Forest Preserve District Employees' Annuity and Benefit Fund of Cook County

Performance Summary

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Will Headwinds or Tailwinds Prevail?

So much for the summer doldrums. The third quarter ended with a host of potential headwinds as well as some notable tailwinds. In the headwinds category, political gridlock around lifting the debt ceiling and infrastructure/social spending bills, massive supply chain issues, real estate woes in China, and repercussions from the Fed's likely 4Q21 "taper" of bond purchases topped the list. At the same time, the Delta surge appears to be abating, the consumer is in excellent shape, job openings are at record highs, and near-term growth prospects remain solid. The prospect for inflation remains uncertain and will likely be a key driver for asset class returns in coming quarters.

Risk appetite was mixed during the quarter, with September results being the bleakest across asset classes; the notable exception was commodities (specifically natural gas). For the quarter, broad developed market equity and fixed income returns were flat, with U.S. dollar strength being a headwind for overseas investments. The dollar gained about 2% vs. a basket of developed market currencies. Emerging market equities sank, led by sharply lower returns from China and Brazil.

GDP for 2Q21 was revised up slightly to an annualized 6.7% (from 6.6%), but expectations for 3Q21 growth have moderated. Bloomberg's monthly survey of economists showed that the median 3Q GDP forecast is 5.0%, down from July's forecast of 7.1%. While still a strong number, it reflects how the Delta variant impacted consumer spending over the summer and the pace and consistency of the "re-opening" around the country. Cities and states differed with respect to re-openings, but across the nation many employees continued to work remotely. Worries over the Delta variant affected consumer sentiment; the Conference Board Consumer Confidence Index weakened for the third consecutive month in September and is down more than 15% over this period (though still much higher than its low in 2020). As further evidence of the moderation in growth, the Citigroup Economic Surprise Index has been below zero since July 2021 (a reading of zero indicates that data are meeting estimates).

On the COVID-19 front, we faced a grim reminder of the toll taken with deaths surpassing 700,000 in the U.S. alone. In the tailwind category, the vaccination rate continued to slowly climb, and confirmed cases and fatalities continued to ebb. A vaccine for children is in the works, and the recently announced antiviral pill from Merck adds to the list of reasons to be optimistic that the worst is behind us. Retail spending was up over 15% in August from one year prior; gas stations (+36%) and restaurants/bars (+32%) notched the biggest gains.

The Federal Open Market Committee (FOMC) left rates on hold at its September meeting, but Fed Chair Jerome Powell suggested that bond purchases would likely be cut back in 4Q with the goal of ending them by mid-2022. The FOMC has been transparent about its plans in this regard, so a repeat of the "taper tantrum" witnessed in 2013 seems unlikely. Nevertheless, fiscal and monetary stimulus will be reduced in coming quarters, and the economic ramifications of less support remain to be seen. The Fed's new "dot plot" revealed that half of the 18 FOMC members now expect at least one rate hike in 2022. This is a significant change from the December 2020 meeting, when only one saw a hike in 2022 and five slated 2023 for the first hike. Notably, Powell disassociated the taper of bond purchases from rate hikes, suggesting that they would be considered separately.

The FOMC also lowered real growth expectations from 7.0% to 5.9% for 2021 but raised its inflation forecast for the year to 4.2% from 3.4%. The Fed continues to expect price pressures to be transitory and for inflation to fall back to 2.2% next year. As of August, U.S. headline CPI was up 5.3% year-over-year (core +4.0%), with Energy up 25% over the period. The PPI soared 8.3%, the highest 12-month rate in more than 10 years. Supply chain bottlenecks have affected prices for shipping, materials, labor, parts, and equipment. Ports and rail yards are clogged and ships are anchored offshore, waiting to unload. Truck drivers are in short supply, as are the chassis needed to offload containers. A prolonged shortage of semiconductor chips persists due to increased demand for electronics from automakers and is further exacerbated by a host of issues facing suppliers as well as transportation glitches. This supply chain dysfunction could persist through 2022 and falls distinctly into the headwinds category.

The labor market also shows signs of dysfunction. A large disconnect exists between job openings—which are at record levels—and labor shortages reported by employers. According to the U.S. JOLTS report, there were a record 10.9 million job openings on the last day of July. At the same time, there are more than 8 million people actively looking for work. The National Federation of Independent Business recently reported that 50% of small businesses have job openings they cannot fill. "Help wanted" signs proliferate in many of our communities. As the shopping season approaches, the largest employers will seek to hire hundreds of thousands of workers. There are a number of factors that have contributed to the mismatch between job seekers and job providers, some of which may be resolved with higher wages. Market participants are closely watching wage growth for its important contribution to inflation; the August jobs report showed average hourly earnings rose 4.3% YOY.

Inflation and supply chain issues are also evident overseas. Natural gas prices have surged in Asia, Europe, and Latin America as demand for the "cleaner" fuel and for manufactured goods that rely on this input has increased while supply has been constrained. In the U.K., post-Brexit issues and a dearth of truckers have resulted in a shortage of even basic supplies. But the economic picture has improved; euro zone growth was 9.2% (annualized) in 2Q21, ending five quarters of contracting growth. The ECB announced that it would "recalibrate" (i.e., lower) its asset purchases and also raised its GDP forecast for 2021, expecting it to reach the pre-pandemic level by 4Q21. The outlook for inflation was also raised, with the headline number expected to be 3.1% in 4Q before falling to 1.7% in 2022.

China faces several headwinds and remains top of mind given its part in the global economy. Its massive real estate sector (30% of its economy) is under stress, with the fate of property giant Evergrande unknown at this juncture. Widespread power outages have resulted from coal production not keeping pace with demand, and the country's regulatory crackdown has taken a toll on several companies, erasing roughly $3 trillion in market capitalization.

While the recovery remains intact for much of the world, tailwinds from consumer spending and unprecedented stimulus may be thwarted by any number of headwinds in coming quarters.

Global Equities

The S&P 500 Index was up a modest 0.6% in 3Q with results mixed across sectors. Industrials (-4.2%) and Materials (-3.5%) were at the bottom of the pack while Financials (+2.7%) were the best performers. Since the market low in February 2020, the S&P is up 97.3%. Growth stocks outperformed value (R1000 Growth: +1.2%; R1000 Value: -0.8%) but lag for the YTD period (+14.3% vs. +16.1%). Small cap stocks underperformed (R2000: -4.4% vs. R1000: +0.2%) and now lag YTD (12.4% vs. 15.2%).

The MSCI ACWI ex-USA Index lost 3.0% for the quarter, hurt primarily by U.S. dollar strength and the benchmark's exposure to emerging markets. The best-performing sector was Energy (+7%), while Consumer Discretionary (-11%) and Communication Services (-10%) posted steep declines. Note that these sectors include some of the Chinese stocks that have been hit hard by the country's regulatory crackdown (Alibaba, Tencent, and Baidu). The MSCI EAFE Index (Europe, Australia, and Far East) lost 0.4% but in local terms it was up 1.3%.

Japan (+4.6%) performed relatively well while many of the larger constituents were down for the quarter. The MSCI Emerging Markets Index sank 8.1%, making it the worst-performing asset class for the quarter. Within emerging markets, Brazil (-20%), China (-18%), and Korea (-13%) fell sharply while India (+13%), Russia (+10%), and Colombia (+10%) were up strongly.

Global Fixed Income

Yields in the U.S. were relatively unchanged from 6/30/21, masking intra-quarter volatility. The 10-year U.S. Treasury closed the quarter at 1.52%, up sharply from early August when it traded at 1.19%. TIPS outperformed nominal Treasuries for the quarter (Bloomberg US TIPS Index: +1.8%; Bloomberg US Treasury Index: +0.1%). The Bloomberg US Aggregate Bond Index returned 0.1% but remains down 1.6% YTD. Lower quality continued to outperform. The Bloomberg High Yield Index rose 0.9% and leveraged loans (S&P LSTA Lev Loan: +1.1%) also performed well. Municipals (Bloomberg Municipal Bond Index: -0.3%) underperformed Treasuries for the quarter.

Overseas developed market returns were similarly muted, and U.S. dollar strength eroded returns for unhedged U.S. investors. The Bloomberg Global Aggregate ex-US Bond Index fell 1.6% but was flat (+0.1%) on a hedged basis. Emerging market debt posted negative returns; the JPM EMBI Global Diversified Index fell 0.7% and the local JPM GBI-EM Global Diversified Index lost 3.1%, most of which was due to currency depreciation. In local terms, this Index was down only 0.2% for the quarter.

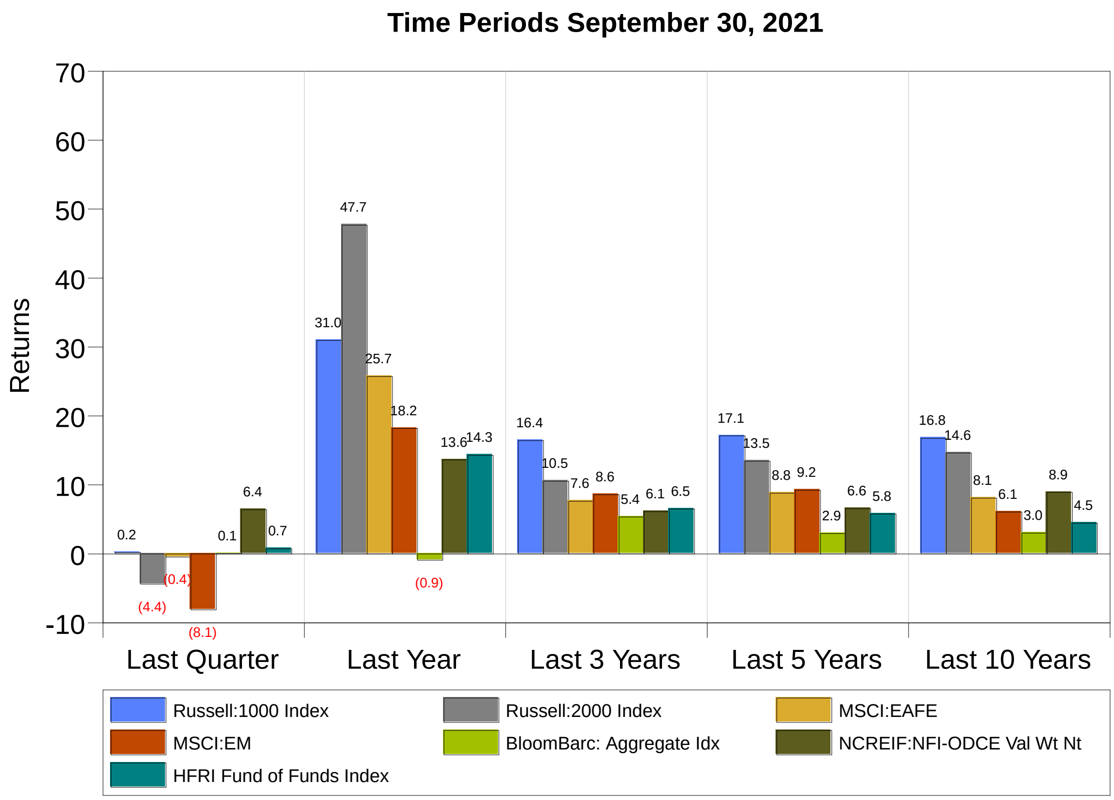
Real Assets

The Bloomberg Commodity Index rose 6.6% for the quarter and is up 29.1% YTD, but what lies under the hood is more interesting. Natural gas prices soared nearly 60% for the quarter, and those gains were relatively muted compared to the experience in Europe, where prices tripled over the quarter. WTI Crude Oil was up 4%. TIPS (Bloomberg TIPS Index: +1.8%) performed well relative to nominal U.S. Treasuries. Several other sectors were essentially flat for the quarter; the MSCI US REIT Index gained 1.0%; gold (S&P Gold Spot Price Index: -0.8%) and infrastructure (DJB Global Infrastructure: -0.9%) fell slightly. Copper fell more than 4% on worries over slowing demand from China.

Closing Thoughts

The 2020 recession was the shortest and steepest on record, and the 2021 recovery has been the sharpest on record. While we don't know what the near-term impact of the prevailing headwinds/tailwinds will be, it is widely acknowledged that growth will be moderating from the lofty levels seen earlier this year. We expect to see volatility increase given the number of political and economic uncertainties that lie ahead and, while welcome, the robust returns experienced thus far in 2021 are not likely to be repeated in the near-term. It will come as no surprise that Callan continues to advise adherence to a disciplined investment process that includes a well-defined long-term asset-allocation policy.

Third Quarter 2021 Market Performance



The Callan Periodic Table of Investment Returns
Third Quarter 2021

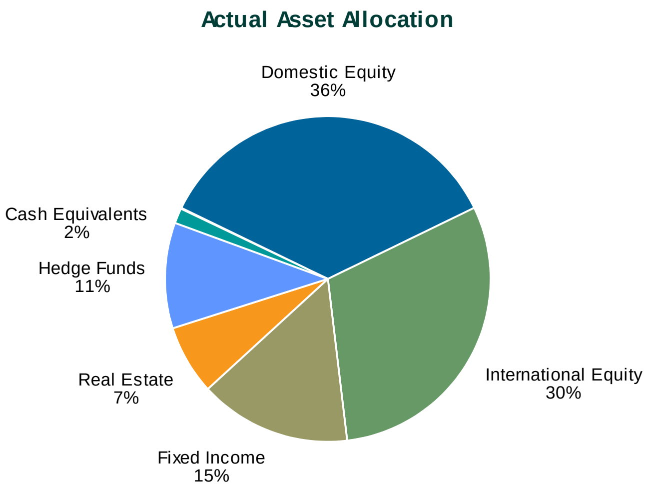
2012	2013	2014	2015	2016	2017	2018	2019	2020	3 Qtrs. 2021
MSCI:EM **18.2%**	Russell:2000 Index **38.8%**	Russell:1000 Index **13.2%**	NCREIF:NFI-ODCE Val Wt Nt **14.0%**	Russell:2000 Index **21.3%**	MSCI:EM **37.3%**	Cambridge:PE Idx **10.1%**	Russell:1000 Index **31.4%**	Cambridge:PE Idx **30.1%**	Russell:1000 Index **15.2%**
MSCI:EAFE **17.3%**	Russell:1000 Index **33.1%**	Cambridge:PE Idx **11.8%**	Cambridge:PE Idx **8.6%**	Russell:1000 Index **12.1%**	MSCI:EAFE **25.0%**	NCREIF:NFI-ODCE Val Wt Nt **7.4%**	Russell:2000 Index **25.5%**	Russell:1000 Index **21.0%**	Russell:2000 Index **12.4%**
Russell:1000 Index **16.4%**	MSCI:EAFE **22.8%**	NCREIF:NFI-ODCE Val Wt Nt **11.5%**	Russell:1000 Index **0.9%**	MSCI:EM **11.2%**	Russell:1000 Index **21.7%**	BC Aggregate **0.0%**	MSCI:EAFE **22.0%**	Russell:2000 Index **20.0%**	NCREIF:NFI-ODCE Val Wt Nt **12.4%**
Russell:2000 Index **16.3%**	Cambridge:PE Idx **21.2%**	BC Aggregate **6.0%**	BC Aggregate **0.5%**	Cambridge:PE Idx **9.5%**	Cambridge:PE Idx **19.7%**	HFRI Fund of Funds Index (4.0%)	MSCI:EM **18.4%**	MSCI:EM **18.3%**	MSCI:EAFE **8.3%**
Cambridge:PE Idx **13.7%**	NCREIF:NFI-ODCE Val Wt Nt **12.9%**	Russell:2000 Index **4.9%**	HFRI Fund of Funds Index (0.3%)	NCREIF:NFI-ODCE Val Wt Nt **7.8%**	Russell:2000 Index **14.6%**	Russell:1000 Index **(4.8%)**	Cambridge:PE Idx **16.3%**	HFRI Fund of Funds Index 10.9%	HFRI Fund of Funds Index 5.7%
NCREIF:NFI-ODCE Val Wt Nt **9.8%**	HFRI Fund of Funds Index 9.0%	HFRI Fund of Funds Index 3.4%	MSCI:EAFE **(0.8%)**	BC Aggregate **2.6%**	HFRI Fund of Funds Index 7.8%	Russell:2000 Index **(11.0%)**	BC Aggregate **8.7%**	MSCI:EAFE **7.8%**	MSCI:EM **(1.2%)**
HFRI Fund of Funds Index 4.8%	BC Aggregate **(2.0%)**	MSCI:EM **(2.2%)**	Russell:2000 Index **(4.4%)**	MSCI:EAFE **1.0%**	NCREIF:NFI-ODCE Val Wt Nt **6.7%**	MSCI:EAFE **(13.8%)**	HFRI Fund of Funds Index 8.4%	BC Aggregate **7.5%**	BC Aggregate **(1.6%)**
BC Aggregate **4.2%**	MSCI:EM **(2.6%)**	MSCI:EAFE **(4.9%)**	MSCI:EM **(14.9%)**	HFRI Fund of Funds Index 0.5%	BC Aggregate **3.5%**	MSCI:EM **(14.6%)**	NCREIF:NFI-ODCE Val Wt Nt **4.4%**	NCREIF:NFI-ODCE Val Wt Nt **0.3%**	**PE Idx Not Yet Reported**

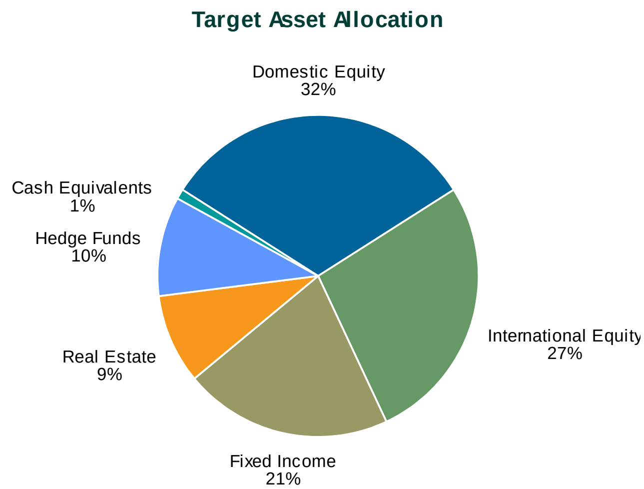
Through the third quarter of 2021, Large Cap Equity was the top performing asset class (Russell 1000 Index: +15.2%), leading Small Cap Equity (Russell 2000 Index: +12.4%). Developed International Equities (MSCI EAFE Index: +8.3%) outperformed Emerging Markets (MSCI Emerging Markets: -1.2%). Real Estate (NCREIF: NFI-ODCE Value Weighted Net Index: +12.4%) outperformed Hedge Funds (HFRI Fund of Funds Index: +5.7%). Fixed Income (Bloomberg US Aggregate Bond Index: -1.6%) also experienced a negative return year to date.

Forest Preserve Pension Fund Commentary

Asset Allocation

The Forest Preserve Fund ("Fund") ended the third quarter with a market value of $224.0 million, a $3.7 million decrease from the second quarter-end value of $227.7 million.





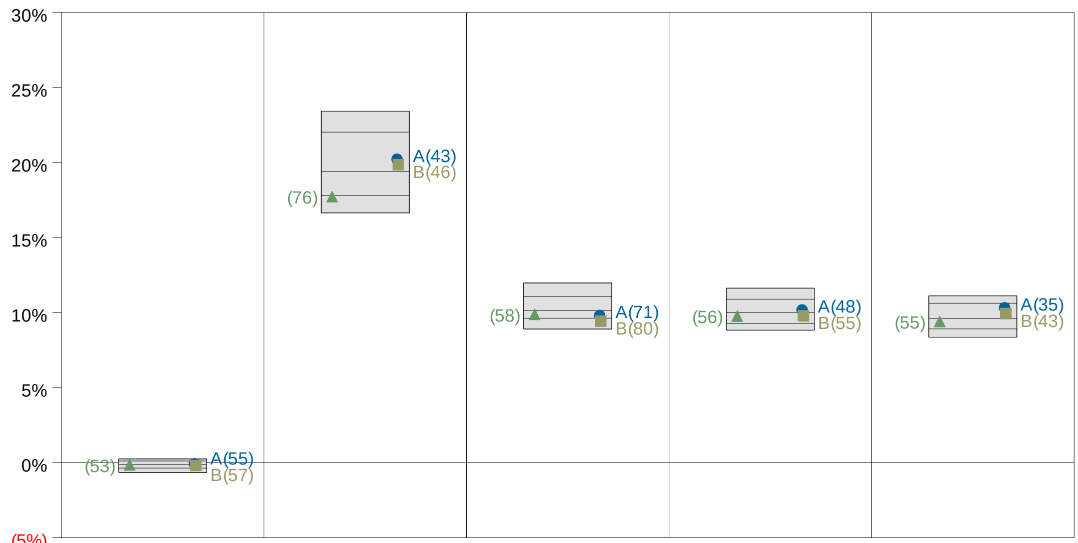
During the quarter, the Fund gained approximately $0.39 million from investment returns and experienced net withdrawals of approximately $3.3 million. Public Equities were overweight compared to their strategic targets while Fixed Income was underweight. Rebalancing will be processed in the fourth quarter.

Asset Class	$000s Actual	Weight Actual	Min Target	Target	Max Target	Percent Difference	$000s Difference
Domestic Equity	79,744	35.6%	28.0%	32.0%	36.0%	3.6%	8,059
International Equity	67,955	30.3%	23.0%	27.0%	31.0%	3.3%	7,471
Fixed Income	33,786	15.1%	17.0%	21.0%	25.0%	(5.9%)	(13,257)
Real Estate	15,510	6.9%	5.0%	9.0%	13.0%	(2.1%)	(4,651)
Hedge Funds	23,627	10.5%	6.0%	10.0%	14.0%	0.5%	1,225
Cash Equivalents	3,393	1.5%	0.0%	1.0%	5.0%	0.5%	1,153
Total	224,015	100.0%		100.0%			

Forest Preserve Pension Fund Performance vs. Target

The Forest Preserve Pension Fund posted a Net of Fee (NOF) return of -0.19% in the third quarter, modestly trailing its benchmark by 0.05%. Active management added value while asset allocation decisions detracted from the return.

Performance vs Callan Public Fund Spons- Mid (100M-1B) (Gross)



		Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
10th Percentile		0.26	23.42	11.98	11.64	11.13
25th Percentile		0.12	22.03	11.09	10.90	10.64
Median		(0.12)	19.41	10.14	10.02	9.61
75th Percentile		(0.35)	17.81	9.64	9.28	8.92
90th Percentile		(0.65)	16.65	8.91	8.84	8.36
Total Forest (Gross)	● A	(0.15)	20.14	9.73	10.10	10.24
Total Forest (Net)	■ B	(0.19)	19.86	9.44	9.79	9.94
Total Forest Preserve Benchmark	▲	(0.14)	17.74	9.90	9.78	9.42

During the last year, the Fund generated a return of 19.86% (NOF), leading its benchmark and peer median. Both active management and fund allocation contributed.

In the last five-year period, the Fund experienced an annualized return of 9.79% (NOF), in line with its custom benchmark (+9.78%). During this period, active management and allocation differences from the strategic allocation were additive. In relation to peers, the Fund ranks above the median of its universe over the trailing one-, five-, and ten-year periods (GOF basis). The Fund has returned in excess of 9% for each annualized period above.

On a long-term basis, the Fund has outperformed its benchmark and peer median over the trailing one, five- and ten-year periods.

Table 1.1 illustrates the Forest Preserve Pension Fund's asset class performance against associated benchmarks.

Table 1.1
Asset Class Performance vs. Target (Net of Fees)

	Market Value $(Dollars)	Ending Weight	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Domestic Equity	**$79,743,998**	**35.60%**	**0.13%**	**33.09%**	**14.57%**	**16.33%**	**16.19%**
Domestic Equity Benchmark (2)	-	-	(0.10%)	31.88%	16.00%	16.85%	16.54%
International Equity	**$67,955,001**	**30.34%**	**(2.21%)**	**25.38%**	**8.70%**	**9.50%**	**10.15%**
International Equity Bnmk (4)	-	-	(2.99%)	23.92%	8.03%	8.94%	7.48%
Fixed Income	**$33,786,142**	**15.08%**	**(0.03%)**	**(0.58%)**	**4.85%**	**2.62%**	**2.87%**
Fixed Income Benchmark (3)	-	-	0.06%	(0.77%)	5.28%	2.90%	2.97%
****Real Estate**	**$15,510,045**	**6.92%**	**5.19%**	**10.22%**	**5.97%**	**5.97%**	**8.15%**
NFI-ODCE Value Weight Net	-	-	6.41%	13.64%	6.13%	6.56%	8.92%
****Hedge Funds**	**$23,626,879**	**10.55%**	**1.15%**	**8.59%**	**4.00%**	**5.15%**	**-**
LIBOR + 4%	-	-	1.02%	4.18%	5.26%	5.39%	-
HFRI Fund of Funds Index (5)	-	-	1.14%	13.93%	6.37%	5.84%	4.15%
Cash Equivalents	**$3,392,784**	**1.51%**	**0.01%**	**0.06%**	**1.54%**	**1.55%**	**0.82%**
3-month Treasury Bill	-	-	0.01%	0.07%	1.18%	1.16%	0.63%
Total Forest Preserve Fund	**$224,014,849**	**100.00%**	**(0.19%)**	**19.86%**	**9.44%**	**9.79%**	**9.94%**
Total Fund Benchmark (1)	-	-	(0.14%)	17.74%	9.90%	9.78%	9.42%

**Represents trailing data.

Definitions for custom benchmarks can be found on the back page

For the third quarter, active management in Domestic Equity, International Equity and Hedge Funds contributed to the relative return while Fixed Income and Real Estate detracted.

The Fund's Domestic Equity allocation outperformed its benchmark in the third quarter by 0.23%. In the last year, the Domestic Equity allocation has outperformed its benchmark by 1.2% due in part to its Small/Mid Cap allocation.

The Fund's International Equity allocation albeit negative also beat its benchmark returning -2.21% versus the benchmark return of -2.99% for the quarter. Strong active management led the International Equity allocation to beat its benchmark for the trailing one-, three-, five- and ten-year periods.

The Fixed Income allocation returned -.03% in the third quarter, trailing the benchmark return by 0.09%. Despite beating its benchmark in the last year, longer term, the allocation has underperformed its benchmark.

The Real Estate allocation is comprised of investments in private real estate. The Real Estate allocation returned 5.19%, but trailed the benchmark (+6.41%) in the third quarter. Over longer periods, the Real Estate allocation also fell short of its benchmark, but the absolute returns have been strong.

The Hedge Fund allocation returned 1.15% during the quarter and outperformed its absolute return benchmark (+1.02%). The Fund's Hedge Fund allocation has struggled versus hedge fund peers as measured by the HFRI Fund-of-Funds Index due a more-credit oriented, low equity beta approach.

The Forest Preserve Pension Fund posted a return of 19.86% in the last year, leading its benchmark, and ranking ahead of the median of peers. Over the trailing five- year period, the fund matches, and ranks in line with its peer median on a gross of fee basis. Over the trailing ten-year period, the Fund leads its benchmark and ranks ahead of the median of peers.

Benchmarks

1. **Total Fund Benchmark:** Blend of asset class benchmarks at policy weights. Current Quarter benchmark: 32.0% Russell 3000 Index, 27.0% MSCI ACWI ex US, 21.0% Bloomberg Aggregate Index, 10.0% Libor-3 Month+4.0%, 9.0% NFI-ODCE Value Weight Net, and 1.0% 3-Month Treasury Bill.

2. **Domestic Equity Benchmark:** Russell 3000 Index; Prior to 6/30/2016 Blend of 70% S&P 500 and 30% Russell 2500 Index; Prior to 12/31/2012 Blend of 55.6% S&P 500, 11.0% Russell 2000 Value, 16.7% Russell 1000 Growth, and 16.7% Russell 1000 Value.

3. **Fixed Income Benchmark:** Blend of 90% Bloomberg Aggregate Index, and 10% Bloomberg Gov/Credit 1-3 Year Index; Prior to 12/31/2019 Bloomberg Aggregate Index; Prior to 12/31/2012 Blend of 75% Bloomberg Aggregate Index, and 25% Bloomberg Gov/Credit Intermediate Index.

4. **International Equity Benchmark:** MSCI ACWI ex U.S.

5. **HFRI Fund of Funds Composite Index:** Returns are lagged 1 month.