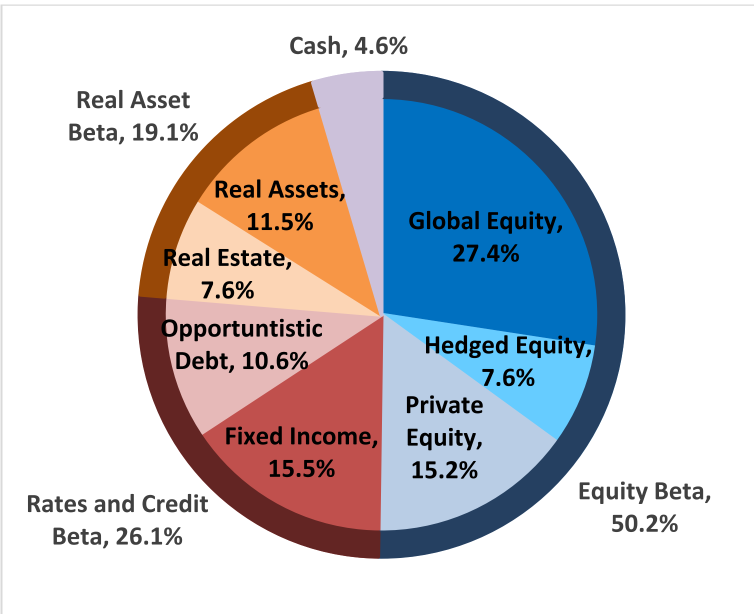
CIO INVESTMENT REPORT

~ by Larry Krummen, CFA ~
Chief Investment Officer
MPERS Board Meeting – November 18, 2021

Investment Performance Report

NEPC will present MPERS' 3rd quarter 2021 investment performance report. A high-level summary of the report is provided below.

MPERS' Asset Allocation
September 30, 2021
Market Value $3,063,164,398



1-Year Return:	27.15%
Benchmark Return:	18.08%
Excess:	9.07%
3-Year Return:	11.63%
Benchmark Return:	11.46%
Excess:	0.17%
5-Year Return:	11.05%
Benchmark Return:	10.48%
Excess:	0.57%
10-Year Return:	10.45%
Benchmark Return:	9.50%
Excess:	0.95%

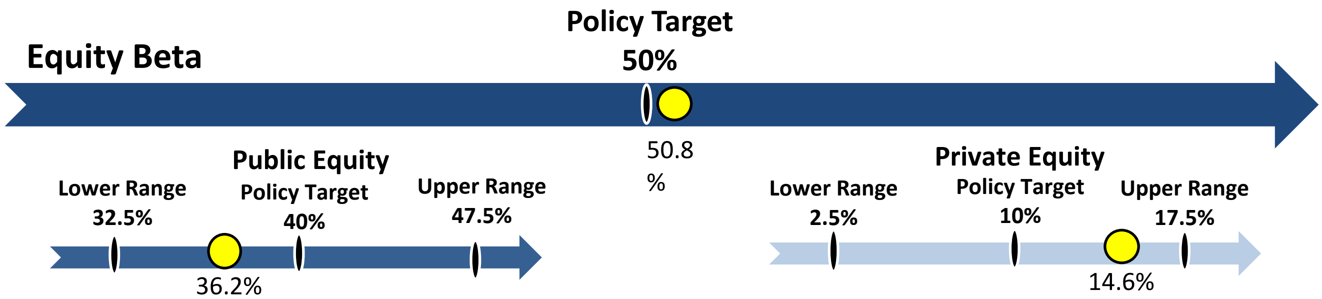
- MPERS' investment portfolio continues to perform well across most any metric. The portfolio gained 2.6% during the 3rd quarter of 2021, which ranked in the top 1% of the peer universe and drove the fund balance to an all-time high of $3.06 billion. MPERS' portfolio now ranks at or near the top quartile of the peer universe over the one-, three-, five-, and ten-year periods. The risk-adjusted performance is even more impressive, as MPERS' five-, ten-, and fifteen-year Sharpe Ratios (a measure of return for a given unit of risk) all rank in the top one or two percent of the public fund peer universe. As of September 30, 2021, and for the first time in my tenure at MPERS, the portfolio is generating double digit annualized returns and outperforming the policy benchmarks for all reporting periods.

- Given this unprecedented run of strong performance, we continue to build a sizeable cash position in the portfolio in anticipation of some eventual weakness in the markets and a better entry point for new capital. We have also yet to utilize any leverage in the portfolio, which together with the growing cash balance should provide a powerful tool in managing any future (and inevitable) downtowns in the market. The current positioning of the portfolio is further detailed on the following page.

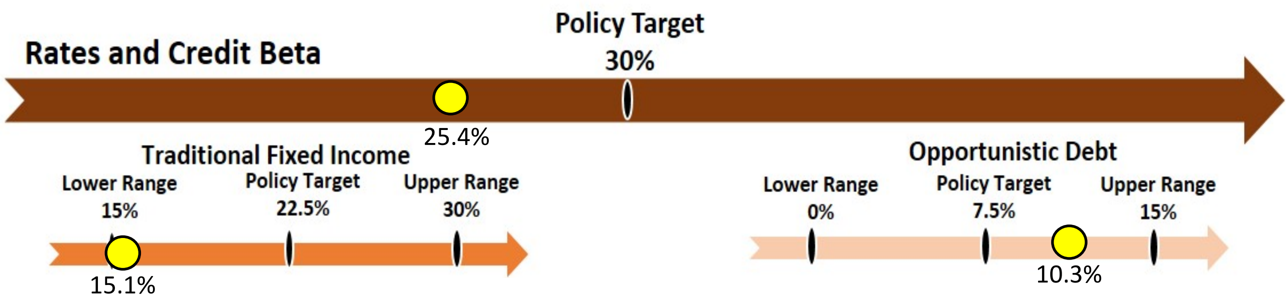
- Consistent with the theme of strong market performance, the portfolio is up an estimated 5.25% to start fiscal year 2022 (July 1st – November 9th).

Current Asset Allocation and Positioning Relative to Targets

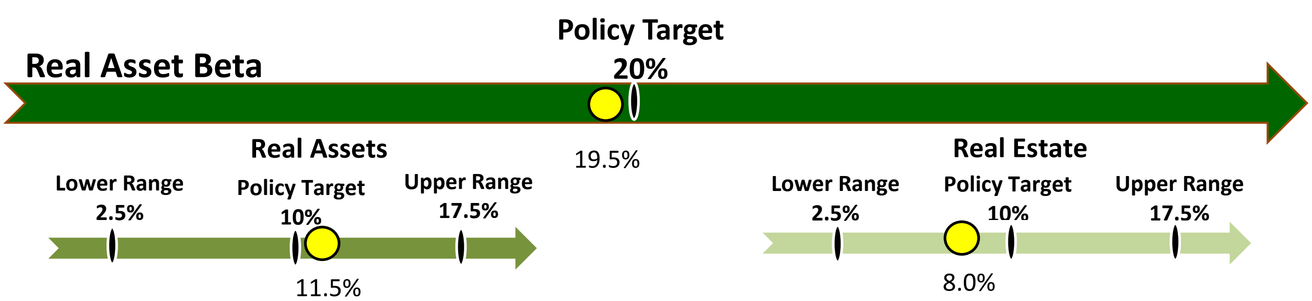
The current allocation relative to policy targets, along with additional comments on the positioning of the portfolio, is provided below. As of November 8, 2021, each of the respective allocations are within the permissible ranges established in MPERS' Investment Policy. The total fund leverage authority is not being utilized and MPERS' cash balance stands at $137.5 million (4.38% of assets).



Public equities have once again rallied to new all-time highs on the strength of the economy and reduced fears of Fed rate hikes. The relative performance of MPERS' public equity portfolio has also improved alongside the recovery of value and small cap strategies. We continue to maintain a neutral weighting overall to the equity Beta group. 77% of the public equity exposure (27% of assets) is currently obtained by using derivative and/or portable alpha strategies.



The opportunistic debt portfolio continues to perform well and now ranks in the top 1% of the peer universe for the past one and three-year periods. On the flip side of the chart, with yields on the 10-year Treasury at 1.45% and 1.82% for the 30-year Treasury, and year over year inflation running over 5% since May of 2021, the risks seem to outweigh the benefits of holding traditional fixed income assets in this market. Given this environment, we intend to maintain an underweight position to traditional fixed income markets for the foreseeable future.



The real assets portfolio continues to perform well, led by gains in the energy and timber portfolios. We remain underweight the real estate allocation target but continue to review a new strategy and potential long-term strategic partner in the sector that could increase the allocation over time. The entire real assets portfolio should continue to perform well should the current inflationary pressures persist over the longer-term.