Pretend Pensions Just How Much Are California's Public Employee Retirement Funds Underwater?

And Where Does Marin Fall?

Joe Nation, Ph.D. Professor of Public Policy Stanford University Sept. 22, 2010

Stanford's Public Policy Program And Practicum

- Practicum combines with International Policy Studies (IPS)
 - Students are MPP, MBA, JD, IPS, or Ph.D. candidates
- Projects (and clients) include:
 - Human Trafficking In India (Asia Foundation)
 - Prosecutorial Discretion in the Filing of Criminal Charges (National Center on State Courts)
 - U.S. Counterinsurgency Strategy in Afghanistan (U.S. Army)
 - The Distributional Effects of a Carbon Tax (Carnegie Foundation)
 - Predicting Judicial Performance (Commission on Judicial Performance)
 - Developing a Sovereign Fiscal Responsibility Index (Peterson Foundation)

Outline

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Methodology

How We Got Here

Marin

- Quantifying the shortfall
- Research methodology
- How we got here
- Where does Marin fall?
- What's next?

California's State Public Employee Pensions Are Underfunded By \$500 Billion

How We Got Here

Marin

• Published by SIEPR in April 2010

Methodology

Quantifying Shortfall

- Research conducted by five former students
 - Now employed at Goldman Sachs, Bain Capital, a local start-up, and a small local investment bank
- John Shoven (SIEPR Director) and I served as Faculty Advisors
- Completed for Governor's Office
- Snapshot of CalPERS, CalSTRS, and UCRS
- Shortfall equivalent to about 6 state budgets

How We Got To Half A Trillion

<u>(</u>	uantifying Sh	nortfall	Methodology	/ How	vWe Got Her	e	Marin	Diggi	ng Out
Reported, 2008			Stanford Estimate			ite			
		Discount rate	Liabilities (AAL)	Unfunded liabilities (UAAL)	Funding ratio	Discount rate	Liabilities (AAL)	Unfunded liabilities (UAAL)	Funding ratio
	CalPERS	7.75%	\$277,246	\$38,679	86.0%	4.14%	\$478,256	\$239,689	49.9%
	CalSTRS	8%	\$177,734	\$16,236	90.8%	4.14%	\$318,177	\$156,679	50.7%
	UCRS	7.50%	\$42,576	\$553	98.7%	4.14%	\$70,765	\$28,742	59.3%
	Total		497,556	\$55,468			867,198	\$425,110	

Including 2008-2009 losses (\$109.8 billion), estimated shortfall about \$525 billion

But Aren't These Unrealistic Estimates?

Qua	ntifying	<u>Shortfall</u>

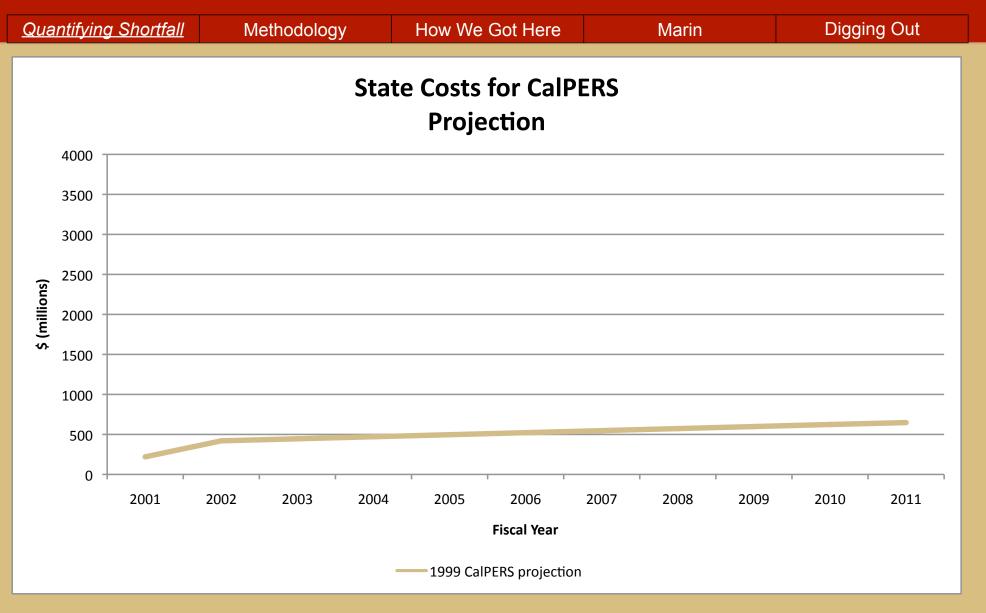
Methodology

How We Got Here

Marin

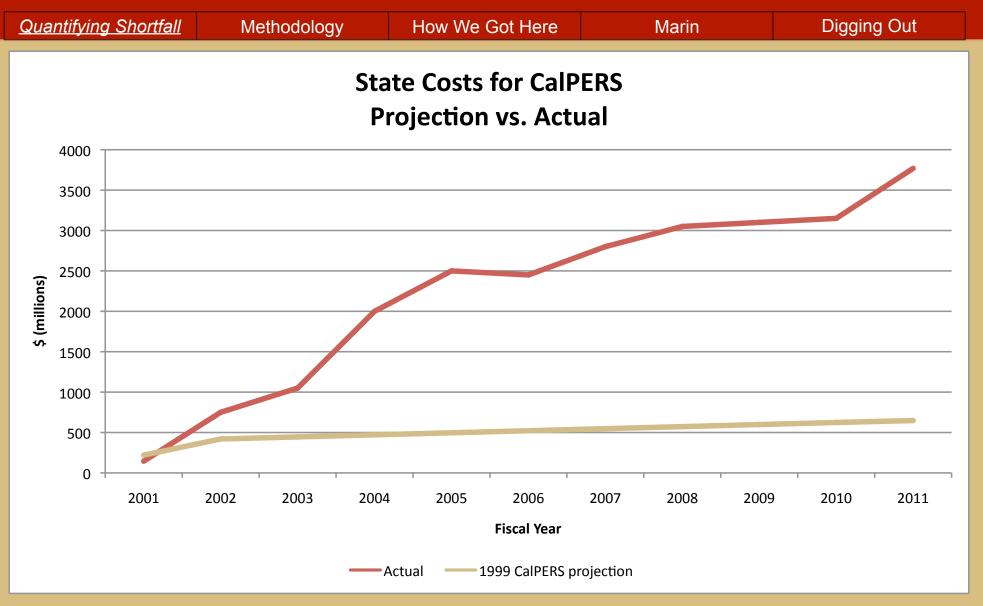
- Northwestern University recently estimated a \$475 billion shortfall for California; \$4-5 trillion for U.S.
 - Pew Center estimated \$1 trillion for U.S.
- Funds themselves now acknowledge larger shortfalls
 - CalPERS asking for bigger General Fund contributions
 - CalSTRS seeking \$4 billion per year based on recent actuarial report
 - UCRS now estimates \$28 billion retirement and OPEB shortfall
 - Among solutions: employees contribute 4-10%, up from 2-5%

CaIPERS Understated Budget Requests



Source: Office of Governor Schwarzenegger (http://gov.ca.gov/press-release/15551), retrieved Sept. 9, 2010

CaIPERS Understated Budget Requests



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Pension Fund Health Depends In Part **On How We Value Future Liabilities**

Quantifying Shortfall

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How We Got Here

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- We use discount rates to assign a present value (PV) to future payments
- What is the value today of a stream of future payments?
 - Similar to a Lottery winner
 - Do I take the \$200,000/year for life or a lump sum of \$3 million?

How We Value Future Liabilities Depends On Discount Rates

Quantifying Shortfall	<u>Methodology</u>	How We Got Here	Marin	Digging Out
 A \$1 billi 4% = P\ 	on obligati / \$494 mill		over 18 ye	ears at

- The same \$1 billion obligation at 8% = PV \$250 million
- GASB requires agencies to match discount rates and expected rates of return
 - So CalPERS, others discount at 7.5%-8.0%
- Strong argument to discount at a risk-free rate, or at the TIPS rate, currently 2%

GASB's Rules Don't Make Financial Sense For Defined Benefit Plans

How We Got Here

Marin

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contract	ually guara	inteed inco	me	

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Quantifying Shortfall

- So fund liabilities are related to required payments to retirees, not investments or rates of return
 - E.g., if the fund's rate of return doubles, does the obligation to the retiree change?
 - How would you plan for a personal obligation that you must pay in 10 years?

Others Argue For "Risk-Free" Discount Rates

Quantifying ShortfallMethodologyHow We Got HereMarinDigging Out• Professors Joshua Rau (Northwestern) and Robert
Novy-Marx (University of Chicago)Northwestern)Northwestern)

- Alicia Munnell, (Boston College, Pres. Clinton Council of Economic Advisors)
- Donald Kohn (Vice Chair, Federal Reserve)
 - "Public pension benefits are essentially bulletproof promises to pay. The only appropriate way to calculate the present value of a very-low-risk liability is to use a very-low-risk discount rate......
 [Any other method] pushes the burden of financing today's pension benefits onto future taxpayers, who will be called upon to fund the true cost of existing pension promises."

Let's Assume A Discount Rate of 6% (Using 2008 Fund Data)

Quantifying Shortfa	all <u>Methodolo</u>	gy How We	Got Here	Marin	Digging Out
	Fund	Liabilities (AAL)	Actuarial Value of Assets (AVA)	Unfunded liabilities (UAAL)	Funding ratio
CalPERS	CalPERS	\$360,286	238,567	-121,719	66.2%
CalSTRS	CalSTRS	\$239,694	161,498	-78,196	67.4%
UCRS	UCRS	\$53,310	42,023	-11,287	78.8%
Total	Total	\$653,290	442,088	-\$211,202	67.7%

This Financial Disaster Accelerated In 1999 With SB 400

Quantifying_Shortfall	Methodology	<u>How We Got Here</u>	Marin	What's Next
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- Prison guards, police/law enforcement, firefighters

• SB 400 expanded benefits

- CalPERS pledged "no increase over current employer contributions is needed for these benefit improvements"
- SB 400 passed with only 7 of 120 "no" votes
- Many now earn more in retirement than when active
 - A public safety employee *without spiking* can earn 60% more (in nominal dollars) in retirement than while on active duty

The Funds Failed Retirees And Taxpayers

Quantifying Shortfall

Methodology

How We Got Here

Marin

What's Next

- When funding ratios dropped, funds failed to contribute sufficiently
 - UCRS is just ending a nearly 20 year "contribution holiday"
- Funds bet on the market--and lost
 - CalPERS requires market to double every 9 years
 - Bet on 25,000 Dow Jones by 2009; down 5.1% since Oct. 1, 2000
- Funds are far from transparent
 - CalPERS ignored our requests for information, even Public Records Act requests
 - CalPERS failed to disclose the possible downside of increased benefits with SB 400
- And BTW, political leaders failed miserably, as well

CalPERS, CalSTRS Have Criticized the Stanford Study

Old data

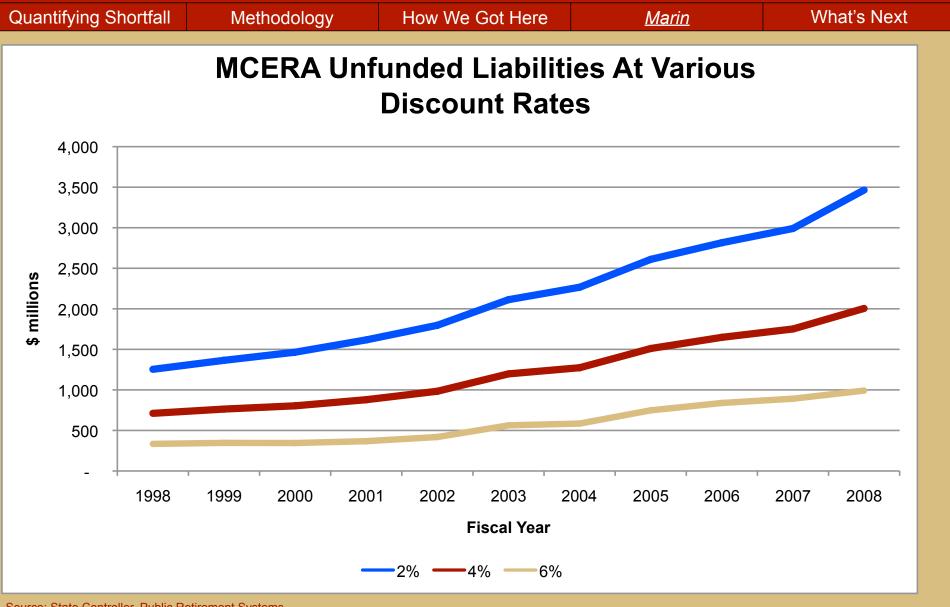
- CalPERS rejected our request(s)
- New data suggests problem even worse
- Argue that not even Stanford uses a risk-free discount rate
 - And for good reason.....we don't guarantee pensions
- Governor's office paid for study
 - Work done free of charge

Thank Goodness We Have Our Own Fund Here In Marin

Quantifying Shortfall	Methodology	How We Got Here	<u>Marin</u>	What's Next
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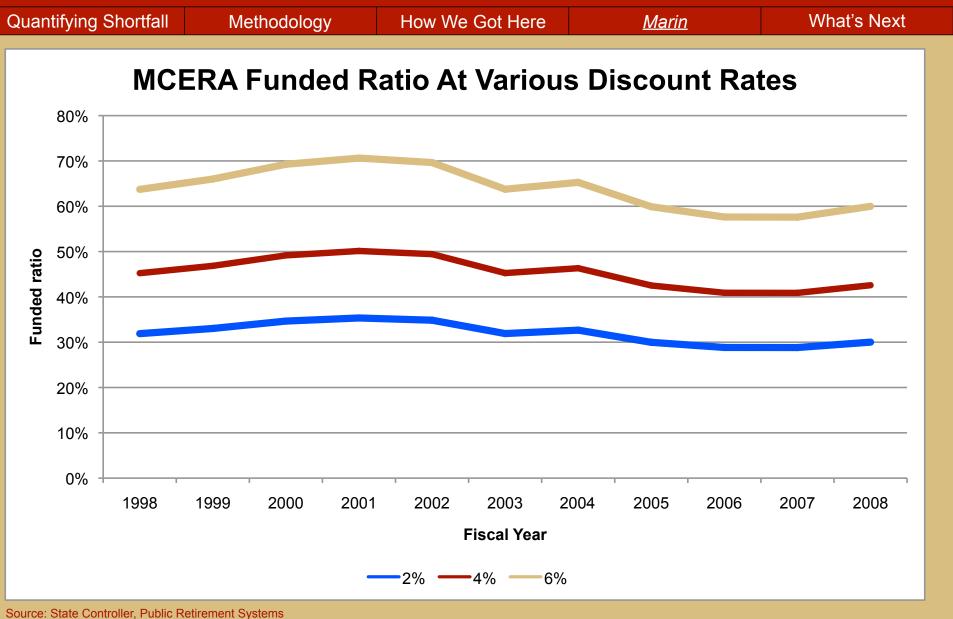
- But MCERA (the County, San Rafael, and the Novato Fire Protection District) operates independently
 - There are 22 1937 Act counties in California that also have separate pension funds

But MCERA Unfunded Liabilities Range From \$1-\$3.5 Billion



Source: State Controller, Public Retirement Systems Annual Report; MCERA reported data.

MCERA Funding Ratio Is At Most 60%

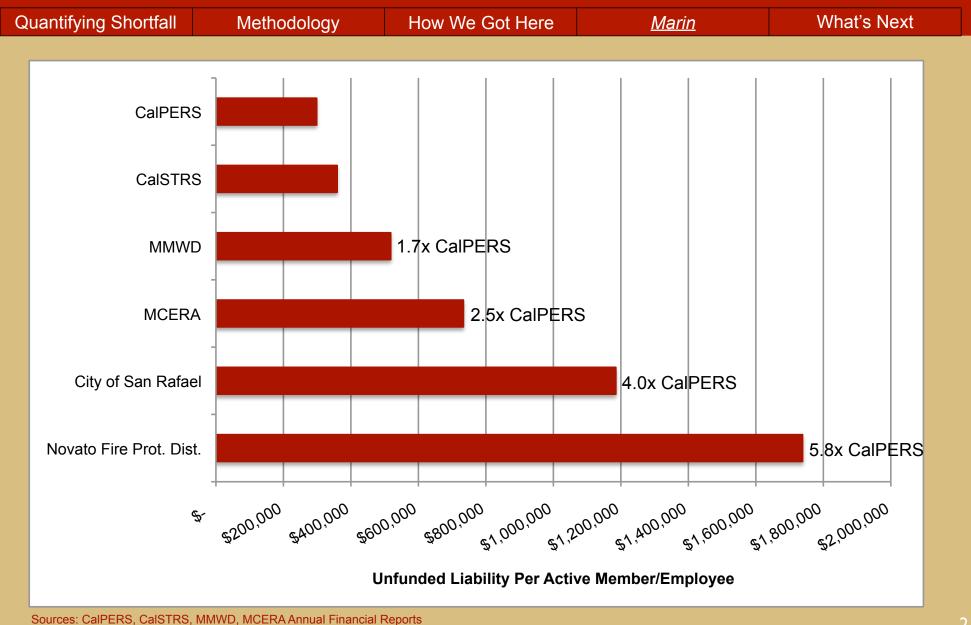


Source: State Controller, Public Retirement System Annual Report; MCERA reported data.

MMWD Funded Ratio About 47% In 2008; Likely Down To About 44% Today

Quantifying Shortfall What's Next Methodology How We Got Here Marin **Estimated MMWD Unfunded Liability, Funded Ratio** 56% 140 Funded ratio 122 54% UAAL Unfunded liability (\$ millions) 104 52% Funded ratio 86 50% 68 48% 50 46% 2002 2003 2004 2005 2006 2007 2008 UAAL Funded ratio

Marin Funds Are In Relatively Poor Condition



Active MCERA, San Rafael, Novato Fire Protection District member/employee counts based on phone interviews, email correspondence.

How To Dig Out

Quantifying Shortfall	Methodology	How We Got Here	Marin	<u>What's Next</u>		
Acknowledge the problem						
 Beneficiaries, public employee unions continue to seek increases 						
Involve the community, stakeholders						
Recognize	 Recognize that minor fixes will not work 					

- E.g., 5th tier won't matter (in short- to medium-term) if you're not hiring
- Employees will have to contribute more
- Avoid contribution "holidays"
- Plan for the long term
- Avoid issuing debt
- Don't "spread" asset losses over long period