County Employees' and Officers' Annuity and Benefit Fund of Cook County

Performance Summary

December 31, 2023

Ann O'Bradovich
Senior Vice President

John Jackson, CFA
Senior Vice President

Table of Contents

County Employees' and Officers' Annuity & Benefit Fund of Cook County
Performance Evaluation Executive Summary
Fourth Quarter 2023

Macroeconomic Environment

The U.S. economy grew by 3.3% in 4Q23, once again surprising to the upside. While many forecasted a recession caused by the Fed's dedication to fighting inflation by raising interest rates, the economy grew 2.5% for the year, up from the 1.9% rate in 2022. The job market has generated 5.4 million new jobs since the end of 2019, before the start of the pandemic. Real wages and real income growth turned positive in mid-2023 as inflation subsided but demand for workers remained. Workers feel confident in the tight labor market, and this confidence is driving consumer spending. Consumption expenditures accounted for half of GDP growth in 3Q and almost 60% in 4Q. The economy seemed to get stronger by the quarter in 2023.

Underneath the mayhem that defined both 2022 and 2023—geopolitical uncertainty, spiking inflation, rising interest rates, and the volatility in the equity market—the U.S. and global economies remain in remarkably good shape. The U.S. economy weathered the rate hikes in 2022 and 2023 particularly well. The first reason that the economy did not slide into a recession is stimulus and lots of it, around the globe, which translated into pent-up demand. Second, the very tight labor market in the U.S. gives workers and their families confidence to spend. Third, despite the housing market taking a big hit as mortgage rates shot up, housing has not dragged down the economy as in rate hike episodes of yore. In addition, we do not have a mortgage crisis similar to the one that struck in 2008-09 and nearly took down the banking system.

Inflation shot up to 9% in mid-2022, but the rate of price increases began to ebb in the second half of 2022 and declined steadily to 3% by the end of 3Q23. Unfortunately, headline inflation ticked back up to 3.5% by the end of the year, so we are not out of the inflation woods yet. Even as the rate of price increases comes down, prices are now "permanently" higher unless we see deflation. The level of the CPI-U index is up 10% since the start of 2022.

One key factor keeping inflation from falling back toward the Federal Reserve's goal of 2% is the labor market. We ended 2023 with labor markets not only tight but tightening. Initial unemployment claims (measured on a weekly basis)—one of our few leading indicators—began climbing in 2Q, and by early spring weekly claims had surpassed the average set in 2019 of 218,000. As claims rose to 250,000 by August, the data appeared to show that interest rate hikes were finally starting to bite. Then initial claims fell back sharply, and we ended the year at 203,000. Continuing unemployment claims also began to rise from a very low level starting in 4Q22 and ended the year about 9% higher than the pre-pandemic level. So initial claims show workers holding onto jobs, but the continuing claims show workers have a bit more trouble finding jobs once laid off. However, the unemployment rate remains low at 3.7%. The tightness in the labor market is inconsistent with the Fed's goal of achieving its 2% inflation target. As continuing claims rose in 2023, bond markets read the data as the first sign of easing in the labor market, but the robust end-of-the-year GDP report, the lower initial claims, and the strong December job market report suggest labor market tightness is not yet easing.

It may take longer than many believed to unravel the current growth momentum in the U.S. economy. The Fed had stated earlier in 2023 a belief that rates would remain elevated, based on its economic expectation of "stronger for longer." After the Fed reversed course in the November and December FOMC meetings, signaling rate cuts were likely in 2024, the economy reverted to stronger for longer on its own.

Global Equities

The S&P 500 Index approached a record high as the year closed. Of note, 2023 was the first year since 2012 that the S&P failed to reach a high-water mark. That said, the index was up an impressive 11.7% in 4Q and 26.3% for the year. The tech sector was the clear winner for the quarter and the year (+17.2%; +57.8%) while Energy (-6.9%; -1.3%) was the only sector to register both a 4Q and 2023 decline. Small caps (R2000: +14.0%) outperformed large caps (R1000: +12.0%) for the quarter but lagged for the year (R2000: +16.9%; R1000: +26.5%). Growth outperformed value in 4Q (R1000 Growth: +14.2%; R1000 Value: +9.5%) and even more substantially for the year (R1000 Growth: +42.7%; R1000 Value: +11.5%). Index concentration continued to have a notable impact on returns in 4Q. The "Magnificent Seven," which comprise over 25% of the S&P 500, accounted for 76% of the 2023 return for the index. The index would have been up only about 10% for the year without these stocks, and the equal-weighted S&P 500 returned 11.9% in 4Q and 13.9% in 2023.

Global ex-U.S. equities (MSCI ACWI ex USA: +9.8%) performed well in 4Q and for the year (+15.6%) but lagged the U.S. Weakness in the U.S. dollar helped 4Q returns across developed markets. As in the U.S., growth outperformed value in the quarter (MSCI ACWI ex USA Growth: +11.1%; MSCI ACWI ex USA Value: +8.4%). However, value outperformed growth for the full year (MSCI ACWI ex USA Growth: +14.0%; MSCI ACWI ex USA Value: +17.3%). Emerging markets (MSCI Emerging Markets: +7.9%) also did well but underperformed developed markets. China was a notable laggard (-4.2%; -11.2%). Latin America (+17.6%; +32.7%) was the best-performing region for the quarter and the year with Mexico (+18.6%; +40.9%) and Brazil (+17.8%; +32.7%) up strongly.

Global Fixed Income

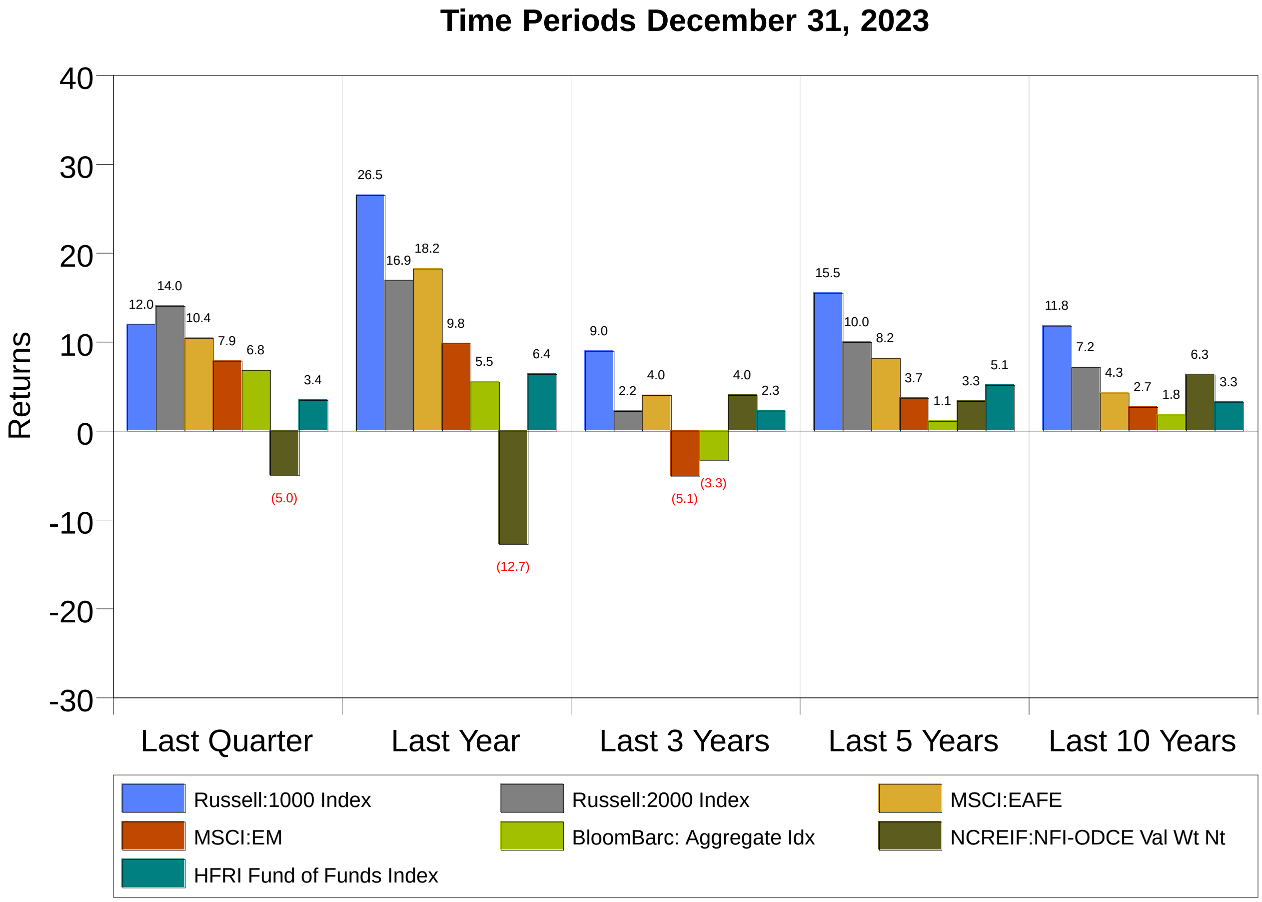
The 10-year U.S. Treasury yield was volatile in 2023—ranging from an April low of 3.31% post the regional banking "crisis" to the October high of 4.99% and subsequently declining into year-end for a 3.88% close. Falling rates drove returns for the Bloomberg US Aggregate to +6.8% in 4Q and +5.5% in 2023, a sharp contrast to the -1.2% YTD print as of 9/30. Corporate credit strongly outperformed U.S. Treasuries in 4Q (excess returns of 2.03%) and for the year (4.55%). High yield (Bloomberg US High Yield) climbed 7.2% for the quarter and was up an equity-like 13.4% for the year. The yield curve remained inverted, but to a much lesser extent; 0.35% between the 2-year and 10-year U.S. Treasury yields versus more than 1.00% earlier in the year.

The Bloomberg Global Aggregate ex USD Index rose 9.2% (hedged: +5.4%) in 4Q as rates fell and the U.S. dollar weakened. Full-year results (+8.3% hedged; +5.7% unhedged) were also positive but reflected an overall stronger greenback. Emerging market debt indices also posted solid returns. The hard currency JPM EMBI Global Diversified gained 9.2% in 4Q and 11.1% in 2023. The local currency-denominated JPM GBI-EM Global Diversified returned 8.1% in 4Q and 12.7% for the year.

Real Assets

Private real estate indices fell in 4Q23, mostly due to appreciation losses. The NCREIF Property Index was off 4.1% and the NCREIF ODCE Index dropped 4.8%. Real estate investment trusts (REITs), on the other hand, jumped and topped stock indices, both in the U.S. and globally. The FTSE EPRA Nareit Developed REIT Index, a measure of global real estate securities, rose 15.6% during 4Q23. U.S. REITs, as measured by the FTSE Nareit Equity REITs Index, increased 16.2%. The outperformance in the U.S stemmed from dampening inflation. Europe was the top-performing region, helped by currency tailwinds.

Fourth Quarter 2023 Market Performance



The Callan Periodic Table of Investment Returns
Fourth Quarter 2023

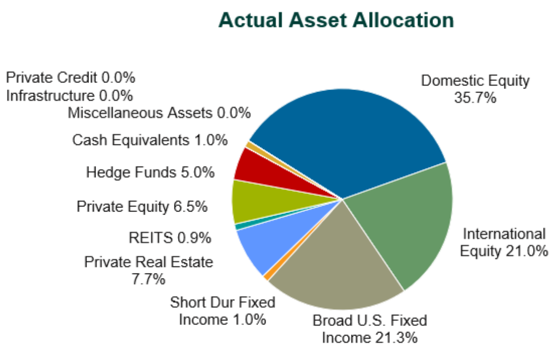
2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Russell:1000 Index **13.2%**	NCREIF:NFI-ODCE Val Wt Nt **14.0%**	Russell:2000 Index **21.3%**	MSCI:EM **37.3%**	Cambridge:Gl PE & Cred **10.0%**	Russell:1000 Index **31.4%**	Cambridge:Gl PE & Cred **29.9%**	Cambridge:Gl PE & Cred **37.2%**	NCREIF:NFI-ODCE Val Wt Nt **6.5%**	Russell:1000 Index **26.5%**
Cambridge:Gl PE & Cred **11.9%**	Cambridge:Gl PE & Cred **8.8%**	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:1000 Index **26.5%**	HFRI Fund of Funds Index (5.3%)	MSCI:EAFE **18.2%**
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 **21.0%**	Cambridge:Gl PE & Cred **(7.7%)**	Russell:2000 Index **16.9%**
BC Aggregate **6.0%**	BC Aggregate **0.5%**	Cambridge:Gl PE & Cred **9.6%**	Cambridge:Gl PE & Cred **20.0%**	HFRI Fund of Funds Index (4.0%)	MSCI:EM **18.4%**	MSCI:EM **18.3%**	Russell:2000 Index **14.8%**	BC Aggregate **(13.0%)**	MSCI:EM **9.8%**
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:Gl PE & Cred **16.4%**	HFRI Fund of Funds Index 10.9%	MSCI:EAFE **11.3%**	MSCI:EAFE **(14.5%)**	HFRI Fund of Funds Index 6.4%
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%**	HFRI Fund of Funds Index 6.2%	Russell:1000 Index **(19.1%)**	BC Aggregate **5.5%**
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 **(1.5%)**	MSCI:EM **(20.1%)**	NCREIF:NFI-ODCE Val Wt Nt **(12.7%)**
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%**	MSCI:EM **(2.5%)**	Russell:2000 Index **(20.4%)**	**PE Idx Not Yet Reported**

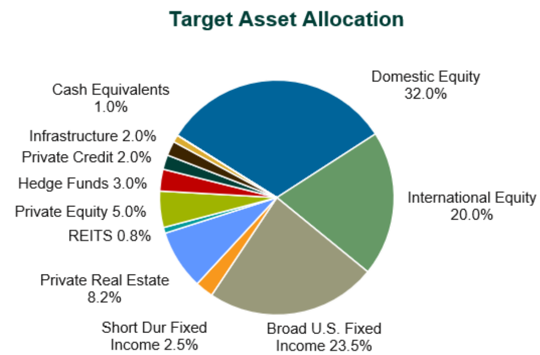
County Employees' and Officers' Annuity & Benefit Fund of Cook County
Performance Evaluation Executive Summary
Fourth Quarter 2023

Cook County Pension Fund Commentary

Asset Allocation

The Cook County Fund ("Fund") finished 2023 with a market value of $12.8 billion, a $755 million increase from the September 30th value of $12.0 billion. The fund experienced investment returns of $859 million and net outflows of $104 million during the quarter. The target asset allocation was established in June 2022; however, the benchmark will be modified in accordance with the actual implementation of new asset classes (private infrastructure and credit). All asset classes are within target ranges. Domestic Equity (+3.7%) is the largest overweight relative to its target. Overweights to Private Equity (+1.5%) and Hedge Funds (+2.0%) are offset by underweights to Infrastructure and Private Credit, which are yet to be implemented.





Asset Class	$000s Actual	Weight Actual	Min Target	Target	Max Target	Percent Difference	$000s Difference
Domestic Equity	4,550,705	35.7%	28.0%	32.0%	36.0%	3.7%	466,864
International Equity	2,676,463	21.0%	16.0%	20.0%	24.0%	1.0%	124,063
Broad U.S. Fixed Income	2,715,634	21.3%	19.5%	23.5%	27.5%	(2.2%)	(283,436)
Short Dur Fixed Income	126,834	1.0%	0.0%	2.5%	5.0%	(1.5%)	(192,216)
Private Real Estate	979,570	7.7%	5.0%	8.2%	13.0%	(0.5%)	(66,914)
REITS	119,984	0.9%	0.0%	0.8%	2.6%	0.1%	17,888
Private Equity	827,151	6.5%	1.0%	5.0%	9.0%	1.5%	189,051
Hedge Funds	640,579	5.0%	0.0%	3.0%	6.0%	2.0%	257,719
Private Credit	-	0.0%	0.0%	2.0%	4.0%	(2.0%)	(255,240)
Infrastructure	-	0.0%	0.0%	2.0%	4.0%	(2.0%)	(255,240)
Cash Equivalents	124,635	1.0%	0.0%	1.0%	5.0%	(0.0%)	(2,985)
Miscellaneous Assets	447	0.0%	0.0%	0.0%	0.0%	0.0%	447
Total	12,762,002	100.0%		100.0%		0.0%	-

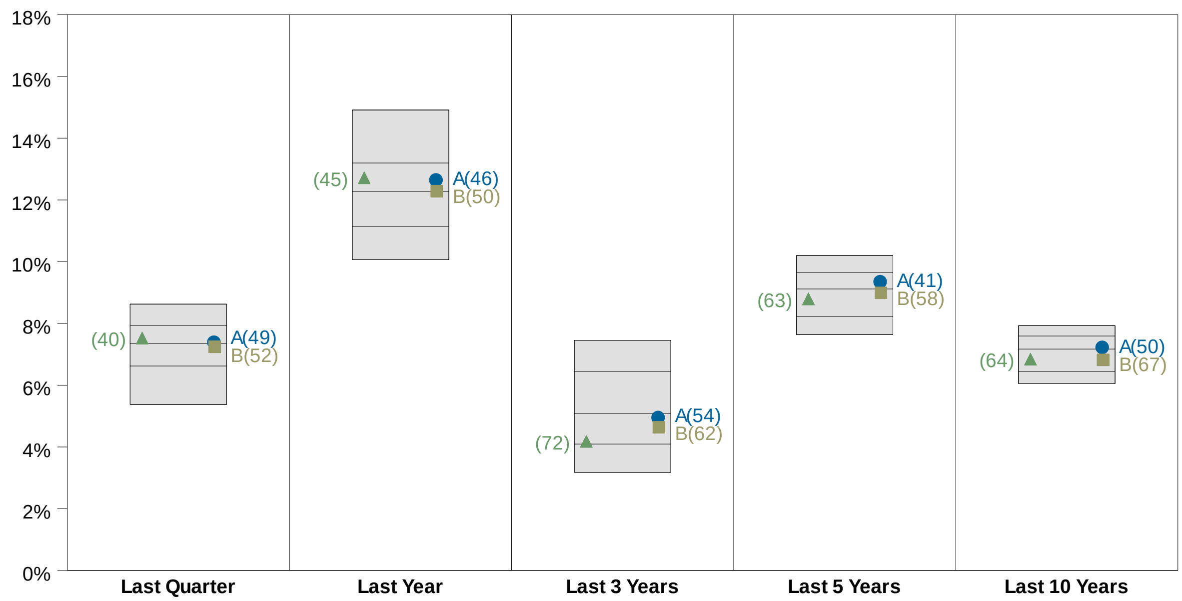
Cook County Performance vs. Target

In the fourth quarter, the Total Fund returned 7.24% net of fees (NOF) versus the benchmark return of 7.53%. Over the trailing year, the Total Fund returned 12.28% and trailed the benchmark return of 12.72%. Over the last three years, the Total Fund generated a return of 4.64% (NOF) and outpaced the benchmark return of 4.18%. The Fund earned an 8.99% return (NOF) over the last five years, exceeding the benchmark return of 8.79%. Over the last ten years, the Fund returned 6.82% (NOF) and performed in line with the benchmark (6.84%).

The Fund's performance ranks in the top half of peers on a gross of fee basis (GOF) for the last one-, five-, and ten-year periods.

Table 1.0

Performance vs Callan Public Fund Spons - Large (>1B) (Gross)



	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
10th Percentile	8.63	14.91	7.45	10.20	7.93
25th Percentile	7.94	13.20	6.44	9.65	7.59
Median	7.34	12.27	5.08	9.12	7.17
75th Percentile	6.62	11.14	4.09	8.23	6.45
90th Percentile	5.38	10.07	3.18	7.64	6.05
Total Cook (Gross) ● A	7.36	12.62	4.92	9.32	7.20
Total Cook County (Net) ■ B	7.24	12.28	4.64	8.99	6.82
Total Fund Benchmark ▲	7.53	12.72	4.18	8.79	6.84

County Employees' and Officers' Annuity & Benefit Fund of Cook County
Performance Evaluation Executive Summary
Fourth Quarter 2023

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	**$4,550,705,189**	**35.66%**	**11.34%**	**24.45%**	**8.55%**	**14.73%**	**10.64%**
Domestic Equity Benchmark (2)	-	-	12.07%	25.96%	8.54%	15.16%	11.48%
International Equity	**$2,676,463,089**	**20.97%**	**9.88%**	**15.40%**	**0.42%**	**6.55%**	**4.01%**
International Equity Benchmark (3)	-	-	9.81%	15.62%	1.53%	7.18%	3.81%
Fixed Income	**$2,842,467,766**	**22.27%**	**6.67%**	**5.97%**	**(2.94%)**	**1.10%**	**1.81%**
Fixed Income Benchmark (4)	-	-	6.41%	5.46%	(2.97%)	1.24%	1.88%
REITS	**$119,983,941**	**0.94%**	**15.04%**	**16.50%**	**7.75%**	**8.60%**	**7.65%**
NAREIT Equity Index	-	-	16.22%	13.73%	7.21%	7.39%	7.65%
****Private Real Estate**	**$979,570,315**	**7.68%**	**(5.13%)**	**(10.04%)**	**7.32%**	**6.22%**	**8.01%**
NFI-ODCE Value Weight Net	-	-	(5.00%)	(12.73%)	4.01%	3.34%	6.33%
****Private Equity**	**$827,151,067**	**6.48%**	**(0.93%)**	**2.81%**	**19.91%**	**22.75%**	**14.89%**
****Hedge Funds**	**$640,579,090**	**5.02%**	**3.17%**	**7.49%**	**5.31%**	**5.14%**	**4.48%**
90-Day Average SOFR + 4% (5)	-	-	2.31%	8.95%	6.44%	6.10%	5.53%
HFRI Fund of Funds Index (6)	-	-	0.66%	4.32%	2.72%	4.32%	3.15%
Cash Equivalents	**$124,634,569**	**0.98%**	**1.40%**	**5.19%**	**2.33%**	**2.03%**	**1.45%**
3-month Treasury Bill	-	-	1.37%	5.01%	2.15%	1.88%	1.25%
Total Cook County Fund	**$12,762,002,294**	**100.00%**	**7.24%**	**12.28%**	**4.64%**	**8.99%**	**6.82%**
Total Fund Benchmark (1)	-	-	7.53%	12.72%	4.18%	8.79%	6.84%

**Represents trailing data.
Footnotes found on the back page

Table 1.1 illustrates the Cook County Fund's asset class performance against associated benchmarks.

Domestic Equity returned 11.34% for the quarter versus the benchmark return of 12.07%. Over the last year, Domestic Equity (24.45%) underperformed the benchmark return (25.96%). Domestic Equity edged its benchmark over the last three years, but modestly underperformed over longer periods.

International Equity gained 9.88% for the quarter and exceeded the benchmark return of 9.81%. Over the last year, International Equity (15.40%) lagged the benchmark return (15.62%). The International Equity composite has outperformed the benchmark over the last ten years.

Fixed Income added 6.67% for the quarter and outpaced the benchmark return of 6.41%. Over the last year, Fixed Income (5.97%) outperformed the benchmark (5.46%). The composite leads the benchmark over the last three years.

REITS returned 15.04% during the quarter but trailed the benchmark return of 16.22%. Over the last year, REITS (16.50%) outperformed the benchmark return (13.73%). REITS lead the benchmark return over the last three- and five-year periods.

Private Real Estate declined 5.13% for the quarter versus the benchmark return of -5.00%. Over the last year, Private Real Estate (-10.04%) outperformed the benchmark return (-12.73%). Over longer periods, the allocation has added considerable value over the benchmark net of investment management fees.

Hedge Funds returned 3.17% for the quarter, ahead of the benchmark return of 2.31%. Over the last year, Hedge Funds (7.49%) underperformed the benchmark (8.95%). The allocation trails its benchmark across long-term periods.

Private Equity declined 0.93% for the quarter and finished with a 2.81% return for the past year. Over longer periods, the allocation generated significant double-digit returns.

Benchmarks

1. **Total Fund Benchmark (Target):** Blend of asset class benchmarks at policy weights. The Long-Term Target was established in June 2022; however, the benchmark will be modified in accordance with the actual implementation. This process reflects the practical implementation of non-publicly traded investments.

	Long Term Target	4Q 2023 Target
Russell 3000	32.0%	33.0%
MSCI ACWI ex US IMI	20.0	21.0
Bloomberg Aggregate	23.4	23.4
Blmbg Gov/Cred 1-3yr	2.6	2.6
90-Day Avg SOFR + 4.0%	3.0	6.0
Real Estate*	9.0	9.0
Private Equity**	5.0	4.0
Private Credit	2.0	0.0
Infrastructure	2.0	0.0
Cash (90 day T-Bill)	1.0	1.0
Total Target	100.0%	100.0%

2. **Domestic Equity Benchmark:** Russell 3000 Index; Prior to 9/31/2011 Blend of 40% S&P 500, 16% Russell 2000 Value, 16% Russell Mid Cap Growth, 14% Russell 1000 Growth, and 14% Russell 1000 Value.

3. **International Benchmark**: MSCI ACWI ex-US IMI Index; Prior to 12/31/2017 MSCI ACWI ex-US Index; Prior to 12/31/2012 Blend of 85% MSCI ACWI ex-US, 15% Global ex US under $2 billion; Prior to 9/30/2011 Blend of 80% MSCI ACWI ex-US, 20% Global ex US under $2 billion.

4. **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 62.5% Bloomberg Aggregate Index, 12.5% Bloomberg US TIPs Index, and 25% Bloomberg Gov/Credit Intermediate Index.

5. **Hedge Funds**: 90-Day Average SOFR + 4%; Prior to 12/31/2022 3-Month LIBOR + 4%

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

***Real Estate Benchmark:** Returns are calculated by weighting the benchmark return for each asset class (i.e. Private RE and Public RE). The Private RE benchmark is the NCREIF NFI-ODCE Value Weight Net Index and the Public RE benchmark is the FTSE NAREIT Equity Index.

****Private Equity Benchmark:** is set equal to actual returns.