Callan

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

Performance Summary

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Performance Evaluation Executive Summary
Second Quarter 2023

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Macroeconomic Environment

The Global Economy: Too Good to Be True?

A recession in the U.S. does not appear imminent, despite the most aggressive rate hikes since the 1980s over the past 15 months. The labor market remains strong, expectations for 2Q23 GDP growth are positive, consumer spending has exceeded expectations, and even housing has shown signs of life. Further good news comes from inflation, which has moderated, though largely due to falling energy prices. We have also successfully weathered a couple of storms this year; regional bank worries have abated after the collapse of Signature Bank, Silicon Valley Bank, and First Republic, and the debt ceiling saga is behind us.

Higher interest rates have a lagged effect but the impact can already be seen in some areas. In April, nearly 50% of U.S. banks reported tightening lending standards for loans to small businesses. Rising payments for credit card debt, auto loans, commercial mortgage payments, and corporate debt all have the potential to put the brakes on economic growth. While the default rate for corporations has not ticked up materially, a June report from S&P Global was a bit ominous: "…the tally of companies that have gone bankrupt so far in 2023 is higher than the first four months of any year since 2010." Commercial real estate woes, especially office and retail, are also on the radar of the more pessimistic crowd. The resumption of student loan payments in August could also temper growth later this year. Americans owe roughly $1.8 trillion in federal and private student loan debt.

And there is mixed news: Headline CPI was up 4.0% over the past 12 months (as of May), the lowest since March 2021, with Core up 5.3% (down from a 6.6% cycle high in September). Headline CPI has benefited from falling energy prices (-12% YOY) while Core has not moderated as much and has the Fed's attention. Within Core, shelter costs (+8% YOY) have been particularly sticky and comprise around 40% of the measure. The Fed's favored inflation metric, the Personal Consumption Expenditures Index, showed progress with a +3.8% gain in May (YOY), down from 5.4% in January. As with CPI, the Core measure remains more stubborn and was up 4.6% in May (YOY), down only slightly from January's 4.7%.

The Fed took a pause at its June meeting, leaving the Fed Funds target at 5.00% – 5.25%, citing uncertainty over the effects of tighter credit conditions and the lags with which monetary policy affects the economy and inflation. However, more hikes are likely this year. The median projection from the Federal Reserve Board for Fed Funds is 5.6% at the end of 2023, up from the March projection of 5.1%. The Fed's median prediction is 4.6% for the end of 2024, but the distribution reflects a wide range of views that range from 3.6% to 5.9%. The Fed remains committed in its goal to tame inflation and it believes it will be successful. The median projection is for Core PCE inflation to be 2.6% in 2024 and 2.2% in 2025. Markets agree, at least over longer periods. The five-year breakeven spread (a market measure of expected inflation over the next five years) was 2.2% as of quarter-end.

Most of the globe continues to be in "tightening" mode (except for China and Japan) as inflation remains stubbornly high. The Bank of England raised rates 50 bps in June, above expectations, in response to May's 7.1% (YOY) inflation print for core CPI, the highest since 1992. Central banks in Norway, Switzerland, and Turkey also raised rates in June. In the euro zone, inflation has moderated but remains high (6.1% YOY in May). Further hikes from the ECB are also expected. However, the impact has already been felt as the euro zone is in a technical recession, as measured by two consecutive quarters of negative growth. GDP in the 20-nation euro zone fell 0.1% in 1Q23 and 4Q22, hurt by declines in household spending amid higher prices.

Global Equities

The S&P 500 Index rose 8.7% while the tech-heavy Nasdaq Composite returned +13.1%. Within the S&P 500, Technology (+17.2%), Communication Services (+13.1%), and Consumer Discretionary (+14.6%) rose sharply while Energy (-0.9%) and Utilities (-2.5%) fell. Growth stocks trounced value for the quarter (Russell 1000 Growth: +12.8%; Russell 1000 Value: +4.1%) due largely to the sharp outperformance of Technology relative to Health Care, Energy, and Financials. Small cap stocks underperformed large (Russell 2000: +5.2%; Russell 1000: +8.6%) across the style spectrum. Index concentration continued to have a significant impact on returns in 2Q. The aptly named "Magnificent Seven" (Nvidia, Meta Platforms, Amazon, Tesla, Apple, Microsoft, Alphabet) comprise roughly 25% of the S&P 500 and have accounted for the vast majority of S&P 500 gains in 2023 (up 64% versus 3% for the rest of the Index).

Lacking the U.S. market's exuberance for any company associated with artificial intelligence, style impacts in developed ex-U.S. equity were more muted with value (MSCI World ex USA Value: +3.1%) in line with growth (MSCI World ex USA Growth: +3.0%). Illustratively, Industrials (EAFE Industrials: +6.4%) outperformed Technology (EAFE Technology: +5.9%). Japan (+6.4%) was a top performer and the Nikkei 225 Index hit its highest level since 1990. Emerging Europe (+11.2%) and Latin America (+14.0%) posted double-digit results while Emerging Asia (-0.8%) was hurt by poor performance from China (-9.7%) offsetting results from India (+12.2%). The recovery in China appears to be sputtering and economic news has been disappointing and remains uncertain. Poland (+24.5%) boosted the performance of emerging Europe while Turkey (-10.7%) weighed on the region's results. In Latin America, Brazil (+20.7%) and Colombia (+11.7%) were top performers.

Global Fixed Income

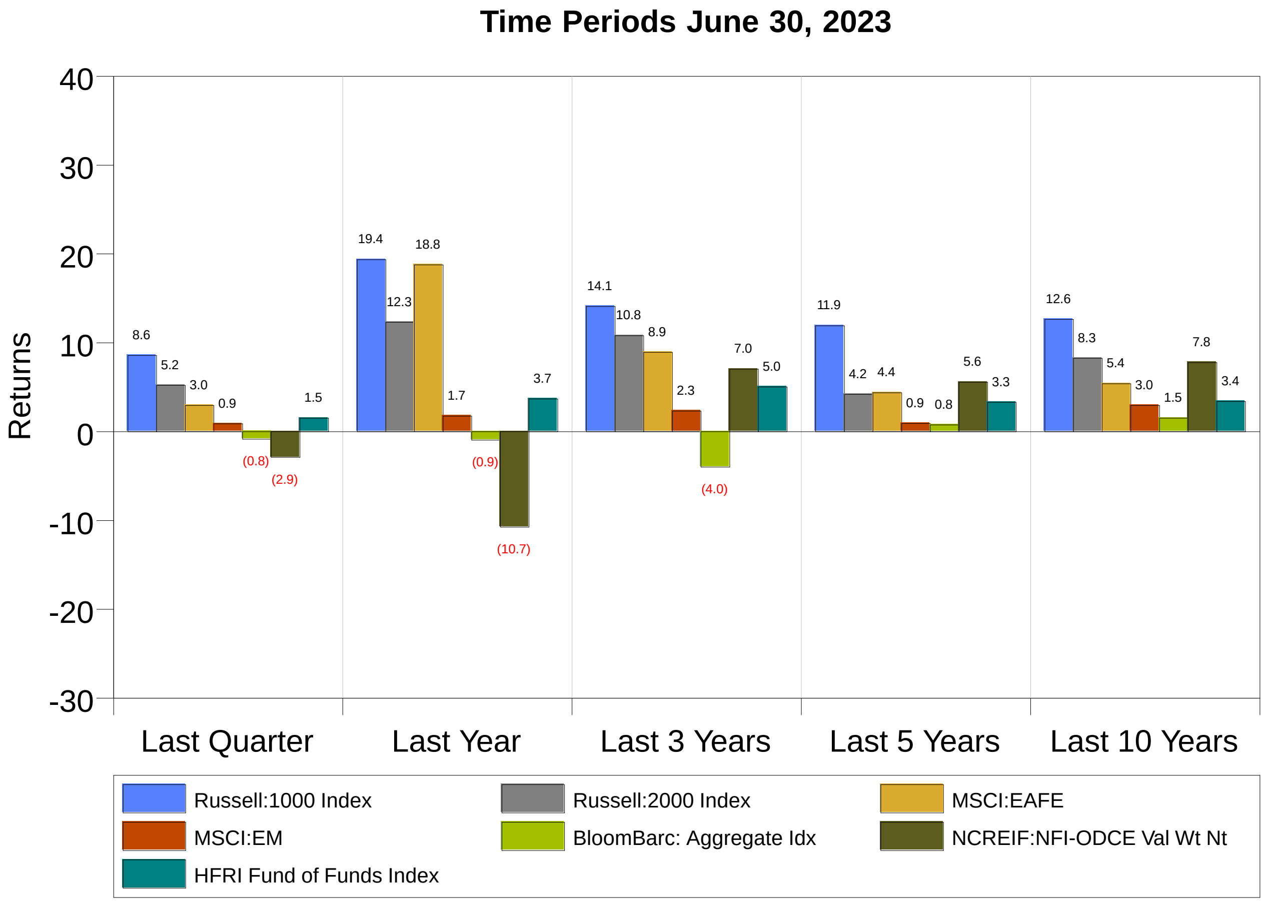
The Bloomberg US Aggregate Bond Index fell 0.8% in 2Q as interest rates rose. The 10-year U.S. Treasury yield was 3.81% as of quarter-end, up from 3.48% as of 3/31. The yield curve was sharply inverted at quarter-end with the 2-year U.S. Treasury yielding 4.87%. High yield (Bloomberg High Yield Index: +1.8%) performed well amid robust risk appetite, muted issuance, and promising economic news.

The Bloomberg Global Aggregate ex USD Index fell 2.2% (hedged: +0.7%). Japan (-8.0%) was the worst-performing constituent, due largely to yen deprecation. Emerging market debt indices performed well (JPM EMBI Global Diversified: +2.2%; local currency JPM GBI-EM Global Diversified: +2.5%). Returns were mixed in the local currency index; Latin America (+11%) performed well with double-digit returns from Brazil (+12%) and Colombia (+23%) while Asia (-2%) was hurt by China (-4%) and Malaysia (-4%). Turkey (-29%) also posted a sharp decline.

Real Assets

The S&P GSCI fell 2.7% in 2Q. WTI Crude ended the quarter at $70.64/barrel, down from $75.67/barrel on 3/31. Copper (-8%) fell on concerns over ebbing global demand and a slowdown in China, and gold (S&P Gold Spot Price: -2.9%) was hurt by lowered expectations for inflation and reduced safe-haven demand. REITs were a bright spot (MSCI US REIT: +2.7%) while TIPS (Bloomberg TIPS: -1.4%) were hurt by rising interest rates.

Second Quarter 2023 Market Performance



The Callan Periodic Table of Investment Returns
Second Quarter 2023

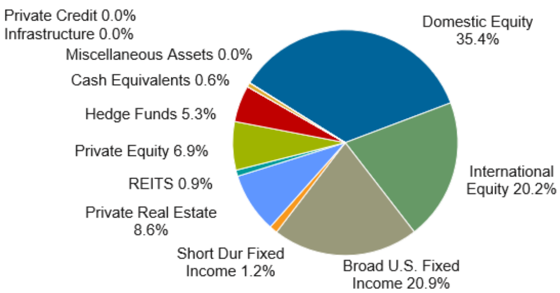
2014	2015	2016	2017	2018	2019	2020	2021	2022	2 Qtrs. 2023
Russell:1000 Index 13.2%	NCREIF:NFI-ODCE Val Wt Nt 14.0%	Russell:2000 Index 21.3%	MSCI:EM 37.3%	Cambridge:Gl PE & Cred 10.0%	Russell:1000 Index 31.4%	Cambridge:Gl PE & Cred 29.8%	Cambridge:Gl PE & Cred 37.0%	NCREIF:NFI-ODCE Val Wt Nt 6.5%	Russell:1000 Index 16.7%
Cambridge:Gl PE & Cred 11.9%	Cambridge:Gl PE & Cred 8.7%	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 11.7%
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 (7.8%)	Russell:2000 Index 8.1%
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 4.9%
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:Gl PE & Cred 16.3%	HFRI Fund of Funds Index 10.9%	MSCI:EAFE 11.3%	MSCI:EAFE (14.5%)	Cambridge:Gl PE & Cred 3.7%
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%)	HFRI Fund of Funds Index 2.3%
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%)	BC Aggregate 2.1%
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

Cook County Pension Fund Commentary

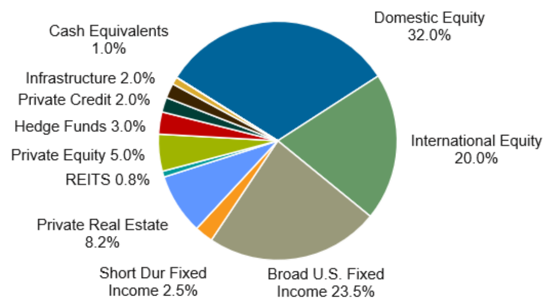
Asset Allocation

The Cook County Fund ("Fund") finished June with a market value of $12.5 billion, a $256 million increase from the first quarter ending value of $12.3 billion. Investment returns increased the market value of the Fund by approximately $375 million, and the Fund experienced $119 million of net outflows during the second quarter. The Long-Term Target 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). Domestic Equity is the largest overweight asset class at 3.4% over its long-term target. The Domestic Equity overweight is offset by underweights to Infrastructure and Private Credit, which are yet to be implemented.

Actual Asset Allocation



Long-Term Target Asset Allocation



Asset Class	$000s Actual	Weight Actual	Min Target	Long-Term Target	Max Target	Percent Difference	$000s Difference
Domestic Equity	4,429,096	35.4%	28.0%	32.0%	36.0%	3.4%	422,757
International Equity	2,534,446	20.2%	16.0%	20.0%	25.0%	0.2%	30,484
Broad U.S. Fixed Income	2,620,076	20.9%	19.5%	23.5%	27.4%	(2.6%)	(322,079)
Short Dur Fixed Income	143,993	1.2%	0.0%	2.5%	5.0%	(1.3%)	(169,002)
Private Real Estate	1,076,352	8.6%	5.0%	8.2%	13.0%	0.4%	49,728
REITS	110,855	0.9%	0.0%	0.8%	2.6%	0.1%	10,697
Private Equity	869,043	6.9%	1.0%	5.0%	9.0%	1.9%	243,053
Hedge Funds	658,214	5.3%	0.0%	3.0%	6.0%	2.3%	282,620
Private Credit	-	0.0%	0.0%	2.0%	4.0%	(2.0%)	(250,396)
Infrastructure	-	0.0%	0.0%	2.0%	4.0%	(2.0%)	(250,396)
Cash Equivalents	77,729	0.6%	0.0%	1.0%	5.0%	(0.4%)	(47,469)
Miscellaneous Assets	6	0.0%	0.0%	0.0%	0.0%	0.0%	6
Total	12,519,810	100.0%		100.0%		0.0%	-

Cook County Performance vs. Target

The Total Fund returned 3.09% net of fees (NOF) and matched the benchmark return for the quarter. Over the last year, the Fund posted a gain of 8.04% versus the benchmark return of 8.10%. The Fund's return ranks in the top half of peers (gross of fees) for the last quarter, last year, and last five-year periods.

Over the trailing three- and ten-year periods, the Fund has outperformed its benchmark on an annualized basis and ranks near the median of peers (gross of fees basis) at the 54th percentile. An overweight to Private Equity and active management in Private Real Estate have contributed to outperformance over longer time 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		4.61	11.22	11.36	8.31	8.56
25th Percentile		3.72	9.71	10.02	7.73	8.17
Median		2.95	8.14	9.13	7.17	7.81
75th Percentile		2.52	6.70	7.56	6.14	7.03
90th Percentile		1.47	4.27	5.88	5.29	6.32
Total Cook (Gross)	● A	3.14	8.36	8.88	7.30	7.75
Total Cook County (Net)	■ B	3.09	8.04	8.59	6.99	7.38
Total Fund Benchmark	▲	3.09	8.10	7.48	6.95	7.22

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	**$4,429,095,844**	**35.38%**	**8.28%**	**19.01%**	**14.26%**	**10.76%**	**11.68%**
Domestic Equity Benchmark (2)	-	-	8.39%	18.95%	13.89%	11.39%	12.34%
International Equity	**$2,534,446,417**	**20.24%**	**2.08%**	**12.49%**	**6.17%**	**2.84%**	**4.98%**
International Equity Benchmark (3)	-	-	2.38%	12.47%	7.33%	3.38%	4.69%
Fixed Income	**$2,764,069,090**	**22.08%**	**(0.57%)**	**(0.76%)**	**(3.03%)**	**0.62%**	**1.53%**
Fixed Income Benchmark (4)	-	-	(0.80%)	(0.78%)	(3.65%)	0.90%	1.58%
REITS	**$110,854,795**	**0.89%**	**4.00%**	**(0.57%)**	**9.14%**	**5.54%**	**6.48%**
NAREIT Equity Index	-	-	2.62%	(0.13%)	8.91%	4.55%	6.42%
****Private Real Estate**	**$1,076,352,449**	**8.60%**	**(2.93%)**	**(2.00%)**	**10.49%**	**9.17%**	**9.51%**
NFI-ODCE Value Weight Net	-	-	(2.88%)	(10.73%)	7.04%	5.56%	7.77%
****Private Equity**	**$869,043,430**	**6.94%**	**2.90%**	**(5.77%)**	**29.87%**	**25.83%**	**15.26%**
****Hedge Funds**	**$658,213,780**	**5.26%**	**0.37%**	**5.17%**	**6.15%**	**3.89%**	**4.21%**
90-Day Average SOFR + 4% (5)	-	-	2.14%	8.08%	5.58%	5.82%	5.28%
HFRI Fund of Funds Index (6)	-	-	(0.36%)	1.12%	5.32%	2.99%	3.13%
Cash Equivalents	**$77,728,787**	**0.62%**	**1.25%**	**3.83%**	**1.43%**	**1.75%**	**1.18%**
3-month Treasury Bill	-	-	1.17%	3.59%	1.27%	1.55%	0.98%
Total Cook County Fund	**$12,519,810,261**	**100.00%**	**3.09%**	**8.04%**	**8.59%**	**6.99%**	**7.38%**
Total Fund Benchmark (1)	-	-	3.09%	8.10%	7.48%	6.95%	7.22%

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

Domestic Equity returned 8.28% for the quarter versus the benchmark return of 8.39%. Domestic Equity outperformed its benchmark over the last one- and three-year periods, but lags the benchmark over longer periods on an annualized basis.

International Equity advanced 2.08% for the quarter and trailed the benchmark return of 2.38%. Over the last year, International Equity (12.49%) performed in line with the benchmark (12.47%). The International Equity composite has modestly outperformed the benchmark over the last ten years.

Fixed Income declined 0.57% for the quarter but fared better than the benchmark return of -0.80%. Over the last year, Fixed Income (-0.76%) performed in line with the benchmark (-0.78%).

REITS returned 4.00% during the quarter and outperformed the benchmark return of 2.62%. Over the last year, REITS (-0.57%) underperformed the benchmark return (-0.13%).

Private Real Estate retreated 2.93% for the quarter versus the benchmark return of -2.88%. Over longer periods, the allocation has added considerable value over the benchmark net of investment management fees.

Hedge Funds returned 0.37% for the quarter, trailing the benchmark return of 2.14%. Over the last year, Hedge Funds (5.17%) underperformed the benchmark (8.08%).

Private Equity earned a 2.90% return for the quarter but has declined 5.77% over the last 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	2Q 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.