Past, Present, Future of Public Pensions in the State of California

Presentation to CSMFO Annual Conference Jan. 10, 2019

Joe Nation, Ph.D.
Stanford Institute for Economic Policy Research (SIEPR)
Stanford University Public Policy Program
joenation@stanford.edu

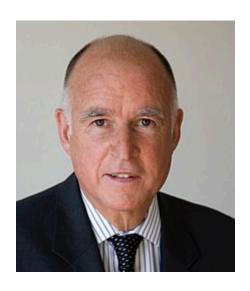
As We Move Forward, Keep This in Mind.....

"It's not even a matter of higher math....
It's fifth-grade arithmetic."

As We Move Forward, Keep This in Mind.....

"It's not even a matter of higher math....
It's fifth-grade arithmetic."

— California Governor Jerry Brown, Oct. 13, 2011



Life Was Good in 1999

- Stock market was on a high
 - S&P rose 225% between Sept. 1992 and 1999, an average annual rate of 15.9%
- The state's civilian unemployment rate fell from 9.7% to 5.0% over the same period
- The state's general fund budget climbed nearly 40%

Life Was Good in 1999

 Ricky Martin's "Livin' la Vida Loca" ('Crazy Life') was the #1 song



Life Was Great in 1999

 Dems controlled the Assembly, Senate, and for the first time in 16 years, the Governor's office

And What Happens When Times Are That Good?

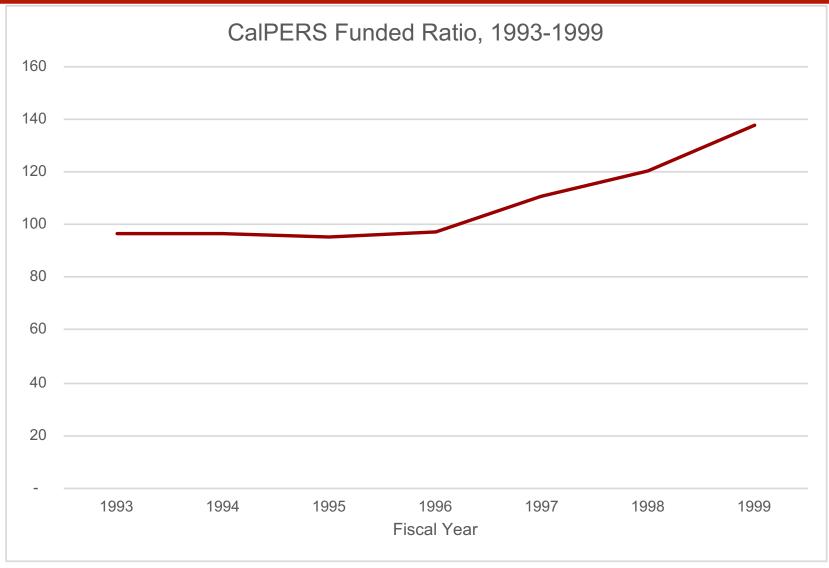


Source: https://www.publicdomainpictures.net/en/view-image.php?image=128056&picture=party-time, retrieved Dec. 16, 2018

SB 400 and AB 616 Enhanced Public Pension Benefits

- SB 400 (1999)
 - State employee focus, sponsored by CalPERS
- AB 616 (2001)
 - Local government employee focus
- Both enhanced benefits with more generous formulas
 - Examples
 - ▶ CHP 2% at 50 became 3% at 50
 - ▶ Retirement pay based on final 12, not 36 months
 - Retired state and school members (back to 1974) received retroactive pay

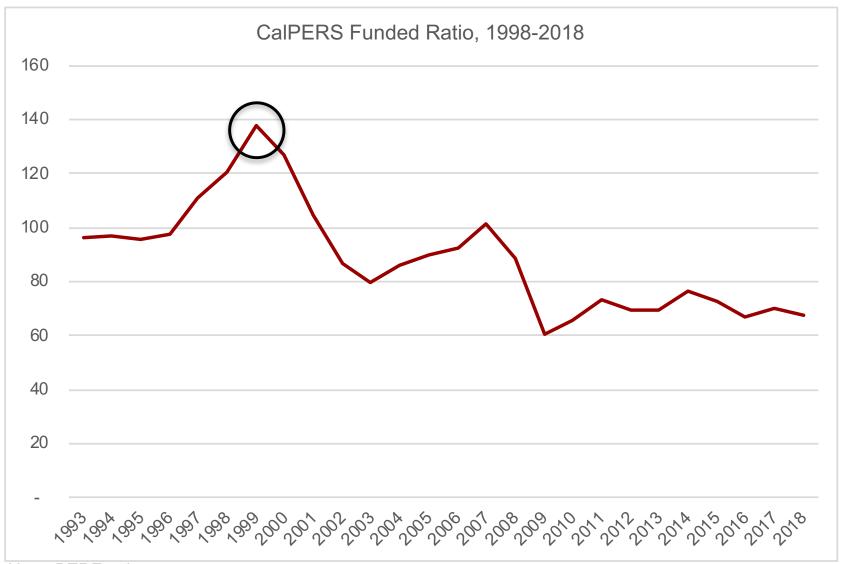
CalPERS Funded Ratio Was Nearly 140% in 1999



Note: PERF only Source: CalPERS

Note: Funded ratio calculated using Actuarial Value of Assets (AVA)

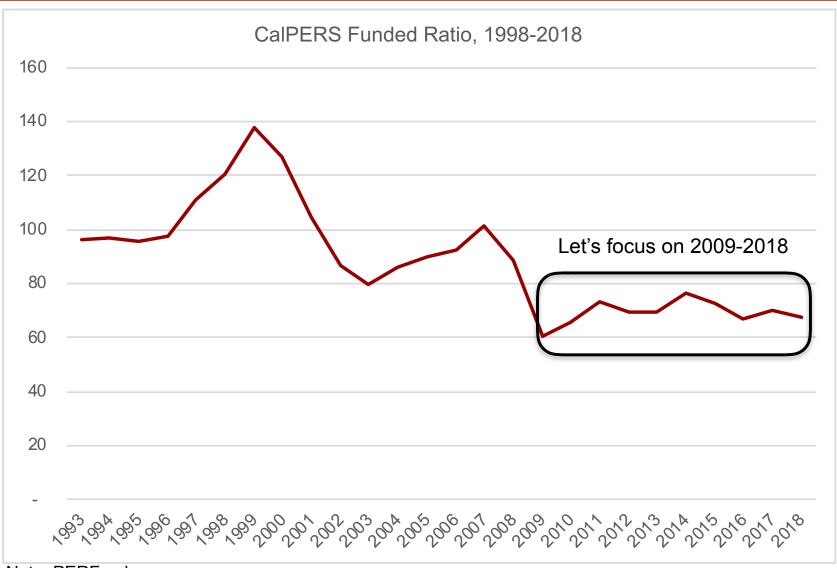
CalPERS Funded Ratio Has Fallen Fairly Steadily Since 1999



Note: PERF only

Sources: CalPERS, author's estimates based on Dec. 2018 reported assets and estimated liabilities Note: Funded ratio calculated using Market Value of Assets (AVA) from 2000

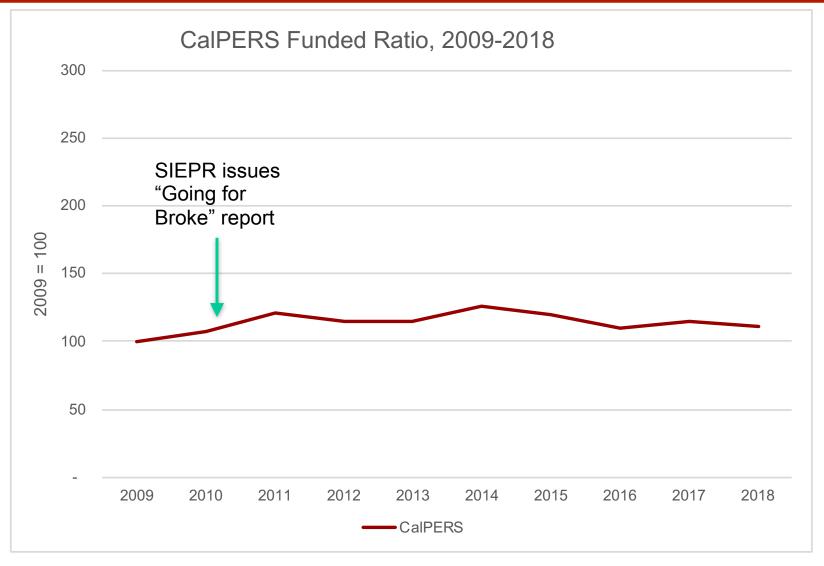
CalPERS Funded Ratio Has Fallen Fairly Steadily Since 1999



Note: PERF only

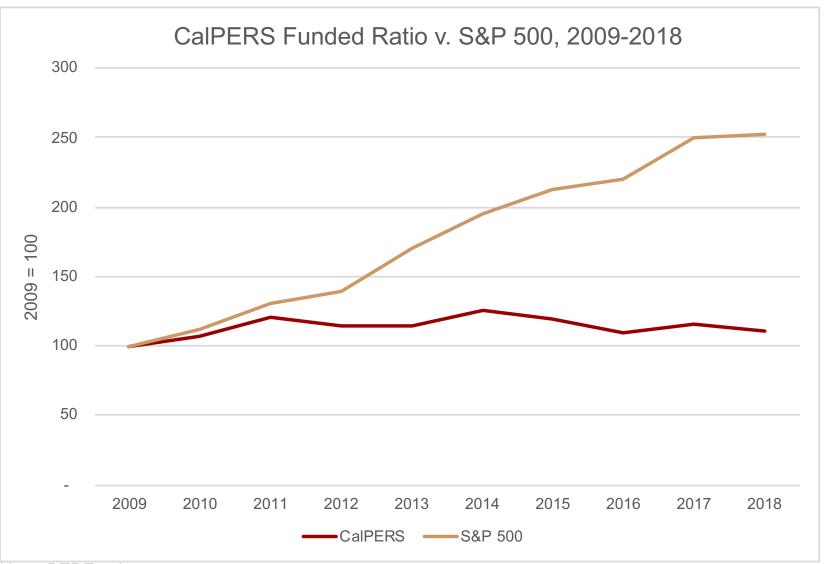
Sources: CalPERS, author's estimates based on Dec. 2018 reported assets and estimated liabilities Note: Funded ratio calculated using Market Value of Assets (AVA) from 2000

CalPERS' Funded Ratio Has Been Essentially Flat Since 2009



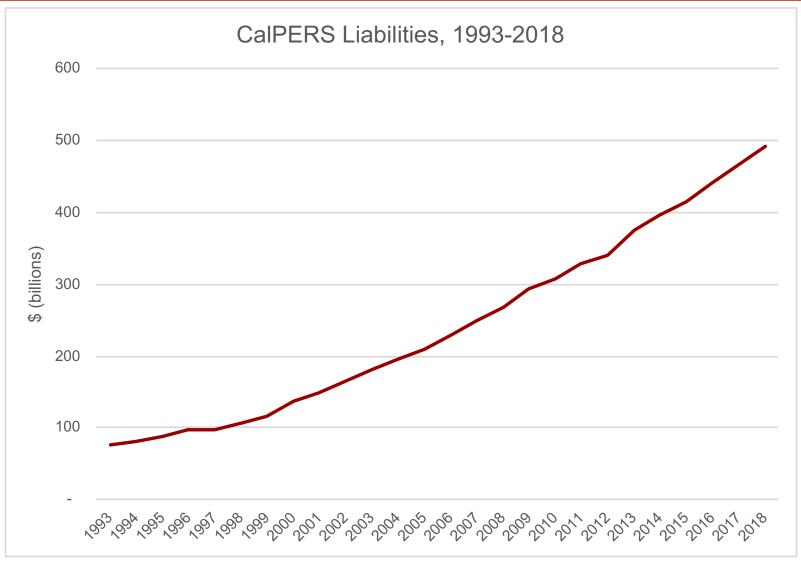
Note: PERF only Source: CalPERS

How Can The Funded Ratio Still Be Low If the Market's Been So Good?



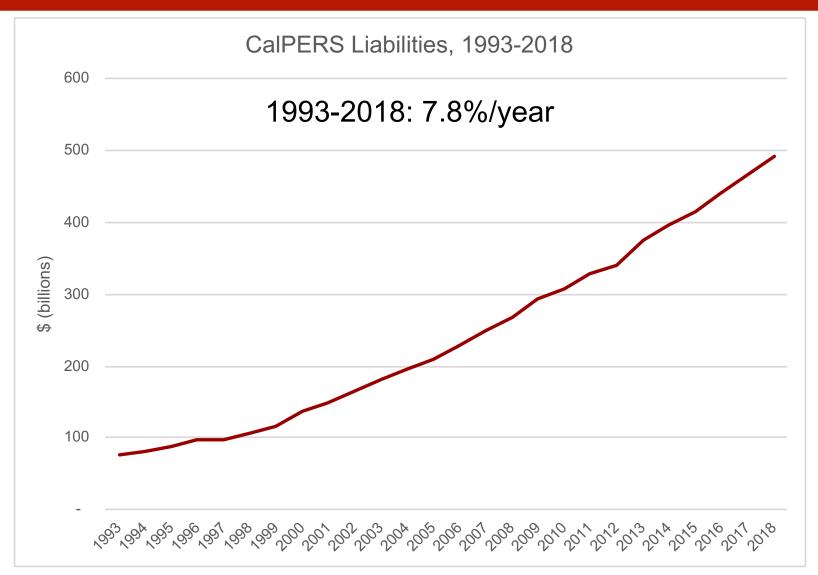
Note: PERF only

Sources: CalPERS, author's estimates based on Dec. 2018 assets, estimated liabilities, Yahoo Finance



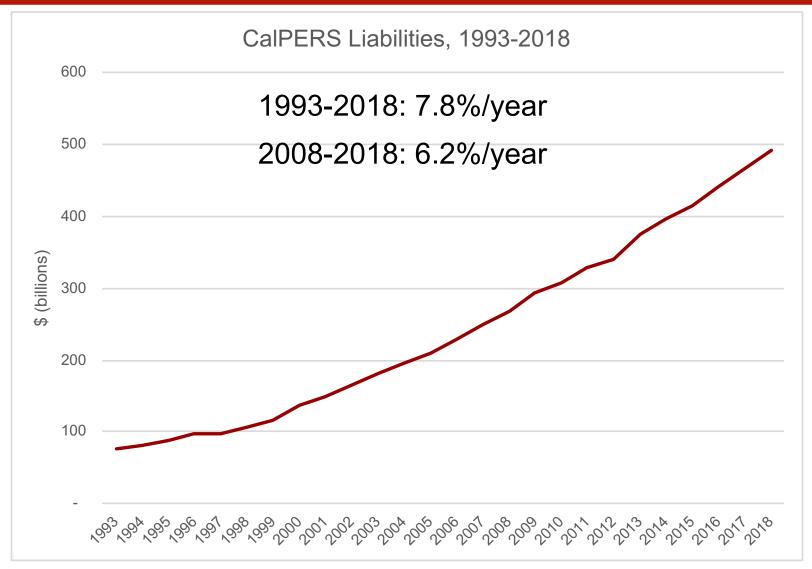
Note: PERF only

Sources: CalPERS, author's estimates based on Dec. 2018 assets, estimated liabilities, Yahoo Finance



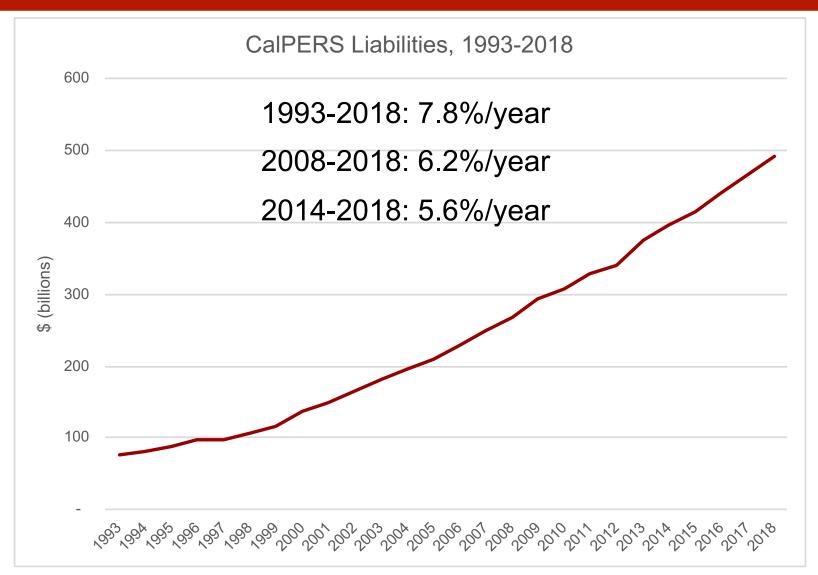
Note: PERF only

Sources: CalPERS, author's estimates based on Dec. 2018 assets, estimated liabilities, Yahoo Finance



Note: PERF only

Sources: CalPERS, author's estimates based on Dec. 2018 assets, estimated liabilities, Yahoo Finance



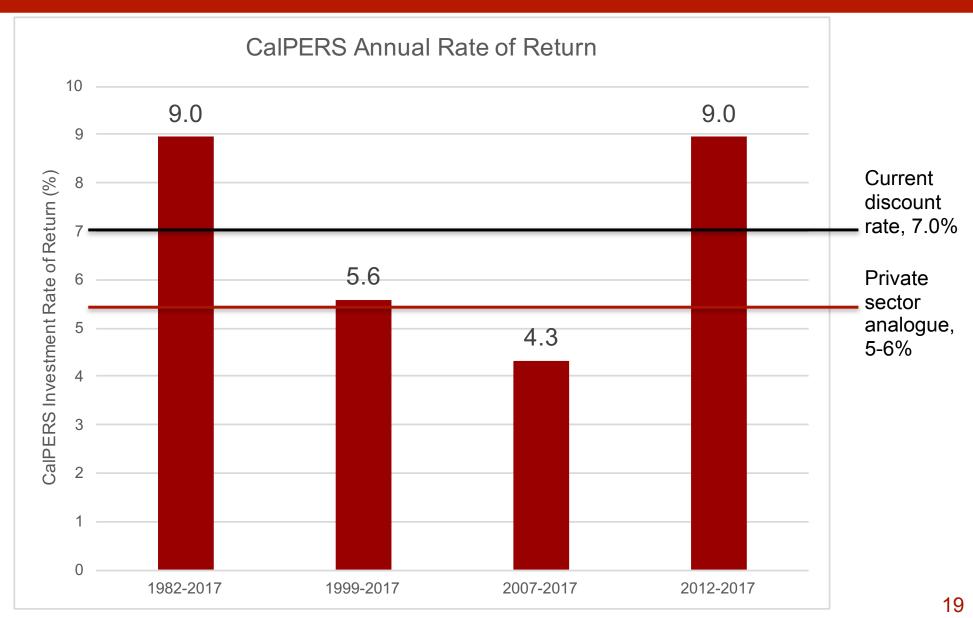
Note: PERF only

Sources: CalPERS, author's estimates based on Dec. 2018 assets, estimated liabilities, Yahoo Finance

Why Public Pensions Are Unlikely to Recover

- Unrealistic assumed rates of return
- Public pension actuarial assumptions and methods
- Local government options to address funding problem are limited

CalPERS Discount Rate vs. Historical Rates of Return



Source: https://www.calpers.ca.gov/docs/forms-publications/facts-investment-pension-funding.pdf

Are Current Investment Return Assumptions Too Optimistic?

- McKinsey forecasts long-run equity returns 20-50% lower than last two decades*
- Blackrock suggests an equity return of 6%**
- The St. Louis Federal Reserve's outlook for equities is 6.4%***
- Wilshire (CalPERS) says 6.1% total return next decade
- Equals long-term rate of return of about 5% for most pension funds

^{*}McKinsey Global Institute," Diminishing Returns: Why Investors May Need to Lower Their Expectations," https://www.mckinsey.com/industries/private-equity-and-principal-investors/our-insights/why-investors-may-need-to-lower-their-sights, retrieved Nov. 19, 2017.

^{**}BlackRock Investment Institute, https://www.blackrock.com/institutions/en-us/insights/portfolio-design/capital-market-assumptions, retrieved Nov. 18, 2017.

^{***}FRED, "The Equity Premium," https://fredblog.stlouisfed.org/2016/07/the-equity-premium/, retrieved Nov. 19, 2017.

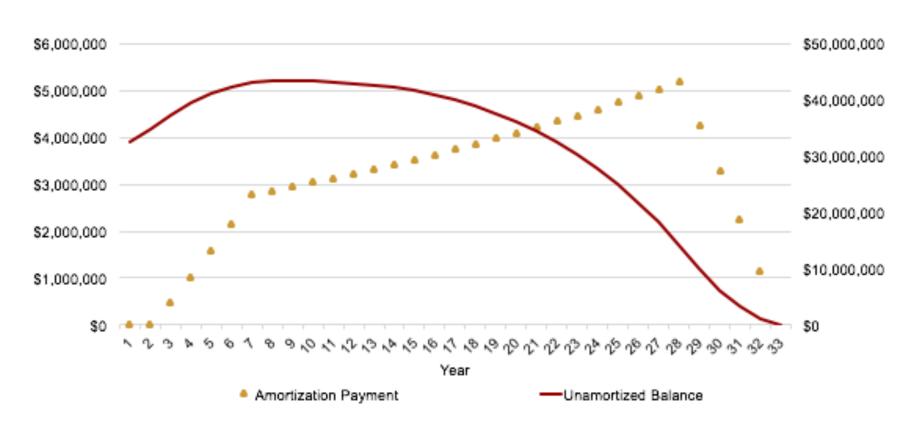
Public Pension Actuarial Assumptions and Methods

	Private Sector	Public Sector
Discount rate	High-quality corp.bonds	Expected return
Amortization period	7 years	20-30 years*
Lag before amortization starts	Not permitted	2 years
Amortization schedule	Level dollar	Percent of payroll
Asset valuation	Market value	Actuarial value
Benefit freeze	Funded ratio < 60%	No provision

^{*}CalPERS moved to 20 years effective June 30, 2019 valuation.

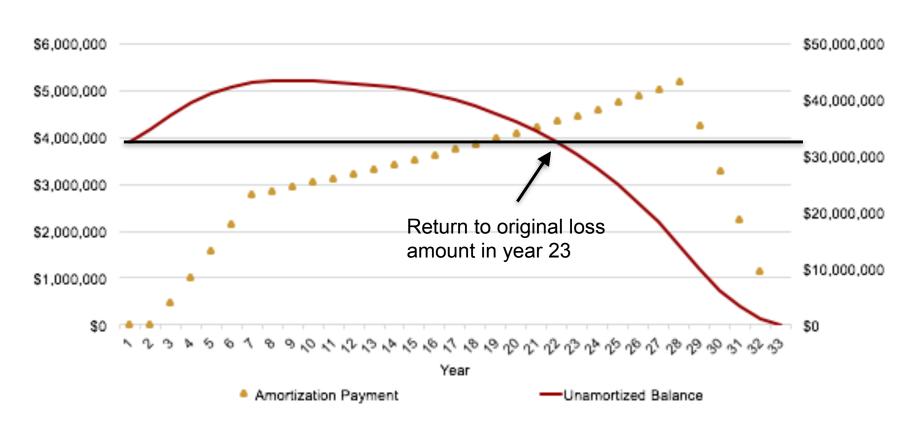
Public Pension Amortization Policies Delay Cost Recognition

Amortization Payments and Unamortized Balance--\$32mm Loss



Public Pension Amortization Policies Delay Cost Recognition

Amortization Payments and Unamortized Balance--\$32mm Loss



Local Government Options to Address Funding Problem Are Limited

Local Government Options to Address Funding Problem Are Limited

- Contribute more
 - Required contribution rates
 - Voluntary high "rates," e.g., Palo Alto
- Save/invest more
 - 115 Trust
- Pension Obligation Bonds (POBs)
- Lower system liabilities
 - California Rule modification
 - But this helps only slightly, and only in long-term

Local Government Advocacy Options to Address Funding Problem

- More "private-sector like" assumptions, methods
- Governance reform
- Local flexibility w.r.t. benefits

Reminder: State, school employees have greater protection from insolvency than local employees

Contact Information

Joe Nation
joenation@stanford.edu
650-724-9532