

The Alternatives Advisor to Institutional Investors

Los Angeles • New York

Cliffwater 2014 State Pension Study

Presentation to RISIC

September 24, 2014



About the Cliffwater Study

Study of state pension systems

Analyze all 95 U.S. state-wide pension systems

Investment, not funding focus

Identify 66 of the 95 state pensions reporting on same (June 30) fiscal year

- Allows for apples-to-apples comparison

Focus on 10 year returns

- We believe shorter period returns vulnerable to misinterpretation



Study Deficiencies

Returns are not standardized as to net or gross of fee

Limited and inconsistent reporting of investment fees/expenses

- Example – carried interest almost always excluded in expense reporting
- Some states report only directly paid fees (exclude fees paid out of market value of commingled funds)
- States that use fund-of-funds do not report fees paid by underlying funds

Risk is very difficult to measure; consequently, risk-adjusted return comparisons are not provided

The study does not incorporate risk-tolerance

- States differ in funded status
- Plans with low funded status have a significantly different risk tolerance than plans with high funded status
- Ability to fund pension deficits also influences risk tolerance



General Observations on State Pension Performance

State pensions earned a median 7.2% annualized return over the 10 years ending June 30, 2013, with individual pension fund returns ranging from 5.0% to 8.8%

Virtually all state pensions earned 10-year returns that exceeded the 6.4% return that would have been achieved by a simple 60/40 buy and hold mix of stock and bond index funds. To put into perspective, the collective active management by state pensions added a cumulative 15%, or \$490 billion, to state pension coffers over the ten year period

State pensions outperformed *managed* defined contribution plan returns by 0.5% over the last 10 years, represented by the average return on target date funds (Source: eVestment)

However, larger endowments – those 74 with assets greater than \$1 billion – continue to outperform state pensions with average 10 year returns equal to 8.2%, a full one percentage point greater than state pensions (Source: NACUBO)

Better performing state funds generally had higher allocations to equities and alternative investments (particularly private equity)

State pensions continue to increase their alternative allocations, reaching 25% of total assets in FY2013

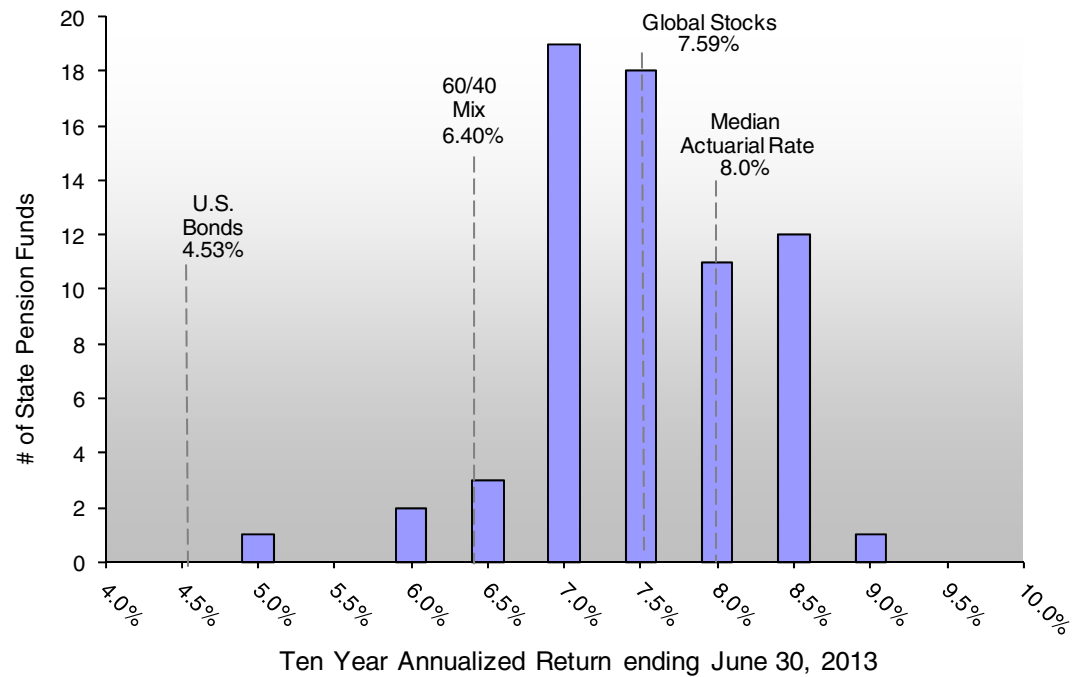


Observations on Rhode Island Pension System

1. Rhode Island's 7.4% return over the 10 year period placed it in the second quartile among state funds
 - a. A 60/40 stock bond mix would have produced a 6.4% return
2. Strong 12.2% private equity performance was a major contributor to overall performance
3. Rhode Island's 26% allocation to alternatives is similar to the 25% average for all state pensions
 - a. Endowment allocations to alternatives average over 50% of total assets (source: NACUBO/Commonfund)
4. Rhode Island's alternatives mix has a greater weight to hedge funds (15%) and lessor weight to private equity and real estate compared to the average state pension
 - a. 18 state pensions have hedge fund allocations above 10% of assets, and those funds produced a 7.7% annualized return over the last 10 years, exceeding the 7.2% average state fund return

Distribution of State Fund Returns (FY2004-2013)

State Pension 10-Year Returns



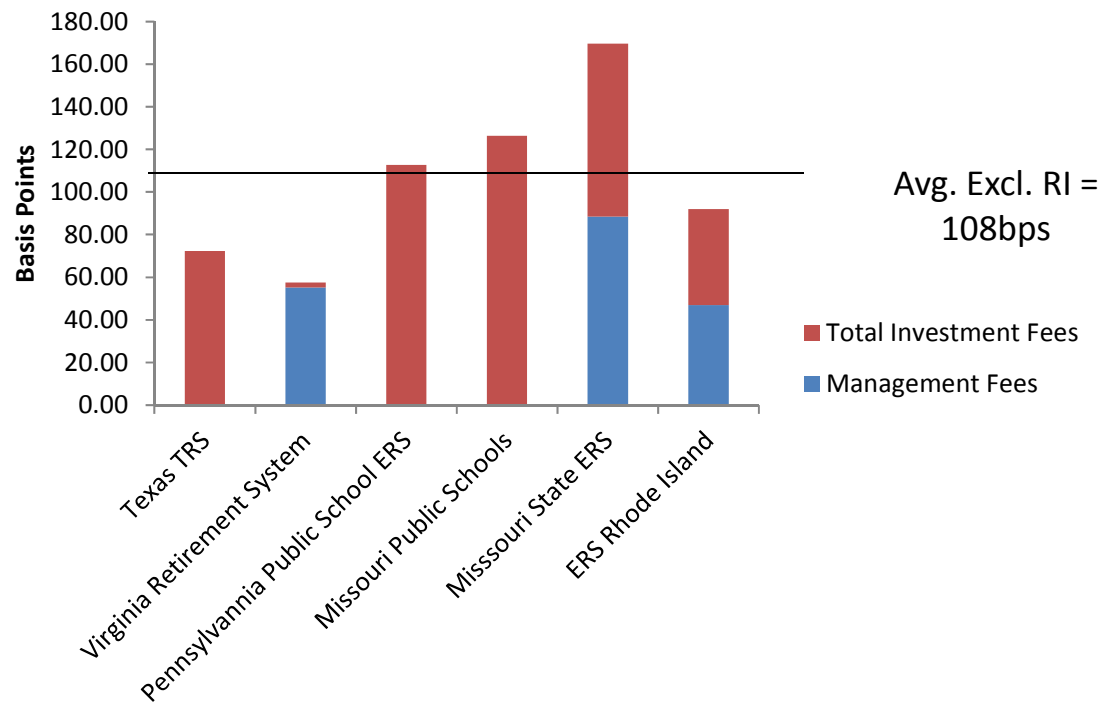
	10-Year Return	
	Annual	Cumulative
Highest	8.8%	132%
First Quartile Return	7.8%	112%
Median Return	7.2%	100%
Third Quartile Return	6.8%	94%
Lowest	5.0%	63%

Rhode Island earned a 7.4% annualized return, placing it in the Second Quartile of state funds.

Survey of Investment Expenses

Survey of Investment Expenses

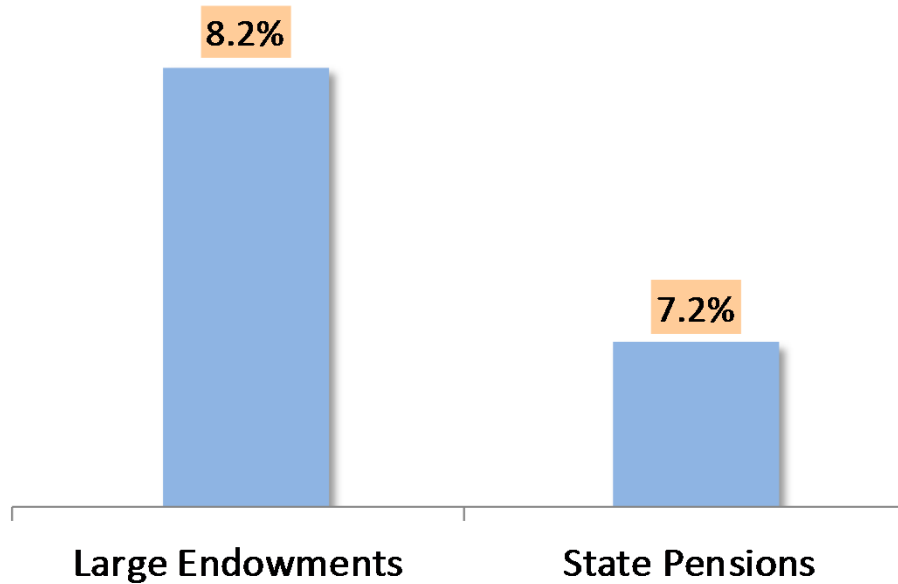
(state-wide public pension systems with comprehensive expense reporting)



Note: Cliffwater estimates based on FY 2013 CAFRs. Funds selected are state-wide public pension systems that report management fees and performance fees. Virginia reports performance fees on a best efforts basis.

Performance Differences Among Institutional Types

10 Yr Returns ending June 2013



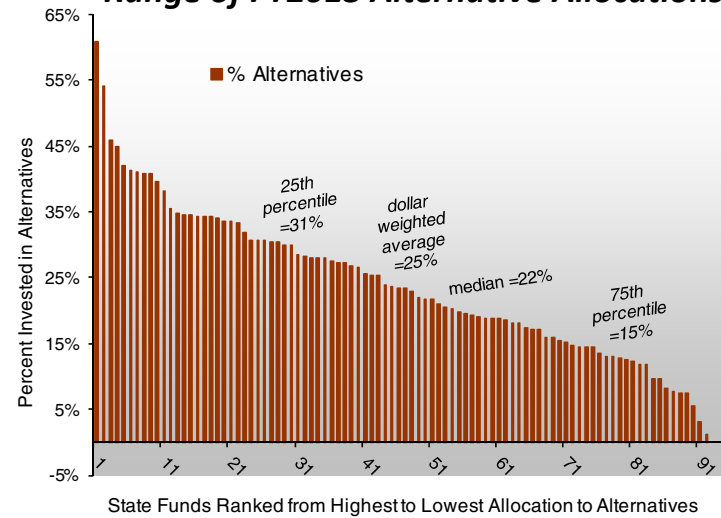
Use of alternative investments explains most of the return difference between state funds and endowments.

Asset Allocation Trends Among State Funds

Change in State Pension Asset Allocation

	2006	2011	2012	2013	YoY Change
Public Equities	61%	51%	49%	50%	1%
Fixed Income	26%	25%	25%	22%	-3%
Alternatives	10%	21%	24%	25%	1%
Cash	1%	2%	2%	3%	1%
Other	1%	1%	0%	0%	0%
Total	100%	100%	100%	100%	

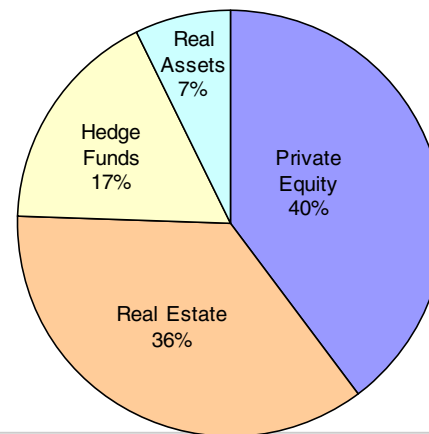
Range of FY2013 Alternative Allocations



Rhode Island had a 25.5% allocation to alternatives, placing it close to the average among state funds.

Rhode Island has an above average allocation to hedge funds and below average real estate allocation, making its alternatives profile more liquid and lower risk.

State Allocations Across Alternatives



State Fund Allocations to Alternatives

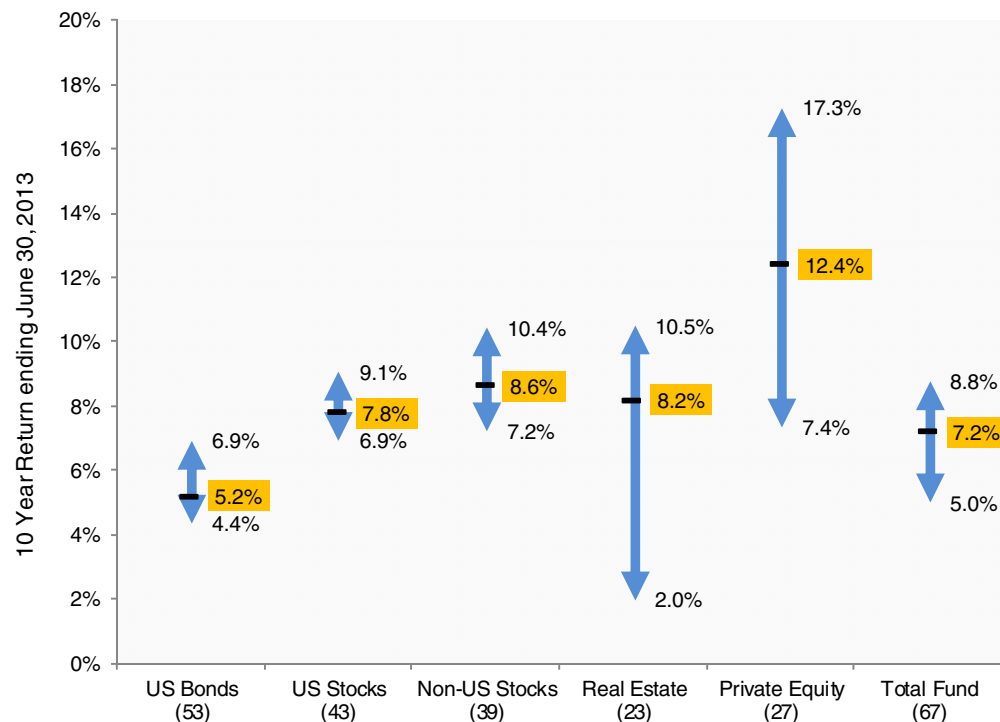
States Ranked by Alternatives Allocations

	Total Assets (\$mil)*	%	% Private	% Real	% Hedge	% Real	%	
		Alternatives	Equity	Estate	Funds*	Assets**	Opportunistic	
Largest Alternative Usage	MOSERS	\$8,083	60.8%	11.1%	7.5%	36.7%	5.5%	
	Pennsylvania Public Schools ERS	\$49,296	54.1%	21.8%	14.1%	11.7%	6.5%	
	Pennsylvania State Employees' RS	\$27,390	44.9%	22.4%	15.6%	6.9%		
	Texas County/District	\$20,884	41.9%	9.9%	4.6%	25.8%	1.6%	0.0%
	Utah Retirement Systems	\$22,871	41.2%	11.0%	13.5%	16.7%		
	Michigan State Public School Employe	\$42,221	40.7%	19.4%	10.8%	10.5%		
	Washington State Inv Board Comm Tr	\$67,902	39.5%	23.8%	13.6%	0.5%	1.5%	
	Illinois Teachers	\$39,681	38.1%	11.9%	12.0%	5.3%	8.9%	
	Oregon PERS	\$62,129	35.4%	21.8%	11.4%			2.2%
	South Carolina RS	\$26,800	34.8%	6.3%	2.1%	5.3%	0.1%	21.0%
Smallest Alternative Usage	Alabama TRS	\$20,571	9.5%		9.5%			
	Nebraska DB Plans - Schools, State P	\$9,443	8.1%	3.7%	4.4%			
	Illinois Municipal	\$33,284	7.7%	3.7%	3.3%		0.7%	
	Nevada PERS	\$28,998	7.5%	3.1%	4.4%			
	Kentucky TRS	\$16,150	7.3%	2.1%	4.0%		1.2%	
	Tennessee Consolidated RS	\$37,788	5.6%	0.7%	4.9%			
	Texas Municipal RS	\$20,628	3.2%		3.2%			
	Georgia TRS	\$56,278	0.0%					
	Georgia ERS	\$12,191	0.0%					
	Oklahoma PERS	\$8,345	0.0%					
Totals	\$2,693,991	\$669,061	\$260,177	\$233,937	\$112,440	\$47,536	\$9,019	
		25%	10%	9%	4%	2%	0%	

18 State Pensions have hedge fund allocations above 10% of assets.

Return Dispersion Across Asset Classes*

5th - 95th Percentile Dispersion of State Fund Asset Class Returns
10 Years Ending June 30, 2013



Rhode Island earned 12.2% on private equity and 5.1% on US bonds over the same 10 year period. US and non-US are not reported separately and real estate is a new asset class.

* Numbers in parenthesis indicate number of state funds in the sample.

State Fund Performance Versus Benchmark Across Asset Classes

Performance Deviations from Benchmarks over 10 Years ending FY2013

	U.S. Stocks	Non-U.S. Stocks	Fixed Income	Real Estate	Private Equity
Top Decile	1.6%	2.9%	4.2%	1.9%	4.9%
1st Quartile	1.3%	1.8%	2.4%	0.4%	4.0%
Median	0.0%	0.0%	0.7%	-0.4%	-0.9%
3rd Quartile	-0.9%	-1.4%	-0.2%	-1.9%	-5.9%
Bottom Decile	-1.3%	-2.8%	-0.7%	-6.6%	-6.8%

Benchmarks:	US Stocks:	Russell 3000 Index
	Non-US Stocks:	MSCI ACWI ex US Index
	Fixed Income:	Barclays Aggregate Index
	Real Estate:	NCREIF Property Index
	Private Equity:	Venture Economics