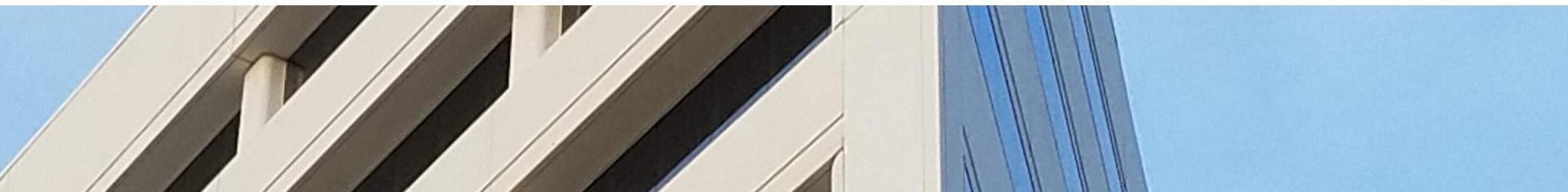




# WILSHIRE ASSOCIATES

Wilshire Consulting



Monthly Performance Review

*As of September 30, 2020*



# Capital Market Review

# Economic Review

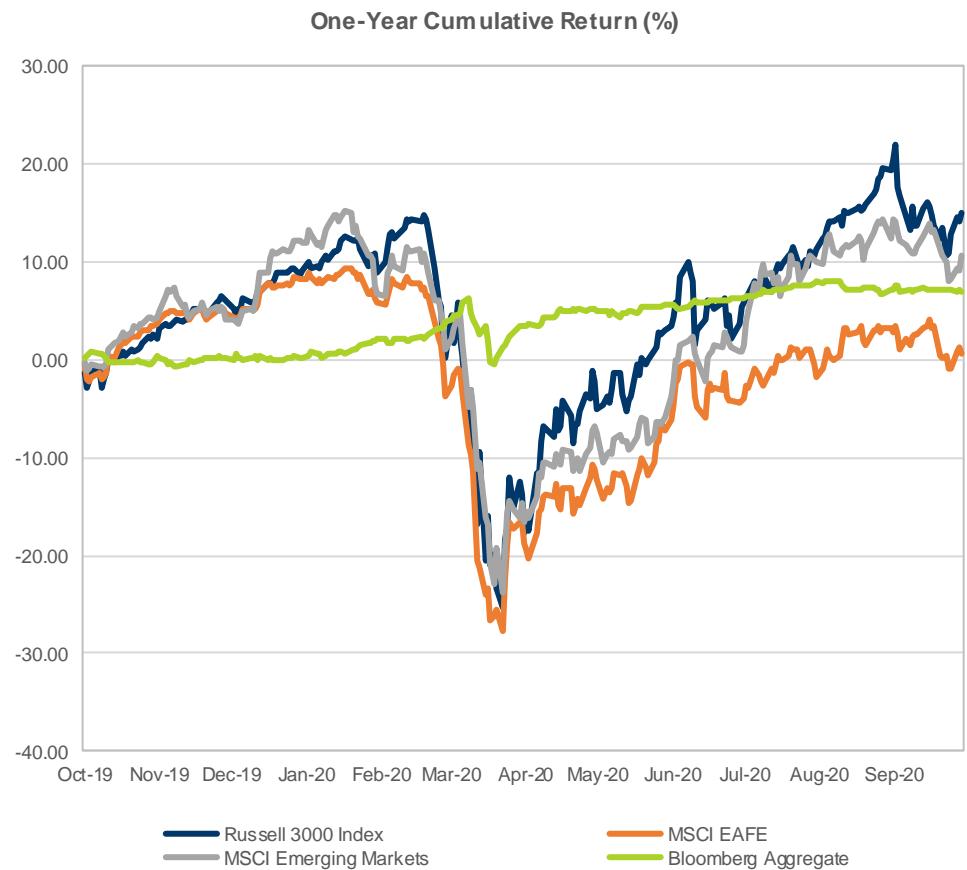
## Market Commentary

Global markets pulled back in September, providing investors nearly nowhere to hide during the month. From U.S. and Non-U.S. equities, to bonds, and even the booming Tech market were all in the red by month's end. Investors grew concerned of the resurgence of COVID-19 cases globally, as well as the potential delay of the development of a vaccine, leading investors to bring down risk and reduce exposure to global stocks. However, not all news was negative during the month. Manufacturing in the United States remained in the expansionary environment – for the fourth straight month, and the consumer confidence index recorded its highest month-over-month increase ever.

Unemployment rates in the United States were mixed in September across the country with 30 states seeing lower rates, 12 remaining stable, and 8 recording higher unemployment. Overall unemployment; however, ticked lower falling 0.5% to 7.9% by the end of the month.

Manufacturing in the United States, marked by the ISM Manufacturing Index, fell modestly to 55.4, down from 56.0. Although down month-over-month, a rating above 50 indicated an expansionary environment, marking the fourth straight month of an index figure above 50.

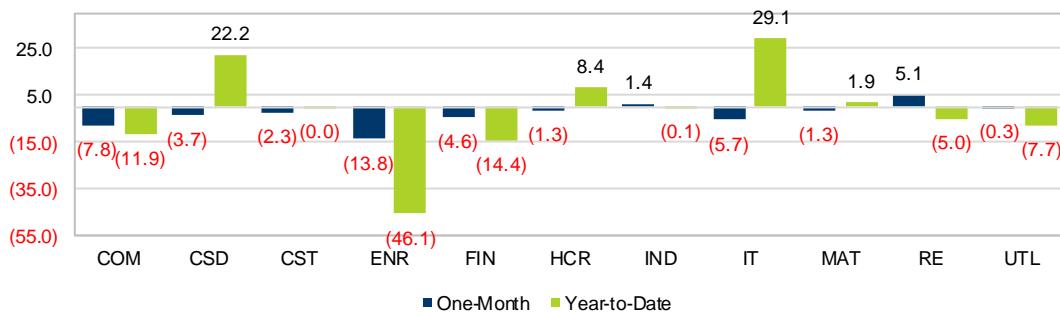
The University of Michigan Consumer Sentiment Index rose to 80.4, up from 74.1 during August. The 8.5% rise from August was the largest increase ever recorded.



# U.S. Equity Market

U.S. Equity Indices (%)	M T D	Q T D	Y T D	1 Year	3 Years	5 Years	10 Years
Russell 3000 Index	(3.64)	9.21	5.41	15.00	11.63	13.67	13.47
Standard & Poor's 500 Index	(3.80)	8.93	5.57	15.15	12.27	14.13	13.73
Russell 1000 Index	(3.65)	9.47	6.40	16.01	12.36	14.08	13.74
Russell 2500 Index	(2.59)	5.88	(5.82)	2.22	4.45	8.96	10.80
Russell 2000 Index	(3.34)	4.93	(8.69)	0.39	1.77	7.99	9.84
Russell Micro Cap Index	(3.17)	3.69	(7.94)	4.44	(0.09)	6.71	9.49
Russell 1000 Index	(3.65)	9.47	6.40	16.01	12.36	14.08	13.74
Russell 1000 Growth Index	(4.71)	13.22	24.33	37.53	2165	20.08	17.24
Russell 1000 Value Index	(2.46)	5.59	(11.58)	(5.03)	2.63	7.65	9.94
Russell 2000 Index	(3.34)	4.93	(8.69)	0.39	1.77	7.99	9.84
Russell 2000 Growth Index	(2.14)	7.16	3.88	15.71	8.17	1141	12.33
Russell 2000 Value Index	(4.65)	2.56	(21.54)	(14.88)	(5.12)	4.10	7.09
Russell 3000 Index	(3.64)	9.21	5.41	15.00	11.63	13.67	13.47
GICS - Communication Services	(7.85)	(11.16)	(11.89)	(8.31)	10.61	11.53	7.83
GICS - Consumer Discretionary	(3.68)	17.47	22.20	29.94	19.53	16.49	17.24
GICS - Consumer Staples	(2.25)	7.66	(0.03)	4.67	5.25	6.86	10.88
GICS - Energy	(13.79)	(16.35)	(46.08)	(43.03)	(20.31)	(10.20)	(3.94)
GICS - Financials	(4.61)	3.26	(14.42)	(7.91)	3.63	9.22	10.85
GICS - Health Care	(128)	6.48	8.41	24.60	12.41	12.60	16.06
GICS - Industrials	138	12.60	(0.14)	6.06	5.67	10.54	12.94
GICS - Information Technology	(5.69)	12.02	29.14	47.60	26.66	26.17	19.37
GICS - Materials	(125)	11.88	190	9.03	4.40	11.70	9.69
GICS - Real Estate	5.11	22.43	(5.00)	12.58	4.17	4.51	5.92
GICS - Utilities	(0.34)	4.63	(7.75)	(6.34)	5.54	9.10	9.52

Sector Returns (%)



## Market Commentary

The U.S. stock market fell sharply in early September before showing resiliency toward the end of the month. Represented by the Russell 3000 Index, U.S. equities were down -3.6% for the month, but remain strong over the Third Quarter, up +9.2%.

U.S. equities' winning streak ended in September at five straight months of positive returns. Early in the month, investors generally rotated out of risk-oriented assets as growing concerns of new COVID-19 cases would impact economic growth, and potential delays of the development of a vaccine dominated news platforms.

Large capitalization stocks underperformed small capitalization stocks during the month, as the Russell 1000 Index returned -3.7% versus -3.3% for the Russell 2000 Index. The Russell Micro Cap Index was down -3.2% for the month.

Growth stocks trailed value stocks during September in large cap as the large technology names in the index (Amazon, Apple, Google, Facebook and Microsoft) all suffered losses. Conversely, in small cap, growth led value during the month.

Of the eleven major sectors, only Industrials and Real Estate were positive for the month. Information Technology, Communication Services and Energy were among the largest laggards for the month. Information Technology; however, remains the strongest sector year-to-date, up +29.1%.

# Non-U.S. Equity Market

## Market Commentary

Equity markets outside of the U.S. outperformed U.S. stocks during September, but were also negative for the month, down -2.5%. For the quarter ending September 30, 2020, Non-U.S. Equities returned +6.3%.

Developed markets underperformed emerging markets during September, down -2.6% versus -1.6%. During the Third Quarter, Emerging Markets led Developed Markets, up 9.6% versus +4.8%.

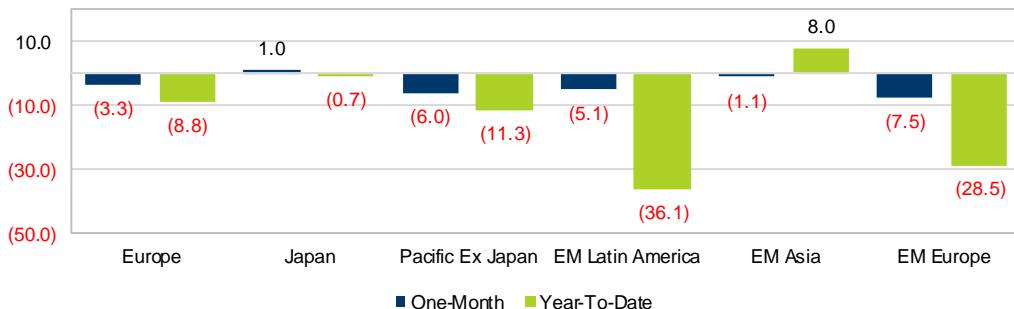
Continued increases in COVID-19 cases across much of Europe led the news for the month. Although hospitalizations remained very low for much of the summer, Spain, France and the U.K. began to see significant spikes toward the end of August and continuing throughout September. Resulting concerns of new lock-down restrictions and economic growth impact hindered developed markets, particularly in the U.K. which is down -20% year-to-date.

Asia's strong performance can be attributed to the success they have seen in containing COVID-19 cases across major cities. Additionally, China reported a Third Quarter GDP of +4.9%, which brought their year-to-date GDP positive, +0.7%.

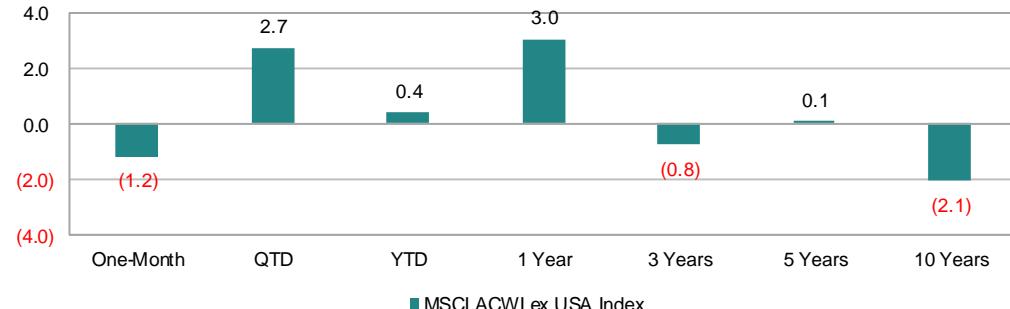
The U.S. Dollar strengthened for the month, challenging U.S.-based investors. The Local Currency Index (MSCI AC World ex-U.S. Index LC) was down just -1.3%, providing a headwind of 1.2% for U.S.-based investors during the month. For the Third Quarter; however, the U.S. Dollar weakened, which provided a strong tailwind of 2.7% 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	(2.46)	6.26	(5.44)	3.00	1.16	6.23	4.00
MSCI EAFE Index	(2.60)	4.80	(7.09)	0.49	0.62	5.26	4.61
MSCI Emerging Markets Index	(160)	9.56	(116)	10.54	2.42	8.96	2.50
MSCI AC World ex U.S. Small Index	(126)	10.50	(3.64)	6.97	0.93	6.79	5.31
MSCI Europe Index	(3.33)	4.51	(8.85)	(0.79)	(0.61)	4.23	4.26
MSCI Japan Index	0.98	6.94	(0.68)	6.91	3.94	7.51	6.20
MSCI Pacific ex Japan Index	(5.99)	1.98	(1126)	(6.13)	0.27	6.73	3.76
MSCI EM Latin America Index	(5.13)	(128)	(36.06)	(29.36)	(1183)	2.05	(5.73)
MSCI EM Asia Index	(112)	11.92	8.01	21.52	5.66	1129	5.45
MSCI EM Europe Index	(7.45)	(5.19)	(28.55)	(19.23)	(4.30)	3.62	(2.97)
Local Currency (%)	MTD	QTD	YTD	1 Year	3 Years	5 Years	10 Years
MSCI AC World ex U.S. Index	(1.29)	3.52	(5.84)	(0.02)	1.92	6.14	6.07
MSCI EAFE Index	(0.99)	1.22	(9.44)	(4.74)	0.55	4.83	6.25
MSCI Emerging Markets Index	(1.65)	8.65	2.67	12.46	4.82	9.63	5.61

Regional Returns (%)



Currency Effect (%)



# Fixed Income Market

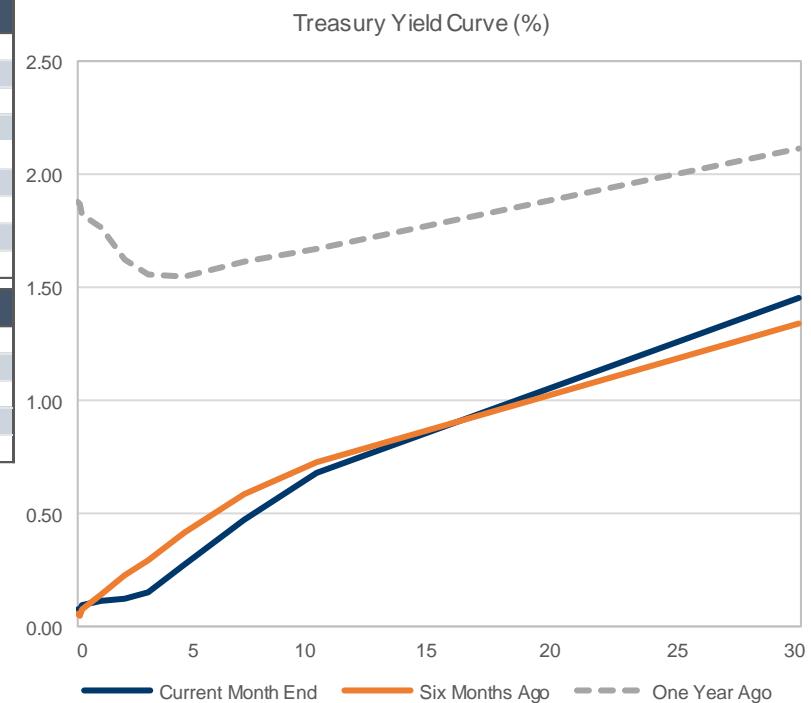
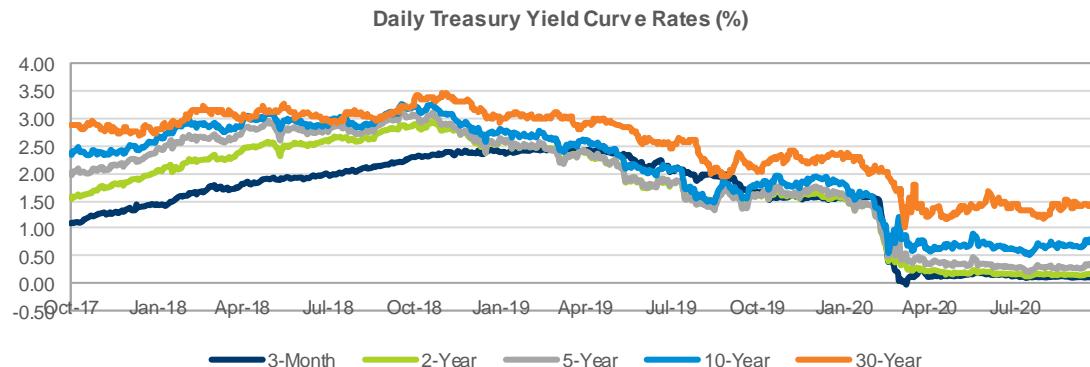
## Market Commentary

The U.S. Treasury yield curve remained depressed during the month across the entire maturity spectrum. The 10-year Treasury yield ended the month at 0.69%, down 3 bps from August 31, 2020 as investors sought safety in treasuries over concerns of the growing number of COVID-19 cases globally.

The Federal Reserve reiterated their commitment to keep interest rates lower for longer, with expectations of no rate hikes until 2023.

Credit spreads widened during September in both investment grade and non-investment grade fixed income, providing a headwind for credit investors. High yield spreads widened to 517 bps by month end, while investment grade credit spreads widened to 136 bps.

U.S. Fixed Income	M T D	QTD	YTD	1 Year	3 Years	5 Years	10 Years
Bloomberg Barclays U.S. Aggregate	(0.05)	0.62	6.79	6.98	5.24	4.17	3.63
Bloomberg Barclays Long Gov't/Credit	(0.14)	1.22	14.20	12.92	10.20	8.77	7.35
Bloomberg Barclays LT Treasury	0.38	0.12	21.35	16.34	11.86	8.20	7.20
Bloomberg Barclays U.S. TIPS	(0.37)	3.03	9.22	10.08	5.79	4.61	3.57
Bloomberg Barclays U.S. Credit	(0.27)	1.50	6.39	7.50	6.19	5.74	4.91
Bloomberg Barclays U.S. High Yield	(1.03)	4.60	0.62	3.25	4.20	6.79	6.46
ICE BofA U.S. High Yield Cash Pay	(1.04)	4.72	(0.23)	2.35	3.84	6.61	6.25
S&P LSTA Levered Loan Index	0.63	4.14	(0.66)	1.06	3.10	4.01	4.25
ICE BofA US 3-Month Treasury Bill	0.01	0.04	0.64	1.10	1.69	1.20	0.64
Global Fixed Income	M T D	QTD	YTD	1 Year	3 Years	5 Years	10 Years
Bloomberg Barclays Global Aggregate	(0.36)	2.66	5.72	6.24	4.09	3.92	2.36
Bloomberg Barclays Global Aggregate (Hdg.)	0.37	0.73	4.65	4.14	5.12	4.32	3.91
JPM GBI-EM Index	(2.13)	101	(6.06)	(103)	(0.79)	3.79	0.74
JPM EMBI Global Index	(1.85)	2.09	0.19	2.29	3.22	6.00	5.19
JPM Corporate EMBI Index	(0.54)	2.62	2.93	5.09	4.92	6.59	5.68



# Real Assets Market

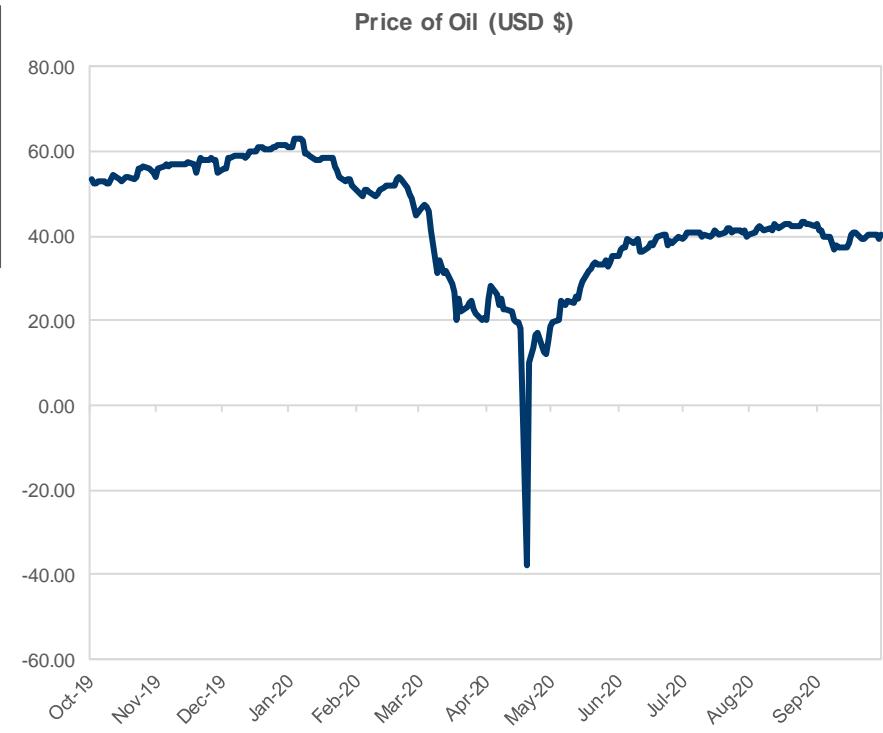
Real Assets	MTD	QTD	YTD	1 Year	3 Years	5 Years	10 Years
Wilshire US RESI	(3.36)	125	(16.86)	(17.75)	0.42	3.87	8.12
Wilshire Global RESI	(3.29)	131	(19.25)	(18.32)	(0.68)	3.00	6.54
Bloomberg Commodity Index	(3.35)	9.07	(12.08)	(8.20)	(4.17)	(3.09)	(6.03)
S&P GSCI Index	(3.64)	4.61	(33.38)	(27.84)	(9.45)	(7.88)	(8.84)
Alerian MLP Index	(13.62)	(16.26)	(46.16)	(48.35)	(20.74)	(11.57)	(4.17)
DJ Brookfield Global Infrastructure	(3.12)	(148)	(12.73)	(9.07)	1.97	6.28	7.71
FTSE Global 50/50 Infrastructure	(1.10)	2.21	(11.05)	(7.59)	3.46	7.69	8.54

## Market Commentary

U.S. real estate securities were down during September, -3.4%. Similarly, global real estate securities were also down, -3.3%.

Commodities were negative during September, down -3.4%, after posting four straight months of positive returns. For the Third Quarter, commodities showed signs of strong recovery, up +9.1%.

Crude oil was down -5.6% for the month, ending at \$40.22 per barrel. Year-to-date; crude oil remains negative, down -34.1%, ending 2019 at \$61.06 per barrel.





# IMRF Performance

# IMRF Commentary

## IMRF Commentary

The Illinois Municipal Retirement Fund (“IMRF”) ended September 2020 with a market value of \$45.2 billion, down for the month by approximately \$0.9 billion. IMRF returned -1.69% during September, outperforming the Total Fund Benchmark which returned -1.75%. Despite another strong quarter of relative performance, IMRF trails the Total Fund Benchmark year-to-date following its underperformance during the market decline in the First Quarter 2020. Year-to-date, IMRF has returned +2.98% versus +3.90% for the Total Fund Benchmark.

For the month of September, the U.S. Equity Portfolio outperformed the benchmark returning -3.21% versus -3.64%. Investment manager performance was the largest contributor to relative outperformance during the month while investment managers in Large Cap Growth, Small Cap Value and Small Cap Growth, in aggregate, outperformed their benchmarks. Year-to-date, the U.S. Equity Portfolio has trailed the benchmark +4.17% versus +5.41%, due in-part to the portfolio’s tilt to Small Cap Value. Diversification outside of Large Cap Growth, specifically the Technology sector, has proven to be a headwind for investors this year. As of September 30, the Technology sector of the market returned +29.14% year-to-date, while the broad market returned just +5.41%.

September 17, 2020 marked the one-year anniversary of the Internally Managed Scientific Beta portfolio. During the month, the strategy modestly trailed the benchmark returning -2.39% versus -2.05%. Since inception; however, the strategy has outperformed the benchmark returning +1.87% versus +1.23%.

The second Internally Managed Portfolio (GSAM-Factor Diversity portfolio) saw its first full month of performance during September. During the month, the strategy modestly outperformed the benchmark, returning -3.61% versus -3.62%.

The Public Real Assets Portfolio outperformed its benchmark for the month and year-to-date returning -1.77% versus -2.02%, and -11.46% versus -13.21%, respectively.

The International Equity Portfolio outpaced the return of the benchmark during September -1.66% versus -2.46%. In aggregate, strong investment manager performance was the largest contributor to relative outperformance during the month, while the Portfolio’s allocation to Small Cap stocks also contributed to relative outperformance, returning +0.61% during the month. Year-to-date, the International Equity Portfolio continues to outperform the benchmark, returning -4.32% versus -5.44%.

The Fixed Income Portfolio’s allocation to credit was challenged during the month due to widening credit spreads in both Investment Grade and Below-Investment Grade Fixed Income, resulting in negative absolute and relative returns. The Portfolio returned -0.11% versus -0.05% for the benchmark. Investment manager performance generally outperformed during the month, providing some downside protection during a market decline. Year-to-date, the Fixed Income Portfolio remains behind the benchmark +5.97% versus +6.79%; although, the Portfolio has posted strong results in the past two quarters.

As of September month end, Domestic Equity was 4.8% over its target. The current Statement of Investment 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. The Chief Investment Officer and Consultant do not recommend any rebalancing at this time.

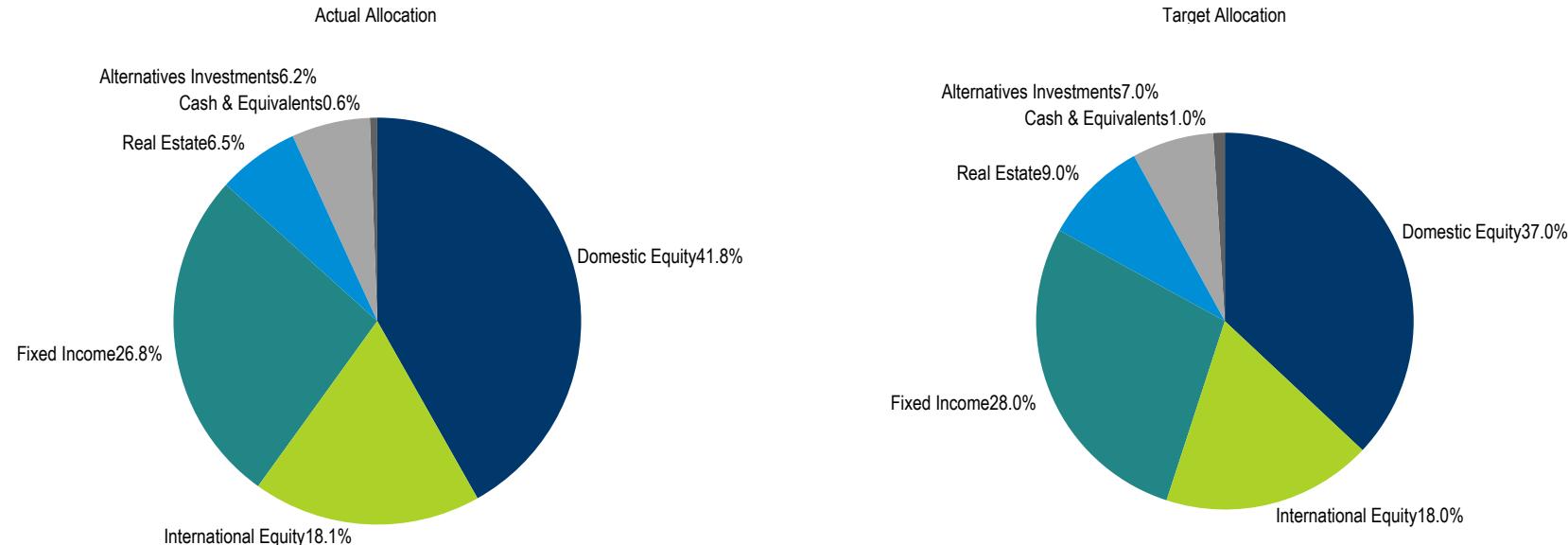


Total Fund

# Asset Allocation

Total Fund

*Periods Ended As of September 30, 2020*

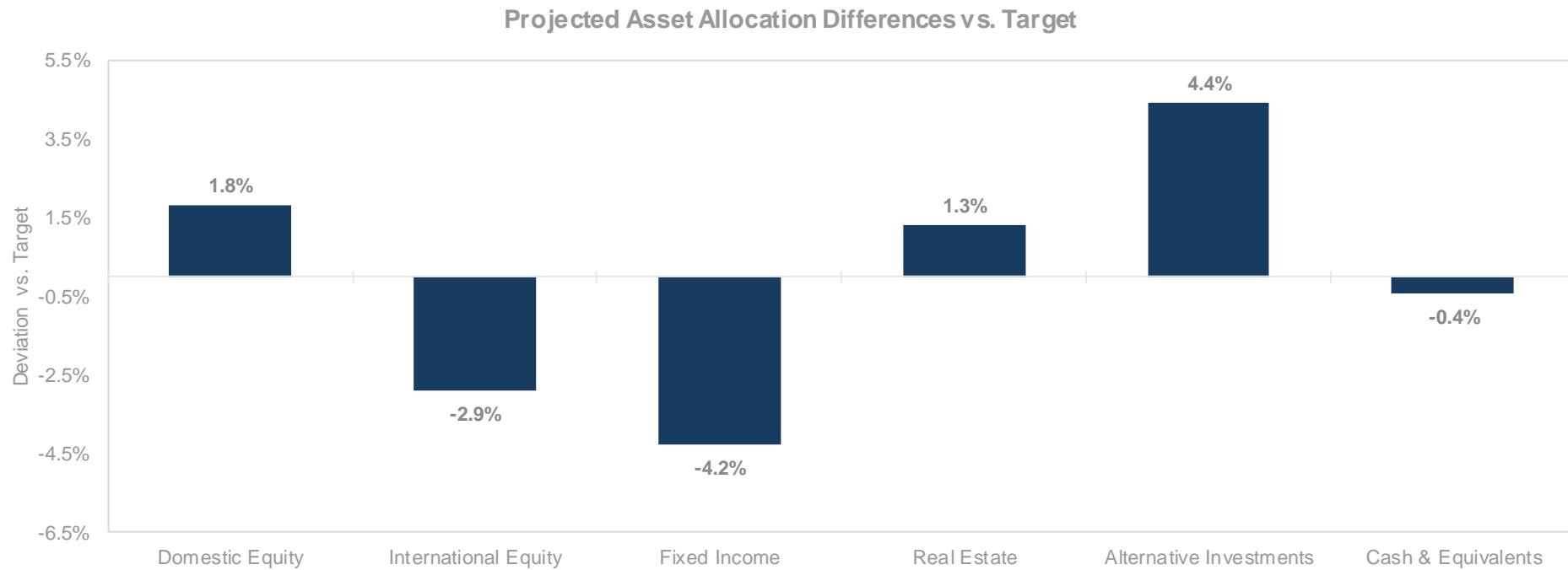


■ Domestic Equity      ■ International Equity      ■ Fixed Income      ■ Real Estate      ■ Alternatives Investments      ■ Cash & Equivalents

	Actual Allocation \$Millions	Actual Allocation %	Target Allocation %	Differences %	Differences \$Millions
Total Fund	45,179	100.0	100.0	0.0	
■ Domestic Equity	18,895	41.8	37.0	4.8	2,179
■ International Equity	8,187	18.1	18.0	0.1	54
■ Fixed Income	12,086	26.8	28.0	-1.2	-564
■ Real Estate	2,932	6.5	9.0	-2.5	-1,134
■ Alternatives Investments	2,814	6.2	7.0	-0.8	-349
■ Cash & Equivalents	266	0.6	1.0	-0.4	-186

# Projected Deviation From Benchmark

Period Ending September 30, 2020

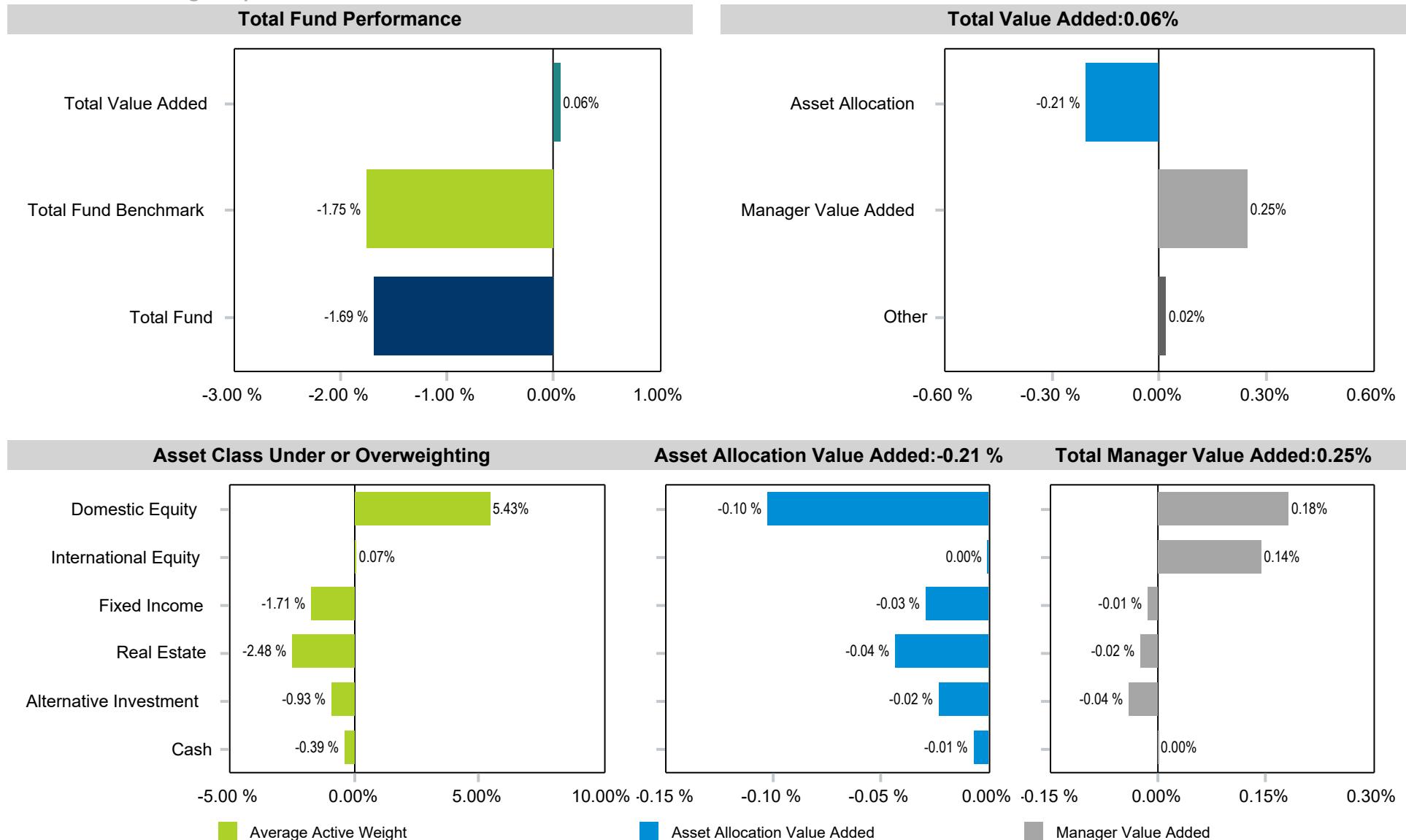


- Includes committed, but unfunded amounts for real estate (\$1,726.3 million) and alternatives (\$2,340.0 million). Assumes real estate and alternatives allocations are fully funded as of quarter end.
- Assumes that outstanding commitments are funded equally from the public markets asset classes (one-third from U.S. Equity, one-third from International Equity, and one-third from Fixed Income).

# Total Fund Attribution

Total Fund

1 Month Ending September 30, 2020



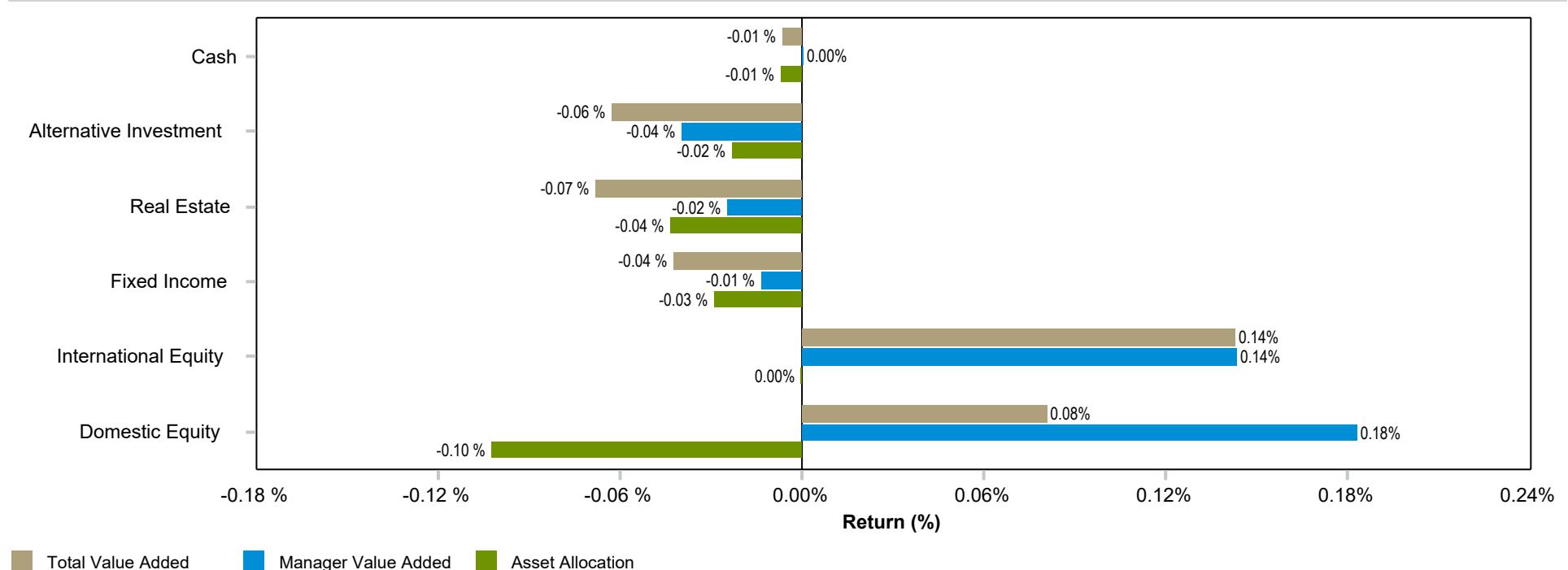
Total Fund Benchmark = 37.0% Russell 3000 Index, 28.0% Blmbg Aggregate, 18.0% MSCI ACWI ex US, 9.0% NCREIF NFI-ODCE Val Wt Nt, 7.0% 9% Annually and 1.0% 3-month Treasury Bill.

# Total Fund Attribution

Total Fund

1 Month Ending September 30, 2020

**Relative Attribution by Asset Class**



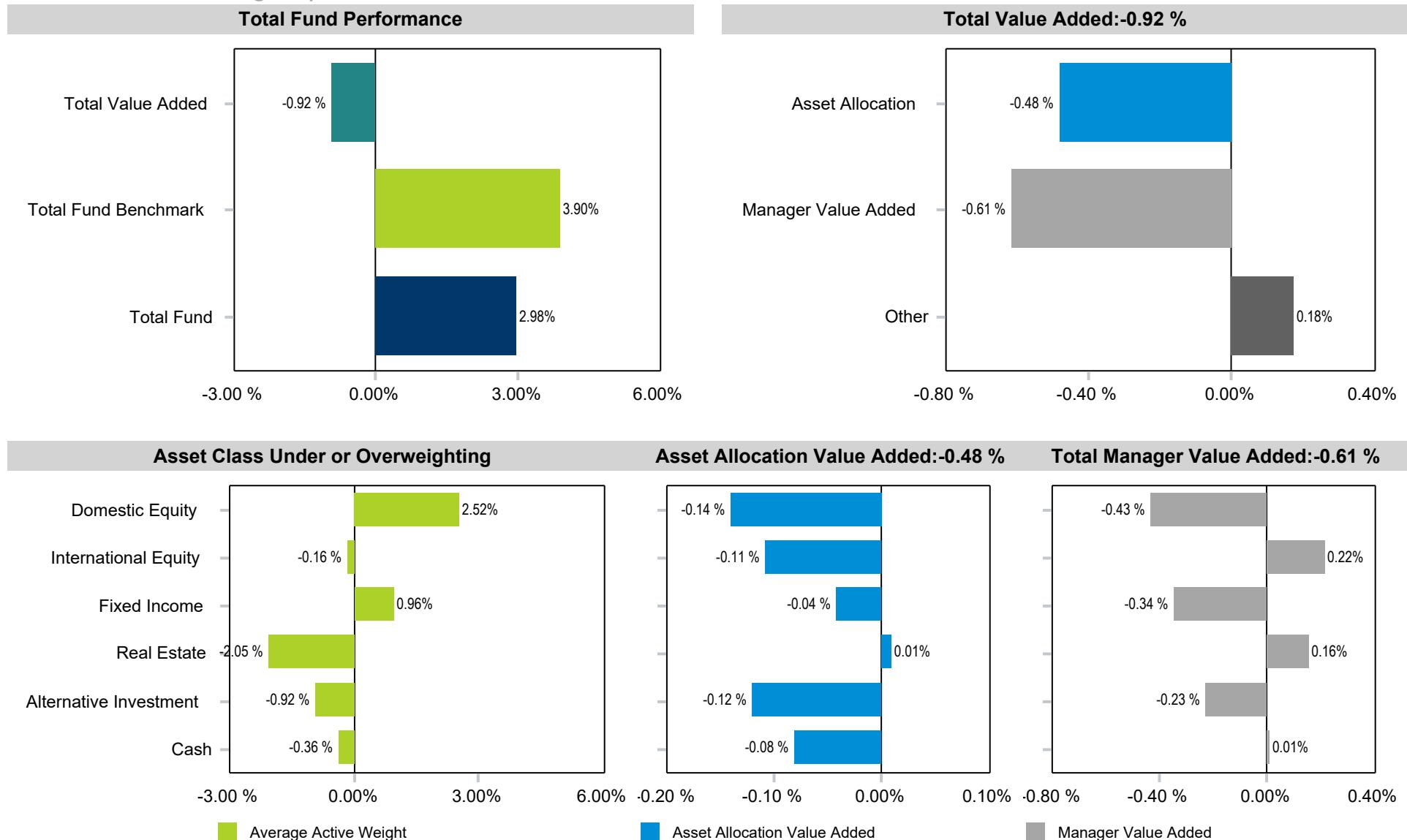
	Relative Attribution Effects						
	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	42.4	37.0	-3.21	-3.64	0.18	-0.10	0.08
International Equity	18.1	18.0	-1.66	-2.46	0.14	0.00	0.14
Fixed Income	26.3	28.0	-0.11	-0.05	-0.01	-0.03	-0.04
Real Estate	6.5	9.0	-0.37	0.00	-0.02	-0.04	-0.07
Alternative Investment	6.1	7.0	0.06	0.72	-0.04	-0.02	-0.06
Cash	0.6	1.0	0.06	0.01	0.00	-0.01	-0.01
<b>Total Fund</b>	<b>100.0</b>	<b>100.0</b>	<b>-1.69</b>	<b>-1.75</b>	<b>0.25</b>	<b>-0.21</b>	<b>0.06</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.

# Total Fund Attribution

Total Fund

Year To Date Ending September 30, 2020



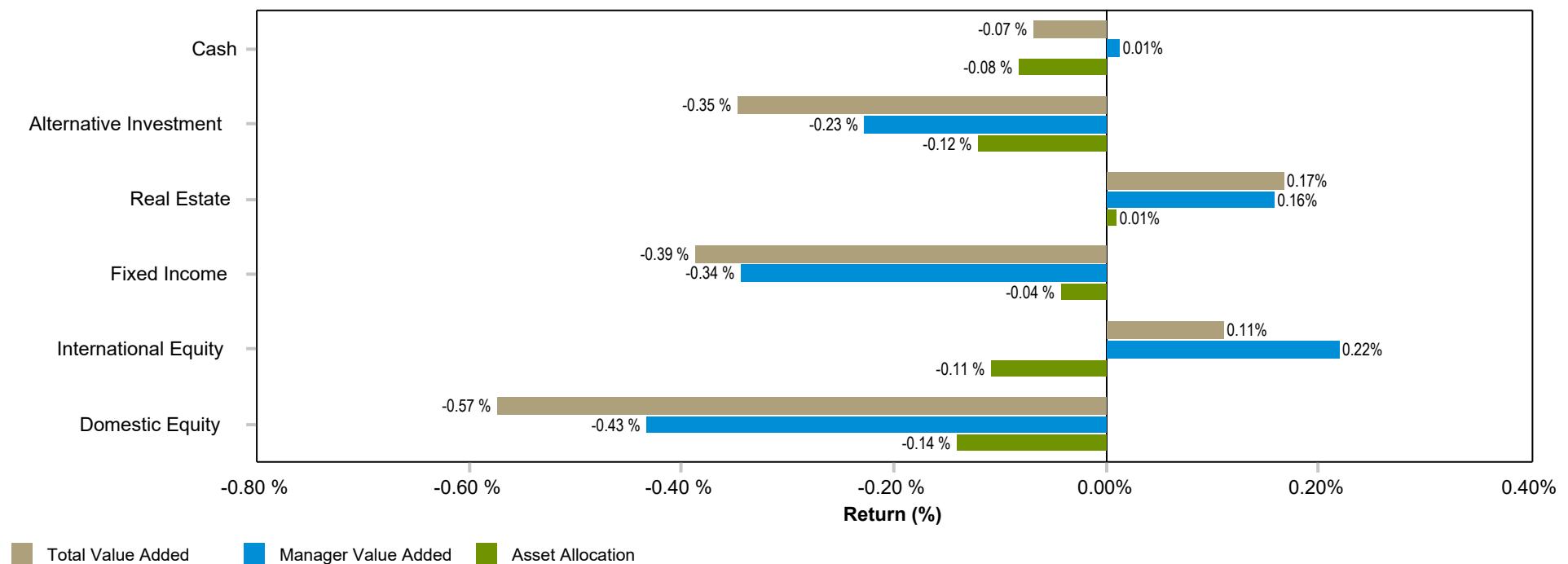
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# Total Fund Attribution

Total Fund

Year To Date Ending September 30, 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	39.5	37.0	4.17	5.41	-0.43	-0.14	-0.57
International Equity	17.8	18.0	-4.32	-5.44	0.22	-0.11	0.11
Fixed Income	29.0	28.0	5.97	6.79	-0.34	-0.04	-0.39
Real Estate	6.9	9.0	1.28	-1.01	0.16	0.01	0.17
Alternative Investment	6.1	7.0	3.06	6.68	-0.23	-0.12	-0.35
Cash	0.6	1.0	2.25	0.64	0.01	-0.08	-0.07
<b>Total Fund</b>	<b>100.0</b>	<b>100.0</b>	<b>2.98</b>	<b>3.90</b>	<b>-0.61</b>	<b>-0.48</b>	<b>-0.92</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.

## Asset Class Returns

Periods Ended September 30, 2020

	Performance (%)										
	1 Month	QTD	YTD	1 Year	3 Years	5 Years	10 Years	20 Years	30 Years	Since Inception	Inception Date
<b>Total Fund</b>	<b>-1.69</b>	<b>5.67</b>	<b>3.11</b>	<b>9.10</b>	<b>7.08</b>	<b>8.88</b>	<b>8.72</b>	<b>6.46</b>	<b>8.78</b>	<b>9.78</b>	<b>1/1/1982</b>
Total Fund - Net	-1.69	5.62	2.98	8.92	6.89	8.67	8.49				
Total Fund Benchmark	-1.75	4.89	3.90	9.35	7.37	8.77	8.39				
<b>Domestic Equity</b>	<b>-3.21</b>	<b>8.91</b>	<b>4.32</b>	<b>13.79</b>	<b>10.15</b>	<b>12.52</b>	<b>13.04</b>	<b>6.67</b>	<b>11.15</b>	<b>11.55</b>	<b>1/1/1982</b>
Domestic Equity - Net	-3.21	8.86	4.17	13.59	9.95	12.29	12.78				
Blended Benchmark (U.S. Equity)	-3.64	9.21	5.41	15.00	11.65	13.69	13.48	6.70	10.73		
U.S. Equity IMRF Custom Benchmark	-3.72	8.51	2.28	11.22	9.23	12.23					
<b>International Equity</b>	<b>-1.66</b>	<b>7.62</b>	<b>-4.06</b>	<b>4.98</b>	<b>2.22</b>	<b>7.12</b>	<b>5.65</b>	<b>5.48</b>	<b>7.35</b>	<b>7.56</b>	<b>9/1/1986</b>
International Equity - Net	-1.66	7.54	-4.32	4.62	1.88	6.76	5.31				
MSCI AC World ex USA (Net)	-2.46	6.25	-5.44	3.00	1.16	6.23	4.00	4.16			
International Equity IMRF Custom Benchmark	-2.29	6.63	-5.12	3.62	1.21	6.29					
<b>Fixed Income</b>	<b>-0.10</b>	<b>1.48</b>	<b>6.06</b>	<b>6.65</b>	<b>5.24</b>	<b>4.84</b>	<b>4.47</b>	<b>5.63</b>	<b>6.70</b>	<b>8.19</b>	<b>1/1/1982</b>
Fixed Income - Net	-0.11	1.45	5.97	6.52	5.10	4.69	4.32				
Bloomberg Barc. U.S. Aggregate	-0.05	0.62	6.79	6.98	5.24	4.18	3.64	5.01	6.01	7.70	
Fixed Income IMRF Custom Benchmark	-0.11	1.03	5.91	6.39	5.08	4.38					
<b>Real Estate</b>	<b>-0.37</b>	<b>0.65</b>	<b>1.30</b>	<b>4.19</b>	<b>7.65</b>	<b>8.34</b>	<b>10.50</b>	<b>7.66</b>	<b>4.91</b>	<b>5.48</b>	<b>5/1/1985</b>
Real Estate - Net	-0.37	0.63	1.28	4.17	7.62	8.31	10.48				
Blended Benchmark (Real Estate)	0.00	0.00	-1.01	0.25	4.15	5.63	9.44	7.03	7.24	7.49	
<b>Alternatives Investments</b>	<b>0.07</b>	<b>4.87</b>	<b>3.09</b>	<b>5.74</b>	<b>11.16</b>	<b>9.74</b>	<b>9.36</b>	<b>6.00</b>	<b>11.56</b>	<b>10.71</b>	<b>2/1/1986</b>
Alternatives Investments - Net	0.06	4.86	3.06	5.71	11.06	9.57	9.12				
Alternatives Custom Benchmark	0.72	2.18	6.68	9.00	9.00	9.00	9.00	10.83	12.20	12.57	
<b>Private Equity</b>	<b>0.35</b>	<b>5.25</b>	<b>4.16</b>	<b>7.69</b>	<b>13.87</b>	<b>12.10</b>	<b>12.07</b>	<b>7.28</b>	<b>14.15</b>	<b>12.91</b>	<b>2/1/1986</b>
Alternatives Custom Benchmark	0.72	2.18	6.68	9.00	9.00	9.00	9.00	10.83	12.20	12.57	
<b>Agriculture</b>	<b>-2.81</b>	<b>-2.58</b>	<b>1.51</b>	<b>-2.08</b>	<b>-1.46</b>	<b>0.83</b>	<b>8.70</b>	<b>7.17</b>		<b>6.80</b>	<b>10/1/1997</b>
NCREIF Farmland Index	0.00	0.00	0.50	2.85	4.99	5.93	10.75	12.09		11.43	
<b>Timberland</b>	<b>0.00</b>	<b>1.03</b>	<b>5.21</b>	<b>5.78</b>	<b>1.75</b>	<b>0.40</b>	<b>3.11</b>	<b>3.55</b>		<b>7.33</b>	<b>10/1/1992</b>
NCREIF Timberland Index	0.00	0.00	0.19	0.15	2.07	2.55	4.40	5.62		8.39	

Benchmark definitions on next page.

# Asset Class Returns

*Periods Ended September 30, 2020*

	Performance (%)										
	1 Month	QTD	YTD	1 Year	3 Years	5 Years	10 Years	20 Years	30 Years	Since Inception	Inception Date
<b>Unlisted Infrastructure</b> Alternatives Custom Benchmark	<b>-0.09</b> 0.72	<b>8.44</b> 2.18	<b>6.89</b> 6.68	<b>9.73</b> 9.00						<b>9.94</b> 9.00	<b>4/1/2018</b>
<b>Cash</b> 90 Day US Treasury Bill	<b>0.06</b> 0.01	<b>0.60</b> 0.04	<b>2.25</b> 0.64	<b>3.48</b> 1.10	<b>2.95</b> 1.69	<b>2.13</b> 1.18	<b>1.15</b> 0.62	<b>1.81</b> 1.55	<b>3.22</b> 2.69	<b>3.80</b> 3.24	<b>7/1/1986</b>

# Benchmark Definitions

Account Name	From Date	To Date	Benchmark
Domestic Equity Blended Benchmark	1/1/2015 1/1/1982	Present 12/31/2014	100% Russell 3000 Index 100% Dow Jones US Total Stock Market Index
Real Estate Blended Benchmark	1/1/2013 1/1/2007 1/1/2005	Present 12/31/2012 12/31/2016	100% NCREIF Fund Index-ODCE (VW) (Net)** 100% 100% NPI + 1% 100% Consumer Price Index + 5%
Alternatives Custom Benchmark	7/1/2010 1/1/2004 1/1/2003 2/1/1986	Present 6/30/2010 12/31/2003 12/31/2002	100% Annualized rate of 9.0% 100% Annualized rate of 12.0% 100% Annualized rate of 13.0% 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 previous month end.
International Equity IMRF Custom Benchmark			Blend of the International Equity Style benchmarks returns, dollar weighted by the actual allocation at previous month end.
Fixed Income IMRF Custom Benchmark			Blend of 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 September 30, 2020

	Aug-2020		Sep-2020	
	\$	%	\$	%
<b>Domestic Equity</b>	<b>19,550,845,501</b>	<b>42.43</b>	<b>18,895,106,985</b>	<b>41.82</b>
<b>Large Cap Growth</b>	<b>8,202,847,510</b>	<b>17.80</b>	<b>7,889,181,328</b>	<b>17.46</b>
NTGI S&P 500 Growth	3,059,988,072	6.64	2,917,163,969	6.46
Sands Capital	3,326,743,371	7.22	3,241,338,813	7.17
Xponance Russell 1000 G	1,816,116,067	3.94	1,730,678,547	3.83
<b>Large Cap Value</b>	<b>4,759,363,397</b>	<b>10.33</b>	<b>4,386,448,201</b>	<b>9.71</b>
Dodge & Cox	1,265,475,427	2.75	1,224,325,502	2.71
BMO	787,424,759	1.71	769,965,276	1.70
LSV Asset	1,321,194,073	2.87	1,040,464,150	2.30
NTGI S&P 500 Value	1,385,269,139	3.01	1,351,693,275	2.99
<b>Large Cap Pass. Core</b>	<b>2,936,822,998</b>	<b>6.37</b>	<b>2,828,824,944</b>	<b>6.26</b>
NTGI MarketCap Idx.	2,936,822,998	6.37	2,828,824,944	6.26
<b>Factor Diversity Strategies</b>	<b>257,726,879</b>	<b>0.56</b>	<b>501,364,933</b>	<b>1.11</b>
U.S. Large Cap FDP-GSAM	257,726,879	0.56	501,364,933	1.11
<b>Quantitative Factor Strategies</b>	<b>261,808,790</b>	<b>0.57</b>	<b>255,625,949</b>	<b>0.57</b>
Quantitative US Equity - SciBeta	261,808,790	0.57	255,625,949	0.57
<b>Small Cap Growth</b>	<b>825,012,823</b>	<b>1.79</b>	<b>837,324,603</b>	<b>1.85</b>
Frontier Capital	649,103,318	1.41	665,299,875	1.47
FIAM Small Cap	175,909,506	0.38	172,024,728	0.38
<b>Small Cap Value</b>	<b>1,320,007,367</b>	<b>2.86</b>	<b>1,259,986,862</b>	<b>2.79</b>
Channing	217,496,064	0.47	209,645,374	0.46
DFA Small Cap Val.	489,567,310	1.06	466,279,900	1.03
Inv. Couns. Maryland	612,943,994	1.33	584,061,589	1.29

## Investment Manager Asset Allocation

Periods Ended September 30, 2020

	Aug-2020		Sep-2020	
	\$	%	\$	%
<b>Micro Cap</b>	<b>345,260,966</b>	<b>0.75</b>	<b>305,710,884</b>	<b>0.68</b>
DFA Micro Cap (9-10)	345,260,966	0.75	305,710,884	0.68
<b>Public Real Assets</b>	<b>641,994,771</b>	<b>1.39</b>	<b>630,639,281</b>	<b>1.40</b>
Brookfield	150,546,047	0.33	145,053,167	0.32
Cohen & Steers	491,448,724	1.07	485,586,113	1.07
<b>International Equity</b>	<b>8,325,911,545</b>	<b>18.07</b>	<b>8,186,708,910</b>	<b>18.12</b>
<b>Intl Large Cap Growth</b>	<b>1,410,009,709</b>	<b>3.06</b>	<b>1,389,068,145</b>	<b>3.07</b>
EARNEST Part. Intl	441,556,142	0.96	427,644,407	0.95
William Blair	968,453,568	2.10	961,423,737	2.13
<b>Intl Large Cap Value</b>	<b>1,175,609,553</b>	<b>2.55</b>	<b>1,134,626,374</b>	<b>2.51</b>
Brandes Investment	543,025,160	1.18	522,640,473	1.16
Mondrian	514,801,918	1.12	496,390,083	1.10
Lazard	117,782,475	0.26	115,595,818	0.26
<b>Intl Large Cap Core</b>	<b>3,824,162,844</b>	<b>8.30</b>	<b>3,764,605,864</b>	<b>8.33</b>
Arrowstreet Capital	764,535,500	1.66	755,361,131	1.67
Brown Capital	421,996,859	0.92	554,706,127	1.23
GlobeFlex Capital	535,750,849	1.16	648,849,468	1.44
NTGI MSCI EAFE	2,100,150,073	4.56	1,804,662,815	3.99
Progress Intl Equity	1,602,459	0.00	903,533	0.00
Transition Account	127,105	0.00	122,790	0.00
<b>Intl All Cap Developed</b>	<b>141,888,506</b>	<b>0.31</b>	<b>139,424,997</b>	<b>0.31</b>
Ativo International	141,888,506	0.31	139,424,997	0.31

## Investment Manager Asset Allocation

Periods Ended September 30, 2020

	Aug-2020		Sep-2020	
	\$	%	\$	%
<b>International Small Cap</b>	<b>545,166,441</b>	<b>1.18</b>	<b>548,486,170</b>	<b>1.21</b>
Franklin Templeton	197,181,920	0.43	199,320,049	0.44
William Blair IntSC	347,984,522	0.76	349,166,120	0.77
<b>Emerging Mkt Equity</b>	<b>1,229,074,491</b>	<b>2.67</b>	<b>1,210,497,361</b>	<b>2.68</b>
Genesis Asset Mngrs.	1,229,074,491	2.67	1,210,497,361	2.68

## Investment Manager Asset Allocation

Periods Ended September 30, 2020

	Aug-2020		Sep-2020	
	\$	%	\$	%
<b>Fixed Income</b>	<b>12,113,871,907</b>	<b>26.29</b>	<b>12,086,120,629</b>	<b>26.75</b>
<b>Domestic Fixed Core</b>	<b>3,806,421,014</b>	<b>8.26</b>	<b>3,800,625,773</b>	<b>8.41</b>
Brandes FI Core	385,116,534	0.84	384,746,925	0.85
EARNEST Partners	1,047,121,624	2.27	1,047,701,590	2.32
Xponance Yield Advantage Agg.	1,121,110,953	2.43	1,117,920,778	2.47
Garcia Hamilton	1,121,786,884	2.43	1,118,905,764	2.48
Ramirez Asset Management	131,285,019	0.28	131,350,717	0.29
<b>Domestic Fixed Passive Core</b>	<b>3,788,662,738</b>	<b>8.22</b>	<b>3,787,148,175</b>	<b>8.38</b>
NTGI Blmbg Agg.	1,933,638,694	4.20	1,932,771,883	4.28
BlackRock US Debt I	1,855,024,044	4.03	1,854,376,292	4.10
<b>Domestic Fixed Core Plus</b>	<b>2,965,316,735</b>	<b>6.44</b>	<b>2,954,042,528</b>	<b>6.54</b>
LM Capital Group FI	973,424,206	2.11	974,155,367	2.16
Progress Inv. FI	3,768	0.00	3,700	0.00
BMO - TCH	667,306,569	1.45	663,844,479	1.47
Western Asset	1,141,827,283	2.48	1,133,291,450	2.51
Longfellow Core Plus	182,754,909	0.40	182,747,532	0.40
<b>Bank Loans</b>	<b>537,097,609</b>	<b>1.17</b>	<b>541,293,227</b>	<b>1.20</b>
Barings Global Loan Fund	537,097,609	1.17	541,293,227	1.20
<b>Emerging Markets Debt</b>	<b>222,148,121</b>	<b>0.48</b>	<b>216,885,366</b>	<b>0.48</b>
Standish-Mellon EMD	222,148,121	0.48	216,885,366	0.48
<b>High Yield</b>	<b>794,225,690</b>	<b>1.72</b>	<b>786,125,560</b>	<b>1.74</b>
MacKay Shields	794,203,439	1.72	786,097,017	1.74
FIAM High Yield	22,251	0.00	28,543	0.00

## Investment Manager Asset Allocation

Periods Ended September 30, 2020

	Aug-2020		Sep-2020	
	\$	%	\$	%
<b>Real Estate</b>	<b>3,004,728,653</b>	<b>6.52</b>	<b>2,931,690,651</b>	<b>6.49</b>
<b>Real Estate Core Cmp</b>	<b>1,615,252,570</b>	<b>3.51</b>	<b>1,560,907,617</b>	<b>3.45</b>
TA Assoc. Buckhead	633,748,333	1.38	586,042,640	1.30
Barings Core Property		0.00		0.00
Barings Euro Core Property	136,880,059	0.30	134,213,306	0.30
Blackstone Property Euro	144,415,658	0.31	141,602,089	0.31
INVESCO Core Real Estate	203,018,548	0.44	203,018,548	0.45
INVESCO European real estate	59,486,422	0.13	58,327,483	0.13
AEW Core Property Tr	232,592,669	0.50	232,592,669	0.51
CBRE Core Partners	205,110,882	0.45	205,110,882	0.45
<b>RE Non-Core Cmp</b>	<b>1,389,476,082</b>	<b>3.02</b>	<b>1,370,783,034</b>	<b>3.03</b>
Artemis MWBE Spruce	216,501,113	0.47	220,088,526	0.49
Franklin T. EMREFF	5,378,057	0.01	5,378,057	0.01
Security Capital	53,660,947	0.12	53,065,585	0.12
Dune II	19,935,889	0.04	19,935,889	0.04
Non-Core Real Estate Funds	940,199,252	2.04	921,381,607	2.04
Non-Core Intl Real Estate	153,606,965	0.33	150,739,511	0.33
Rockwood Fund VIII	61,273	0.00	61,273	0.00
Almanac ARS V	132,586	0.00	132,586	0.00
<b>Alternatives Investments</b>	<b>2,797,914,614</b>	<b>6.07</b>	<b>2,813,944,850</b>	<b>6.23</b>
<b>Absolute Return</b>	<b>274,390</b>	<b>0.00</b>	<b>262,168</b>	<b>0.00</b>
Aurora Investment	274,390	0.00	262,168	0.00

## Investment Manager Asset Allocation

Periods Ended September 30, 2020

	Aug-2020		Sep-2020	
	\$	%	\$	%
<b>Private Equity</b>	<b>2,306,507,745</b>	<b>5.01</b>	<b>2,327,565,327</b>	<b>5.15</b>
Abbott S/A Comp.	354,412,360	0.77	382,260,962	0.85
Muller Monroe MPEFF	4,793,706	0.01	4,707,209	0.01
<b>Pantheon S/A Comp.</b>	<b>247,641,534</b>	<b>0.54</b>	<b>247,341,852</b>	<b>0.55</b>
Private Equity Fund - Domestic	1,324,196,498	2.87	1,324,410,427	2.93
Private Equity Fund - International	357,734,382	0.78	348,049,166	0.77
Oakbrook Opportunities Fund	17,729,264	0.04	20,795,710	0.05
<b>Private Credit</b>	<b>143,598,103</b>	<b>0.31</b>	<b>143,598,103</b>	<b>0.32</b>
Private Credit Fund - Domestic	143,598,103	0.31	143,598,103	0.32
<b>Agriculture</b>	<b>216,836,347</b>	<b>0.47</b>	<b>210,733,027</b>	<b>0.47</b>
Premiere Partners IV	216,836,347	0.47	210,733,027	0.47
<b>Timberland</b>	<b>77,144,129</b>	<b>0.17</b>	<b>76,694,130</b>	<b>0.17</b>
Forest Investment	77,144,129	0.17	76,694,130	0.17
<b>Unlisted Infrastructure</b>	<b>53,553,900</b>	<b>0.12</b>	<b>55,092,095</b>	<b>0.12</b>
Unlisted Infrastructure Funds	53,553,900	0.12	55,092,095	0.12
<b>Cash &amp; Equivalents</b>	<b>281,259,485</b>	<b>0.61</b>	<b>265,617,801</b>	<b>0.59</b>
<b>Total Fund</b>	<b>46,074,531,705</b>	<b>100.00</b>	<b>45,179,189,826</b>	<b>100.00</b>

# Wilshire Consulting Performance



Periods Ended September 30, 2020

	Market Value \$	Performance (%)									
		1 Month	QTD	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date	
<b>Total Fund</b>	<b>45,179,189,826</b>	<b>-1.69</b>	<b>5.67</b>	<b>3.11</b>	<b>9.10</b>	<b>7.08</b>	<b>8.88</b>	<b>8.72</b>	<b>9.78</b>	<b>1/1/1982</b>	
Total Fund - Net		-1.69	5.62	2.98	8.92	6.89	8.67	8.49			
Total Fund Benchmark		-1.75	4.89	3.90	9.35	7.37	8.77	8.39			
<b>Domestic Equity</b>	<b>18,895,106,985</b>	<b>-3.21</b>	<b>8.91</b>	<b>4.32</b>	<b>13.79</b>	<b>10.15</b>	<b>12.52</b>	<b>13.04</b>	<b>11.55</b>	<b>1/1/1982</b>	
Domestic Equity - Net		-3.21	8.86	4.17	13.59	9.95	12.29	12.78			
Blended Benchmark		-3.64	9.21	5.41	15.00	11.65	13.69	13.48			
Russell 3000 Index		-3.64	9.21	5.41	15.00	11.65	13.69	13.48	11.51		
<b>Large Cap Equity</b>	<b>15,605,819,407</b>	<b>-3.39</b>	<b>9.85</b>	<b>8.62</b>	<b>18.79</b>	<b>12.47</b>	<b>14.10</b>	<b>13.90</b>	<b>11.35</b>	<b>1/1/1982</b>	
Large Cap Equity - Net		-3.39	9.83	8.55	18.68	12.36	13.98	13.75			
Russell 1000 Index		-3.65	9.47	6.40	16.01	12.38	14.09	13.76	11.67		
<b>Large Cap Growth</b>	<b>7,889,181,328</b>	<b>-3.82</b>	<b>13.54</b>	<b>30.42</b>	<b>42.98</b>	<b>23.62</b>	<b>20.53</b>	<b>17.25</b>	<b>12.57</b>	<b>1/1/1982</b>	
Large Cap Growth - Net		-3.82	13.52	30.34	42.86	23.50	20.40	17.08			
LCG Blended Benchmark		-4.71	13.22	24.33	37.53	21.67	20.10	17.25			
Russell 1000 Growth Index		-4.71	13.22	24.33	37.53	21.67	20.10	17.25	11.72		
<b>NTGI S&amp;P 500 Growth</b>	<b>2,917,163,969</b>	<b>-4.67</b>	<b>11.72</b>	<b>20.47</b>	<b>30.50</b>	<b>19.03</b>	<b>18.33</b>	<b>16.52</b>	<b>8.98</b>	<b>8/1/2001</b>	
NTGI S&P 500 Growth - Net		-4.67	11.72	20.46	30.49	19.02	18.32	16.51			
S&P 500 Growth		-4.68	11.75	20.61	30.64	19.09	18.37	16.53	8.95		
<b>Xponance Russell 1000 G</b>	<b>1,730,678,547</b>	<b>-4.70</b>	<b>13.21</b>	<b>24.32</b>	<b>37.50</b>				<b>19.41</b>	<b>10/1/2018</b>	
Xponance Russell 1000 G - Net		-4.70	13.21	24.30	37.48				19.39		
Russell 1000 Growth Index		-4.71	13.22	24.33	37.53				19.43		
<b>Sands Capital</b>	<b>3,241,338,813</b>	<b>-2.57</b>	<b>15.40</b>	<b>44.70</b>	<b>60.19</b>	<b>29.07</b>	<b>23.90</b>	<b>20.20</b>	<b>14.34</b>	<b>11/1/2003</b>	
Sands Capital - Net		-2.57	15.35	44.49	59.88	28.79	23.63	19.93			
LCG Blended Benchmark		-4.71	13.22	24.33	37.53	21.67	20.10	17.25	11.32		
Russell 1000 Growth Index		-4.71	13.22	24.33	37.53	21.67	20.10	17.25	11.36		
<b>Large Cap Value</b>	<b>4,386,448,201</b>	<b>-2.53</b>	<b>4.60</b>	<b>-12.80</b>	<b>-4.75</b>	<b>2.12</b>	<b>7.70</b>	<b>10.65</b>	<b>9.82</b>	<b>10/1/1982</b>	
Large Cap Value - Net		-2.53	4.57	-12.88	-4.88	1.97	7.53	10.47			
LCV Blended Benchmark		-2.46	5.59	-11.58	-5.03	2.63	7.66	9.95			
Russell 1000 Value Index		-2.46	5.59	-11.58	-5.03	2.63	7.66	9.95	11.32		

Benchmark definitions in glossary.

# Wilshire Consulting Performance



Periods Ended September 30, 2020

	Market Value \$	Performance (%)								
		1 Month	QTD	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
<b>Dodge &amp; Cox</b>	<b>1,224,325,502</b>	<b>-3.03</b>	<b>4.51</b>	<b>-10.81</b>	<b>-2.07</b>	<b>3.01</b>	<b>9.24</b>	<b>11.34</b>	<b>8.60</b>	<b>9/1/2003</b>
Dodge & Cox - Net		-3.03	4.46	-10.96	-2.28	2.79	9.01	11.11		
LCV Blended Benchmark		-2.46	5.59	-11.58	-5.03	2.63	7.66	9.95	7.47	
Russell 1000 Value Index		-2.46	5.59	-11.58	-5.03	2.63	7.66	9.95	7.62	
<b>BMO</b>	<b>769,965,276</b>	<b>-2.00</b>	<b>5.27</b>	<b>-10.92</b>	<b>-4.70</b>	<b>1.09</b>	<b>6.40</b>	<b>10.53</b>	<b>7.18</b>	<b>2/1/2001</b>
BMO - Net		-2.00	5.27	-10.94	-4.77	0.91	6.20	10.31		
LCV Blended Benchmark		-2.46	5.59	-11.58	-5.03	2.63	7.66	9.95	5.16	
Russell 1000 Value Index		-2.46	5.59	-11.58	-5.03	2.63	7.66	9.95	6.10	
<b>LSV Asset</b>	<b>1,040,464,150</b>	<b>-2.45</b>	<b>4.09</b>	<b>-17.34</b>	<b>-9.32</b>	<b>0.00</b>	<b>6.47</b>	<b>10.34</b>	<b>9.50</b>	<b>2/1/2003</b>
LSV Asset - Net		-2.45	4.02	-17.49	-9.54	-0.23	6.22	10.07		
LCV Blended Benchmark		-2.46	5.59	-11.58	-5.03	2.63	7.66	9.95	8.36	
Russell 1000 Value Index		-2.46	5.59	-11.58	-5.03	2.63	7.66	9.95	8.37	
<b>NTGI S&amp;P 500 Value</b>	<b>1,351,693,275</b>	<b>-2.42</b>	<b>4.83</b>	<b>-11.22</b>	<b>-2.42</b>	<b>4.30</b>	<b>8.96</b>	<b>10.44</b>	<b>5.51</b>	<b>8/1/1999</b>
NTGI S&P 500 Value - Net		-2.42	4.83	-11.23	-2.43	4.29	8.95	10.44		
S&P 500 Value		-2.40	4.79	-11.47	-2.68	4.18	8.84	10.35	5.47	
<b>Large Cap Pass. Core</b>	<b>2,828,824,944</b>	<b>-3.68</b>	<b>9.06</b>	<b>5.23</b>	<b>14.75</b>	<b>11.57</b>	<b>13.68</b>	<b>13.50</b>	<b>11.20</b>	<b>1/1/1985</b>
Large Cap Pass. Core - Net		-3.68	9.06	5.23	14.74	11.56	13.67	13.50		
Dow Jones US Total Stock Market Index		-3.68	9.07	5.25	14.77	11.53	13.60	13.43		
<b>NTGI MarketCap Idx.</b>	<b>2,828,824,944</b>	<b>-3.68</b>	<b>9.06</b>	<b>5.23</b>	<b>14.75</b>	<b>11.57</b>	<b>13.68</b>	<b>13.50</b>	<b>10.98</b>	<b>2/1/1985</b>
NTGI MarketCap Idx. - Net		-3.68	9.06	5.23	14.74	11.56	13.67	13.50		
Dow Jones US Total Stock Market Index		-3.68	9.07	5.25	14.77	11.53	13.60	13.43		
<b>Factor Diversity Strategies</b>	<b>501,364,933</b>	<b>-3.60</b>							<b>-0.92</b>	<b>8/18/2020</b>
<b>U.S. Large Cap FDP-GSAM</b>	<b>501,364,933</b>	<b>-3.60</b>							<b>-0.92</b>	<b>8/18/2020</b>
U.S. Large Cap FDP-GSAM - Net		-3.61							-0.93	
Solactive GBS U.S. 1000 Index		-3.62							-0.30	
GSAM Active Beta US. Large Cap FDC Index		-3.62							-0.92	
<b>Quantitative Factor Strategies</b>	<b>255,625,949</b>	<b>-2.36</b>	<b>6.25</b>	<b>-3.05</b>	<b>2.00</b>				<b>2.23</b>	<b>9/17/2019</b>

Benchmark definitions in glossary.

# Wilshire Consulting Performance



Periods Ended September 30, 2020

	Market Value \$	Performance (%)								
		1 Month	QTD	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
<b>Quantitative US Equity - SciBeta</b>	<b>255,625,949</b>	-2.36	6.25	-3.05	2.00				2.23	9/17/2019
Quantitative US Equity - SciBeta - Net		-2.39	6.12	-3.42	1.61				1.87	
SciBeta US Hi-Fctr-Intst Div Multi-Beta Multi-Strat Index		-2.05	6.41	-3.75	1.31				1.23	
<b>Small Cap</b>	<b>2,403,022,348</b>	-2.50	5.53	-12.61	-4.49	0.80	6.30	9.82	11.36	7/1/1988
Small Cap Composite - Net		-2.50	5.37	-13.05	-5.07	0.26	5.72	9.23		
Russell 2000 Index		-3.34	4.93	-8.69	0.39	1.77	8.00	9.85	8.95	
<b>Small Cap Growth</b>	<b>837,324,603</b>	1.49	10.49	4.08	16.79	10.79	11.18	12.87	12.88	7/1/1988
Small Cap Growth - Net		1.49	10.36	3.30	15.80	10.13	10.53	12.24		
Russell 2000 Growth Index		-2.14	7.16	3.88	15.71	8.18	11.42	12.34	8.18	
<b>Frontier Capital</b>	<b>665,299,875</b>	2.50	11.44	7.70	21.01	15.63	14.85	13.61	13.28	8/1/1988
Frontier Capital - Net		2.50	11.31	6.69	19.73	14.73	14.05	12.89		
Russell 2000 Growth Index		-2.14	7.16	3.88	15.71	8.18	11.42	12.34	8.27	
<b>FIAM Small Cap</b>	<b>172,024,728</b>	-2.21	6.94	-7.91	2.90	4.86	7.29	11.84	12.94	8/1/1988
FIAM Small Cap - Net		-2.21	6.83	-8.02	2.77	4.53	6.83	11.31		
Russell 2000 Index		-3.34	4.93	-8.69	0.39	1.77	8.00	9.85	9.01	
Russell 2000 Growth Index		-2.14	7.16	3.88	15.71	8.18	11.42	12.34	8.27	
<b>Small Cap Value</b>	<b>1,259,986,862</b>	-4.55	3.05	-19.88	-13.58	-4.21	4.47	8.41	10.64	9/1/1989
Small Cap Value - Net		-4.55	2.86	-20.22	-14.03	-4.70	3.92	7.89		
Russell 2000 Value Index		-4.65	2.56	-21.54	-14.88	-5.13	4.11	7.09	8.93	
<b>Channing</b>	<b>209,645,374</b>	-3.61	3.55	-13.46	-6.58	-2.31	5.34		7.77	7/1/2011
Channing - Net		-3.61	3.43	-13.79	-7.05	-2.80	4.82		7.19	
Russell 2000 Value Index		-4.65	2.56	-21.54	-14.88	-5.13	4.11		5.62	
<b>DFA Small Cap Val.</b>	<b>466,279,900</b>	4.76	3.61	-22.65	-15.66	-6.82	2.25	7.67	10.28	2/1/1996
DFA Small Cap Val. - Net		-4.76	3.49	-22.93	-16.07	-7.28	1.73		7.15	
Russell 2000 Value Index		-4.65	2.56	-21.54	-14.88	-5.13	4.11	7.09	8.17	
<b>Inv. Couns. Maryland</b>	<b>584,061,589</b>	-4.71	2.43	-19.73	-14.20	-2.61	6.63	9.31	10.00	5/1/1999
Inv. Couns. Maryland - Net		-4.71	2.16	-20.11	-14.69	-3.13	6.04	8.80		
Russell 2000 Value Index		-4.65	2.56	-21.54	-14.88	-5.13	4.11	7.09	7.54	

Benchmark definitions in glossary.

# Wilshire Consulting Performance



Periods Ended September 30, 2020

	Market Value \$	Performance (%)									
		1 Month	QTD	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date	
<b>Micro Cap</b>	<b>305,710,884</b>	<b>-4.12</b>	<b>3.25</b>	<b>-17.18</b>	<b>-9.48</b>	<b>-3.37</b>	<b>3.22</b>	<b>7.95</b>	<b>10.64</b>	<b>7/1/1984</b>	
Micro Cap - Net		-4.12	3.12	-17.49	-9.93	-3.86	2.62	7.27			
Russell Microcap Index		-3.17	3.69	-7.94	4.44	-0.09	6.72	9.50			
<b>DFA Micro Cap (9-10)</b>	<b>305,710,884</b>	<b>-4.12</b>	<b>3.25</b>	<b>-17.18</b>	<b>-9.48</b>	<b>-2.60</b>	<b>5.97</b>	<b>9.76</b>	<b>10.23</b>	<b>8/1/1987</b>	
DFA Micro Cap (9-10) - Net		-4.12	3.12	-17.49	-9.93	-3.08	5.45	9.23			
Russell 2000 Index		-3.34	4.93	-8.69	0.39	1.77	8.00	9.85	8.38		
<b>Public Real Assets</b>	<b>630,639,281</b>	<b>-1.77</b>	<b>1.29</b>	<b>-11.18</b>	<b>-8.46</b>	<b>3.54</b>			<b>3.46</b>	<b>8/1/2017</b>	
Public Real Assets - Net		-1.77	1.19	-11.46	-8.84	3.09			3.02		
Public Real Assets Benchmark		-2.02	0.51	-13.21	-10.05	1.41			1.30		
<b>Brookfield</b>	<b>145,053,167</b>	<b>-3.65</b>	<b>-1.46</b>	<b>-17.71</b>	<b>-15.24</b>	<b>-0.88</b>			<b>-0.96</b>	<b>8/1/2017</b>	
Brookfield - Net		-3.65	-1.59	-18.05	-15.70	-1.40			-1.45		
Dow Jones Brookfield Global Infrastructure Composite Index		-3.71	-2.48	-16.51	-13.57	-1.05			-1.19		
<b>Cohen &amp; Steers</b>	<b>485,586,113</b>	<b>-1.19</b>	<b>2.15</b>	<b>-8.45</b>	<b>-5.61</b>	<b>5.50</b>			<b>5.43</b>	<b>8/1/2017</b>	
Cohen & Steers - Net		-1.19	2.05	-8.71	-5.98	5.07			5.02		
FTSE Global Core Infrastructure 50/50 Index (Net)		-1.17	2.02	-11.55	-8.29	2.63			2.54		

Benchmark definitions in glossary.

# Wilshire Consulting Performance



Periods Ended September 30, 2020

	Market Value \$	Performance (%)								
		1 Month	QTD	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
<b>International Equity</b>	<b>8,186,708,910</b>	<b>-1.66</b>	<b>7.62</b>	<b>-4.06</b>	<b>4.98</b>	<b>2.22</b>	<b>7.12</b>	<b>5.65</b>	<b>7.56</b>	<b>9/1/1986</b>
International Equity - Net		-1.66	7.54	-4.32	4.62	1.88	6.76	5.31		
MSCI AC World ex USA (Net)		-2.46	6.25	-5.44	3.00	1.16	6.23	4.00		
<b>Intl LargeCap Equity</b>	<b>6,288,300,382</b>	<b>-1.88</b>	<b>6.66</b>	<b>-5.13</b>	<b>3.43</b>	<b>1.62</b>	<b>6.57</b>	<b>5.54</b>	<b>7.51</b>	<b>9/1/1986</b>
Intl LargeCap Equity - Net		-1.88	6.60	-5.31	3.16	1.36	6.29	5.26		
MSCI AC World ex USA (Net)		-2.46	6.25	-5.44	3.00	1.16	6.23	4.00		
<b>Intl Large Cap Grwth</b>	<b>1,389,068,145</b>	<b>-1.49</b>	<b>10.80</b>	<b>3.34</b>	<b>13.96</b>	<b>4.67</b>	<b>8.97</b>	<b>6.39</b>	<b>8.43</b>	<b>9/1/2002</b>
Intl Large Cap Grwth - Net		-1.49	10.72	3.11	13.62	4.41	8.69	6.05		
MSCI AC World ex USA (Net)		-2.46	6.25	-5.44	3.00	1.16	6.23	4.00	6.85	
MSCI AC World ex USA Growth (Net)		-0.88	10.16	7.27	17.54	7.33	10.16	6.38	7.90	
<b>EARNEST Part. Intl</b>	<b>427,644,407</b>	<b>-3.15</b>	<b>5.00</b>	<b>-15.10</b>	<b>-7.24</b>	<b>-3.30</b>	<b>4.73</b>	<b>3.26</b>	<b>7.59</b>	<b>10/1/2004</b>
EARNEST Part. Intl - Net		-3.15	4.95	-15.24	-7.44	-3.47	4.54	2.98		
MSCI AC World ex USA (Net)		-2.46	6.25	-5.44	3.00	1.16	6.23	4.00	5.49	
MSCI AC World ex USA Growth (Net)		-0.88	10.16	7.27	17.54	7.33	10.16	6.38	7.05	
<b>William Blair</b>	<b>961,423,737</b>	<b>-0.73</b>	<b>13.59</b>	<b>14.80</b>	<b>27.50</b>	<b>9.71</b>	<b>11.35</b>	<b>8.59</b>	<b>10.33</b>	<b>10/1/2002</b>
William Blair - Net		-0.73	13.51	14.50	27.07	9.33	10.95	8.20		
MSCI AC World ex USA (Net)		-2.46	6.25	-5.44	3.00	1.16	6.23	4.00	7.55	
MSCI AC World ex USA Growth (Net)		-0.88	10.16	7.27	17.54	7.33	10.16	6.38	8.49	
<b>Intl Large Cap Val.</b>	<b>1,134,626,374</b>	<b>-3.49</b>	<b>3.43</b>	<b>-16.14</b>	<b>-8.73</b>	<b>-2.79</b>	<b>3.23</b>	<b>3.33</b>	<b>7.74</b>	<b>10/1/1995</b>
Intl Large Cap Val. - Net		-3.49	3.36	-16.33	-9.01	-3.10	2.88	2.98		
MSCI AC World ex USA (Net)		-2.46	6.25	-5.44	3.00	1.16	6.23	4.00		
MSCI AC World ex USA Value		-4.09	2.43	-17.19	-10.32	-4.51	2.75	2.08		
<b>Brandes Investment</b>	<b>522,640,473</b>	<b>-3.75</b>	<b>2.99</b>	<b>-19.21</b>	<b>-12.47</b>	<b>-4.44</b>	<b>2.19</b>	<b>3.10</b>	<b>7.69</b>	<b>1/1/1996</b>
Brandes Investment - Net		-3.75	2.93	-19.34	-12.66	-4.64	1.96	2.86		
MSCI AC World ex USA (Net)		-2.46	6.25	-5.44	3.00	1.16	6.23	4.00		
MSCI AC World ex USA Value		-4.09	2.43	-17.19	-10.32	-4.51	2.75	2.08		
<b>Mondrian</b>	<b>496,390,083</b>	<b>-3.58</b>	<b>3.03</b>	<b>-14.76</b>	<b>-6.48</b>	<b>-1.83</b>	<b>3.86</b>		<b>3.61</b>	<b>4/1/2012</b>
Mondrian - Net		-3.58	2.93	-15.03	-6.86	-2.28	3.37		3.12	
MSCI AC World ex USA (Net)		-2.46	6.25	-5.44	3.00	1.16	6.23		4.38	
MSCI AC World ex USA Value		-4.09	2.43	-17.19	-10.32	-4.51	2.75		2.12	

Benchmark definitions in glossary.

# Wilshire Consulting Performance



Periods Ended September 30, 2020

	Market Value \$	Performance (%)								
		1 Month	QTD	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
<b>Lazard</b>	<b>115,595,818</b>	<b>-1.86</b>	<b>7.35</b>	<b>-6.55</b>	<b>0.23</b>	<b>1.48</b>	<b>5.66</b>		<b>5.41</b>	<b>4/1/2012</b>
Lazard - Net		-1.86	7.28	-6.73	-0.02	1.22	5.31		4.91	
MSCI AC World ex USA (Net)		-2.46	6.25	-5.44	3.00	1.16	6.23		4.38	
MSCI AC World ex USA Value		-4.09	2.43	-17.19	-10.32	-4.51	2.75		2.12	
<b>Intl Large Cap Active Core</b>	<b>1,959,943,049</b>	<b>-0.72</b>	<b>7.60</b>	<b>-2.05</b>	<b>6.98</b>	<b>2.98</b>	<b>8.13</b>	<b>7.08</b>	<b>4.77</b>	<b>2/1/2008</b>
Intl Large Cap Active Core - Net		-0.72	7.50	-2.42	6.44	2.50	7.58	6.55		
MSCI AC World ex USA (Net)		-2.46	6.25	-5.44	3.00	1.16	6.23	4.00	2.15	
<b>Arrowstreet Capital</b>	<b>755,361,131</b>	<b>-1.20</b>	<b>7.04</b>	<b>-0.43</b>	<b>9.35</b>	<b>4.28</b>	<b>9.24</b>	<b>7.54</b>	<b>5.16</b>	<b>3/1/2008</b>
Arrowstreet Capital - Net		-1.20	6.92	-0.77	8.85	3.80	8.73	7.04	4.67	
MSCI AC World ex USA (Net)		-2.46	6.25	-5.44	3.00	1.16	6.23	4.00	1.94	
<b>Brown Capital</b>	<b>554,706,127</b>	<b>1.20</b>	<b>10.61</b>	<b>12.99</b>	<b>21.36</b>	<b>9.05</b>	<b>9.79</b>	<b>8.89</b>	<b>8.54</b>	<b>10/1/2004</b>
Brown Capital - Net		1.20	10.54	12.79	21.02	8.57	8.98	8.11		
MSCI AC World ex USA (Net)		-2.46	6.25	-5.44	3.00	1.16	6.23	4.00	5.49	
<b>GlobeFlex Capital</b>	<b>648,849,468</b>	<b>-1.60</b>	<b>6.10</b>	<b>-9.10</b>	<b>-1.16</b>	<b>-1.96</b>	<b>5.80</b>	<b>5.65</b>	<b>4.13</b>	<b>3/1/2006</b>
GlobeFlex Capital - Net		-1.60	5.99	-9.41	-1.60	-2.36	5.38	5.22	3.68	
MSCI AC World ex USA (Net)		-2.46	6.25	-5.44	3.00	1.16	6.23	4.00	3.45	
<b>Progress Intl Equity</b>	<b>903,533</b>									
<b>Intl Large Cap Passive Core</b>	<b>1,804,662,815</b>	<b>-2.39</b>	<b>4.84</b>	<b>-6.57</b>	<b>0.96</b>	<b>1.01</b>	<b>5.68</b>	<b>5.04</b>	<b>3.22</b>	<b>1/1/2000</b>
Intl Large Cap Passive Core - Net		-2.39	4.84	-6.57	0.95	1.00	5.67	5.03		
MSCI EAFE Index (Net)		-2.60	4.80	-7.09	0.49	0.62	5.26	4.62	2.83	
<b>NTGI MSCI EAFE</b>	<b>1,804,662,815</b>	<b>-2.39</b>	<b>4.84</b>	<b>-6.57</b>	<b>0.96</b>	<b>1.01</b>	<b>5.68</b>	<b>5.04</b>	<b>3.56</b>	<b>2/1/2000</b>
NTGI MSCI EAFE - Net		-2.39	4.84	-6.57	0.95	1.00	5.67	5.03		
MSCI EAFE Index (Net)		-2.60	4.80	-7.09	0.49	0.62	5.26	4.62	3.17	
<b>Intl All Cap Developed</b>	<b>139,424,997</b>	<b>-1.74</b>	<b>8.01</b>	<b>-6.21</b>	<b>1.04</b>				<b>4.76</b>	<b>2/1/2019</b>
Intl All Cap Developed - Net		-1.74	7.90	-6.55	0.54				4.32	
MSCI EAFE + Canada (Net)		-2.82	4.92	-7.13	0.16				3.66	

Benchmark definitions in glossary.

# Wilshire Consulting Performance



Periods Ended September 30, 2020

	Market Value \$	Performance (%)								
		1 Month	QTD	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
<b>Ativo International</b>	<b>139,424,997</b>	<b>-1.74</b>	<b>8.01</b>	<b>-6.21</b>	<b>1.04</b>				<b>4.76</b>	<b>2/1/2019</b>
Ativo International - Net		-1.74	7.90	-6.55	0.54				4.32	
MSCI EAFE + Canada (Net)		-2.82	4.92	-7.13	0.16				3.66	
<b>Intl Small Cap Eqty</b>	<b>548,486,170</b>	<b>0.61</b>	<b>13.61</b>	<b>5.26</b>	<b>18.64</b>	<b>4.75</b>	<b>8.79</b>	<b>8.32</b>	<b>5.36</b>	<b>12/1/2005</b>
Intl Small Cap Eqty - Net		0.61	13.42	4.66	17.75	3.96	7.98	7.53		
MSCI AC World ex USA Small Cap (Net)		-1.26	10.50	-3.64	6.97	0.93	6.80	5.31	5.73	
Custom Benchmark (Intl Small Cap)		-1.26	10.50	-3.64	6.97	0.93	6.80	5.62	5.05	
<b>Franklin Templeton</b>	<b>199,320,049</b>	<b>1.08</b>	<b>13.15</b>	<b>-3.63</b>	<b>5.83</b>	<b>1.47</b>	<b>6.71</b>		<b>5.78</b>	<b>8/1/2011</b>
Franklin Templeton - Net		1.08	12.96	-4.17	5.05	0.72	5.93		5.02	
MSCI AC World ex USA Small Cap (Net)		-1.26	10.50	-3.64	6.97	0.93	6.80		4.37	
<b>William Blair IntSC</b>	<b>349,166,120</b>	<b>0.34</b>	<b>13.87</b>	<b>11.11</b>	<b>27.45</b>	<b>6.78</b>	<b>10.07</b>	<b>9.22</b>	<b>10.21</b>	<b>9/1/2010</b>
William Blair IntSC - Net		0.34	13.68	10.47	26.48	5.97	9.23	8.39	9.38	
MSCI AC World ex USA Small Cap (Net)		-1.26	10.50	-3.64	6.97	0.93	6.80	5.31	6.42	
Custom Benchmark (Intl Small Cap)		-1.26	10.50	-3.64	6.97	0.93	6.80	5.62	6.71	
<b>Emerging Mkt Equity</b>	<b>1,210,497,361</b>	<b>-1.47</b>	<b>10.11</b>	<b>-2.03</b>	<b>8.52</b>	<b>5.09</b>	<b>10.57</b>	<b>4.64</b>	<b>8.92</b>	<b>2/1/1992</b>
Emerging Mkt Equity - Net		-1.51	9.96	-2.51	7.87	4.48	9.91	4.03		
MSCI Emerging Markets Index		-1.58	9.70	-0.91	10.91	2.79	9.37	2.87	6.97	
<b>Genesis Asset Mngrs.</b>	<b>1,210,497,361</b>	<b>-1.47</b>	<b>10.11</b>	<b>-2.03</b>	<b>8.52</b>	<b>5.09</b>	<b>10.57</b>	<b>4.64</b>	<b>10.79</b>	<b>5/1/2004</b>
Genesis Asset Mngrs. - Net		-1.51	9.96	-2.51	7.87	4.48	9.91	4.03		
MSCI Emerging Markets Index		-1.58	9.70	-0.91	10.91	2.79	9.37	2.87	8.56	

Benchmark definitions in glossary.

# Wilshire Consulting Performance



Periods Ended September 30, 2020

	Market Value \$	Performance (%)									
		1 Month	QTD	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date	
<b>Fixed Income</b>	<b>12,086,120,629</b>	<b>-0.10</b>	<b>1.48</b>	<b>6.06</b>	<b>6.65</b>	<b>5.24</b>	<b>4.84</b>	<b>4.47</b>	<b>8.19</b>	<b>1/1/1982</b>	
Fixed Income - Net		-0.11	1.45	5.97	6.52	5.10	4.69	4.32			
Blmbg. Barc. U.S. Aggregate		-0.05	0.62	6.79	6.98	5.24	4.18	3.64	7.70		
<b>Active Fixed Core</b>	<b>3,800,625,773</b>	<b>0.05</b>	<b>1.17</b>	<b>7.32</b>	<b>7.14</b>	<b>5.44</b>	<b>4.49</b>	<b>4.20</b>	<b>4.78</b>	<b>4/1/2001</b>	
ActiveCore Fixed Inc - Net		0.05	1.15	7.24	7.03	5.34	4.36	4.04			
Blmbg. Barc. U.S. Aggregate		-0.05	0.62	6.79	6.98	5.24	4.18	3.64	4.76		
<b>Brandes FI Core</b>	<b>384,746,925</b>	<b>0.10</b>	<b>1.16</b>	<b>7.60</b>	<b>7.51</b>	<b>5.03</b>			<b>3.99</b>	<b>3/1/2016</b>	
Brandes FI Core - Net		0.10	1.16	7.60	7.51	5.03			3.99		
Blmbg. Barc. U.S. Aggregate		-0.05	0.62	6.79	6.98	5.24			4.22		
<b>EARNEST Partners</b>	<b>1,047,701,590</b>	<b>0.29</b>	<b>1.19</b>	<b>6.78</b>	<b>6.61</b>	<b>5.41</b>	<b>4.31</b>	<b>4.19</b>	<b>4.82</b>	<b>5/1/2005</b>	
EARNEST Partners - Net		0.29	1.15	6.68	6.47	5.27	4.15	4.00	4.62		
Blmbg. Barc. U.S. Aggregate		-0.05	0.62	6.79	6.98	5.24	4.18	3.64	4.42		
<b>Xponance Yield Advantage Agg.</b>	<b>1,117,920,778</b>	<b>-0.08</b>	<b>1.49</b>	<b>7.21</b>	<b>6.99</b>	<b>5.17</b>	<b>4.58</b>	<b>4.13</b>	<b>4.62</b>	<b>6/1/2005</b>	
Xponance Yield Advantage Agg. - Net		-0.08	1.46	7.10	6.86	5.03	4.43	3.97	4.44		
Blmbg. Barc. U.S. Aggregate		-0.05	0.62	6.79	6.98	5.24	4.18	3.64	4.38		
<b>Garcia Hamilton</b>	<b>1,118,905,764</b>	<b>-0.08</b>	<b>0.79</b>	<b>7.57</b>	<b>7.37</b>	<b>5.70</b>	<b>4.53</b>		<b>4.38</b>	<b>6/1/2015</b>	
Garcia Hamilton - Net		-0.08	0.77	7.51	7.28	5.61	4.44		4.29		
Blmbg. Barc. U.S. Aggregate		-0.05	0.62	6.79	6.98	5.24	4.18		3.94		
<b>Ramirez Asset Management</b>	<b>131,350,717</b>	<b>0.05</b>	<b>1.75</b>						<b>4.95</b>	<b>5/1/2020</b>	
Ramirez Asset Management - Net		0.05	1.72						4.91		
Blmbg. Barc. U.S. Aggregate		-0.05	0.62						1.72		
<b>Pass. Core Fixed Inc</b>	<b>3,787,148,175</b>	<b>-0.04</b>	<b>0.63</b>	<b>6.88</b>	<b>7.06</b>	<b>5.31</b>	<b>4.24</b>	<b>3.68</b>	<b>6.01</b>	<b>1/1/1990</b>	
Pass. Core Fixed Inc - Net		-0.04	0.63	6.87	7.05	5.30	4.23	3.68			
Blmbg. Barc. U.S. Aggregate		-0.05	0.62	6.79	6.98	5.24	4.18	3.64	5.99		
<b>BlackRock US Debt I</b>	<b>1,854,376,292</b>	<b>-0.03</b>	<b>0.66</b>	<b>6.92</b>	<b>7.12</b>	<b>5.34</b>	<b>4.28</b>		<b>4.10</b>	<b>10/1/2013</b>	
BlackRock US Debt I - Net		-0.03	0.66	6.92	7.11	5.33	4.28		4.09		
Blmbg. Barc. U.S. Aggregate		-0.05	0.62	6.79	6.98	5.24	4.18		3.97		

Benchmark definitions in glossary.

# Wilshire Consulting Performance



Periods Ended September 30, 2020

	Market Value \$	Performance (%)									
		1 Month	QTD	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date	
<b>NTGI Blmbg Agg.</b>	<b>1,932,771,883</b>	<b>-0.04</b>	<b>0.60</b>	<b>6.83</b>	<b>7.01</b>	<b>5.28</b>	<b>4.20</b>	<b>3.66</b>	<b>6.06</b>	<b>2/1/1990</b>	
NTGI Blmbg Agg. - Net		-0.04	0.60	6.83	7.00	5.27	4.19	3.66			
Blmbg. Barc. U.S. Aggregate		-0.05	0.62	6.79	6.98	5.24	4.18	3.64	6.05		
<b>Core Plus Fixed Income</b>	<b>2,954,042,528</b>	<b>-0.21</b>	<b>1.62</b>	<b>7.27</b>	<b>8.02</b>	<b>5.68</b>	<b>5.14</b>	<b>4.65</b>	<b>8.09</b>	<b>1/1/1982</b>	
Core Plus Fixed Inc. - Net		-0.21	1.59	7.12	7.82	5.48	4.95	4.47			
Blmbg. Barc. U.S. Aggregate		-0.05	0.62	6.79	6.98	5.24	4.18	3.64	7.70		
<b>LM Capital Group FI</b>	<b>974,155,367</b>	<b>0.14</b>	<b>2.00</b>	<b>8.35</b>	<b>8.93</b>	<b>5.62</b>	<b>4.92</b>	<b>4.42</b>	<b>5.19</b>	<b>5/1/2005</b>	
LM Capital Group FI - Net		0.14	1.96	8.23	8.76	5.45	4.75	4.25	5.02		
Blmbg. Barc. U.S. Aggregate		-0.05	0.62	6.79	6.98	5.24	4.18	3.64	4.42		
<b>Progress Inv. FI</b>	<b>3,700</b>										
<b>BMO - TCH</b>	<b>663,844,479</b>	<b>-0.30</b>	<b>1.00</b>	<b>6.74</b>	<b>7.46</b>	<b>5.42</b>	<b>5.51</b>	<b>4.90</b>	<b>5.23</b>	<b>5/1/2005</b>	
BMO - TCH - Net		-0.30	0.96	6.63	7.32	5.28	5.37	4.76	5.10		
Blmbg. Barc. U.S. Aggregate		-0.05	0.62	6.79	6.98	5.24	4.18	3.64	4.42		
<b>Western Asset</b>	<b>1,133,291,450</b>	<b>-0.48</b>	<b>1.81</b>	<b>6.56</b>	<b>7.79</b>	<b>5.88</b>	<b>5.66</b>	<b>5.12</b>	<b>5.69</b>	<b>11/1/2001</b>	
Western Asset - Net		-0.48	1.77	6.46	7.65	5.76	5.53	4.99			
Blmbg. Barc. U.S. Aggregate		-0.05	0.62	6.79	6.98	5.24	4.18	3.64	4.52		
<b>Longfellow Core Plus</b>	<b>182,747,532</b>	<b>0.00</b>	<b>1.62</b>						<b>3.67</b>	<b>5/1/2020</b>	
Longfellow Core Plus - Net		-0.04	1.59						3.63		
Blmbg. Barc. U.S. Aggregate		-0.05	0.62						1.72		
<b>Bank Loans</b>	<b>541,293,227</b>	<b>0.78</b>	<b>4.11</b>	<b>-2.51</b>	<b>-0.64</b>	<b>2.59</b>	<b>4.15</b>		<b>3.69</b>	<b>8/1/2014</b>	
Bank Loans - Net		0.78	4.11	-2.51	-0.64	2.30	3.74		3.24		
Custom Benchmark		0.71	3.88	-0.65	0.97	3.37	4.21		3.63		
<b>Barings Global Loan Fund</b>	<b>541,293,227</b>	<b>0.78</b>	<b>4.11</b>	<b>-2.51</b>	<b>-0.64</b>	<b>2.59</b>	<b>4.15</b>		<b>3.69</b>	<b>8/1/2014</b>	
Barings Global Loan Fund - Net		0.78	4.11	-2.51	-0.64	2.30	3.74		3.24		
Custom Benchmark		0.71	3.88	-0.65	0.97	3.37	4.21		3.63		
<b>Emerging Markets Debt</b>	<b>216,885,366</b>	<b>-2.37</b>	<b>1.63</b>	<b>-3.87</b>	<b>0.27</b>	<b>1.38</b>	<b>5.83</b>		<b>2.44</b>	<b>8/1/2014</b>	
Emerging Markets Debt - Net		-2.37	1.46	-4.11	-0.08	1.03	5.47		2.10		
Custom Benchmark		-1.63	1.44	-2.38	1.17	2.23	5.67		2.11		

Benchmark definitions in glossary.

# Wilshire Consulting Performance



Periods Ended September 30, 2020

	Market Value \$	Performance (%)								
		1 Month	QTD	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
<b>Standish-Mellon EMD</b> Standish EM MRK - Net Custom Benchmark	<b>216,885,366</b>	-2.37 -2.37 -1.63	1.63 1.46 1.44	-3.87 -4.11 -2.38	0.27 -0.08 1.17	1.38 1.03 2.23	5.83 5.47 5.67		2.44 2.10 2.11	8/1/2014
<b>High Yield</b> High Yield - Net ICE BofAML US High Yield, Cash Pay Index	<b>786,125,560</b>	-0.64 -0.72 -1.04	4.63 4.47 4.72	2.58 2.33 -0.23	5.46 5.03 2.35	5.56 5.21 3.84	7.47 7.11 6.61	7.10 6.72 6.26	9.43 8.12	4/1/1986
<b>MacKay Shields</b> MacKay Shields - Net ICE BofAML US High Yield, Cash Pay Index	<b>786,097,017</b>	-0.64 -0.72 -1.04	4.65 4.48 4.72	2.59 2.35 -0.23	5.47 5.05 2.35	5.57 5.22 3.84	7.68 7.31 6.61	7.27 6.90 6.26	8.68 7.30	11/1/2000

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Benchmark definitions in glossary.

# 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 Emerging Markets	4/1/2020	Present	50% JPM GBI-EM Global Diversified ex-CNY, 25% JPM EMBI Global (USD), 25% JPM CEMBI Broad Index
	8/1/2014	3/31/2020	50% JPM GBI-EM Global Diversified, 25% JPM EMBI Global (USD), 25% JPM CEMBI Broad Index