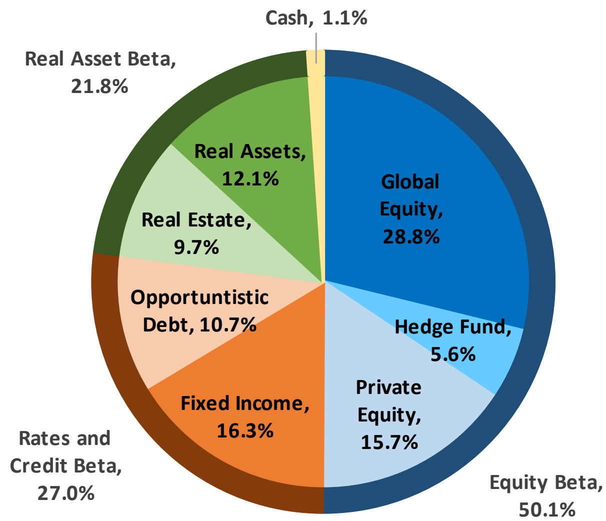
CIO INVESTMENT REPORT
~ by Larry Krummen, CFA ~
Chief Investment Officer
MPERS Board Meeting – November 21, 2019

Investment Performance Report

NEPC will present MPERS' 3rd Quarter 2019 investment performance report. A high level summary of the report is provided below.

MPERS' Asset Allocation
September 30, 2019
Market Value $2,447,489,206



1-Year Return:	5.68%
Benchmark Return:	7.83%
Excess:	(2.15%)
3-Year Return:	8.66%
Benchmark Return:	8.62%
Excess:	0.04%
5-Year Return:	7.16%
Benchmark Return:	7.03%
Excess:	0.13%
10-Year Return:	9.28%
Benchmark Return:	8.29%
Excess:	0.99%

- The 3rd quarter of 2019 was yet another time frame that highlights the benefits of MPERS' diversified mix of investment strategies. In a quarter where global equities were essentially flat (-0.03%), MPERS' portfolio was able to grind out a positive 1.5% return which ranked in the top 6% of the peer universe. The rates and credit portfolio (beta group) delivered a healthy 3.25% return, while the real assets and equity portfolios generated 1.8% and 1.0% returns, respectively.

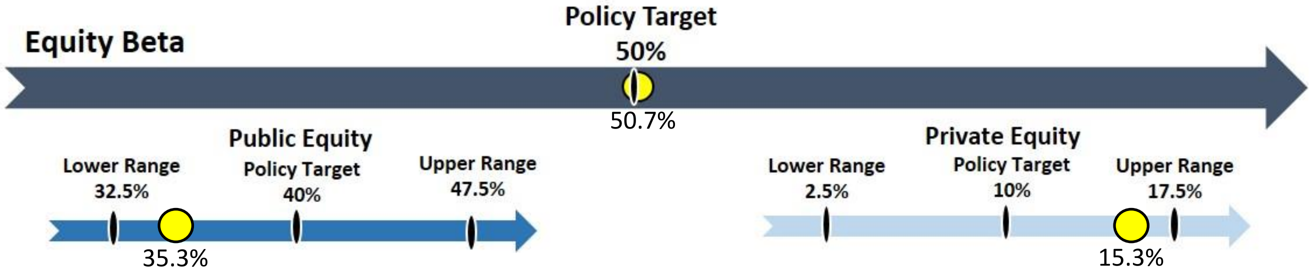
- Longer term, the investment portfolio continues to perform very well. As of September 30, 2019, MPERS' one, three, five, and ten-year returns all rank in the top quartile of the of the public fund universe. MPERS' ten-year return of 9.3% outperforms the policy benchmark by roughly 1% per year, and ranks in the top 5% of the peer universe.

- A key takeaway from this quarter's report is that while MPERS has struggled to keep up with policy benchmarks and the rising equity markets over the past year, our peers are having the same difficulties and MPERS' long term performance remains very strong.

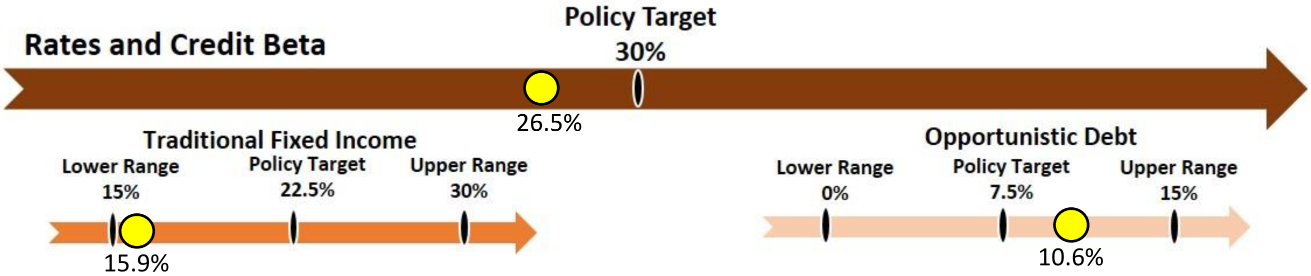
- On a cautionary note, the drop in global interest rates along with equity markets trading at all time highs have significant implications to future market returns. While economic expansions do not die of "old age", you have to expect and prepare for the inevitable slowdown in growth and a pullback in the markets. Over the coming months we will be working with NEPC to complete an asset/liability study and review whether the current marketplace has any implications on MPERS' expected return and asset allocation mix. We plan to present those findings to the Board in February of 2020.

Current Asset Allocation and Positioning Relative to Targets

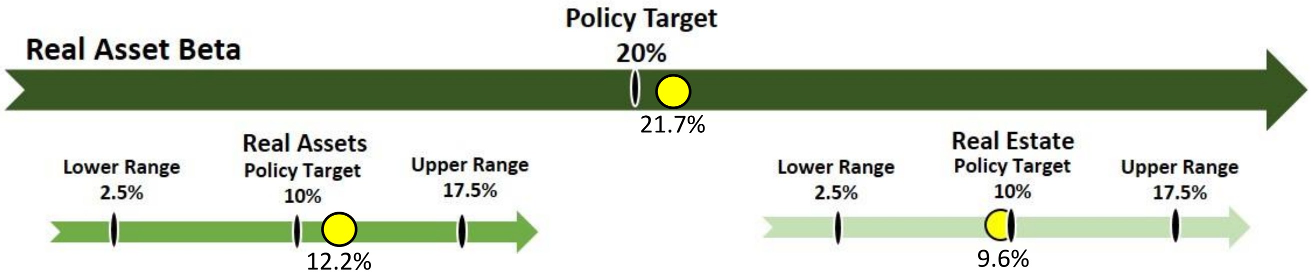
Effective January 1, 2019, MPERS' Board adopted new asset allocation targets including a new concept which breaks down all investment strategies into three broad beta groups (equities, interest rates and credit, and real assets). As of November 13, 2019, each of the respective allocations are within the permissible ranges established in MPERS' investment policy. The current allocation relative to the new policy targets, along with additional comments on the positioning of the portfolio, is provided below. MPERS' current cash balance stands at $28.6 million (or 1.2% of assets).



Public equity markets are once again trading at or near all time highs. With valuations at the high range of historical metrics, the ongoing trade tensions between the U.S. and China, and the looming presidential election in 2020, and the economy in the late stages of economic expansion, we continue to maintain an underweight position to public equities in favor of private equity structures that are less sensitive to global macro trends. The underweight to public equity is offset by the overweight to private equity, creating a neutral allocation to the overall equity allocation targets. We expect this positioning will remain intact for the foreseeable future.



Interest rates continue to stabilize and move somewhat higher after dropping to historical lows in July and August. The Federal Reserve is essentially on hold for the remainder of 2019, and the market is pricing in between 0.25% and 0.50% of additional rate cuts in calendar year 2020. The 10-year Treasury now yields 1.87%, after dropping as low as 1.5%, while the 30-year Treasury yields 2.35% after dropping under 2% for a brief time. Given the low return environment for traditional fixed income, we continue to favor the various strategies within the opportunistic debt portfolio, and expect that positioning to remain in place over the intermediate time frame.



The real assets portfolio is performing reasonablly well given pressures from volatile commodity markets. Energy strategies continue to reposition and adapt to lower energy prices, while real estate continues to perform very well driven by the strong job market and low rate environment. Lower interest rates are also helping the timber sector, which is suddenly gaining appeal given the increased housing demand. We are reviewing a few niche opportunities in both the real estate and timber sectors that could increase the current allocation.