (29) | 1/1/1985 |
| Large Cap Pass. Core - Net | 9.04 (38) | 30.97 (38) | 14.58 (41) | 11.26 (31) | 13.48 (23) | | |
| Dow Jones US Total Stock Market Index | 9.04 (38) | 30.90 (39) | 14.52 (43) | 11.18 (33) | 13.43 (23) | | |
| IM U.S. Large Cap Core Equity (SA+CF+MF) Median | 8.60 | 29.67 | 14.03 | 10.48 | 12.52 | 10.82 | |
| NTGI MarketCap Idx. | 9.04 (38) | 30.98 (38) | 14.59 (41) | 11.27 (31) | 13.50 (22) | 11.06 (30) | 2/1/1985 |
| NTGI MarketCap Idx. - Net | 9.04 (38) | 30.97 (38) | 14.58 (41) | 11.26 (31) | 13.49 (22) | | |
| Dow Jones US Total Stock Market Index | 9.04 (38) | 30.90 (39) | 14.52 (43) | 11.18 (33) | 13.43 (23) | | |
| IM U.S. Large Cap Core Equity (SA+CF+MF) Median | 8.60 | 29.67 | 14.03 | 10.48 | 12.52 | 10.52 | |
| Quantitative Factor Strategies | 5.21 | | | | | 5.63 | 9/17/2019 |
| Quantitative US Equity - SciBeta | 5.21 | | | | | 5.63 | 9/17/2019 |
| Quantitative US Equity - SciBeta - Net | 5.21 | | | | | 5.63 | |
| SciBeta United States High-Factor-Intensity Divers | 5.25 | | | | | 5.28 | |

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

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

*** Public Real Assets benchmark is 1/3 Dow Jones Global Infrastructure Composite Index + 2/3 FTSE Global Core Infrastructure 50/50 Net Tax Index.

Wilshire Consulting Performance

Domestic Equity

Periods Ended December 31, 2019

| | Performance (%) | | | | | | |
|--|-----------------|------------|------------|------------|------------|-----------------|----------------|
| | 1 Quarter | 1 Year | 3 Years | 5 Years | 10 Years | Since Inception | Inception Date |
| Small Cap Composite | 9.30 (35) | 27.07 (30) | 8.35 (43) | 8.04 (49) | 12.34 (42) | 12.13 (38) | 7/1/1988 |
| Small Cap Composite - Net | 9.18 (38) | 26.41 (35) | 7.82 (48) | 7.47 (58) | 11.72 (56) | | |
| Russell 2000 Index | 9.94 (25) | 25.53 (42) | 8.59 (41) | 8.23 (46) | 11.83 (54) | 9.49 (90) | |
| IM U.S. Small Cap Equity (SA+CF+MF) Median | 8.48 | 24.53 | 7.57 | 7.95 | 11.97 | 11.45 | |
| Small Cap Growth | 12.21 (17) | 34.69 (21) | 13.27 (55) | 10.13 (48) | 13.41 (41) | 13.06 (1) | 7/1/1988 |
| Small Cap Growth - Net | 12.11 (17) | 33.94 (25) | 12.77 (58) | 9.56 (59) | 12.77 (54) | | |
| Russell 2000 Growth Index | 11.39 (25) | 28.48 (47) | 12.49 (61) | 9.34 (62) | 13.01 (50) | 8.25 (99) | |
| Small Growth Median | 9.47 | 28.03 | 13.93 | 9.98 | 13.00 | 10.21 | |
| Frontier Capital | 12.36 (17) | 34.20 (23) | 18.86 (17) | 11.15 (28) | 13.75 (34) | 13.35 (1) | 8/1/1988 |
| Frontier Capital - Net | 12.22 (17) | 33.15 (28) | 18.17 (21) | 10.48 (40) | 13.02 (50) | | |
| Russell 2000 Growth Index | 11.39 (25) | 28.48 (47) | 12.49 (61) | 9.34 (62) | 13.01 (50) | 8.34 (99) | |
| Small Growth Median | 9.47 | 28.03 | 13.93 | 9.98 | 13.00 | 10.30 | |
| FIAM Small Cap | 11.73 (20) | 34.79 (21) | 10.96 (74) | 10.43 (41) | 13.74 (35) | 13.56 (1) | 8/1/1988 |
| FIAM Small Cap - Net | 11.73 (20) | 34.27 (23) | 10.56 (76) | 9.91 (52) | 13.15 (48) | | |
| Russell 2000 Growth Index | 11.39 (25) | 28.48 (47) | 12.49 (61) | 9.34 (62) | 13.01 (50) | 8.34 (99) | |
| Small Growth Median | 9.47 | 28.03 | 13.93 | 9.98 | 13.00 | 10.30 | |
| Small Cap Value | 7.87 (54) | 23.88 (27) | 5.32 (31) | 7.55 (21) | 11.71 (10) | 11.73 (1) | 9/1/1989 |
| Small Cap Value - Net | 7.75 (57) | 23.27 (32) | 4.78 (40) | 7.00 (29) | 11.17 (21) | | |
| Russell 2000 Value Index | 8.49 (33) | 22.39 (45) | 4.77 (40) | 6.99 (29) | 10.56 (40) | 10.04 (51) | |
| Small Value Median | 8.01 | 21.95 | 4.12 | 5.83 | 10.26 | 10.05 | |
| Channing | 7.96 (52) | 25.91 (19) | 4.24 (48) | 6.99 (29) | | 10.34 (10) | 7/1/2011 |
| Channing - Net | 7.82 (55) | 25.29 (21) | 3.73 (57) | 6.48 (36) | | 9.75 (19) | |
| Russell 2000 Value Index | 8.49 (33) | 22.39 (45) | 4.77 (40) | 6.99 (29) | | 9.20 (32) | |
| Small Value Median | 8.01 | 21.95 | 4.12 | 5.83 | | 8.62 | |

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** 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.

*** Public Real Assets benchmark is 1/3 Dow Jones Global Infrastructure Composite Index + 2/3 FTSE Global Core Infrastructure 50/50 Net Tax Index.

Wilshire Consulting Performance

Domestic Equity

Periods Ended December 31, 2019

| | Performance (%) | | | | | | |
|--|------------------|-------------------|------------------|------------------|-------------------|--------------------|-------------------|
| | 1 Quarter | 1 Year | 3 Years | 5 Years | 10 Years | Since Inception | Inception Date |
| DFA Small Cap Val. | 9.04 (24) | 19.22 (82) | 3.01 (72) | 5.80 (51) | 11.80 (9) | 11.81 (3) | 2/1/1996 |
| DFA Small Cap Val. - Net | 8.91 (26) | 18.64 (86) | 2.48 (80) | 5.26 (62) | 11.26 (19) | | |
| Russell 2000 Value Index | 8.49 (33) | 22.39 (45) | 4.77 (40) | 6.99 (29) | 10.56 (40) | 9.54 (68) | |
| Small Value Median | 8.01 | 21.95 | 4.12 | 5.83 | 10.26 | 9.90 | |
| Inv. Couns. Maryland | 6.88 (77) | 27.33 (13) | 7.97 (5) | 10.09 (4) | 12.39 (4) | 11.56 (3) | 5/1/1999 |
| Inv. Couns. Maryland - Net | 6.79 (79) | 26.67 (15) | 7.41 (7) | 9.52 (4) | 11.87 (8) | | |
| Russell 2000 Value Index | 8.49 (33) | 22.39 (45) | 4.77 (40) | 6.99 (29) | 10.56 (40) | 9.09 (71) | |
| Small Value Median | 8.01 | 21.95 | 4.12 | 5.83 | 10.26 | 9.60 | |
| Micro Cap | 9.30 (35) | 21.62 (74) | 6.00 (65) | 5.19 (86) | 11.60 (58) | 11.47 (52) | 7/1/1984 |
| Micro Cap - Net | 9.16 (38) | 21.00 (79) | 5.41 (70) | 4.55 (92) | 10.89 (71) | | |
| Russell Microcap Index | 13.45 (3) | 22.43 (68) | 6.39 (61) | 6.57 (71) | 11.26 (65) | | |
| IM U.S. Small Cap Equity (SA+CF+MF) Median | 8.48 | 24.53 | 7.57 | 7.95 | 11.97 | 11.51 | |
| DFA Micro Cap (9-10) | 9.30 (35) | 21.63 (74) | 6.74 (58) | 8.51 (41) | 13.08 (27) | 11.12 (31) | 8/1/1987 |
| DFA Micro Cap (9-10) - Net | 9.16 (38) | 21.04 (79) | 6.22 (63) | 7.97 (50) | 12.53 (37) | | |
| Russell 2000 Index | 9.94 (25) | 25.53 (42) | 8.59 (41) | 8.23 (46) | 11.83 (54) | 8.89 (87) | |
| IM U.S. Small Cap Equity (SA+CF+MF) Median | 8.48 | 24.53 | 7.57 | 7.95 | 11.97 | 10.28 | |
| Public Real Assets | 3.07 | 27.35 | | | | 9.81 | 8/1/2017 |
| Public Real Assets - Net | 2.95 | 26.78 | | | | 9.35 | |
| Public Real Assets Benchmark*** | 3.63 | 25.60 | | | | 7.85 | |
| Real Assets Median | | | | | | | |
| Brookfield | 3.00 | 27.30 | | | | 7.04 | 8/1/2017 |
| Brookfield - Net | 2.86 | 26.64 | | | | 6.52 | |
| Dow Jones Brookfield Global Infrastructure Composi | 3.52 | 26.53 | | | | 6.08 | |
| Real Assets Median | | | | | | | |

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

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

*** Public Real Assets benchmark is 1/3 Dow Jones Global Infrastructure Composite Index + 2/3 FTSE Global Core Infrastructure 50/50 Net Tax Index.

Wilshire Consulting Performance

Domestic Equity

Periods Ended December 31, 2019

| | Performance (%) | | | | | | |
|---|-----------------|-----------|------------|------------|-------------|--------------------|-------------------|
| | 1 Quarter | 1 Year | 3 Years | 5 Years | 10 Years | Since Inception | Inception Date |
| Cohen & Steers | 3.10 | 27.37 | | | | 11.16 | 8/1/2017 |
| Cohen & Steers - Net | 2.99 | 26.84 | | | | 10.73 | |
| FTSE GLOBAL CORE INFRASTRUCTURE 50/50 INDEX (Net) Real Assets Median | 3.68 | 25.13 | | | | 8.72 | |

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

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

*** Public Real Assets benchmark is 1/3 Dow Jones Global Infrastructure Composite Index + 2/3 FTSE Global Core Infrastructure 50/50 Net Tax Index.

Performance

International Equity

Periods Ended December 31, 2019

| | Performance (%) | | | | | | |
|---|-------------------|-------------------|-------------------|------------------|------------------|------------------|------------------|
| | 1 Quarter | 1 Year | 3 Years | 5 Years | 10 Years | Since Inception | Inception Date |
| International Equity | 9.42 (59) | 23.76 (43) | 10.78 (49) | 6.68 (49) | 6.66 (54) | 7.87 (66) | 9/1/1986 |
| International Equity - Net | 9.34 (60) | 23.39 (45) | 10.43 (53) | 6.33 (55) | 6.33 (62) | | |
| MSCI AC World ex USA (Net) | 8.92 (69) | 21.51 (59) | 9.87 (62) | 5.51 (73) | 4.97 (84) | | |
| IM International Equity (SA+CF) Median | 9.98 | 22.54 | 10.64 | 6.60 | 6.84 | 9.01 | |
| Intl Large Cap Equity | 9.02 (55) | 22.52 (65) | 10.32 (49) | 6.48 (42) | 6.57 (46) | 7.85 (54) | 9/1/1986 |
| Intl LargeCap Equity - Net | 8.95 (57) | 22.22 (66) | 10.04 (55) | 6.20 (47) | 6.29 (52) | | |
| MSCI AC World ex USA (Net) | 8.92 (58) | 21.51 (70) | 9.87 (57) | 5.51 (65) | 4.97 (78) | | |
| IM International Large Cap Equity (SA+CF+MF) Median | 9.16 | 25.02 | 10.21 | 6.02 | 6.34 | 8.39 | |
| Intl Large Cap Grwth | 10.27 (44) | 27.27 (64) | 11.41 (73) | 6.47 (82) | 6.98 (70) | 8.60 (57) | 9/1/2002 |
| Intl Large Cap Grwth - Net | 10.20 (45) | 26.98 (65) | 11.14 (76) | 6.20 (86) | 6.63 (78) | | |
| MSCI AC World ex USA (Net) | 8.92 (69) | 21.51 (88) | 9.87 (85) | 5.51 (93) | 4.97 (100) | 7.50 (99) | |
| IM International Large Cap Growth Equity (SA+CF) Median | 9.90 | 28.29 | 13.20 | 7.75 | 7.74 | 9.02 | |
| EARNEST Part. Intl | 9.26 (59) | 21.97 (87) | 9.91 (85) | 5.47 (94) | 6.10 (94) | 9.15 (23) | 10/1/2004 |
| EARNEST Part. Intl - Net | 9.20 (62) | 21.85 (87) | 9.73 (88) | 5.28 (95) | 5.82 (97) | | |
| MSCI AC World ex USA (Net) | 8.92 (69) | 21.51 (88) | 9.87 (85) | 5.51 (93) | 4.97 (100) | 6.16 (97) | |
| MSCI AC World ex USA Growth (Net) | 9.58 (53) | 27.34 (63) | 12.89 (55) | 7.30 (60) | 6.24 (91) | 6.92 (79) | |
| IM International Large Cap Growth Equity (SA+CF) Median | 9.90 | 28.29 | 13.20 | 7.75 | 7.74 | 8.11 | |
| William Blair | 11.06 (24) | 31.90 (25) | 12.74 (57) | 7.36 (59) | 8.37 (31) | 9.92 (44) | 10/1/2002 |
| William Blair - Net | 10.97 (26) | 31.45 (26) | 12.35 (64) | 6.98 (67) | 7.98 (46) | | |
| MSCI AC World ex USA (Net) | 8.92 (69) | 21.51 (88) | 9.87 (85) | 5.51 (93) | 4.97 (100) | 8.24 (97) | |
| MSCI AC World ex USA Growth (Net) | 9.58 (53) | 27.34 (63) | 12.89 (55) | 7.30 (60) | 6.24 (91) | 8.43 (93) | |
| IM International Large Cap Growth Equity (SA+CF) Median | 9.90 | 28.29 | 13.20 | 7.75 | 7.74 | 9.82 | |
| Intl Large Cap Val. | 8.83 (65) | 18.17 (77) | 8.36 (65) | 5.61 (54) | 5.29 (77) | 8.78 (21) | 10/1/1995 |
| Intl Large Cap Val. - Net | 8.75 (69) | 17.80 (83) | 7.99 (70) | 5.22 (67) | 4.94 (83) | | |
| MSCI AC World ex USA (Net) | 8.92 (65) | 21.51 (43) | 9.87 (40) | 5.51 (59) | 4.97 (82) | | |
| IM International Large Cap Value Equity (SA+CF) Median | 9.61 | 21.09 | 9.08 | 5.74 | 6.63 | 7.53 | |

* Custom benchmark is calculated as a weighted average of each funds respective benchmark until 12/2017. After 12/2017 the benchmark is MSCI ACWI ex US - Net.

** Genesis is NOF NAV commingled fund.

International Equity

Periods Ended December 31, 2019

| | Performance (%) | | | | | | |
|--|------------------|-------------------|-------------------|------------------|------------------|--------------------|-------------------|
| | 1 Quarter | 1 Year | 3 Years | 5 Years | 10 Years | Since Inception | Inception Date |
| Brandes Investment | 8.34 (79) | 15.57 (93) | 7.19 (80) | 5.62 (54) | 5.45 (73) | 8.91 (18) | 1/1/1996 |
| Brandes Investment - Net | 8.29 (79) | 15.33 (95) | 6.93 (83) | 5.38 (64) | 5.21 (78) | | |
| MSCI AC World ex USA (Net) | 8.92 (65) | 21.51 (43) | 9.87 (40) | 5.51 (59) | 4.97 (82) | | |
| MSCI AC World ex USA Value | 8.29 (79) | 16.45 (90) | 7.53 (78) | 4.26 (89) | 4.23 (93) | | |
| IM International Large Cap Value Equity (SA+CF) Median | 9.61 | 21.09 | 9.08 | 5.74 | 6.63 | 7.57 | |
| Mondrian | 9.71 (49) | 20.29 (56) | 9.32 (46) | 5.66 (53) | | 6.13 (67) | 4/1/2012 |
| Mondrian - Net | 9.61 (51) | 19.75 (59) | 8.80 (56) | 5.14 (69) | | 5.62 (82) | |
| MSCI AC World ex USA (Net) | 8.92 (65) | 21.51 (43) | 9.87 (40) | 5.51 (59) | | 5.57 (83) | |
| MSCI AC World ex USA Value | 8.29 (79) | 16.45 (90) | 7.53 (78) | 4.26 (89) | | 4.85 (92) | |
| IM International Large Cap Value Equity (SA+CF) Median | 9.61 | 21.09 | 9.08 | 5.74 | | 6.74 | |
| Lazard | 7.26 (95) | 22.38 (37) | 10.34 (29) | 5.62 (54) | | 6.88 (45) | 4/1/2012 |
| Lazard - Net | 7.19 (95) | 22.08 (39) | 10.07 (38) | 5.20 (67) | | 6.35 (61) | |
| MSCI AC World ex USA (Net) | 8.92 (65) | 21.51 (43) | 9.87 (40) | 5.51 (59) | | 5.57 (83) | |
| MSCI AC World ex USA Value | 8.29 (79) | 16.45 (90) | 7.53 (78) | 4.26 (89) | | 4.85 (92) | |
| IM International Large Cap Value Equity (SA+CF) Median | 9.61 | 21.09 | 9.08 | 5.74 | | 6.74 | |
| Intl Large Cap Active Core | 9.22 (58) | 22.65 (47) | 11.37 (35) | 7.66 (22) | 7.92 (19) | 5.26 (21) | 2/1/2008 |
| Intl Large Cap Active Core - Net | 9.08 (60) | 22.11 (50) | 10.88 (40) | 7.12 (28) | 7.38 (24) | | |
| MSCI AC World ex USA (Net) | 8.92 (63) | 21.51 (56) | 9.87 (53) | 5.51 (56) | 4.97 (66) | 2.77 (65) | |
| IM International Equity (SA+CF+MF) Median | 9.67 | 22.10 | 10.05 | 5.79 | 5.67 | 3.49 | |
| Arrowstreet Capital | 9.82 (27) | 23.25 (52) | 11.77 (24) | 8.04 (15) | 8.20 (6) | 5.54 (3) | 3/1/2008 |
| Arrowstreet Capital - Net | 9.70 (27) | 22.69 (58) | 11.26 (32) | 7.54 (21) | 7.70 (17) | 5.05 (8) | |
| MSCI AC World ex USA (Net) | 8.92 (53) | 21.51 (70) | 9.87 (52) | 5.51 (78) | 4.97 (95) | 2.55 (95) | |
| IM International Large Cap Core Equity (SA+CF) Median | 9.06 | 23.73 | 9.88 | 6.16 | 6.70 | 3.89 | |

* Custom benchmark is calculated as a weighted average of each funds respective benchmark until 12/2017. After 12/2017 the benchmark is MSCI ACWI ex US - Net.

** Genesis is NOF NAV commingled fund.

Performance

International Equity

Periods Ended December 31, 2019

| | Performance (%) | | | | | | |
|--|-------------------|-------------------|-------------------|------------------|------------------|-------------------|------------------|
| | 1 Quarter | 1 Year | 3 Years | 5 Years | 10 Years | Since Inception | Inception Date |
| Brown Capital | 7.41 (88) | 23.43 (52) | 11.11 (34) | 7.50 (22) | 7.89 (11) | 8.11 (8) | 10/1/2004 |
| Brown Capital - Net | 7.30 (89) | 23.09 (54) | 10.62 (38) | 6.70 (38) | 7.12 (35) | | |
| MSCI AC World ex USA (Net) | 8.92 (53) | 21.51 (70) | 9.87 (52) | 5.51 (78) | 4.97 (95) | 6.16 (82) | |
| IM International Large Cap Core Equity (SA+CF) Median | 9.06 | 23.73 | 9.88 | 6.16 | 6.70 | 6.98 | |
| GlobeFlex Capital | 8.74 (61) | 19.18 (87) | 9.68 (55) | 6.85 (34) | 7.52 (19) | 5.08 (49) | 3/1/2006 |
| GlobeFlex Capital - Net | 8.62 (64) | 18.68 (89) | 9.27 (71) | 6.43 (41) | 7.08 (36) | 4.63 (69) | |
| MSCI AC World ex USA (Net) | 8.92 (53) | 21.51 (70) | 9.87 (52) | 5.51 (78) | 4.97 (95) | 4.06 (88) | |
| IM International Large Cap Core Equity (SA+CF) Median | 9.06 | 23.73 | 9.88 | 6.16 | 6.70 | 5.02 | |
| Progress Intl Equity* | 10.77 (16) | 27.31 (23) | 14.05 (10) | 8.45 (11) | | 6.16 (12) | 7/1/2014 |
| Progress Intl Equity - Net | 10.50 (17) | 26.55 (27) | 13.45 (11) | 7.89 (17) | | 5.66 (18) | |
| Custom Benchmark (Progress Intl Equity) | 8.92 (53) | 21.51 (70) | 10.79 (36) | 6.52 (39) | | 4.16 (49) | |
| MSCI AC World ex USA (Net) | 8.92 (53) | 21.51 (70) | 9.87 (52) | 5.51 (78) | | 3.22 (80) | |
| IM International Large Cap Core Equity (SA+CF) Median | 9.06 | 23.73 | 9.88 | 6.16 | | 4.13 | |
| Intl Large Cap Passive Core | 8.06 (78) | 22.24 (50) | 9.93 (52) | 6.05 (45) | 5.89 (47) | 3.70 (71) | 1/1/2000 |
| Intl Large Cap Passive Core - Net | 8.06 (78) | 22.23 (50) | 9.92 (53) | 6.04 (45) | 5.88 (47) | | |
| MSCI EAFE Index (Net) | 8.17 (76) | 22.01 (51) | 9.56 (58) | 5.67 (53) | 5.50 (54) | 3.32 (78) | |
| IM International Equity (SA+CF+MF) Median | 9.67 | 22.10 | 10.05 | 5.79 | 5.67 | 5.19 | |
| NTGI MSCI EAFE | 8.06 (77) | 22.24 (62) | 9.93 (50) | 6.05 (52) | 5.89 (81) | 4.05 (95) | 2/1/2000 |
| NTGI MSCI EAFE - Net | 8.06 (77) | 22.23 (62) | 9.92 (50) | 6.04 (53) | 5.88 (81) | | |
| MSCI EAFE Index (Net) | 8.17 (74) | 22.01 (64) | 9.56 (60) | 5.67 (72) | 5.50 (90) | 3.67 (98) | |
| IM International Large Cap Core Equity (SA+CF) Median | 9.06 | 23.73 | 9.88 | 6.16 | 6.70 | 5.17 | |
| Intl All Cap Developed | 7.72 (88) | | | | | 15.21 (51) | 2/1/2019 |
| Intl All Cap Developed - Net | 7.59 (89) | | | | | 14.83 (54) | |
| MSCI EAFE + Canada (Net) | 7.86 (86) | | | | | 14.33 (57) | |
| IM International Equity Developed Markets (SA+CF) Median | 9.62 | | | | | 15.22 | |

* Custom benchmark is calculated as a weighted average of each funds respective benchmark until 12/2017. After 12/2017 the benchmark is MSCI ACWI ex US - Net.

** Genesis is NOF NAV commingled fund.

Performance

International Equity

Periods Ended December 31, 2019

| | Performance (%) | | | | | | |
|--|-------------------|-------------------|-------------------|------------------|------------------|-------------------|------------------|
| | 1 Quarter | 1 Year | 3 Years | 5 Years | 10 Years | Since Inception | Inception Date |
| Ativo International | 7.72 (88) | | | | | 15.21 (51) | 2/1/2019 |
| Ativo International - Net | 7.59 (89) | | | | | 14.83 (54) | |
| MSCI EAFE + Canada (Net) | 7.86 (86) | | | | | 14.33 (57) | |
| IM International Equity Developed Markets (SA+CF) Median | 9.62 | | | | | 15.22 | |
| Intl Small Cap Eqty | 12.71 (24) | 30.81 (12) | 11.66 (39) | 7.92 (47) | 8.43 (54) | 5.26 (90) | 12/1/2005 |
| Intl Small Cap Eqty - Net | 12.51 (26) | 29.86 (14) | 10.84 (46) | 7.12 (62) | 7.64 (75) | | |
| MSCI AC World ex USA Small Cap (Net) | 11.01 (54) | 22.42 (63) | 9.65 (61) | 7.04 (62) | 6.92 (85) | 6.33 (69) | |
| Custom Benchmark (Intl Small Cap) | 11.01 (54) | 22.42 (63) | 9.65 (61) | 7.04 (62) | 6.93 (85) | 5.61 (83) | |
| IM International Small Cap Equity (SA+CF+MF) Median | 11.34 | 23.84 | 10.55 | 7.71 | 8.81 | 7.00 | |
| Franklin Templeton | 9.82 (77) | 24.16 (47) | 11.47 (41) | 7.30 (58) | | 6.78 (59) | 8/1/2011 |
| Franklin Templeton - Net | 9.63 (82) | 23.28 (56) | 10.67 (48) | 6.52 (71) | | 6.02 (78) | |
| MSCI AC World ex USA Small Cap (Net) | 11.01 (54) | 22.42 (63) | 9.65 (61) | 7.04 (62) | | 5.24 (88) | |
| IM International Small Cap Equity (SA+CF+MF) Median | 11.34 | 23.84 | 10.55 | 7.71 | | 7.25 | |
| William Blair IntSC | 14.70 (4) | 35.84 (3) | 11.73 (39) | 8.40 (38) | | 9.83 (41) | 9/1/2010 |
| William Blair IntSC - Net | 14.49 (5) | 34.83 (4) | 10.88 (46) | 7.57 (52) | | 9.00 (58) | |
| MSCI AC World ex USA Small Cap (Net) | 11.01 (54) | 22.42 (63) | 9.65 (61) | 7.04 (62) | | 7.38 (87) | |
| Custom Benchmark (Intl Small Cap) | 11.01 (54) | 22.42 (63) | 9.65 (61) | 7.04 (62) | | 7.69 (84) | |
| IM International Small Cap Equity (SA+CF+MF) Median | 11.34 | 23.84 | 10.55 | 7.71 | | 9.36 | |
| Emerging Mkt Equity | 10.76 (57) | 30.00 (11) | 14.17 (20) | 7.42 (19) | 6.52 (15) | 9.25 (22) | 2/1/1992 |
| Emerging Mkt Equity - Net | 10.64 (59) | 29.35 (13) | 13.52 (25) | 6.79 (28) | 5.91 (22) | | |
| MSCI Emerging Markets Index | 11.93 (33) | 18.90 (58) | 11.99 (39) | 6.01 (42) | 4.04 (57) | 7.20 (82) | |
| IM Emerging Markets Equity (SA+CF+MF) Median | 11.08 | 20.15 | 10.92 | 5.49 | 4.39 | 8.51 | |
| Genesis Asset Mngrs.** | 10.76 (57) | 30.00 (11) | 14.17 (20) | 7.42 (19) | 6.52 (15) | 11.48 (7) | 5/1/2004 |
| Genesis Asset Mngrs. - Net | 10.64 (59) | 29.35 (13) | 13.52 (25) | 6.79 (28) | 5.91 (22) | | |
| MSCI Emerging Markets Index | 11.93 (33) | 18.90 (58) | 11.99 (39) | 6.01 (42) | 4.04 (57) | 9.05 (51) | |
| IM Emerging Markets Equity (SA+CF+MF) Median | 11.08 | 20.15 | 10.92 | 5.49 | 4.39 | 9.14 | |

* Custom benchmark is calculated as a weighted average of each funds respective benchmark until 12/2017. After 12/2017 the benchmark is MSCI ACWI ex US - Net.

** Genesis is NOF NAV commingled fund.

Wilshire Consulting

Performance

Fixed Income

Periods Ended December 31, 2019

| | Performance (%) | | | | | | |
|---|-------------------|------------------|------------------|------------------|------------------|------------------|-----------------|
| | 1 Quarter | 1 Year | 3 Years | 5 Years | 10 Years | Since Inception | Inception Date |
| Fixed Income | 0.56 (44) | 9.50 (26) | 4.62 (27) | 3.78 (26) | 4.76 (26) | 8.20 (16) | 1/1/1982 |
| Fixed Income - Net | 0.52 (47) | 9.37 (27) | 4.47 (30) | 3.63 (29) | 4.60 (28) | | |
| Blmbg. Barc. U.S. Aggregate | 0.18 (85) | 8.72 (33) | 4.03 (40) | 3.05 (43) | 3.75 (45) | 7.67 (27) | |
| IM U.S. Fixed Income (SA+CF+MF) Median | 0.49 | 7.02 | 3.59 | 2.79 | 3.53 | 6.94 | |
| Active Fixed Core | -0.17 (94) | 8.10 (94) | 4.12 (76) | 3.34 (60) | 4.32 (45) | 4.58 (94) | 4/1/2001 |
| Active Fixed Core - Net | -0.20 (96) | 7.99 (95) | 4.01 (86) | 3.21 (72) | 4.16 (59) | | |
| Blmbg. Barc. U.S. Aggregate | 0.18 (57) | 8.72 (77) | 4.03 (85) | 3.05 (89) | 3.75 (91) | 4.59 (92) | |
| IM U.S. Broad Market Core Fixed Income (SA+CF) Median | 0.22 | 9.20 | 4.40 | 3.46 | 4.27 | 5.02 | |
| Brandes FI Core | -0.08 (90) | 7.58 (95) | 3.64 (96) | | | 2.80 (97) | 3/1/2016 |
| Brandes FI Core - Net | -0.08 (90) | 7.58 (95) | 3.64 (96) | | | 2.80 (97) | |
| Blmbg. Barc. U.S. Aggregate | 0.18 (57) | 8.72 (77) | 4.03 (85) | | | 3.28 (85) | |
| IM U.S. Broad Market Core Fixed Income (SA+CF) Median | 0.22 | 9.20 | 4.40 | | | 3.79 | |
| EARNEST Partners | -0.16 (94) | 8.26 (89) | 4.29 (59) | 3.34 (60) | 4.39 (37) | 4.60 (54) | 5/1/2005 |
| EARNEST Partners - Net | -0.20 (96) | 8.12 (92) | 4.14 (72) | 3.17 (75) | 4.20 (56) | 4.40 (76) | |
| Blmbg. Barc. U.S. Aggregate | 0.18 (57) | 8.72 (77) | 4.03 (85) | 3.05 (89) | 3.75 (91) | 4.19 (91) | |
| IM U.S. Broad Market Core Fixed Income (SA+CF) Median | 0.22 | 9.20 | 4.40 | 3.46 | 4.27 | 4.63 | |
| Piedmont Investment | -0.20 (96) | 8.49 (86) | 3.99 (87) | 3.34 (59) | 4.32 (45) | 4.37 (75) | 6/1/2005 |
| Piedmont Investment - Net | -0.23 (96) | 8.36 (87) | 3.84 (94) | 3.20 (73) | 4.16 (59) | 4.18 (89) | |
| Blmbg. Barc. U.S. Aggregate | 0.18 (57) | 8.72 (77) | 4.03 (85) | 3.05 (89) | 3.75 (91) | 4.13 (91) | |
| IM U.S. Broad Market Core Fixed Income (SA+CF) Median | 0.22 | 9.20 | 4.40 | 3.46 | 4.27 | 4.58 | |
| Garcia Hamilton | -0.19 (96) | 7.76 (95) | 4.17 (71) | | | 3.45 (55) | 6/1/2015 |
| Garcia Hamilton - Net | -0.21 (96) | 7.68 (95) | 4.07 (79) | | | 3.36 (63) | |
| Blmbg. Barc. U.S. Aggregate | 0.18 (57) | 8.72 (77) | 4.03 (85) | | | 3.11 (87) | |
| IM U.S. Broad Market Core Fixed Income (SA+CF) Median | 0.22 | 9.20 | 4.40 | | | 3.50 | |

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

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

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

Wilshire Consulting

Performance

Fixed Income

Periods Ended December 31, 2019

| | Performance (%) | | | | | | |
|--|------------------|-------------------|------------------|------------------|------------------|-------------------|------------------|
| | 1 Quarter | 1 Year | 3 Years | 5 Years | 10 Years | Since Inception | Inception Date |
| Pass. Core Fixed Income | 0.17 (61) | 8.78 (72) | 4.09 (78) | 3.11 (82) | 3.79 (87) | 5.93 (97) | 1/1/1990 |
| Pass. Core Fixed Income - Net | 0.17 (61) | 8.78 (72) | 4.09 (78) | 3.10 (82) | 3.78 (88) | | |
| Blmbg. Barc. U.S. Aggregate | 0.18 (57) | 8.72 (77) | 4.03 (85) | 3.05 (89) | 3.75 (91) | 5.91 (98) | |
| IM U.S. Broad Market Core Fixed Income (SA+CF) Median | 0.22 | 9.20 | 4.40 | 3.46 | 4.27 | 6.21 | |
| BlackRock US Debt I | 0.19 (56) | 8.80 (71) | 4.13 (74) | 3.14 (77) | | 3.49 (75) | 10/1/2013 |
| BlackRock US Debt I - Net | 0.18 (57) | 8.79 (71) | 4.12 (74) | 3.14 (78) | | 3.48 (76) | |
| Blmbg. Barc. U.S. Aggregate | 0.18 (57) | 8.72 (77) | 4.03 (85) | 3.05 (89) | | 3.36 (88) | |
| IM U.S. Broad Market Core Fixed Income (SA+CF) Median | 0.22 | 9.20 | 4.40 | 3.46 | | 3.75 | |
| NTGI Blmbg Agg. | 0.16 (62) | 8.77 (72) | 4.06 (80) | 3.07 (83) | 3.78 (88) | 5.98 (97) | 2/1/1990 |
| NTGI Blmbg Agg. - Net | 0.16 (63) | 8.77 (73) | 4.06 (81) | 3.07 (86) | 3.77 (88) | | |
| Blmbg. Barc. U.S. Aggregate | 0.18 (57) | 8.72 (77) | 4.03 (85) | 3.05 (89) | 3.75 (91) | 5.97 (97) | |
| IM U.S. Broad Market Core Fixed Income (SA+CF) Median | 0.22 | 9.20 | 4.40 | 3.46 | 4.27 | 6.28 | |
| Core Plus Fixed Income | 0.70 (35) | 10.19 (41) | 4.71 (52) | 3.81 (53) | 4.89 (54) | 8.06 (100) | 1/1/1982 |
| Core Plus Fixed Income - Net | 0.65 (37) | 10.01 (48) | 4.52 (69) | 3.63 (63) | 4.71 (65) | | |
| Blmbg. Barc. U.S. Aggregate | 0.18 (86) | 8.72 (89) | 4.03 (93) | 3.05 (96) | 3.75 (97) | 7.67 (100) | |
| IM U.S. Broad Market Core+ Fixed Income (SA+CF) Median | 0.51 | 9.92 | 4.72 | 3.83 | 4.94 | 9.25 | |
| LM Capital Group FI | 0.53 (47) | 9.79 (59) | 4.15 (89) | 3.48 (73) | 4.45 (79) | 4.89 (71) | 5/1/2005 |
| LM Capital Group FI - Net | 0.49 (53) | 9.62 (66) | 3.98 (94) | 3.32 (84) | 4.28 (83) | 4.72 (82) | |
| Blmbg. Barc. U.S. Aggregate | 0.18 (86) | 8.72 (89) | 4.03 (93) | 3.05 (96) | 3.75 (97) | 4.19 (97) | |
| IM U.S. Broad Market Core+ Fixed Income (SA+CF) Median | 0.51 | 9.92 | 4.72 | 3.83 | 4.94 | 5.13 | |
| Progress Inv. FI | 0.36 (67) | 9.51 (69) | 4.62 (58) | 3.68 (60) | 4.54 (76) | 4.97 (72) | 1/1/2006 |
| Progress Inv. FI - Net | 0.28 (77) | 9.16 (79) | 4.28 (85) | 3.34 (83) | 4.19 (89) | 4.62 (91) | |
| Blmbg. Barc. U.S. Aggregate | 0.18 (86) | 8.72 (89) | 4.03 (93) | 3.05 (96) | 3.75 (97) | 4.28 (97) | |
| IM U.S. Broad Market Core+ Fixed Income (SA+CF) Median | 0.51 | 9.92 | 4.72 | 3.83 | 4.94 | 5.23 | |

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

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

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

Wilshire Consulting

Performance

Fixed Income

Periods Ended December 31, 2019

| | Performance (%) | | | | | | |
|--|------------------|-------------------|------------------|------------------|------------------|------------------|------------------|
| | 1 Quarter | 1 Year | 3 Years | 5 Years | 10 Years | Since Inception | Inception Date |
| BMO - TCH | 0.68 (36) | 9.36 (73) | 4.70 (53) | 3.93 (39) | 5.04 (46) | 5.04 (58) | 5/1/2005 |
| BMO - TCH - Net | 0.64 (39) | 9.22 (76) | 4.56 (64) | 3.79 (54) | 4.90 (54) | 4.91 (70) | |
| Blmbg. Barc. U.S. Aggregate | 0.18 (86) | 8.72 (89) | 4.03 (93) | 3.05 (96) | 3.75 (97) | 4.19 (97) | |
| IM U.S. Broad Market Core+ Fixed Income (SA+CF) Median | 0.51 | 9.92 | 4.72 | 3.83 | 4.94 | 5.13 | |
| Western Asset | 1.15 (16) | 11.82 (13) | 5.60 (14) | 4.52 (16) | 5.56 (23) | 5.56 (37) | 11/1/2001 |
| Western Asset - Net | 1.12 (16) | 11.75 (14) | 5.48 (15) | 4.39 (21) | 5.42 (25) | | |
| Blmbg. Barc. U.S. Aggregate | 0.18 (86) | 8.72 (89) | 4.03 (93) | 3.05 (96) | 3.75 (97) | 4.33 (99) | |
| IM U.S. Broad Market Core+ Fixed Income (SA+CF) Median | 0.51 | 9.92 | 4.72 | 3.83 | 4.94 | 5.30 | |
| Bank Loans | 1.92 (25) | 8.33 (65) | 4.78 (27) | 5.14 (10) | | 4.70 (5) | 8/1/2014 |
| Bank Loans - Net | 1.92 (25) | 8.10 (78) | 4.34 (64) | 4.64 (51) | | 4.19 (52) | |
| Barings Custom Benchmark* | 1.63 (72) | 8.21 (74) | 4.71 (30) | 4.74 (42) | | 4.27 (40) | |
| IM U.S. Bank Loans (SA+CF) Median | 1.79 | 8.69 | 4.48 | 4.64 | | 4.19 | |
| Barings Global Loan Fund | 1.92 (25) | 8.33 (65) | 4.78 (27) | 5.14 (10) | | 4.70 (5) | 8/1/2014 |
| Barings Global Loan Fund - Net | 1.92 (25) | 8.10 (78) | 4.34 (64) | 4.64 (51) | | 4.19 (52) | |
| Barings Custom Benchmark* | 1.63 (72) | 8.21 (74) | 4.71 (30) | 4.74 (42) | | 4.27 (40) | |
| IM U.S. Bank Loans (SA+CF) Median | 1.79 | 8.69 | 4.48 | 4.64 | | 4.19 | |
| Emerging Markets Debt | 4.30 (32) | 14.90 (27) | 6.99 (27) | 4.55 (54) | | 3.53 (48) | 8/1/2014 |
| Emerging Markets Debt - Net | 4.21 (34) | 14.51 (33) | 6.62 (39) | 4.19 (61) | | 3.19 (53) | |
| Custom Benchmark** (Emerging Markets Debt) | 3.63 (42) | 13.72 (52) | 6.73 (35) | 4.50 (55) | | 2.86 (57) | |
| IM Emerging Markets Debt (SA+CF+MF) Median | 3.08 | 13.79 | 6.27 | 4.77 | | 3.33 | |
| Standish Emerging Markets | 4.30 (32) | 14.90 (27) | 6.99 (27) | 4.55 (54) | | 3.53 (48) | 8/1/2014 |
| Standish EM MRK - Net | 4.21 (34) | 14.51 (33) | 6.62 (39) | 4.19 (61) | | 3.19 (53) | |
| Custom Benchmark** | 3.63 (42) | 13.72 (52) | 6.73 (35) | 4.50 (55) | | 2.86 (57) | |
| IM Emerging Markets Debt (SA+CF+MF) Median | 3.08 | 13.79 | 6.27 | 4.77 | | 3.33 | |

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

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

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

Wilshire Consulting Performance

Fixed Income

Periods Ended December 31, 2019

| | Performance (%) | | | | | | |
|--|------------------|-------------------|-----------------|-----------------|------------------|--------------------|-------------------|
| | 1 Quarter | 1 Year | 3 Years | 5 Years | 10 Years | Since Inception | Inception Date |
| High Yield | 2.81 (27) | 15.13 (20) | 7.09 (5) | 7.13 (2) | 7.87 (11) | 9.56 (1) | 4/1/1986 |
| High Yield - Net | 2.64 (38) | 14.77 (27) | 6.73 (11) | 6.76 (4) | 7.47 (20) | | |
| ICE BofAML US High Yield, Cash Pay Index | 2.59 (42) | 14.40 (35) | 6.32 (19) | 6.12 (16) | 7.49 (19) | 8.32 (14) | |
| IM U.S. High Yield Bonds (SA+CF+MF) Median | 2.47 | 13.52 | 5.60 | 5.11 | 6.74 | 7.23 | |
| MacKay Shields | 2.81 (27) | 15.14 (20) | 7.07 (6) | 7.29 (2) | 8.02 (7) | 8.88 (5) | 11/1/2000 |
| MacKay Shields - Net | 2.64 (37) | 14.78 (27) | 6.71 (11) | 6.92 (3) | 7.64 (16) | | |
| ICE BofAML US High Yield, Cash Pay Index | 2.59 (42) | 14.40 (35) | 6.32 (19) | 6.12 (16) | 7.49 (19) | 7.61 (27) | |
| IM U.S. High Yield Bonds (SA+CF+MF) Median | 2.47 | 13.52 | 5.60 | 5.11 | 6.74 | 6.84 | |

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

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

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

Asset Allocation & Performance

Real Estate

Periods Ended December 31, 2019

| | Allocation | Performance (%) | | | | |
|-------------------------------------|----------------------|-----------------|--------------|--------------|--------------|--------------|
| | Market Value \$ | 1 Quarter | 1 Year | 3 Years | 5 Years | 10 Years |
| Real Estate | 2,964,215,006 | 2.86 | 9.81 | 9.40 | 9.93 | 10.51 |
| Real Estate - Net | | 2.86 | 9.78 | 9.39 | 9.91 | 10.49 |
| Blended Benchmark (Real Estate) | | 1.27 | 4.39 | 6.13 | 7.98 | 10.49 |
| Value Added | | 1.59 | 5.42 | 3.27 | 1.95 | 0.02 |
| Real Estate Core Cmp | 1,571,332,424 | 3.49 | 11.04 | 9.58 | 9.88 | 10.09 |
| TA Assoc. Buckhead | 605,428,300 | 4.52 | 15.13 | 13.54 | 12.52 | 10.90 |
| Blended Benchmark (Real Estate) | | 1.27 | 4.39 | 6.13 | 7.98 | 10.49 |
| Value Added | | 3.25 | 10.74 | 7.41 | 4.54 | 0.41 |
| Barings Core Property | 1,070 | 0.00 | 0.00 | 20.96 | 16.95 | |
| Blended Benchmark (Real Estate) | | 1.27 | 4.39 | 6.13 | 7.98 | |
| Value Added | | -1.27 | -4.39 | 14.83 | 8.97 | |
| Barings Euro Core Property | 126,969,573 | 5.74 | 45.66 | | | |
| Blended Benchmark (Real Estate) | | 1.27 | 4.39 | | | |
| Value Added | | 4.47 | 41.27 | | | |
| Blackstone Property Euro | 130,685,873 | 5.66 | 7.49 | | | |
| Blended Benchmark (Real Estate) | | 1.27 | 4.39 | | | |
| Value Added | | 4.39 | 3.10 | | | |
| INVESCO Core Real Estate | 211,508,105 | 1.80 | 3.38 | 6.44 | 8.06 | |
| Blended Benchmark (Real Estate) | | 1.27 | 4.39 | 6.13 | 7.98 | |
| Value Added | | 0.53 | -1.01 | 0.31 | 0.08 | |
| INVESCO European real estate | 56,923,207 | 4.01 | -0.60 | | | |
| Blended Benchmark (Real Estate) | | 1.27 | 4.39 | | | |
| Value Added | | 2.74 | -4.99 | | | |

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

The Blended Benchmark (Real Estate) is currently the NCREIF ODCE VW Net Index. Prior to January 1, 2013, it was the NCREIF Property Index + 1%. Returns prior to January, 2007, reflect those of the Consumer Price Index + 5%.

Asset Allocation & Performance

Real Estate

Periods Ended December 31, 2019

| | Allocation | Performance (%) | | | | |
|---------------------------------|----------------------|-----------------|-------------|-------------|--------------|--------------|
| | Market Value \$ | 1 Quarter | 1 Year | 3 Years | 5 Years | 10 Years |
| AEW Core Property Tr | 239,085,694 | 1.54 | 4.40 | 5.98 | 7.37 | |
| Blended Benchmark (Real Estate) | | 1.27 | 4.39 | 6.13 | 7.98 | |
| Value Added | | 0.27 | 0.01 | -0.15 | -0.61 | |
| CBRE Core Partners | 200,730,602 | 1.67 | 5.93 | 8.20 | 8.42 | |
| Blended Benchmark (Real Estate) | | 1.27 | 4.39 | 6.13 | 7.98 | |
| Value Added | | 0.40 | 1.54 | 2.07 | 0.44 | |
| RE Non-Core Cmp | 1,392,882,581 | 2.15 | 8.42 | 9.20 | 10.02 | 11.75 |
| Artemis MWBE Spruce | 240,731,549 | 0.50 | 7.86 | 4.92 | | |
| Blended Benchmark (Real Estate) | | 1.27 | 4.39 | 6.13 | | |
| Value Added | | -0.77 | 3.47 | -1.21 | | |
| Franklin T. EMREFF | 14,756,093 | 7.56 | 7.61 | 10.12 | 15.12 | |
| Blended Benchmark (Real Estate) | | 1.27 | 4.39 | 6.13 | 7.98 | |
| Value Added | | 6.29 | 3.22 | 3.99 | 7.14 | |
| Security Capital | 59,648,554 | 3.82 | 18.36 | 7.48 | 5.39 | 8.60 |
| Blended Benchmark (Real Estate) | | 1.27 | 4.39 | 6.13 | 7.98 | 10.49 |
| Value Added | | 2.55 | 13.97 | 1.35 | -2.59 | -1.89 |
| Dune II | 21,982,160 | -1.02 | 0.99 | 6.13 | 9.89 | 15.50 |
| Blended Benchmark (Real Estate) | | 1.27 | 4.39 | 6.13 | 7.98 | 10.49 |
| Value Added | | -2.29 | -3.40 | 0.00 | 1.91 | 5.01 |
| Non-Core Real Estate Funds | 893,638,295 | 1.89 | 8.73 | 10.50 | 11.57 | |
| Blended Benchmark (Real Estate) | | 1.27 | 4.39 | 6.13 | 7.98 | |
| Value Added | | 0.62 | 4.34 | 4.37 | 3.59 | |

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

The Blended Benchmark (Real Estate) is currently the NCREIF ODCE VW Net Index. Prior to January 1, 2013, it was the NCREIF Property Index + 1%. Returns prior to January, 2007, reflect those of the Consumer Price Index + 5%.

Asset Allocation & Performance

Real Estate

Periods Ended December 31, 2019

| | Allocation | Performance (%) | | | | |
|---------------------------------|-----------------|-----------------|--------|---------|---------|----------|
| | Market Value \$ | 1 Quarter | 1 Year | 3 Years | 5 Years | 10 Years |
| Non-Core Intl Real Estate | 161,583,067 | 5.70 | 5.50 | 7.37 | -2.65 | |
| Blended Benchmark (Real Estate) | | 1.27 | 4.39 | 6.13 | 7.98 | |
| Value Added | | 4.43 | 1.11 | 1.24 | -10.63 | |
| Rockwood Fund VIII | 168,181 | -10.99 | -35.96 | -33.93 | -18.91 | -1.31 |
| Blended Benchmark (Real Estate) | | 1.27 | 4.39 | 6.13 | 7.98 | 10.49 |
| Value Added | | -12.26 | -40.35 | -40.06 | -26.89 | -11.80 |
| Almanac ARS V | 374,681 | 39.02 | 40.73 | 30.81 | 21.39 | 16.64 |
| Blended Benchmark (Real Estate) | | 1.27 | 4.39 | 6.13 | 7.98 | 10.49 |
| Value Added | | 37.75 | 36.34 | 24.68 | 13.41 | 6.15 |

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

The Blended Benchmark (Real Estate) is currently the NCREIF ODCE VW Net Index. Prior to January 1, 2013, it was the NCREIF Property Index + 1%. Returns prior to January, 2007, reflect those of the Consumer Price Index + 5%.

Asset Allocation & Performance

Alternatives Investments

Periods Ended December 31, 2019

| | Allocation | Performance (%) | | | | |
|--|----------------------|-----------------|--------------|--------------|--------------|--------------|
| | Market Value \$ | 1 Quarter | 1 Year | 3 Years | 5 Years | 10 Years |
| Alternatives Investments | 2,426,795,465 | 2.57 | 9.48 | 12.92 | 10.14 | 9.53 |
| Alternatives Custom Benchmark | | 2.18 | 9.00 | 9.00 | 9.00 | 9.15 |
| Value Added | | 0.39 | 0.48 | 3.92 | 1.14 | 0.38 |
| Absolute Return | 550,758 | -0.70 | 1.87 | 3.53 | 2.78 | 3.48 |
| Aurora Investment | 550,758 | -0.70 | 1.87 | 3.63 | 3.18 | 3.75 |
| Private Equity | 1,968,686,105 | 3.39 | 11.78 | 16.22 | 13.07 | 12.61 |
| Alternatives Custom Benchmark | | 2.18 | 9.00 | 9.00 | 9.00 | 9.15 |
| Value Added | | 1.21 | 2.78 | 7.22 | 4.07 | 3.46 |
| Abbott S/A Comp. | 359,027,403 | 6.73 | 9.27 | 15.99 | 13.12 | 12.47 |
| Muller Monroe MPEFF | 5,104,385 | -0.14 | -3.94 | 4.75 | 7.23 | 10.00 |
| Pantheon S/A Comp. | 256,760,283 | 6.71 | 11.76 | 16.39 | 12.74 | 12.52 |
| Private Equity Fund - Domestic | 1,010,187,362 | 0.41 | 13.71 | 16.52 | 13.84 | |
| Private Equity Fund - International | 332,244,607 | 6.91 | 16.16 | 21.22 | | |
| Oakbrook Opportunities Fund | 5,362,066 | -11.03 | | | | |
| Private Credit | 128,930,696 | 2.13 | | | | |
| Private Credit Fund - Domestic | 128,930,696 | 2.13 | | | | |
| Agriculture | 208,323,624 | -3.54 | -5.82 | -3.41 | 1.51 | 8.01 |
| NCREIF Farmland Index | | 0.97 | 5.33 | 6.10 | 7.09 | 11.05 |
| Value Added | | -4.51 | -11.15 | -9.51 | -5.58 | -3.04 |
| Premiere Partners IV | 208,323,624 | -3.54 | -5.82 | -3.41 | | |

Returns are time-weighted and are reported gross of fee for alternative investments..

Alternatives Custom Benchmark: The Alternatives Custom Benchmark is based on an annualized return of 9%. Prior to July 1, 2010, it was based on an annual return of 12%. Prior to 2004, it was based on an annualized return of 13%. Prior to 2003, it was based on an annual return of 15%.

Asset Allocation & Performance

Alternatives Investments

Periods Ended December 31, 2019

| | Allocation | Performance (%) | | | | |
|--|-------------------|-----------------|-------------|-------------|-------------|-------------|
| | Market Value \$ | 1 Quarter | 1 Year | 3 Years | 5 Years | 10 Years |
| Timberland | 73,900,301 | 0.55 | 1.00 | 0.63 | 0.41 | 2.59 |
| Alternatives Custom Benchmark (Timberland) | | 0.18 | 2.32 | 3.20 | 4.40 | 3.99 |
| Value Added | | 0.37 | -1.32 | -2.57 | -3.99 | -1.40 |
| Forest Investment | 73,900,301 | 0.55 | 1.00 | 0.63 | 0.41 | 3.02 |
| Alternatives Custom Benchmark (Timberland) | | 0.18 | 2.32 | 3.20 | 4.40 | 3.99 |
| Value Added | | 0.37 | -1.32 | -2.57 | -3.99 | -1.40 |
| Unlisted Infrastructure | 46,403,981 | 2.66 | 9.65 | | | |
| Alternatives Custom Benchmark | | 2.18 | 9.00 | | | |
| Value Added | | 0.48 | 0.65 | | | |
| Unlisted Infrastructure Funds | 46,403,981 | 2.66 | 9.65 | | | |
| Alternatives Custom Benchmark | | 2.18 | 9.00 | | | |
| Value Added | | 0.48 | 0.65 | | | |

Returns are time-weighted and are reported gross of fee for alternative investments..

Alternatives Custom Benchmark: The Alternatives Custom Benchmark is based on an annualized return of 9%. Prior to July 1, 2010, it was based on an annual return of 12%. Prior to 2004, it was based on an annualized return of 13%. Prior to 2003, it was based on an annual return of 15%.

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