Semi-Annual Investment Performance Summary

PERFORMANCE PULSE

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December 2019



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INTRODUCTION

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.



How Did We Do?

THE KEY QUESTIONS

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

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.



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 16.3% net of investment manager fees for the calendar year ended December 31, 2019, underperforming SamCERA's policy benchmark return of 17.1%. This calendar-year performance resulted in below median performance relative to SamCERA's peers, as defined by large (greater than \$1 billion in assets) public plans.

	1 Year	3 Years	5 Years	10 Years
SamCERA Return	16.3%	8.5%	6.9%	8.2%
Benchmark Return	17.1%	9.3%	7.3%	8.8%
Excess Return	(0.8%)	(0.8%)	(0.4%)	(0.6%)
Peer Rank Return (Percentile)	61st	69th	42nd	40th
SamCERA Risk (Std Dev)	6.4	5.8	6.3	7.9
Benchmark Risk (Std Dev)	6.3	5.9	6.7	8.2
SamCERA Sharpe Ratio	2.2	1.2	0.9	1.0
Benchmark Sharpe Ratio	2.4	1.3	0.9	1.0

TABLE ONE: SAMCERA TOTAL FUND NET PERFORMANCE CHARACTERISTICS ENDING DECEMBER 31, 2019

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 by 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. Underperformance in the past two calendar years has resulted in a lower risk-adjusted return relative to the benchmark over the trailing one and three-year periods. Over longer-term periods, SamCERA had a similar risk-adjusted return relative 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 for the calendar year. Public Equity was the best performing composite and returned 26.2%, while Alternatives returned 7.6% and was the lowest returning asset class composite. Risk Parity returned 23.2%, while Fixed Income and Inflation Hedge returned 8.4% and 8.1%, respectively.

While providing positive absolute returns, Fixed Income, Inflation Hedge, and Public Equity detracted in terms of relative performance versus the benchmark. Risk Parity and Alternatives outperformed during the year.

Composite	Composite Return	Benchmark Return	Excess Return
Public Equity	26.2%	26.7%	-0.5%
Fixed Income	8.4%	10.8%	-2.4%
Alternatives	7.6%	6.5%	1.1%
Inflation Hedge	8.1%	9.3%	-1.2%
Risk Parity	23.2%	19.8%	3.4%

TABLE TWO: SAMCERA COMPOSITE NET PERFORMANCE FOR TRAILING YEAR ENDING DECEMBER 31, 2019

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 end as well as six months ago. The allocation percentages include exposures from SamCERA's cash overlay program. Table Three shows that SamCERA's total market value was \$4.93 billion as of December 31, 2019, an increase of \$274.7 million from June 30, 2019.

	12/31/2019		6/30/2019		Change
	Market Value (\$m)	Allocation (%)	Market Value (\$m)	Allocation (%)	in %
Public Equity	2,043.5	41.4	1,931.1	41.4	0.0
Fixed Income	1,065.0	21.5	980.2	21.0	+0.5
Alternatives	538.6	10.9	532.7	11.4	-0.5
Inflation Hedge	801.1	16.2	807.7	17.3	-1.1
Risk Parity	407.9	8.3	389.1	8.4	-0.1
Cash	78.5	1.6	19.1	0.4	+1.2

4,659.9

TABLE THREE: SAMCERA ASSET ALLOCATION COMPARISON

Total

4,934.6

WHAT DID WE DO?

SamCERA has begun grouping its investments by the underlying performance drivers within each asset class composite. As part of this process, SamCERA classifies its portfolio into three main drivers of performance: 1) Growth, 2) Diversifying, and 3) Inflation Hedge. In addition, Risk Parity is its own category as it contains components of all three drivers of performance.

The Growth category includes assets in which their primary driver of returns is tied to the general strength of economic output. These assets will generally do well when economic conditions are favorable, but generally struggle in times of economic weakness and recession. Examples of assets classified in Growth include Public Equity, Private Equity in Alternatives, and Opportunistic Credit in Fixed Income.

Diversifying assets provide protection from equity risk and may be characterized as being more defensive (i.e. help provide stability when markets fall) or more absolute-return oriented (i.e. performance is not as dependent on the overall strength of equity markets). Examples of Diversifying assets are our core fixed income assets and absolute return strategies.

Lastly, Inflation Hedge assets provide additional diversification from equity risk and provide a potential hedge against unexpected inflation. Examples of assets in this category include real estate, public real assets, and private real assets.

SamCERA completed its asset liability study in the fourth quarter of 2019, and as part of this process the Board approved a new asset allocation policy portfolio. The new policy eliminates the 8% allocation to Risk Parity and reduces Inflation Hedge by 3%, with a corresponding 8% increase to Diversifying assets and a 3% increase to Growth assets. Implementation of the new policy is anticipated to consist of multiple phases, with the final phase expected to be complete by the end of 2020. The table on the right compares the new policy to the old policy.

TABLE FOUR: ASSET ALLOCATION POLICY -PERFORMANCE DRIVER VIEW

	Old Policy	New Policy
Growth	52%	55%
Public Equity	37%	39%
Private Equity	6%	6%
Opportunistic Credit	9%	10%
Diversifying	20%	28%
Core Fixed Income	14%	21%
Absolute Return	6%	6%
Liquidity	0%	1%
Inflation Hedge	20%	17%
Real Estate	10%	10%
Private Real Estate	4%	3%
Public Real Assets	6%	4%
Risk Parity	8%	0%

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