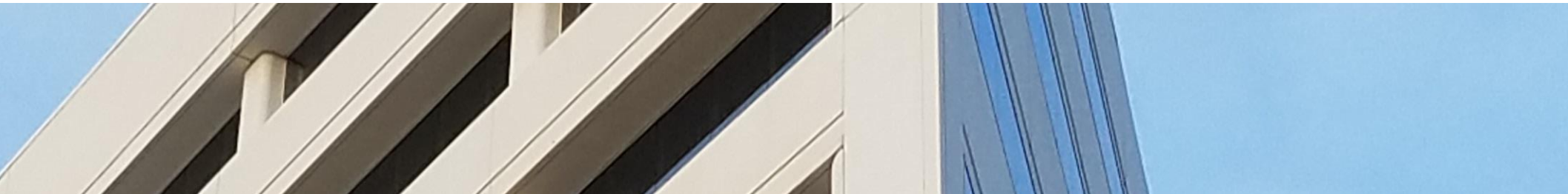




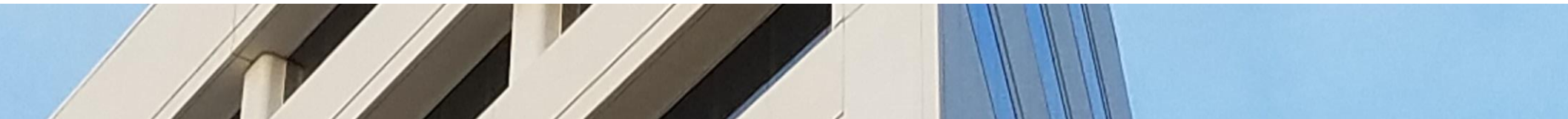
# WILSHIRE ASSOCIATES

Wilshire Consulting



## Monthly Investment Summary

March 31, 2020



# Capital Market Review

# Economic Review

## Market Commentary

The world of investing has been introduced to an unprecedented set of conditions in 2020. As the COVID-19 virus continued to spread globally, the response has been to separate people and close nonessential businesses, with all others working remotely. The economic expectations are that the unemployment rate will rise into the mid-teens and U.S. GDP will fall by at least one-third.

As of March 31, 2020 Johns Hopkins COVID-19 interactive map indicated 809,608 confirmed cases globally, with 39,545 deaths linked to the virus.

Investors today are facing challenges reminiscent of the Global Financial Crisis. Like then, the immediate goals in navigating the market drawdowns is to prudently balance short-term liquidity needs against the important rebalancing guidelines established within investment policies.

As expected, manufacturing in the United States, marked by the ISM Manufacturing Index, dipped below 50.0 during March – marking a contractionary environment for the manufacturing sector. Early indicators during February, particularly virus-related disruption in Asia and Europe, noted the expectation of a contractionary environment during the COVID-19 shutdown.

Consumer sentiment in the United States lowered during March to its lowest level since October 2016. The University of Michigan Consumer Sentiment Index dropped to 89.1 from 101.0 at the end of February. March's decline in sentiment has been noted as the fourth largest drop in sentiment in nearly five decades.

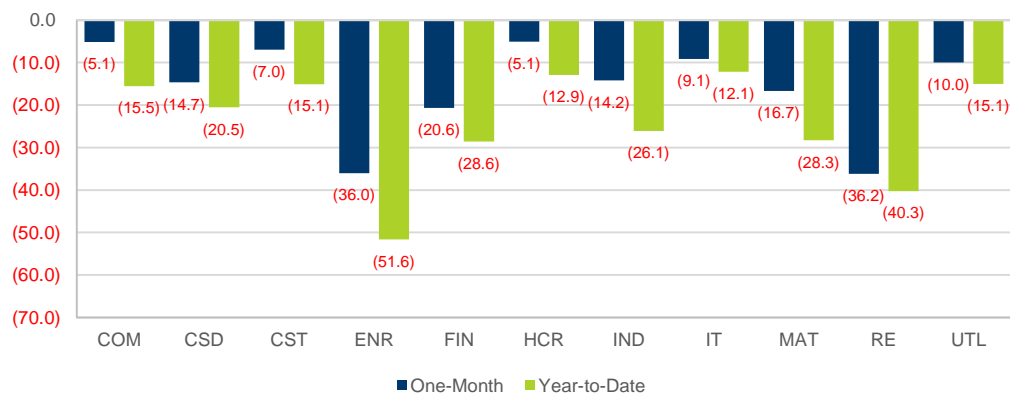
One-Year Cumulative Return (%)



# U.S. Equity Market

U.S. Equity Indices (%)	MTD	QTD	YTD	1 Year	3 Years	5 Years	10 Years
Russell 3000 Index	(13.75)	(20.90)	(20.90)	(9.13)	4.00	5.76	10.14
Standard & Poor's 500 Index	(12.35)	(19.60)	(19.60)	(6.98)	5.10	6.72	10.52
Russell 1000 Index	(13.21)	(20.22)	(20.22)	(8.03)	4.64	6.21	10.38
Russell 2500 Index	(21.70)	(29.72)	(29.72)	(22.47)	(3.10)	0.49	7.72
Russell 2000 Index	(21.73)	(30.61)	(30.61)	(23.99)	(4.64)	(0.25)	6.90
Russell Micro Cap Index	(23.43)	(31.99)	(31.99)	(26.38)	(6.55)	(1.94)	6.04
Russell 1000 Index	(13.21)	(20.22)	(20.22)	(8.03)	4.64	6.21	10.38
Russell 1000 Growth Index	(9.84)	(14.10)	(14.10)	0.91	11.31	10.35	12.96
Russell 1000 Value Index	(17.09)	(26.73)	(26.73)	(17.17)	(2.17)	1.90	7.66
Russell 2000 Index	(21.73)	(30.61)	(30.61)	(23.99)	(4.64)	(0.25)	6.90
Russell 2000 Growth Index	(19.10)	(25.76)	(25.76)	(18.58)	0.10	1.70	8.88
Russell 2000 Value Index	(24.67)	(35.66)	(35.66)	(29.64)	(9.50)	(2.42)	4.79
Russell 3000 Index	(13.75)	(20.90)	(20.90)	(9.13)	4.00	5.76	10.14
GICS - Communication Services	(5.12)	(15.55)	(15.55)	(8.41)	8.77	7.95	6.82
GICS - Consumer Discretionary	(14.67)	(20.53)	(20.53)	(10.63)	5.20	6.12	12.51
GICS - Consumer Staples	(7.00)	(15.08)	(15.08)	(4.23)	(0.63)	3.22	9.28
GICS - Energy	(36.01)	(51.61)	(51.61)	(54.50)	(23.41)	(16.09)	(5.10)
GICS - Financials	(20.64)	(28.59)	(28.59)	(15.60)	0.40	4.42	7.96
GICS - Health Care	(5.06)	(12.88)	(12.88)	(2.11)	8.30	5.85	13.12
GICS - Industrials	(14.21)	(26.11)	(26.11)	(14.75)	(1.74)	(0.20)	9.92
GICS - Information Technology	(9.11)	(12.14)	(12.14)	8.03	15.71	15.54	14.82
GICS - Materials	(16.68)	(28.30)	(28.30)	(19.18)	(4.65)	0.40	5.98
GICS - Real Estate	(36.21)	(40.26)	(40.26)	(28.89)	(8.30)	(8.38)	1.88
GICS - Utilities	(9.98)	(15.05)	(15.05)	(3.20)	3.64	6.57	9.68

Sector Returns (%)



## Market Commentary

The U.S. stock market, represented by the Russell 3000 Index, was down -13.8% for the month of March 2020, and down during the First Quarter of 2020 -20.9%.

The First Quarter 2020 results marked the worst quarter since the Global Financial Crisis.

Uncertainty and a declining outlook were the driving forces behind the sell-off as the COVID-19 global pandemic worsened, resulting in significant limitations on global commerce. Government action so far has included cutting short-term rates to near zero and the passage of a \$2 trillion stimulus bill.

Large capitalization stocks outperformed small caps for the month as the Russell 1000 Index returned -13.2% versus -21.7% for the Russell 2000 Index. For the quarter, Large cap stocks also outperformed small cap stocks, -20.2% versus -30.6%. The Russell Micro Cap Index was down -23.4% for the month, and down for the quarter, -32.0%.

Growth stocks again led value stocks during March, as well as during the quarter.

Of the eleven major sectors in the index, all were negative during the month and quarter. Energy, most notably, was down -36.0% during March and -51.6% during the quarter. Real Estate and Financials were also among the largest laggards during the month, down -36.2% and -20.6%, respectively.

# Non-U.S. Equity Market

## Market Commentary

Equity markets outside of the U.S. trailed the U.S. equity market during March, down -14.5%. For the First Quarter 2020, Non-U.S. Equity markets were down -23.4%.

Tighter restrictions and the ongoing spread of the COVID-19 virus largely impacted the sell-off in global markets during March.

Economic growth in the U.K. was already nonexistent during the end of 2019, before the country had to deal with the virus in earnest. Prime Minister Boris Johnson became the first world leader to announce that he was infected with the respiratory disease.

Across continental Europe, quarantine efforts are starting to bear fruit as cases in Italy, one of the worst afflicted countries, and Spain appear to be nearing a peak.

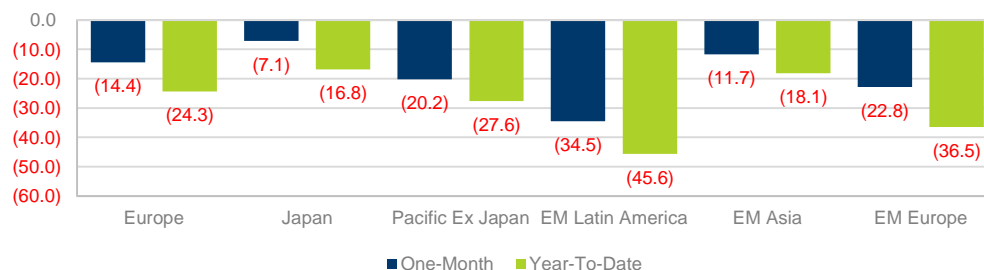
Within China, where the virus originated, travel restrictions have been relaxed, allowing some domestic travel for its citizens.

Developed Markets outperformed Emerging Markets during the month, -13.4% versus -15.4%. EM Europe and EM Latin America were down -22.8% and -34.5%, respectively during the month.

The U.S. Dollar strengthened during the month, providing a headwind for U.S. based investors.

Non-U.S. Equity (USD %)	MTD	QTD	YTD	1 Year	3 Years	5 Years	10 Years
MSCI AC World ex U.S. Index	(14.48)	(23.36)	(23.36)	(15.57)	(196)	(0.64)	2.05
MSCI EAFE Index	(13.35)	(22.83)	(22.83)	(14.38)	(182)	(0.62)	2.71
MSCI Emerging Markets Index	(15.40)	(23.60)	(23.60)	(17.69)	(162)	(0.37)	0.68
MSCI AC World ex U.S. Small Index	(19.29)	(29.00)	(29.00)	(21.18)	(4.88)	(0.81)	2.79
MSCI Europe Index	(14.44)	(24.33)	(24.33)	(15.50)	(2.34)	(131)	2.46
MSCI Japan Index	(7.15)	(16.79)	(16.79)	(6.69)	0.95	182	3.82
MSCI Pacific ex Japan Index	(20.24)	(27.60)	(27.60)	(23.65)	(4.68)	(152)	2.14
MSCI EM Latin America Index	(34.48)	(45.62)	(45.62)	(40.77)	(12.97)	(5.89)	(6.67)
MSCI EM Asia Index	(11.72)	(18.09)	(18.09)	(12.10)	132	142	3.53
MSCI EM Europe Index	(22.84)	(36.47)	(36.47)	(21.87)	(4.15)	(128)	(3.97)
Local Currency (%)	MTD	QTD	YTD	1 Year	3 Years	5 Years	10 Years
MSCI AC World ex U.S. Index	(12.93)	(20.14)	(20.14)	(12.77)	(107)	0.38	4.15
MSCI EAFE Index	(12.49)	(20.55)	(20.55)	(12.58)	(180)	(0.15)	4.35
MSCI Emerging Markets Index	(12.96)	(19.05)	(19.05)	(12.99)	135	2.03	3.78

Regional Returns (%)



Currency Effect (%)



# Fixed Income Market

## Market Commentary

The U.S. Treasury yield curve fell dramatically during March across the maturity spectrum. While the largest decreases occurred in the short end of the curve, yields across the curve all fell in excess of 1.0%. The 10-year Treasury yield ended the quarter at 0.70%, down 1.22% from the end of 2019. The Federal Open Market Committee decreased its overnight rate by a total of 1.50% during two unscheduled meetings in March. The Fed also announced quantitative easing measures, committing to Treasury purchases of at least \$500 billion and mortgage-backed securities of at least \$200 billion over the coming months.

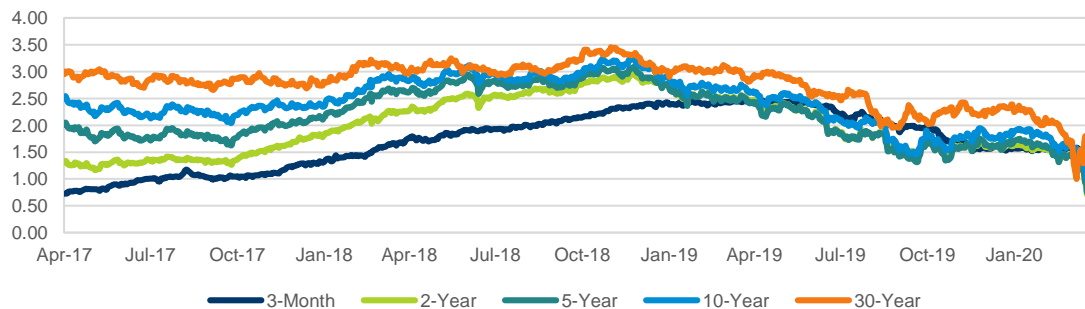
Credit spreads were up big during March within both the investment grade and high yield markets. Spreads within high yield topped out at over 1100 bps at the bottom of the market on March 23.

U.S. Fixed Income	MTD	QTD	YTD	1 Year	3 Years	5 Years	10 Years
Bloomberg Barclays U.S. Aggregate	(0.59)	3.15	3.15	8.93	4.82	3.35	3.88
Bloomberg Barclays Long Gov't/Credit	(2.95)	6.21	6.21	19.32	9.68	5.98	8.07
Bloomberg Barclays LT Treasury	6.05	20.90	20.90	32.64	13.40	7.32	8.95
Bloomberg Barclays U.S. TIPS	(1.76)	1.69	1.69	6.85	3.46	2.67	3.47
Bloomberg Barclays U.S. Credit	(6.63)	(3.14)	(3.14)	5.10	4.18	3.28	4.74
Bloomberg Barclays U.S. High Yield	(11.46)	(12.68)	(12.68)	(6.94)	0.76	2.77	5.64
ICE BofA U.S. High Yield Cash Pay	(11.71)	(13.06)	(13.06)	(7.40)	0.57	2.68	5.49
S&P LSTA Levered Loan Index	(12.37)	(13.05)	(13.05)	(9.16)	(0.78)	1.14	3.08
ICE BofA US 3-Month Treasury Bill	0.29	0.57	0.57	2.25	1.83	1.19	0.64

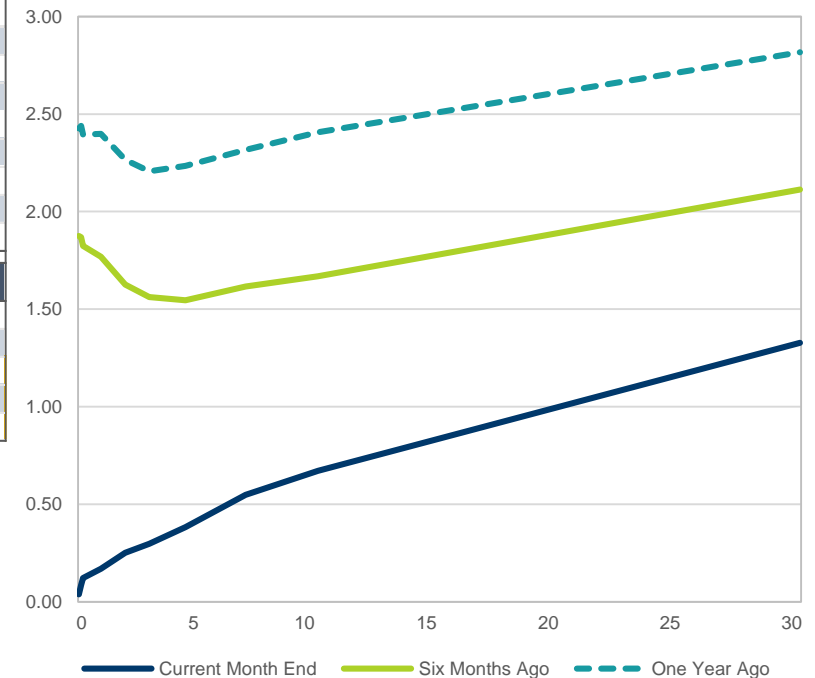
  

Global Fixed Income	MTD	QTD	YTD	1 Year	3 Years	5 Years	10 Years
Bloomberg Barclays Global Aggregate	(2.24)	(0.33)	(0.33)	4.20	3.55	2.63	2.47
Bloomberg Barclays Global Aggregate (Hdg.)	(1.56)	1.45	1.45	6.59	4.64	3.48	4.05
JPM GBI-EM Index	(9.67)	(13.60)	(13.60)	(5.00)	(1.01)	0.39	0.74
JPM EMBI Global Index	(12.55)	(11.75)	(11.75)	(5.27)	0.45	2.86	4.82
JPM Corporate EMBI Index	(11.28)	(10.02)	(10.02)	(3.01)	1.68	3.36	5.11

Daily Treasury Yield Curve Rates (%)



Treasury Yield Curve (%)



# Real Assets Market

Real Assets	MTD	QTD	YTD	1 Year	3 Years	5 Years	10 Years
Wilshire US RESI	(20.05)	(25.73)	(25.73)	(19.47)	(2.47)	0.08	7.75
Wilshire Global RESI	(21.42)	(27.21)	(27.21)	(21.39)	(2.69)	(0.66)	6.53
Bloomberg Commodity Index	(12.81)	(23.29)	(23.29)	(22.31)	(8.60)	(7.76)	(6.74)
S&P GSCI Index	(29.43)	(42.34)	(42.34)	(41.01)	(13.32)	(12.81)	(10.42)
Alerian MLP Index	(47.23)	(57.19)	(57.19)	(60.95)	(28.89)	(20.64)	(5.03)
DJ Brookfield Global Infrastructure	(15.61)	(20.80)	(20.80)	(11.34)	1.17	1.96	7.16
FTSE Global 50/50 Infrastructure	(15.46)	(21.25)	(21.25)	(12.31)	1.97	3.74	7.81

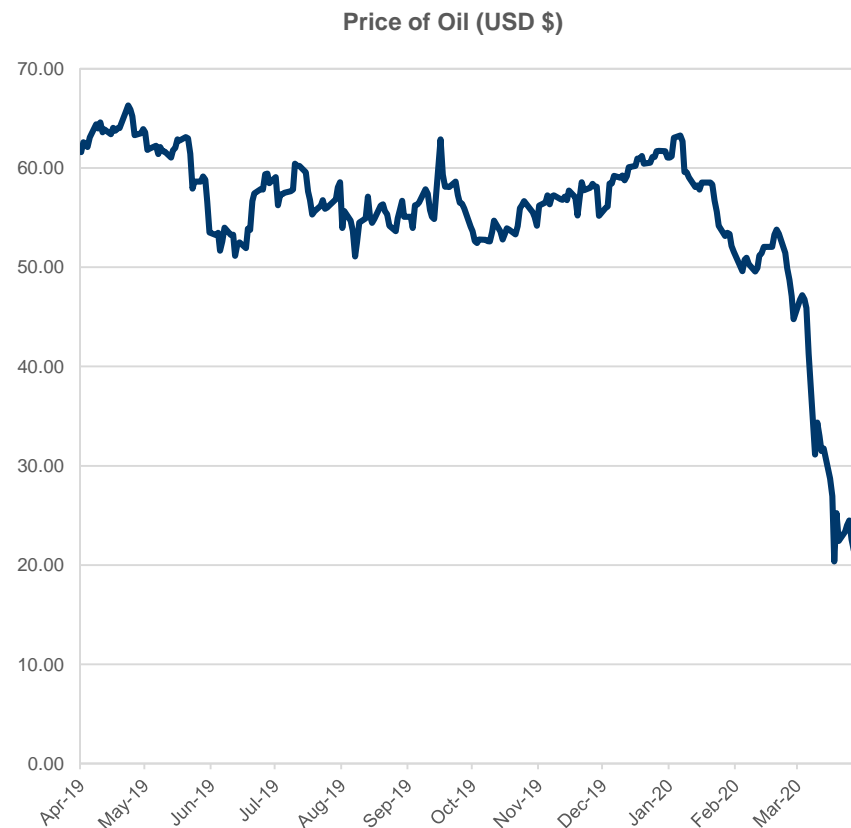
## Market Commentary

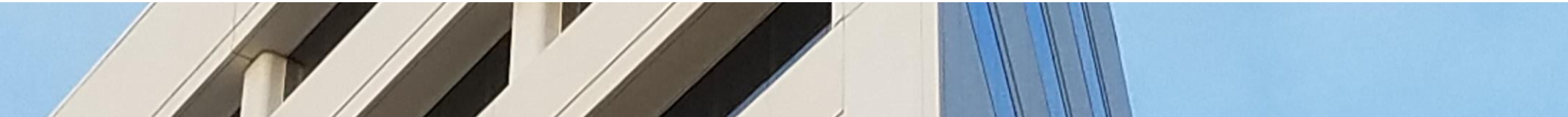
U.S. real estate securities were down during March (-20.1%), and the first quarter (-25.7%). Similarly, global real estate securities were down during March (-21.4%), and for the quarter (-27.2%)

Commodity results were largely negative for the month as crude oil fell -54.2% to \$20.48 per barrel. Year-to-date, crude oil has fallen nearly -66.5%, ending 2019 at \$61.06 per barrel. Natural gas prices were again down, ending the month at \$1.64 per million BTUs.

Midstream Energy (MLPs) were among the worst performing market segments, down for the month (-47.2%) and quarter (-57.2%).

Finally, gold prices were up for the month and finished at \$1,597 per troy ounce, up +4.8% from the end of 2019.





# IMRF Performance



# IMRF Commentary

## IMRF Commentary

The Illinois Municipal Retirement Fund (“IMRF”) ended March 2020 with a market value of \$38.5 billion, down for the month by approximately \$3.9 billion. The Fund returned -9.23% for the month, underperforming the Total Fund Benchmark, which returned -7.81%.

During the month, the allocation to U.S. Equity, on average, was overweight by 1.31% versus the Total Fund Benchmark. Conversely, the allocation to Real Estate, on average, was underweight by 2.00%. Given the decline in the U.S. Equity market (the U.S. Equity market returned -13.75% during the month), an overweight position detracted relative value.

The U.S. Equity Portfolio trailed the benchmark for the month returning -15.20% versus -13.75%. The Portfolio’s allocations to Small Cap Value detracted from relative performance, returning -24.74%, while allocations to Large Cap Growth added value, returning -9.57%.

The Public Real Assets Portfolio outperformed its benchmark for the month returning -15.04% versus -16.52%.

The International Equity Portfolio modestly trailed the return of the benchmark during March, -15.07% versus -14.48%. Investment manager relative performance within the Portfolio was mixed for the month with Large Cap Core and International Small Cap outperforming their benchmarks, in aggregate, and Large Cap Value, Large Cap Growth, and Emerging Markets trailing their benchmarks.

The Fixed Income Portfolio faced a significant headwind as credit spreads continued to widen during the month, peaking on March 23, 2020. The Portfolio underperformed its benchmark during March -3.16% versus -0.59%. Positions in Corporate Credit, High Yield and Emerging Markets detracted value.

Current policy states that when actual allocations of the asset classes differ by more than four percentage points from their policy target, a recommendation for rebalancing will be made to the Board of Trustees. As of March month end, Fixed Income was 4.2% above the target. Staff and Consultant are evaluating options for rebalancing recommendations.



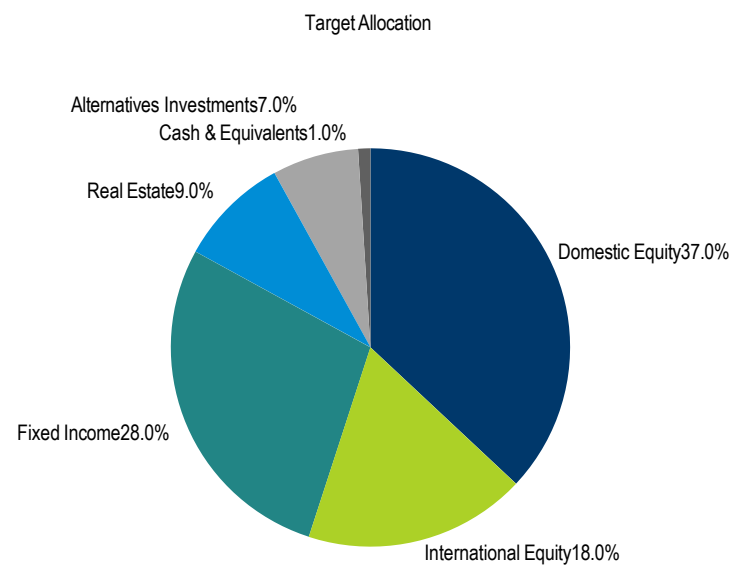
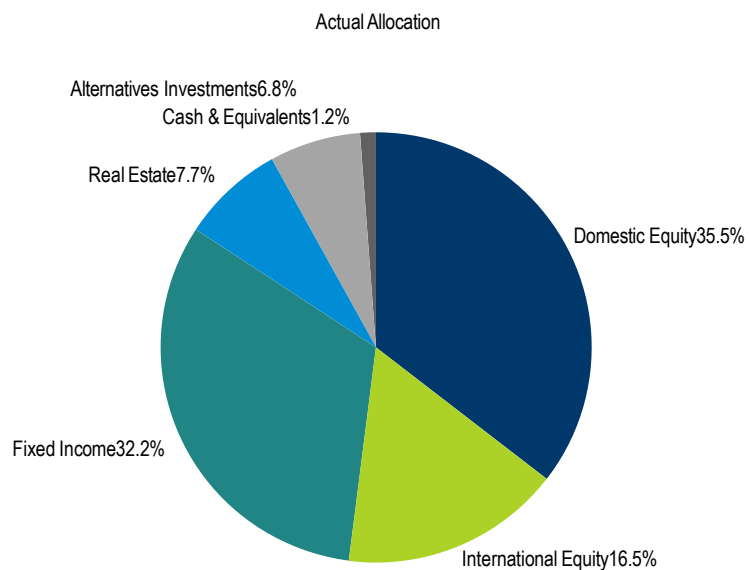
Total Fund

# Wilshire Consulting

## Asset Allocation

Total Fund

Periods Ended As of March 31, 2020

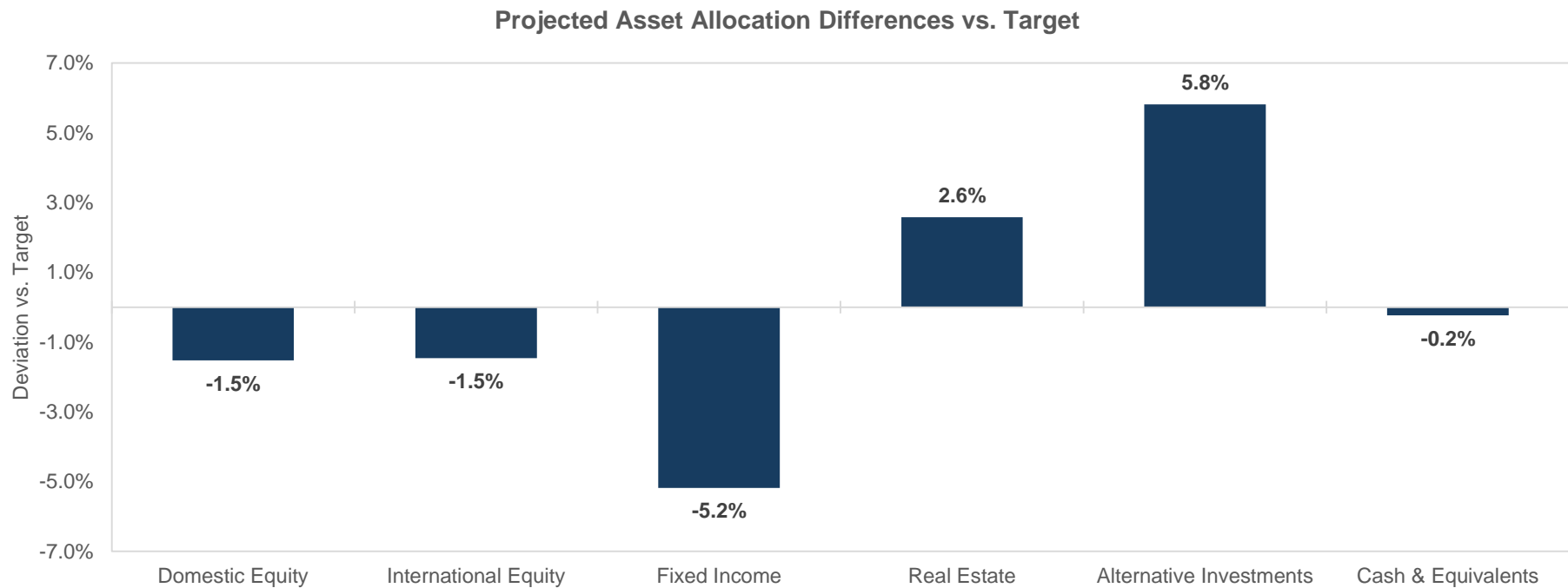


■ Domestic Equity    
 ■ International Equity    
 ■ Fixed Income    
 ■ Real Estate    
 ■ Alternatives Investments    
 ■ Cash & Equivalents

	Actual Allocation \$Millions	Actual Allocation %	Target Allocation %	Differences %	Differences \$Millions
Total Fund	38,533	100.0	100.0	0.0	
■ Domestic Equity	13,669	35.5	37.0	-1.5	-588
■ International Equity	6,375	16.5	18.0	-1.5	-561
■ Fixed Income	12,413	32.2	28.0	4.2	1,624
■ Real Estate	2,980	7.7	9.0	-1.3	-488
■ Alternatives Investments	2,636	6.8	7.0	-0.2	-61
■ Cash & Equivalents	459	1.2	1.0	0.2	73

# Projected Deviation From Benchmark

Period Ending March 31, 2020

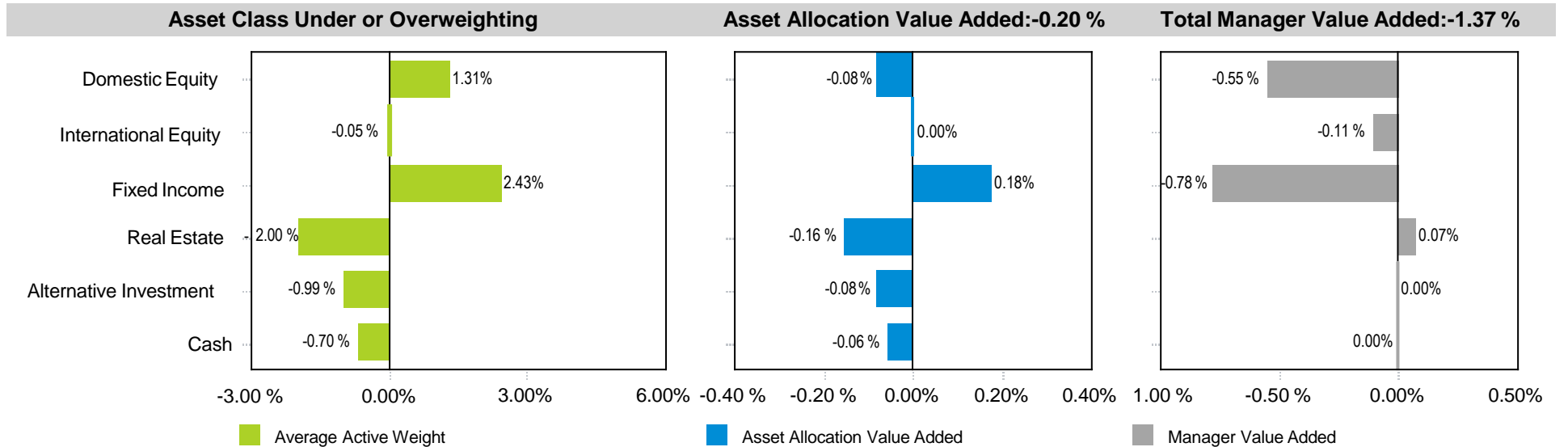
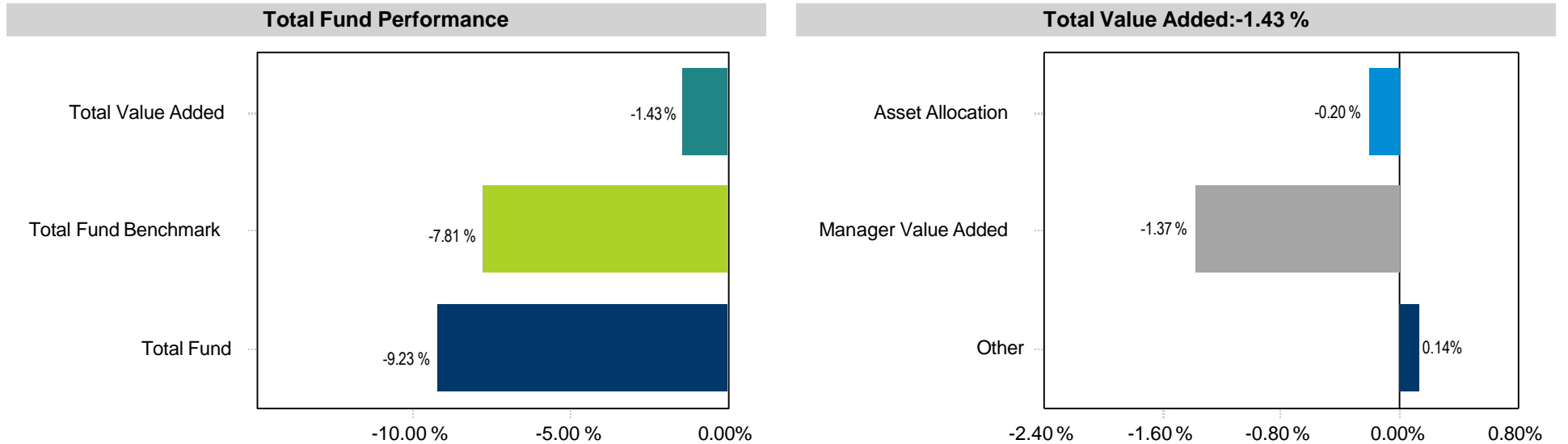


- Includes committed, but unfunded amounts for real estate (\$1,482.5 million) and alternatives (\$2,301.4 million). Assumes real estate and alternatives allocations are fully funded as of quarter end.
- Assumes that outstanding commitments are funded from the overweight asset classes (fixed income and cash) in proportion to their respective overweighting relative to the target.

# Total Fund Attribution

Total Fund

1 Month Ending March 31, 2020



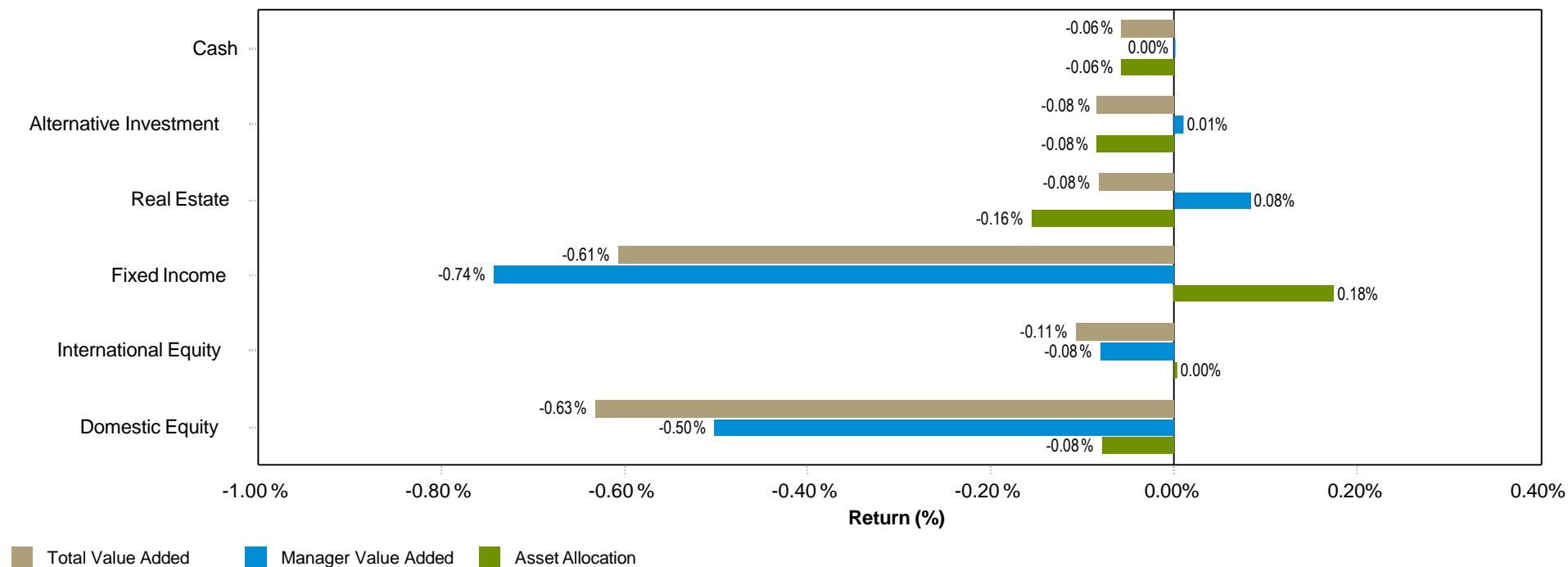
Total Fund Benchmark = 37.0% Russell 3000 Index, 28.0% Blmbg Aggregate, 18.0% MSCI ACWI ex US, 9.0% NCREIF NFI-ODCE Val Wt Nt, 7.0% 9% Annually and 1.0% 3-month Treasury Bill.

# Total Fund Attribution

Total Fund

1 Month Ending March 31, 2020

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	38.3	37.0	-15.20	-13.75	-0.55	-0.08	-0.63
International Equity	17.9	18.0	-15.09	-14.48	-0.11	0.00	-0.11
Fixed Income	30.4	28.0	-3.16	-0.59	-0.78	0.18	-0.61
Real Estate	7.0	9.0	1.05	0.00	0.07	-0.16	-0.08
Alternative Investment	6.0	7.0	0.73	0.72	0.00	-0.08	-0.08
Cash	0.3	1.0	0.27	0.29	0.00	-0.06	-0.06
<b>Total Fund</b>	<b>100.0</b>	<b>100.0</b>	<b>-9.23</b>	<b>-7.81</b>	<b>-1.37</b>	<b>-0.20</b>	<b>-1.43</b>

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.

\*Other Relative Attribution Effect: +0.14%

# Asset Class Returns

Periods Ended March 31, 2020

	Performance (%)									
	1 Month	QTD	1 Year	3 Years	5 Years	10 Years	20 Years	30 Years	Since Inception	Inception Date
<b>Total Fund</b>	<b>-9.23</b>	<b>-13.39</b>	<b>-4.85</b>	<b>3.42</b>	<b>4.06</b>	<b>7.09</b>	<b>5.57</b>	<b>8.02</b>	<b>9.42</b>	<b>1/1/1982</b>
Total Fund - Net	-9.23	-13.43	-5.02	3.23	3.85	6.87				
Total Fund Benchmark	-7.81	-11.34	-2.65	3.89	4.53	6.99				
<b>Domestic Equity</b>	<b>-15.20</b>	<b>-22.79</b>	<b>-12.92</b>	<b>2.24</b>	<b>4.33</b>	<b>9.58</b>	<b>5.06</b>	<b>9.57</b>	<b>10.83</b>	<b>1/1/1982</b>
Domestic Equity - Net	-15.20	-22.83	-13.09	2.04	4.10	9.34				
Blended Benchmark (U.S. Equity)	-13.75	-20.90	-9.13	4.00	5.77	10.17	4.95	9.27		
U.S. Equity IMRF Custom Benchmark	-14.75	-22.36	-11.54	1.96	4.40					
<b>International Equity</b>	<b>-15.07</b>	<b>-23.94</b>	<b>-15.33</b>	<b>-1.44</b>	<b>0.15</b>	<b>3.55</b>	<b>4.00</b>	<b>6.17</b>	<b>6.93</b>	<b>9/1/1986</b>
International Equity - Net	-15.09	-24.01	-15.60	-1.76	-0.19	3.22				
MSCI AC World ex USA (Net)	-14.48	-23.36	-15.57	-1.96	-0.64	2.05	2.42			
International Equity IMRF Custom Benchmark	-14.61	-23.59	-15.84	-2.07	-0.62					
<b>Fixed Income</b>	<b>-3.16</b>	<b>-0.22</b>	<b>5.56</b>	<b>4.10</b>	<b>3.36</b>	<b>4.47</b>	<b>5.45</b>	<b>6.65</b>	<b>8.13</b>	<b>1/1/1982</b>
Fixed Income - Net	-3.16	-0.25	5.44	3.96	3.21	4.32				
Blmbg. Barc. U.S. Aggregate	-0.59	3.15	8.93	4.82	3.36	3.88	5.08	6.05	7.70	
Fixed Income IMRF Custom Benchmark	-1.96	1.10	6.85	4.31	3.24					
<b>Real Estate</b>	<b>1.05</b>	<b>2.05</b>	<b>10.81</b>	<b>9.77</b>	<b>9.95</b>	<b>11.16</b>	<b>8.07</b>	<b>5.04</b>	<b>5.58</b>	<b>5/1/1985</b>
Real Estate - Net	1.05	2.05	10.75	9.76	9.92	11.15				
Blended Benchmark (Real Estate)*	0.00	0.00	3.15	5.59	7.31	10.38	7.29	7.46	7.64	
<b>Alternatives Investments</b>	<b>0.73</b>	<b>1.79</b>	<b>9.21</b>	<b>12.78</b>	<b>10.08</b>	<b>9.45</b>	<b>6.97</b>	<b>11.61</b>	<b>10.84</b>	<b>2/1/1986</b>
Alternatives Investments - Net	0.73	1.78	9.19	12.66	9.86	9.20				
Alternatives Custom Benchmark	0.72	2.18	9.00	9.00	9.00	9.07	10.98	12.30	12.63	
<b>Private Equity</b>	<b>0.81</b>	<b>1.53</b>	<b>10.48</b>	<b>15.54</b>	<b>12.89</b>	<b>12.31</b>	<b>8.45</b>	<b>14.19</b>	<b>13.03</b>	<b>2/1/1986</b>
Alternatives Custom Benchmark	0.72	2.18	9.00	9.00	9.00	9.07	10.98	12.30	12.63	
<b>Agriculture**</b>	<b>0.00</b>	<b>4.71</b>	<b>0.81</b>	<b>-1.75</b>	<b>2.52</b>	<b>9.01</b>	<b>7.34</b>		<b>7.10</b>	<b>10/1/1997</b>
NCREIF Farmland Index*	0.00	0.00	4.09	5.74	6.58	10.88	12.22		11.67	

Benchmark definitions on next page.

\*NCREIF Index data not yet available as of April 23, 2020

\*\*March 2020 valuations not yet available as of April 23, 2020

# Asset Class Returns

Periods Ended March 31, 2020

	Performance (%)									
	1 Month	QTD	1 Year	3 Years	5 Years	10 Years	20 Years	30 Years	Since Inception	Inception Date
<b>Timberland</b>	<b>0.60</b>	<b>3.54</b>	<b>4.61</b>	<b>1.80</b>	<b>1.06</b>	<b>2.80</b>	<b>3.53</b>		<b>7.40</b>	<b>10/1/1992</b>
NCREIF Timberland Index*	0.00	0.00	1.19	2.45	2.78	4.47	5.78		8.54	
<b>Unlisted Infrastructure</b>	<b>-0.25</b>	<b>-0.35</b>	<b>9.27</b>						<b>8.70</b>	<b>4/1/2018</b>
Alternatives Custom Benchmark	0.72	2.18	9.00						9.00	
<b>Cash</b>	<b>0.27</b>	<b>0.79</b>	<b>3.64</b>	<b>2.74</b>	<b>1.86</b>	<b>1.02</b>	<b>1.98</b>	<b>3.30</b>	<b>3.82</b>	<b>7/1/1986</b>
90 Day US Treasury Bill	0.29	0.58	2.25	1.83	1.17	0.62	1.70	2.82	3.28	

Benchmark definitions on next page.

\*NCREIF Index data not yet available as of April 23, 2020



# 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>

# Investment Manager Asset Allocation

Periods Ended March 31, 2020

	Feb-2020		Mar-2020	
	\$	%	\$	%
Domestic Equity	16,247,866,798	38.31	13,668,971,433	35.47
Large Cap Growth	5,609,880,848	13.23	5,126,742,469	13.30
NTGI S&P 500 Growth	2,414,312,690	5.69	2,069,459,350	5.37
Sands Capital	2,096,063,961	4.94	1,908,113,528	4.95
Piedmont Russell 1000 G	1,099,504,197	2.59	1,149,169,592	2.98
Large Cap Value	5,016,631,928	11.83	3,914,838,799	10.16
Dodge & Cox	1,275,225,034	3.01	1,034,356,532	2.68
BMO	826,648,006	1.95	629,528,118	1.63
LSV Asset	1,405,822,914	3.31	1,071,499,412	2.78
NTGI S&P 500 Value	1,508,935,974	3.56	1,179,454,737	3.06
Large Cap Pass. Core	2,404,854,277	5.67	2,125,275,576	5.52
NTGI MarketCap Idx.	2,404,854,277	5.67	2,125,275,576	5.52
Quantitative Factor Strategies	238,961,782	0.56	201,705,914	0.52
Quantitative US Equity - SciBeta	238,961,782	0.56	201,705,914	0.52
Small Cap Growth	728,652,703	1.72	551,266,738	1.43
Frontier Capital	560,620,722	1.32	422,410,674	1.10
FIAM Small Cap	168,031,981	0.40	128,856,063	0.33
Small Cap Value	1,331,441,664	3.14	1,001,994,074	2.60
Channing	207,688,110	0.49	160,808,344	0.42
DFA Small Cap Val.	500,887,608	1.18	365,385,230	0.95
Inv. Couns. Maryland	622,865,946	1.47	475,800,500	1.23
Micro Cap	390,417,236	0.92	299,383,019	0.78
DFA Micro Cap (9-10)	390,417,236	0.92	299,383,019	0.78

# Investment Manager Asset Allocation

Periods Ended March 31, 2020

	Feb-2020		Mar-2020	
	\$	%	\$	%
Public Real Assets	527,026,360	1.24	447,764,844	1.16
Brookfield Public Global Infrastru	163,379,567	0.39	130,924,720	0.34
Cohen & St Public Global Infrastru	363,646,793	0.86	316,840,124	0.82
International Equity	7,610,929,509	17.95	6,375,234,549	16.55
Intl Large Cap Growth	1,216,456,468	2.87	1,031,781,339	2.68
EARNEST Part. Intl	442,800,093	1.04	354,457,282	0.92
William Blair	773,656,375	1.82	677,324,057	1.76
Intl Large Cap Value	1,186,427,366	2.80	979,722,803	2.54
Brandes Investment	556,007,027	1.31	451,974,911	1.17
Mondrian	518,788,169	1.22	434,126,577	1.13
Lazard	111,632,170	0.26	93,621,315	0.24
Intl Large Cap Core	3,657,355,351	8.62	3,084,412,715	8.00
Arrowstreet Capital	678,429,930	1.60	591,454,419	1.53
Brown Capital	345,849,553	0.82	324,641,242	0.84
GlobeFlex Capital	515,601,701	1.22	428,804,486	1.11
NTGI MSCI EAFE	1,807,553,129	4.26	1,558,649,283	4.05
Progress Intl Equity	309,921,037	0.73	179,132,662	0.46
Transition Account		0.00	1,730,624	0.00
Intl All Cap Developed	134,614,449	0.32	110,830,271	0.29
Ativo International	134,614,449	0.32	110,830,271	0.29
International Small Cap	458,965,812	1.08	381,551,018	0.99
Franklin Templeton	176,706,453	0.42	143,489,095	0.37

# Investment Manager Asset Allocation

*Periods Ended March 31, 2020*

	Feb-2020		Mar-2020	
	\$	%	\$	%
William Blair IntSC	282,259,360	0.67	238,061,923	0.62
Emerging Mkt Equity	957,110,063	2.26	786,936,404	2.04
Genesis Asset Mngrs.	957,110,063	2.26	786,936,404	2.04

# Investment Manager Asset Allocation

Periods Ended March 31, 2020

	Feb-2020		Mar-2020	
	\$	%	\$	%
Fixed Income	12,904,687,801	30.43	12,413,453,584	32.22
Domestic Fixed Core	3,595,903,966	8.48	3,525,397,122	9.15
Brandes FI Core	375,226,261	0.88	377,137,787	0.98
EARNEST Partners	1,038,109,677	2.45	1,011,853,792	2.63
Piedmont Investment	1,098,642,391	2.59	1,063,148,984	2.76
Garcia Hamilton	1,083,925,637	2.56	1,073,256,558	2.79
Domestic Fixed Passive Core	3,677,304,984	8.67	3,657,764,463	9.49
NTGI Blmbg Agg.	1,877,450,766	4.43	1,868,813,612	4.85
BlackRock US Debt I	1,799,854,217	4.24	1,788,950,851	4.64
Domestic Fixed Core Plus	4,073,502,805	9.61	3,859,782,439	10.02
LM Capital Group FI	940,158,067	2.22	923,331,973	2.40
Progress Inv. FI	1,009,848,159	2.38	893,976,306	2.32
BMO - TCH	968,921,352	2.28	948,560,486	2.46
Western Asset	1,154,575,227	2.72	1,093,913,675	2.84
Bank Loans	562,914,075	1.33	485,469,967	1.26
Barings Global Loan Fund	562,914,075	1.33	485,469,967	1.26
Emerging Markets Debt	220,838,277	0.52	191,012,507	0.50
Standish-Mellon Emerging Markets	220,838,277	0.52	191,012,507	0.50
High Yield	774,223,694	1.83	694,027,085	1.80
Mackay Shields	773,895,483	1.82	693,700,141	1.80
FIAM High Yield	328,211	0.00	326,945	0.00

# Investment Manager Asset Allocation

Periods Ended March 31, 2020

	Feb-2020		Mar-2020	
	\$	%	\$	%
Real Estate	2,968,687,076	7.00	2,980,393,027	7.73
Real Estate Core Cmp	1,590,260,040	3.75	1,587,706,425	4.12
TA Assoc. Buckhead	623,609,054	1.47	617,321,318	1.60
Barings Core Property		0.00		0.00
Barings Euro Core Property	124,185,538	0.29	124,049,875	0.32
Blackstone Property Euro	127,885,865	0.30	131,817,239	0.34
INVESCO Core Real Estate	214,400,464	0.51	214,400,464	0.56
INVESCO European real estate	56,379,304	0.13	56,317,714	0.15
AEW Core Property Tr	239,175,524	0.56	239,175,523	0.62
CBRE Core Partners	204,624,292	0.48	204,624,292	0.53
RE Non-Core Cmp	1,378,427,035	3.25	1,392,686,602	3.61
Artemis MWBE Spruce	243,768,632	0.57	257,005,249	0.67
Franklin T. EMREFF	7,808,708	0.02	7,808,708	0.02
Security Capital	57,169,599	0.13	54,509,302	0.14
Dune II	22,643,881	0.05	22,643,881	0.06
Non-Core Real Estate Funds	882,772,768	2.08	913,649,465	2.37
Non-Core Intl Real Estate	164,107,294	0.39	136,861,187	0.36
Rockwood Fund VIII	156,152	0.00	156,152	0.00
Almanac ARS V	1	0.00	52,658	0.00
Alternatives Investments	2,548,968,258	6.01	2,635,896,790	6.84
Absolute Return	487,914	0.00	459,321	0.00
Aurora Investment	487,914	0.00	459,321	0.00

# Investment Manager Asset Allocation

Periods Ended March 31, 2020

	Feb-2020		Mar-2020	
	\$	%	\$	%
Private Equity	2,079,395,332	4.90	2,128,227,619	5.52
Abbott S/A Comp.	357,954,615	0.84	356,110,535	0.92
Muller Monroe MPEFF	4,808,888	0.01	4,808,888	0.01
Pantheon S/A Comp.	258,463,453	0.61	258,119,053	0.67
Private Equity Fund - Domestic	1,104,733,681	2.60	1,160,630,657	3.01
Private Equity Fund - International	346,732,377	0.82	337,060,844	0.87
Oakbrook Opportunities Fund	6,702,317	0.02	11,497,642	0.03
Private Credit	128,372,034	0.30	165,703,962	0.43
Private Credit Fund - Domestic	128,372,034	0.30	165,703,962	0.43
Agriculture	218,125,794	0.51	217,875,894	0.57
Premiere Partners IV	218,125,794	0.51	217,875,894	0.57
Timberland	76,057,702	0.18	76,516,130	0.20
Forest Investment	76,057,702	0.18	76,516,130	0.20
Unlisted Infrastructure	46,529,482	0.11	47,113,864	0.12
Unlisted Infrastructure Funds	46,529,482	0.11	47,113,864	0.12
Cash & Equivalents	128,211,176	0.30	458,659,217	1.19
<b>Total Fund</b>	<b>42,409,350,618</b>	<b>100.00</b>	<b>38,532,608,600</b>	<b>100.00</b>



Periods Ended March 31, 2020

	Performance (%)							
	1 Month	QTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
<b>Total Fund</b>	<b>-9.23</b>	<b>-13.39</b>	<b>-4.85</b>	<b>3.42</b>	<b>4.06</b>	<b>7.09</b>	<b>9.42</b>	<b>1/1/1982</b>
Total Fund - Net	-9.23	-13.43	-5.02	3.23	3.85	6.87		
Total Fund Benchmark	-7.81	-11.34	-2.65	3.89	4.53	6.99		
<b>Domestic Equity</b>	<b>-15.20</b>	<b>-22.79</b>	<b>-12.92</b>	<b>2.24</b>	<b>4.33</b>	<b>9.58</b>	<b>10.83</b>	<b>1/1/1982</b>
Domestic Equity - Net	-15.20	-22.83	-13.09	2.04	4.10	9.34		
Blended Benchmark	-13.75	-20.90	-9.13	4.00	5.77	10.17		
Russell 3000 Index	-13.75	-20.90	-9.13	4.00	5.77	10.15	10.83	
<b>Large Cap Equity</b>	<b>-13.47</b>	<b>-20.50</b>	<b>-9.74</b>	<b>4.11</b>	<b>5.74</b>	<b>10.26</b>	<b>10.60</b>	<b>1/1/1982</b>
Large Cap Equity - Net	-13.47	-20.51	-9.81	4.01	5.62	10.12		
Russell 1000 Index	-13.21	-20.22	-8.03	4.64	6.22	10.39	10.99	
<b>Large Cap Growth</b>	<b>-9.57</b>	<b>-12.54</b>	<b>-1.22</b>	<b>12.05</b>	<b>10.02</b>	<b>12.69</b>	<b>11.57</b>	<b>1/1/1982</b>
Large Cap Growth - Net	-9.57	-12.56	-1.31	11.93	9.89	12.52		
LCG Blended Benchmark	-9.84	-14.10	0.91	11.32	10.36	12.97		
Russell 1000 Growth Index	-9.84	-14.10	0.91	11.32	10.36	12.97	10.81	
<b>NTGI S&amp;P 500 Growth</b>	<b>-9.97</b>	<b>-14.54</b>	<b>-2.49</b>	<b>9.56</b>	<b>9.46</b>	<b>12.59</b>	<b>7.24</b>	<b>8/1/2001</b>
NTGI S&P 500 Growth - Net	-9.97	-14.54	-2.50	9.55	9.45	12.58		
S&P 500 Growth	-9.96	-14.50	-2.47	9.59	9.48	12.58	7.21	
<b>Piedmont Russell 1000 G</b>	<b>-9.84</b>	<b>-14.09</b>	<b>0.89</b>				<b>-0.98</b>	<b>10/1/2018</b>
Piedmont Russell 1000 G - Net	-9.84	-14.10	0.87				-1.00	
Russell 1000 Growth Index	-9.84	-14.10	0.91				-0.97	
<b>Sands Capital</b>	<b>-8.97</b>	<b>-9.28</b>	<b>-0.83</b>	<b>15.57</b>	<b>11.01</b>	<b>15.41</b>	<b>11.59</b>	<b>11/1/2003</b>
Sands Capital - Net	-8.97	-9.33	-1.05	15.32	10.76	15.15		
LCG Blended Benchmark	-9.84	-14.10	0.91	11.32	10.36	12.97	9.19	
Russell 1000 Growth Index	-9.84	-14.10	0.91	11.32	10.36	12.97	9.24	

# Wilshire Consulting Performance



Periods Ended March 31, 2020

	Performance (%)							
	1 Month	QTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
<b>Large Cap Value</b>	<b>-17.67</b>	<b>-28.26</b>	<b>-18.57</b>	<b>-2.25</b>	<b>2.02</b>	<b>8.20</b>	<b>9.38</b>	<b>10/1/1982</b>
Large Cap Value - Net	-17.67	-28.29	-18.69	-2.40	1.85	8.02		
LCV Blended Benchmark	-17.09	-26.73	-17.17	-2.18	1.90	7.67		
Russell 1000 Value Index	-17.09	-26.73	-17.17	-2.18	1.90	7.67	10.92	
<b>Dodge &amp; Cox</b>	<b>-18.71</b>	<b>-28.17</b>	<b>-18.82</b>	<b>-2.02</b>	<b>3.07</b>	<b>8.49</b>	<b>7.46</b>	<b>9/1/2003</b>
Dodge & Cox - Net	-18.71	-28.21	-18.99	-2.23	2.86	8.26		
LCV Blended Benchmark	-17.09	-26.73	-17.17	-2.18	1.90	7.67	6.49	
Russell 1000 Value Index	-17.09	-26.73	-17.17	-2.18	1.90	7.67	6.65	
<b>BMO</b>	<b>-17.13</b>	<b>-27.75</b>	<b>-21.97</b>	<b>-3.37</b>	<b>0.57</b>	<b>7.95</b>	<b>6.21</b>	<b>2/1/2001</b>
BMO - Net	-17.13	-27.75	-22.11	-3.57	0.36	7.72		
LCV Blended Benchmark	-17.09	-26.73	-17.17	-2.18	1.90	7.67	4.27	
Russell 1000 Value Index	-17.09	-26.73	-17.17	-2.18	1.90	7.67	5.23	
<b>LSV Asset</b>	<b>-19.70</b>	<b>-31.79</b>	<b>-22.17</b>	<b>-4.01</b>	<b>0.88</b>	<b>7.93</b>	<b>8.57</b>	<b>2/1/2003</b>
LSV Asset - Net	-19.70	-31.83	-22.35	-4.23	0.64	7.67		
LCV Blended Benchmark	-17.09	-26.73	-17.17	-2.18	1.90	7.67	7.43	
Russell 1000 Value Index	-17.09	-26.73	-17.17	-2.18	1.90	7.67	7.44	
<b>NTGI S&amp;P 500 Value</b>	<b>-15.18</b>	<b>-25.25</b>	<b>-12.11</b>	<b>0.13</b>	<b>3.53</b>	<b>8.27</b>	<b>4.78</b>	<b>8/1/1999</b>
NTGI S&P 500 Value - Net	-15.18	-25.25	-12.12	0.13	3.53	8.26		
S&P 500 Value	-15.25	-25.34	-12.20	0.05	3.45	8.18	4.74	
<b>Large Cap Pass. Core</b>	<b>-13.79</b>	<b>-20.94</b>	<b>-9.21</b>	<b>3.98</b>	<b>5.79</b>	<b>10.18</b>	<b>10.47</b>	<b>1/1/1985</b>
Large Cap Pass. Core - Net	-13.79	-20.94	-9.22	3.97	5.78	10.17		
Dow Jones US Total Stock Market Index	-13.81	-20.96	-9.28	3.92	5.70	10.13		
<b>NTGI MarketCap Idx.</b>	<b>-13.79</b>	<b>-20.94</b>	<b>-9.21</b>	<b>3.98</b>	<b>5.79</b>	<b>10.19</b>	<b>10.24</b>	<b>2/1/1985</b>
NTGI MarketCap Idx. - Net	-13.79	-20.94	-9.22	3.97	5.78	10.18		
Dow Jones US Total Stock Market Index	-13.81	-20.96	-9.28	3.92	5.70	10.13		
<b>Quantitative Factor Strategies</b>	<b>-15.59</b>	<b>-23.50</b>					<b>-19.19</b>	<b>9/17/2019</b>

Benchmark definitions in glossary.

Periods Ended March 31, 2020

	Performance (%)							
	1 Month	QTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
<b>Quantitative US Equity - SciBeta</b>	<b>-15.59</b>	<b>-23.50</b>					<b>-19.19</b>	<b>9/17/2019</b>
Quantitative US Equity - SciBeta - Net	-15.59	-23.50					-19.19	
SciBeta U.S. High-Factor-Intensity Diversified Multi-Beta Multi-Strategy Index	-15.51	-23.38					-19.34	
<b>Small Cap Composite</b>	<b>-24.40</b>	<b>-34.67</b>	<b>-28.30</b>	<b>-6.37</b>	<b>-1.67</b>	<b>6.72</b>	<b>10.54</b>	<b>7/1/1988</b>
Small Cap Composite - Net	-24.40	-34.83	-28.75	-6.87	-2.21	6.14		
Russell 2000 Index	-21.73	-30.61	-23.99	-4.64	-0.25	6.90	8.16	
<b>Small Cap Growth</b>	<b>-24.34</b>	<b>-31.48</b>	<b>-23.70</b>	<b>-1.36</b>	<b>0.59</b>	<b>8.38</b>	<b>11.61</b>	<b>7/1/1988</b>
Small Cap Growth - Net	-24.34	-31.84	-24.37	-1.96	0.00	7.77		
Russell 2000 Growth Index	-19.10	-25.76	-18.58	0.10	1.70	8.89	7.18	
<b>Frontier Capital</b>	<b>-24.65</b>	<b>-31.62</b>	<b>-24.89</b>	<b>2.98</b>	<b>1.55</b>	<b>8.70</b>	<b>11.89</b>	<b>8/1/1988</b>
Frontier Capital - Net	-24.65	-32.09	-25.69	2.18	0.85	8.01		
Russell 2000 Growth Index	-19.10	-25.76	-18.58	0.10	1.70	8.89	7.26	
<b>FIAM Small Cap</b>	<b>-23.31</b>	<b>-31.02</b>	<b>-22.45</b>	<b>-3.00</b>	<b>0.90</b>	<b>8.75</b>	<b>12.13</b>	<b>8/1/1988</b>
FIAM Small Cap - Net	-23.31	-31.02	-22.75	-3.34	0.44	8.22		
Russell 2000 Index	-21.73	-30.61	-23.99	-4.64	-0.25	6.90	8.21	
Russell 2000 Growth Index	-19.10	-25.76	-18.58	0.10	1.70	8.89	7.26	
<b>Small Cap Value</b>	<b>-24.74</b>	<b>-36.29</b>	<b>-30.33</b>	<b>-9.25</b>	<b>-2.25</b>	<b>5.75</b>	<b>10.00</b>	<b>9/1/1989</b>
Small Cap Value - Net	-24.74	-36.37	-30.69	-9.73	-2.76	5.24		
Russell 2000 Value Index	-24.67	-35.66	-29.64	-9.51	-2.42	4.79	8.38	
<b>Channing</b>	<b>-22.57</b>	<b>-33.62</b>	<b>-27.50</b>	<b>-9.15</b>	<b>-2.49</b>		<b>5.00</b>	<b>7/1/2011</b>
Channing - Net	-22.57	-33.71	-27.86	-9.60	-2.97		4.43	
Russell 2000 Value Index	-24.67	-35.66	-29.64	-9.51	-2.42		3.57	
<b>DFA Small Cap Val.</b>	<b>-27.05</b>	<b>-39.39</b>	<b>-34.97</b>	<b>-12.38</b>	<b>-4.77</b>	<b>5.07</b>	<b>9.39</b>	<b>2/1/1996</b>
DFA Small Cap Val. - Net	-27.05	-39.48	-35.31	-12.84	-5.26	4.56		
Russell 2000 Value Index	-24.67	-35.66	-29.64	-9.51	-2.42	4.79	7.46	

Periods Ended March 31, 2020

	Performance (%)							
	1 Month	QTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
<b>Inv. Couns. Maryland</b>	<b>-23.61</b>	<b>-34.61</b>	<b>-27.31</b>	<b>-6.52</b>	<b>0.57</b>	<b>6.78</b>	<b>9.18</b>	<b>5/1/1999</b>
Inv. Couns. Maryland - Net	-23.61	-34.68	-27.69	-7.01	0.05	6.29		
Russell 2000 Value Index	-24.67	-35.66	-29.64	-9.51	-2.42	4.79	6.71	
<b>Micro Cap</b>	<b>-23.32</b>	<b>-34.71</b>	<b>-28.98</b>	<b>-8.15</b>	<b>-3.86</b>	<b>5.82</b>	<b>10.06</b>	<b>7/1/1984</b>
Micro Cap - Net	-23.32	-34.81	-29.34	-8.65	-4.44	5.15		
Russell Microcap Index	-23.43	-31.99	-26.38	-6.55	-1.94	6.05		
<b>DFA Micro Cap (9-10)</b>	<b>-23.32</b>	<b>-34.71</b>	<b>-28.98</b>	<b>-7.26</b>	<b>-0.89</b>	<b>7.44</b>	<b>9.59</b>	<b>8/1/1987</b>
DFA Micro Cap (9-10) - Net	-23.32	-34.81	-29.34	-7.72	-1.39	6.92		
Russell 2000 Index	-21.73	-30.61	-23.99	-4.64	-0.25	6.90	7.61	
<b>Public Real Assets</b>	<b>-15.04</b>	<b>-20.47</b>	<b>-11.74</b>				<b>-0.11</b>	<b>8/1/2017</b>
Public Real Assets - Net	-15.04	-20.56	-12.13				-0.53	
Public Real Assets Benchmark	-16.52	-22.40	-14.52				-2.63	
<b>Brookfield</b>	<b>-19.86</b>	<b>-25.73</b>	<b>-18.82</b>				<b>-4.87</b>	<b>8/1/2017</b>
Brookfield - Net	-19.86	-25.83	-19.24				-5.33	
Dow Jones Brookfield Global Infrastructure Composite Index	-18.52	-24.45	-17.51				-5.03	
<b>Cohen &amp; Steers</b>	<b>-12.87</b>	<b>-18.07</b>	<b>-8.44</b>				<b>2.13</b>	<b>8/1/2017</b>
Cohen & Steers - Net	-12.87	-18.16	-8.82				1.73	
FTSE Global Core Infrastructure 50/50 Index (Net)	-15.52	-21.38	-13.01				-1.43	

Periods Ended March 31, 2020

	Performance (%)							
	1 Month	QTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
<b>International Equity</b>	<b>-15.07</b>	<b>-23.94</b>	<b>-15.33</b>	<b>-1.44</b>	<b>0.15</b>	<b>3.55</b>	<b>6.93</b>	<b>9/1/1986</b>
International Equity - Net	-15.09	-24.01	-15.60	-1.76	-0.19	3.22		
MSCI AC World ex USA (Net)	-14.48	-23.36	-15.57	-1.96	-0.64	2.05		
<b>Intl LargeCap Equity</b>	<b>-14.46</b>	<b>-23.44</b>	<b>-15.15</b>	<b>-1.56</b>	<b>0.02</b>	<b>3.57</b>	<b>6.94</b>	<b>9/1/1986</b>
Intl LargeCap Equity - Net	-14.47	-23.50	-15.37	-1.82	-0.25	3.30		
MSCI AC World ex USA (Net)	-14.48	-23.36	-15.57	-1.96	-0.64	2.05		
<b>Intl Large Cap Grwth</b>	<b>-15.18</b>	<b>-23.24</b>	<b>-13.27</b>	<b>-0.48</b>	<b>0.37</b>	<b>3.87</b>	<b>6.85</b>	<b>9/1/2002</b>
Intl Large Cap Grwth - Net	-15.18	-23.30	-13.48	-0.73	0.11	3.53		
MSCI AC World ex USA (Net)	-14.48	-23.36	-15.57	-1.96	-0.64	2.05	5.78	
MSCI AC World ex USA Growth (Net)	-10.95	-18.25	-7.31	2.53	2.10	3.91	6.47	
<b>EARNEST Part. Intl</b>	<b>-19.95</b>	<b>-29.64</b>	<b>-22.73</b>	<b>-4.81</b>	<b>-1.84</b>	<b>2.07</b>	<b>6.55</b>	<b>10/1/2004</b>
EARNEST Part. Intl - Net	-19.95	-29.68	-22.80	-4.97	-2.02	1.80		
MSCI AC World ex USA (Net)	-14.48	-23.36	-15.57	-1.96	-0.64	2.05	4.25	
MSCI AC World ex USA Growth (Net)	-10.95	-18.25	-7.31	2.53	2.10	3.91	5.42	
<b>William Blair</b>	<b>-12.45</b>	<b>-19.13</b>	<b>-6.46</b>	<b>2.65</b>	<b>1.86</b>	<b>5.74</b>	<b>8.45</b>	<b>10/1/2002</b>
William Blair - Net	-12.45	-19.20	-6.78	2.29	1.50	5.36		
MSCI AC World ex USA (Net)	-14.48	-23.36	-15.57	-1.96	-0.64	2.05	6.49	
MSCI AC World ex USA Growth (Net)	-10.95	-18.25	-7.31	2.53	2.10	3.91	7.07	
<b>Intl Large Cap Val.</b>	<b>-17.42</b>	<b>-27.59</b>	<b>-21.08</b>	<b>-4.68</b>	<b>-1.91</b>	<b>1.82</b>	<b>7.26</b>	<b>10/1/1995</b>
Intl Large Cap Val. - Net	-17.42	-27.65	-21.33	-5.00	-2.27	1.47		
MSCI AC World ex USA (Net)	-14.48	-23.36	-15.57	-1.96	-0.64	2.05		
MSCI AC World ex USA Value	-18.17	-28.45	-23.18	-5.92	-2.92	0.68		
<b>Brandes Investment</b>	<b>-18.71</b>	<b>-30.14</b>	<b>-24.38</b>	<b>-6.48</b>	<b>-2.80</b>	<b>1.61</b>	<b>7.21</b>	<b>1/1/1996</b>
Brandes Investment - Net	-18.71	-30.18	-24.53	-6.67	-3.02	1.37		
MSCI AC World ex USA (Net)	-14.48	-23.36	-15.57	-1.96	-0.64	2.05		
MSCI AC World ex USA Value	-18.17	-28.45	-23.18	-5.92	-2.92	0.68		

Periods Ended March 31, 2020

	Performance (%)							
	1 Month	QTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
<b>Mondrian</b>	<b>-16.32</b>	<b>-25.45</b>	<b>-18.47</b>	<b>-3.30</b>	<b>-1.18</b>		<b>2.12</b>	<b>4/1/2012</b>
Mondrian - Net	-16.32	-25.53	-18.82	-3.75	-1.66		1.63	
MSCI AC World ex USA (Net)	-14.48	-23.36	-15.57	-1.96	-0.64		1.94	
MSCI AC World ex USA Value	-18.17	-28.45	-23.18	-5.92	-2.92		0.40	
<b>Lazard</b>	<b>-16.13</b>	<b>-24.32</b>	<b>-15.91</b>	<b>-1.52</b>	<b>-0.79</b>		<b>3.00</b>	<b>4/1/2012</b>
Lazard - Net	-16.13	-24.37	-16.12	-1.77	-1.18		2.50	
MSCI AC World ex USA (Net)	-14.48	-23.36	-15.57	-1.96	-0.64		1.94	
MSCI AC World ex USA Value	-18.17	-28.45	-23.18	-5.92	-2.92		0.40	
<b>Intl Large Cap Active Core</b>	<b>-12.75</b>	<b>-21.83</b>	<b>-13.79</b>	<b>-0.39</b>	<b>1.40</b>	<b>5.13</b>	<b>3.04</b>	<b>2/1/2008</b>
Intl Large Cap Active Core - Net	-12.79	-21.95	-14.21	-0.84	0.89	4.61		
MSCI AC World ex USA (Net)	-14.48	-23.36	-15.57	-1.96	-0.64	2.05	0.49	
<b>Arrowstreet Capital</b>	<b>-12.82</b>	<b>-22.04</b>	<b>-13.34</b>	<b>-0.01</b>	<b>1.52</b>	<b>5.38</b>	<b>3.27</b>	<b>3/1/2008</b>
Arrowstreet Capital - Net	-12.82	-22.14	-13.74	-0.47	1.05	4.89	2.79	
MSCI AC World ex USA (Net)	-14.48	-23.36	-15.57	-1.96	-0.64	2.05	0.26	
<b>Brown Capital</b>	<b>-6.13</b>	<b>-14.12</b>	<b>-4.76</b>	<b>3.12</b>	<b>2.70</b>	<b>5.95</b>	<b>6.92</b>	<b>10/1/2004</b>
Brown Capital - Net	-6.13	-14.18	-5.03	2.66	1.94	5.19		
MSCI AC World ex USA (Net)	-14.48	-23.36	-15.57	-1.96	-0.64	2.05	4.25	
<b>GlobeFlex Capital</b>	<b>-16.83</b>	<b>-26.07</b>	<b>-21.00</b>	<b>-4.08</b>	<b>-0.23</b>	<b>3.88</b>	<b>2.76</b>	<b>3/1/2006</b>
GlobeFlex Capital - Net	-16.83	-26.15	-21.34	-4.45	-0.62	3.45	2.32	
MSCI AC World ex USA (Net)	-14.48	-23.36	-15.57	-1.96	-0.64	2.05	2.04	
<b>Progress Intl Equity</b>	<b>-13.21</b>	<b>-22.69</b>	<b>-11.53</b>	<b>1.59</b>	<b>2.38</b>		<b>1.25</b>	<b>7/1/2014</b>
Progress Intl Equity - Net	-13.40	-22.96	-12.26	0.98	1.80		0.73	
Custom Benchmark (Progress Intl Equity)	-14.48	-23.36	-15.57	-1.43	0.22		-0.72	
MSCI AC World ex USA (Net)	-14.48	-23.36	-15.57	-1.96	-0.64		-1.58	
<b>Intl Large Cap Passive Core</b>	<b>-13.77</b>	<b>-22.48</b>	<b>-13.84</b>	<b>-1.39</b>	<b>-0.20</b>	<b>3.13</b>	<b>2.36</b>	<b>1/1/2000</b>
Intl Large Cap Passive Core - Net	-13.77	-22.48	-13.85	-1.40	-0.21	3.12		
MSCI EAFE Index (Net)	-13.35	-22.83	-14.38	-1.82	-0.62	2.72	1.96	

Benchmark definitions in glossary.

Periods Ended March 31, 2020

	Performance (%)							
	1 Month	QTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
<b>NTGI MSCI EAFE</b>	<b>-13.77</b>	<b>-22.48</b>	<b>-13.84</b>	<b>-1.39</b>	<b>-0.20</b>	<b>3.13</b>	<b>2.69</b>	<b>2/1/2000</b>
NTGI MSCI EAFE - Net	-13.77	-22.48	-13.85	-1.40	-0.21	3.12		
MSCI EAFE Index (Net)	-13.35	-22.83	-14.38	-1.82	-0.62	2.72	2.30	
<b>Intl All Cap Developed</b>	<b>-17.67</b>	<b>-25.44</b>	<b>-16.61</b>				<b>-12.22</b>	<b>2/1/2019</b>
Intl All Cap Developed - Net	-17.67	-25.54	-16.99				-12.56	
MSCI EAFE + Canada (Net)	-14.12	-23.26	-14.89				-10.61	
<b>Ativo International</b>	<b>-17.67</b>	<b>-25.44</b>	<b>-16.61</b>				<b>-12.22</b>	<b>2/1/2019</b>
Ativo International - Net	-17.67	-25.54	-16.99				-12.56	
MSCI EAFE + Canada (Net)	-14.12	-23.26	-14.89				-10.61	
<b>Intl Small Cap Eqty</b>	<b>-16.87</b>	<b>-26.78</b>	<b>-15.21</b>	<b>-2.19</b>	<b>0.53</b>	<b>4.62</b>	<b>2.91</b>	<b>12/1/2005</b>
Intl Small Cap Eqty - Net	-16.98	-26.93	-15.85	-2.92	-0.23	3.85		
MSCI AC World ex USA Small Cap (Net)	-19.30	-29.01	-21.18	-4.89	-0.81	2.79	3.71	
Custom Benchmark (Intl Small Cap)	-19.30	-29.01	-21.18	-4.89	-0.81	2.90	3.01	
<b>Franklin Templeton</b>	<b>-18.80</b>	<b>-30.62</b>	<b>-23.71</b>	<b>-4.42</b>	<b>-1.26</b>		<b>2.17</b>	<b>8/1/2011</b>
Franklin Templeton - Net	-18.80	-30.77	-24.27	-5.13	-1.98		1.44	
MSCI AC World ex USA Small Cap (Net)	-19.30	-29.01	-21.18	-4.89	-0.81		1.01	
<b>William Blair IntSC</b>	<b>-15.66</b>	<b>-24.24</b>	<b>-9.19</b>	<b>-0.73</b>	<b>1.78</b>		<b>6.44</b>	<b>9/1/2010</b>
William Blair IntSC - Net	-15.84	-24.41	-9.89	-1.49	0.99		5.62	
MSCI AC World ex USA Small Cap (Net)	-19.30	-29.01	-21.18	-4.89	-0.81		3.41	
Custom Benchmark (Intl Small Cap)	-19.30	-29.01	-21.18	-4.89	-0.81		3.71	
<b>Emerging Mkt Equity</b>	<b>-17.74</b>	<b>-25.52</b>	<b>-16.34</b>	<b>0.30</b>	<b>1.19</b>	<b>2.85</b>	<b>8.03</b>	<b>2/1/1992</b>
Emerging Mkt Equity - Net	-17.78	-25.64	-16.78	-0.27	0.59	2.26		
MSCI Emerging Markets Index	-15.38	-23.57	-17.36	-1.25	0.01	1.04	6.11	
<b>Genesis Asset Mngrs.</b>	<b>-17.74</b>	<b>-25.52</b>	<b>-16.34</b>	<b>0.30</b>	<b>1.19</b>	<b>2.85</b>	<b>9.25</b>	<b>5/1/2004</b>
Genesis Asset Mngrs. - Net	-17.78	-25.64	-16.78	-0.27	0.59	2.26		
MSCI Emerging Markets Index	-15.38	-23.57	-17.36	-1.25	0.01	1.04	7.07	

Benchmark definitions in glossary.

Periods Ended March 31, 2020

	Performance (%)							
	1 Month	QTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
<b>Fixed Income</b>	<b>-3.16</b>	<b>-0.22</b>	<b>5.56</b>	<b>4.10</b>	<b>3.36</b>	<b>4.47</b>	<b>8.13</b>	<b>1/1/1982</b>
Fixed Income - Net	-3.16	-0.25	5.44	3.96	3.21	4.32		
Blmbg. Barc. U.S. Aggregate	-0.59	3.15	8.93	4.82	3.36	3.88	7.70	
<b>Active Fixed Core</b>	<b>-1.79</b>	<b>2.15</b>	<b>7.38</b>	<b>4.52</b>	<b>3.39</b>	<b>4.32</b>	<b>4.63</b>	<b>4/1/2001</b>
ActiveCore Fixed Inc - Net	-1.79	2.13	7.28	4.41	3.26	4.16		
Blmbg. Barc. U.S. Aggregate	-0.59	3.15	8.93	4.82	3.36	3.88	4.70	
<b>Brandes FI Core</b>	<b>0.74</b>	<b>4.34</b>	<b>8.98</b>	<b>4.72</b>			<b>3.70</b>	<b>3/1/2016</b>
Brandes FI Core - Net	0.74	4.34	8.98	4.72			3.70	
Blmbg. Barc. U.S. Aggregate	-0.59	3.15	8.93	4.82			3.87	
<b>EARNEST Partners</b>	<b>-2.28</b>	<b>2.16</b>	<b>7.54</b>	<b>4.74</b>	<b>3.43</b>	<b>4.35</b>	<b>4.67</b>	<b>5/1/2005</b>
EARNEST Partners - Net	-2.28	2.12	7.40	4.60	3.27	4.17	4.48	
Blmbg. Barc. U.S. Aggregate	-0.59	3.15	8.93	4.82	3.36	3.88	4.33	
<b>Piedmont Investment</b>	<b>-3.00</b>	<b>1.01</b>	<b>6.49</b>	<b>3.93</b>	<b>3.12</b>	<b>4.15</b>	<b>4.36</b>	<b>6/1/2005</b>
Piedmont Investment - Net	-3.00	0.98	6.36	3.79	2.97	3.99	4.18	
Blmbg. Barc. U.S. Aggregate	-0.59	3.15	8.93	4.82	3.36	3.88	4.28	
<b>Garcia Hamilton</b>	<b>-0.95</b>	<b>2.53</b>	<b>7.61</b>	<b>4.71</b>			<b>3.81</b>	<b>6/1/2015</b>
Garcia Hamilton - Net	-0.95	2.51	7.53	4.62			3.72	
Blmbg. Barc. U.S. Aggregate	-0.59	3.15	8.93	4.82			3.61	
<b>Pass. Core Fixed Inc</b>	<b>-0.53</b>	<b>3.22</b>	<b>9.04</b>	<b>4.91</b>	<b>3.43</b>	<b>3.92</b>	<b>5.99</b>	<b>1/1/1990</b>
Pass. Core Fixed Inc - Net	-0.53	3.22	9.03	4.90	3.42	3.91		
Blmbg. Barc. U.S. Aggregate	-0.59	3.15	8.93	4.82	3.36	3.88	5.97	
<b>BlackRock US Debt I</b>	<b>-0.61</b>	<b>3.15</b>	<b>8.97</b>	<b>4.91</b>	<b>3.45</b>		<b>3.84</b>	<b>10/1/2013</b>
BlackRock US Debt I - Net	-0.61	3.15	8.96	4.91	3.45		3.84	
Blmbg. Barc. U.S. Aggregate	-0.59	3.15	8.93	4.82	3.36		3.72	
<b>NTGI Blmbg Agg.</b>	<b>-0.46</b>	<b>3.30</b>	<b>9.11</b>	<b>4.90</b>	<b>3.41</b>	<b>3.91</b>	<b>6.04</b>	<b>2/1/1990</b>
NTGI Blmbg Agg. - Net	-0.46	3.30	9.10	4.89	3.40	3.90		
Blmbg. Barc. U.S. Aggregate	-0.59	3.15	8.93	4.82	3.36	3.88	6.03	

Benchmark definitions in glossary.



Periods Ended March 31, 2020

	Performance (%)							
	1 Month	QTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
<b>Core Plus Fixed Income</b>	<b>-3.06</b>	<b>0.11</b>	<b>6.36</b>	<b>4.28</b>	<b>3.46</b>	<b>4.61</b>	<b>8.00</b>	<b>1/1/1982</b>
Core Plus Fixed Inc. - Net	-3.06	0.06	6.17	4.09	3.28	4.43		
Blmbg. Barc. U.S. Aggregate	-0.59	3.15	8.93	4.82	3.36	3.88	7.70	
<b>LM Capital Group FI</b>	<b>-1.75</b>	<b>1.89</b>	<b>7.78</b>	<b>4.37</b>	<b>3.51</b>	<b>4.39</b>	<b>4.93</b>	<b>5/1/2005</b>
LM Capital Group FI - Net	-1.75	1.85	7.61	4.21	3.34	4.23	4.77	
Blmbg. Barc. U.S. Aggregate	-0.59	3.15	8.93	4.82	3.36	3.88	4.33	
<b>Progress Inv. FI</b>	<b>-3.04</b>	<b>0.33</b>	<b>6.25</b>	<b>4.32</b>	<b>3.36</b>	<b>4.32</b>	<b>4.90</b>	<b>1/1/2006</b>
Progress Inv. FI - Net	-3.04	0.25	5.91	3.98	3.02	3.97	4.56	
Blmbg. Barc. U.S. Aggregate	-0.59	3.15	8.93	4.82	3.36	3.88	4.43	
<b>BMO - TCH</b>	<b>-1.90</b>	<b>1.46</b>	<b>7.05</b>	<b>4.72</b>	<b>3.91</b>	<b>5.01</b>	<b>5.05</b>	<b>5/1/2005</b>
BMO - TCH - Net	-1.90	1.43	6.92	4.58	3.77	4.87	4.92	
Blmbg. Barc. U.S. Aggregate	-0.59	3.15	8.93	4.82	3.36	3.88	4.33	
<b>Western Asset</b>	<b>-5.13</b>	<b>-2.65</b>	<b>4.69</b>	<b>4.01</b>	<b>3.54</b>	<b>4.94</b>	<b>5.33</b>	<b>11/1/2001</b>
Western Asset - Net	-5.13	-2.68	4.59	3.89	3.41	4.80		
Blmbg. Barc. U.S. Aggregate	-0.59	3.15	8.93	4.82	3.36	3.88	4.45	
<b>Bank Loans</b>	<b>-13.76</b>	<b>-14.63</b>	<b>-10.76</b>	<b>-1.05</b>	<b>1.39</b>		<b>1.61</b>	<b>8/1/2014</b>
Bank Loans - Net	-13.76	-14.63	-10.87	-1.42	0.93		1.14	
Custom Benchmark	-12.66	-13.25	-9.36	-0.55	1.38		1.50	
<b>Barings Global Loan Fund</b>	<b>-13.76</b>	<b>-14.63</b>	<b>-10.76</b>	<b>-1.05</b>	<b>1.39</b>		<b>1.61</b>	<b>8/1/2014</b>
Barings Global Loan Fund - Net	-13.76	-14.63	-10.87	-1.42	0.93		1.14	
Custom Benchmark	-12.66	-13.25	-9.36	-0.55	1.38		1.50	
<b>Emerging Markets Debt</b>	<b>-13.49</b>	<b>-15.34</b>	<b>-7.29</b>	<b>-0.65</b>	<b>1.34</b>		<b>0.38</b>	<b>8/1/2014</b>
Emerging Markets Debt - Net	-13.49	-15.42	-7.61	-1.00	0.99		0.04	
Custom Benchmark	-11.10	-12.58	-4.78	0.41	1.90		0.33	
<b>Standish-Mellon Emerging Markets</b>	<b>-13.49</b>	<b>-15.34</b>	<b>-7.29</b>	<b>-0.65</b>	<b>1.34</b>		<b>0.38</b>	<b>8/1/2014</b>
Standish-Mellon EMD - Net	-13.49	-15.42	-7.61	-1.00	0.99		0.04	
Custom Benchmark	-11.10	-12.58	-4.78	0.41	1.90		0.33	

Benchmark definitions in glossary.

Periods Ended March 31, 2020

	Performance (%)							
	1 Month	QTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
<b>High Yield</b>	<b>-10.02</b>	<b>-11.19</b>	<b>-4.81</b>	<b>2.21</b>	<b>4.00</b>	<b>6.18</b>	<b>9.11</b>	<b>4/1/1986</b>
High Yield - Net	-10.02	-11.26	-5.12	1.86	3.64	5.79		
ICE BofAML US High Yield, Cash Pay Index	-11.71	-13.06	-7.40	0.57	2.68	5.49	7.81	
<b>MacKay Shields</b>	<b>-10.03</b>	<b>-11.19</b>	<b>-4.81</b>	<b>2.18</b>	<b>4.18</b>	<b>6.36</b>	<b>8.10</b>	<b>11/1/2000</b>
MacKay Shields - Net	-10.03	-11.27	-5.12	1.83	3.82	5.99		
ICE BofAML US High Yield, Cash Pay Index	-11.71	-13.06	-7.40	0.57	2.68	5.49	6.73	

# Benchmark History

Account Name	From Date	To Date	Benchmark
Total Fund			<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>
Domestic Equity	1/1/2015	Present	100% Russell 3000 Index
	1/1/1982	12/31/2014	100% Dow Jones US Total Stock Market Index
Large Cap Growth	1/1/2006	Present	100% Russell 1000 Growth Index
	11/1/2003	12/31/2005	100% S&P 500 Growth
Large Cap Value	1/1/2006	Present	100% Russell 1000 Value Index
	2/1/2001	12/31/2005	100% S&P 500 Value
Public Real Assets	8/1/2017	Present	33.3% Dow Jones Brookfield Global Infrastructure Composi, 66.7% FTSE GLOBAL CORE INFRASTRUCTURE 50/50 INDEX (Net)
Progress Intl Equity	12/1/2017	Present	100% MSCI AC World ex USA (Net)
	7/1/2014	11/30/2017	Custom blended weighted average of the underlying managers' individual MSCI benchmarks

# Benchmark History

Account Name	From Date	To Date	Benchmark
Intl Small Cap Eqty	6/1/2011	Present	100% MSCI AC World ex USA Small Cap (Net)
	12/1/2005	5/31/2011	100% S&P Developed Ex-U.S. SmallCap (Net)
Barings Global Loan Fund	8/1/2014	Present	Comprised of the Credit Suisse US Leveraged Loan Index and the Credit Suisse Western European Leveraged Loan Index, weighted by the portfolio's market value to each sector.
Standish-Mellon Emerging Markets	8/1/2014	Present	50% JPM GBI-EM Global Diversified, 25% JPM EMBI Global (USD), 25% JPM CEMBI Broad Index