SamCERA

Performance Pulse

June 2018



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PERFORMANCE PULSE

The Performance Pulse is a semi-annual summary of SamCERA's investment performance answering key questions to explain the performance of the fund, where the fund was invested and any significant updates or changes.

SamCERA continues to actively rebalance the portfolio to its long-term policy asset allocation weights to keep a balanced risk posture without relying too much on any single asset, strategy, or return stream.

THE KEY QUESTIONS

1

How Did We Do?

Learn about SamCERA's total fund performance and how it compares to the policy benchmark.

2

Where Did We Invest?

Discover where the fund was invested. Compare the market value and allocation percentages for the current period and the prior period.

3

What Did We Do?

Explore details about updates to policies and any changes to the fund that occurred during the current period.

How Did We Do?

Table One shows SamCERA's total fund performance over various trailing time periods. As seen in the table, the portfolio returned 6.7% net of investment manager fees for the fiscal year ended June 30, 2018, underperforming SamCERA's policy benchmark return of 7.8%. This fiscal-year performance resulted in 92nd percentile performance relative to SamCERA's peers, as defined by large (greater than \$1 billion in assets) public plans.

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	1 Year	3 Years	5 Years	10 Years
SamCERA Return	6.7%	6.5%	8.0%	6.1%
Benchmark Return	7.8%	7.0%	8.2%	6.8%
Excess Return	(1.1%)	(0.5%)	(0.2%)	(0.7%)
Peer Rank (Percentile)	92nd	57th	41st	48th
SamCERA Return/Risk	N.A.*	0.97	1.25	0.57
Benchmark Return/Risk	N.A.*	0.96	1.22	0.60
Benchmark Return/Risk	1.2	1.0	1.3	0.6
Benchmark Return/Risk	1.3	1.0	1.2	0.6

^{*} Not enough observations for useful risk measure.

Return/Risk Measure

SamCERA also looks at "risk-adjusted" returns to compare how much return was received given the risk (measured by standard deviation of returns) taken to achieve that return. This is typically measured as the Sharpe Ratio. The higher the ratio, the better, as it measures the return provided per unit of risk taken. For example, if a fund has a lower return than the benchmark but also a much lower risk level (as measured by standard deviation of returns), it may result in a higher risk-adjusted outcome. Conversely, if a fund has a higher return but also takes higher than commensurate risk than the benchmark, then its risk-adjusted return may be lower than that of the benchmark. While SamCERA had lower risk than the benchmark over the all trailing periods, underperformance in the current fiscal year resulted in a lower risk-adjusted return compared to the benchmark over the trailing one-year period. Over longer-term periods, SamCERA has a higher or similar risk-adjusted return to the benchmark.

Table Two shows performance for each of SamCERA's five primary composites. All five of SamCERA's asset class composites provided positive returns on the year. Public Equity was the highest performing composite and returned 10.9%. Inflation Hedge and Risk Parity returned 6.7% and 6.6%, respectively, while Alternatives was up 2.6%. Fixed Income, which was up 1.0%, was the lowest returning composite for the year.

In terms of relative performance versus the benchmark, Alternatives (primary impact from hedge funds/absolute return, with secondary impact from private equity) were the main detractor. Public Equity (primarily international equity) also detracted, while Fixed Income outperformed during the year.

Table Two: SamCERA Composite Net Performance for Trailing Year Ending June 30, 2018

Composite	Composite Return Benchmark Return		Excess Return
Public Equity	10.9%	11.8%	-0.9%
Fixed Income	1.0%	0.0%	+1.0%
Alternatives	2.6%	10.0%	-7.4%
Inflation Hedge	6.7%	7.2%	-0.5%
Risk Parity	6.6%	7.3%	-0.7%

Where Did We Invest?

In this section we show where the fund is invested, displaying both the market value and resulting allocation percentages for the current period compared to the previous period six months prior. The allocation percentages include exposures from SamCERA's cash overlay program. Table Three shows that SamCERA's total market value was \$4.347 billion as of June 30, 2018, an increase of \$44.4 million from December 31, 2017. In terms of allocation changes, increases in Inflation Hedge assets were funded from primarily Public Equity investments.

Table Three: SamCERA Asset Allocation Comparison

	6/30/2018		12/31/2018		
	MARKET VALUE (\$m)	ALLOCATION (%)	MARKET VALUE (\$m)	ALLOCATION (%)	CHANGE IN (%)
Public Equity	1,782.2	41.0	1,844.5	42.9	-1.9
Fixed Income	951.0	21.9	923.6	21.5	+0.4
Alternatives	507.7	11.7	501.5	11.7	0.0
Inflation Hedge	761.6	17.5	710	16.5	+1.0
Risk Parity	311.1	7.2	316.2	7.3	-0.1
Cash	0.8	33.6	7.0	0.2	+0.6
TOTAL:	4,347.2	_	4,302.8	_	



What Did We Do?

During the first half of 2018, the Board approved an updated target policy portfolio during its annual asset allocation review. The changes consist of a 1% reduction to Alternatives and a corresponding 1% increase to Public Equity. In addition, the Board approved an allocation to low volatility equity and a 50% currency hedge for developed international equity as a way to dampen expected portfolio volatility. SamCERA is currently in the process of implementing the approved target policy portfolio, initially approved in October 2016, over a multiple year period. Table Four compares SamCERA's current "interim" policy and the final target policy weights (inclusive of the 2018 changes) across the five primary asset classes. It is anticipated that final implementation of the target policy will take place by year-end 2020.

ASSET CLASS	CURRENT INTERIM POLICY	TARGET POLICY	% CHANGE
Public Equity	40%	37%	-3%
Fixed Income	21%	23%	+2%
Alternatives	13%	12%	-1%
Inflation Hedge	18%	20%	+2%
Risk Parity	8%	8%	0%

