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# US Local Government GO Debt Methodology

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# Agenda

1. Outlook for Local Governments
2. Overview of GO Methodology
3. California Local Governments' Relative Pension Burdens

# 1

# Outlook for Local Governments

# Stable Outlook for US Local Governments

Outlook period is 12-18 months

## Stable Outlook Overview

» Local government property tax revenue will continue to grow, albeit at a slower pace of 2% - 4%

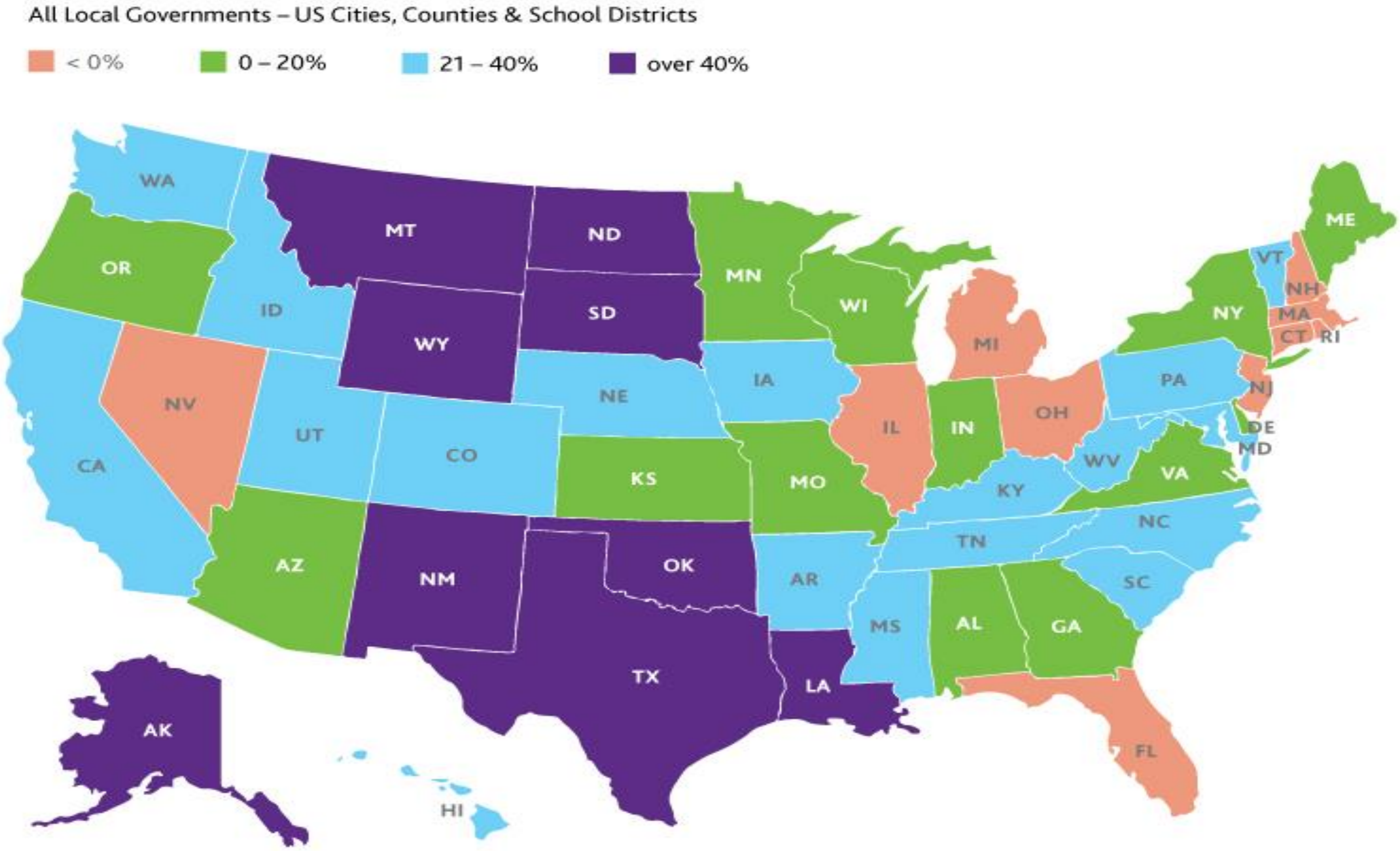
» Growing fund balances will support stable credit quality for local governments

» Municipal bankruptcies and defaults will remain the exception, not the rule

» Pockets of local governments face intensifying credit pressures

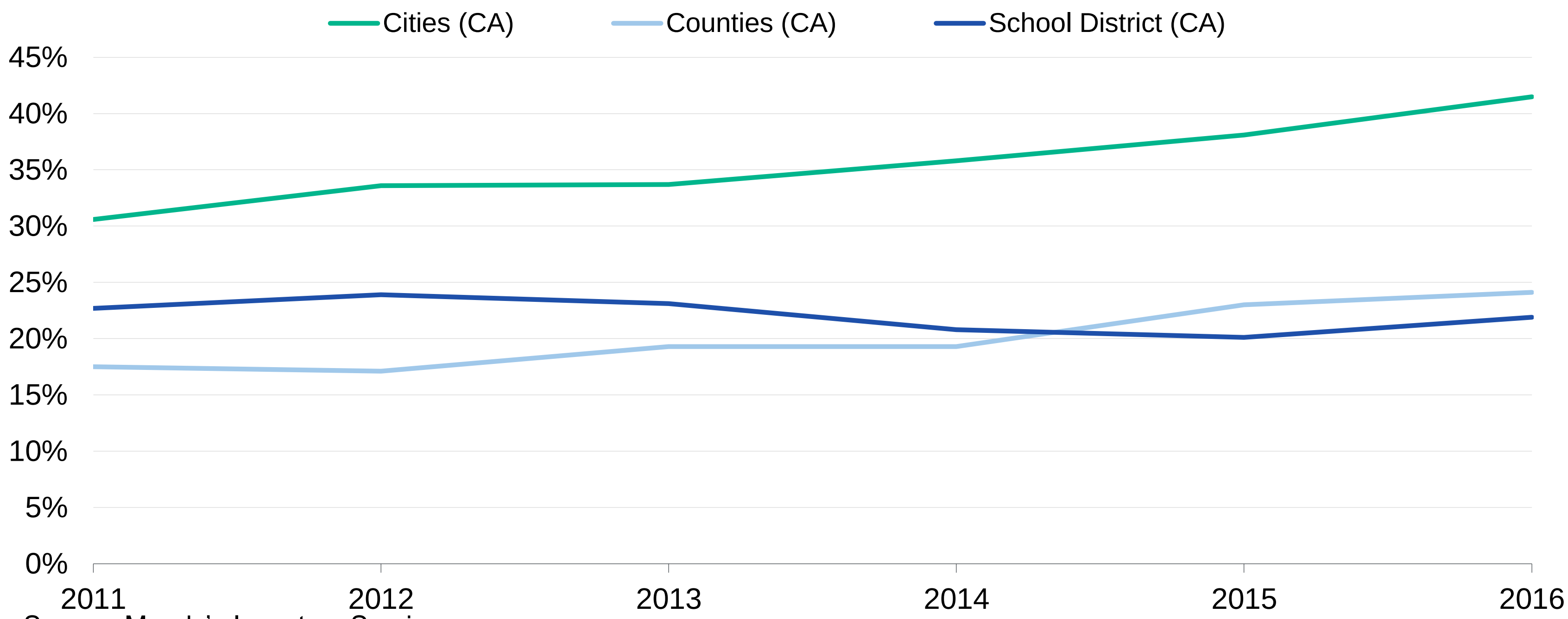
# Property Values Show Strong Growth in CA

Per-state median of rated issuers' 10-year property value trend (2007-2016)



# Average Operating Fund Balances Increasing for California Cities and Counties

- School districts lagged general increasing trend, but increased in 2016
- CA city operating fund balance average exceeds national average
- CA counties lag national averages though reserves are still at healthy levels




Source: Moody's Investors Service

# 2

## Overview of GO Methodology

# Updated GO Methodology in 2014

## Small revisions but significant increase in transparency

- Updated prior methodology to reflect recent trends & key issues, including pensions
- Developed quantitative scorecard for rating guidance

**Purpose and Use of the Scorecard:**

- Enhances the transparency of our rating process
- Scorecard acts as a starting point for a more thorough and individualistic analysis
- Assigned rating may be higher or lower than scorecard-indicated rating based on additional factors
- Final rating is determined by a rating committee, incorporating all quantitative and qualitative factors relevant to the individual issuer and debt issue

# Overview of GO Scorecard

| Factors & Sub-Factors | Weights |
|---|---|
| | |
| **Factor 1: Economy/Tax Base** | **30%** |
| Full Value (market value of taxable property) | 10% |
| Full Value per Capita | 10% |
| Median Family Income | 10% |
| | |
| **Factor 2: Finances** | **30%** |
| Fund Balance as % of Operating Revenue | 10% |
| 5-Year Dollar Change in Fund Balance as % of Revenues | 5% |
| Cash Balance as % of Revenues | 10% |
| 5-Year Dollar Change in Cash Balance as % of Revenues | 5% |
| | |
| **Factor 3: Management** | **20%** |
| Institutional Framework | 10% |
| Operating History: 5-Year Average of Operating Revenues / Operating Expenditures | 10% |
| | |
| **Factor 4: Debt/Pensions** | **20%** |
| Net Direct Debt / Full Value | 5% |
| Net Direct Debt / Operating Revenue | 5% |
| 3-Year Average of Moody's Adjusted Net Pension Liability / Full Value | 5% |
| 3-Year Average of Moody's Adjusted Net Pension Liability / Operating Revenues | 5% |

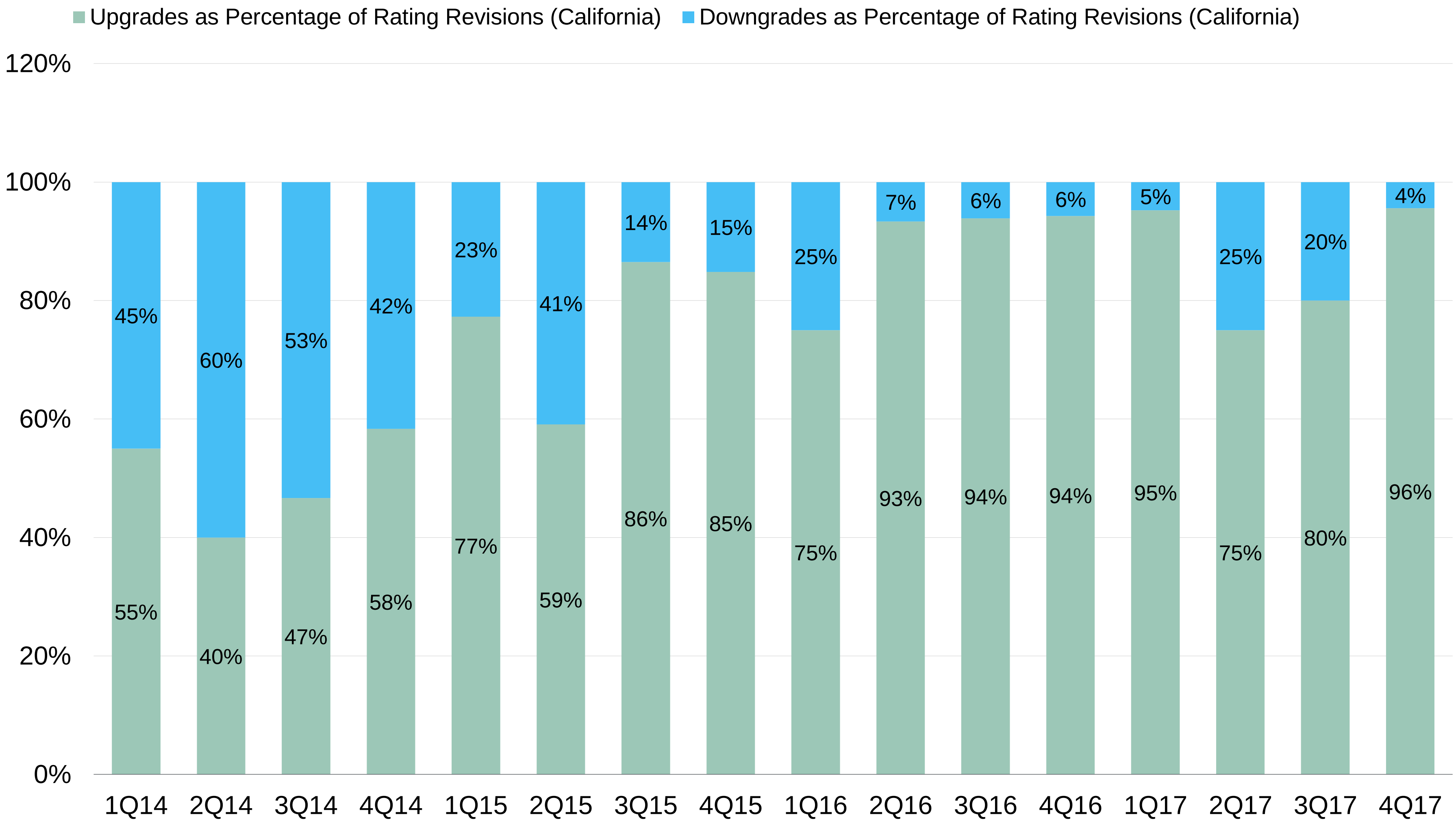
# GO Scorecard – Standard Adjustments

| Adjustments/Notching Factors | |
|---|---|
| *Description* | Direction |
| **Economy/Tax Base** | |
| Institutional presence | up |
| Regional economic center | up |
| Economic concentration | down |
| Outsized unemployment or poverty levels | down |
| Other analyst adjustment to Economy/Tax Base factor (specify) | up/down |
| **Finances** | |
| Outsized contingent liability risk | down |
| Unusually volatile revenue structure | down |
| Other analyst adjustment to Finances factor (specify) | up/down |
| **Management** | |
| State oversight or support | up/down |
| Unusually strong or weak budgetary management and planning | up/down |
| Other analyst adjustment to Management factor (specify) | up/down |
| **Debt/Pensions** | |
| Unusually strong or weak security features | up/down |
| Unusual risk posed by debt/pension structure | down |
| History of missed debt service payments | down |
| Other analyst adjustment to Debt/Pensions factor (specify) | up/down |
| **Other** | |
| Credit event/trend not yet reflected in existing data sets | up/down |

# Applying the Analytical Factors


- The adjusted scorecard rating is typically the assigned, public rating
- However:
  - The final rating assignment is determined by the vote of rating committee members
  - The assigned public rating may be different from the adjusted, scorecard indicated rating based on this vote

# Upgrades Substantially Outpace Downgrades in California Since Late 2014



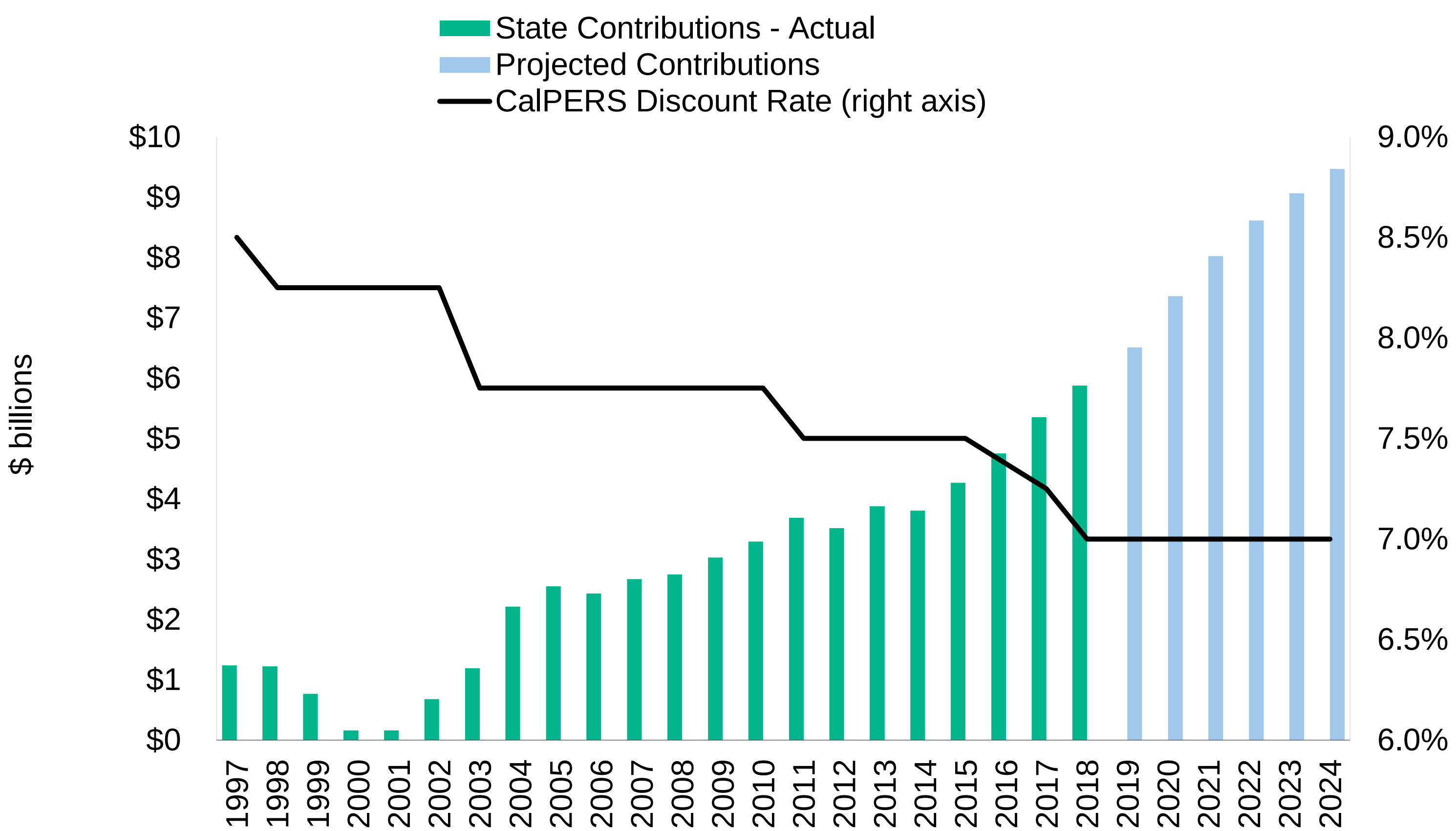
# 3 California Local Governments' Relative Pension Burdens

# Rising Pensions Costs Remain a Long-term Risk for the Local Government Sector

- Given the exceptionally strong legal protections provided to public pensions, the State of California (Aa3 stable) and its local governments face limited options to address pension challenges
- Savings from enacted pension reforms will take years to materialize because they primarily impact new employees
- State and local government contributions to public pension systems such as CalPERs and CalSTRS will continue to rise materially for at leas the next several years
- State Supreme Court to revisit the “California Rule”, potentially providing some relief

# Liability Build-Up and Falling Discount Rate Assumptions Are Increasing Pension Costs

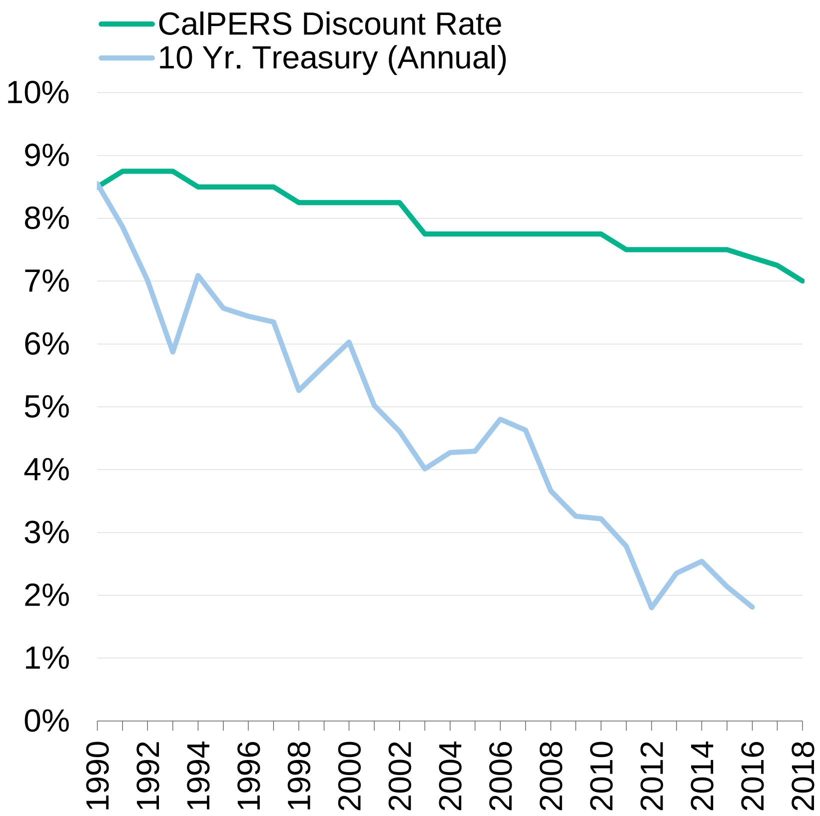
» California's CalPERS pension contributions

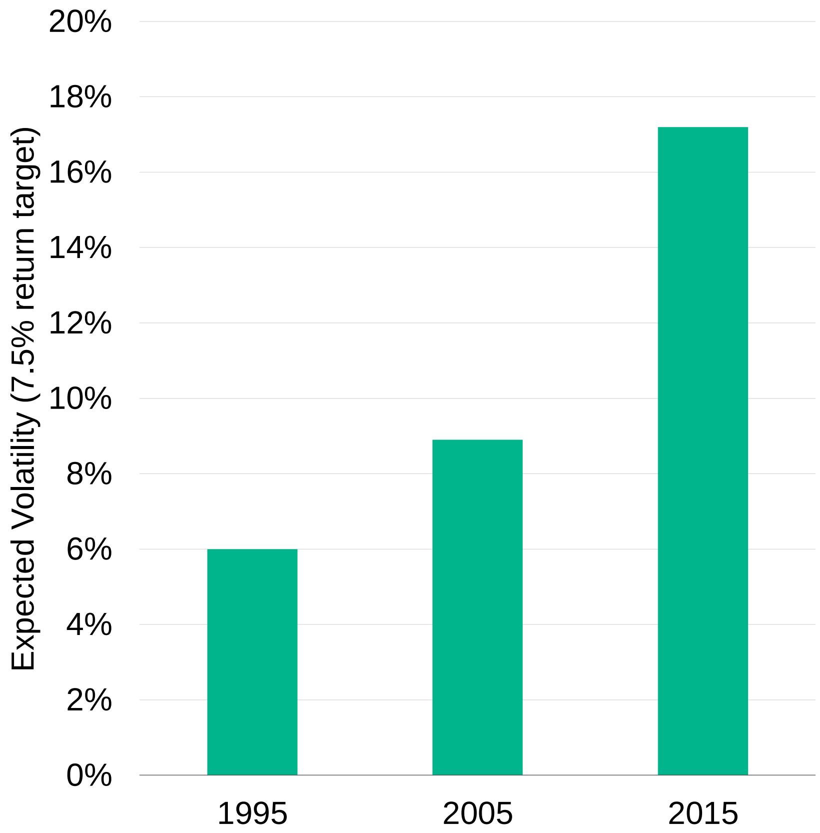



*Source: CalPERS actuarial valuations*

# Declines in Reported US Public Pension Discount Rates Lag Market Indicators

- Even at new, lower levels, reported discount rates remain well above market interest rates
- Callan: volatility risk required to maintain 7.5% return expectations roughly tripled from 1995 to 2015

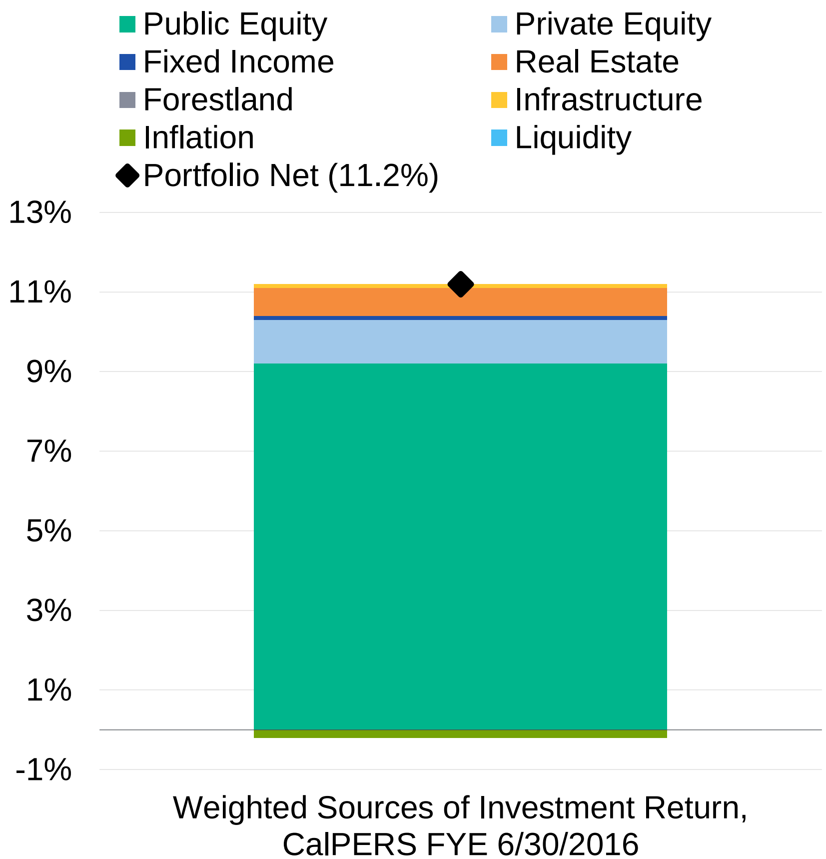



*Sources: Callan, CalPERS, Federal Reserve Bank of St. Louis*

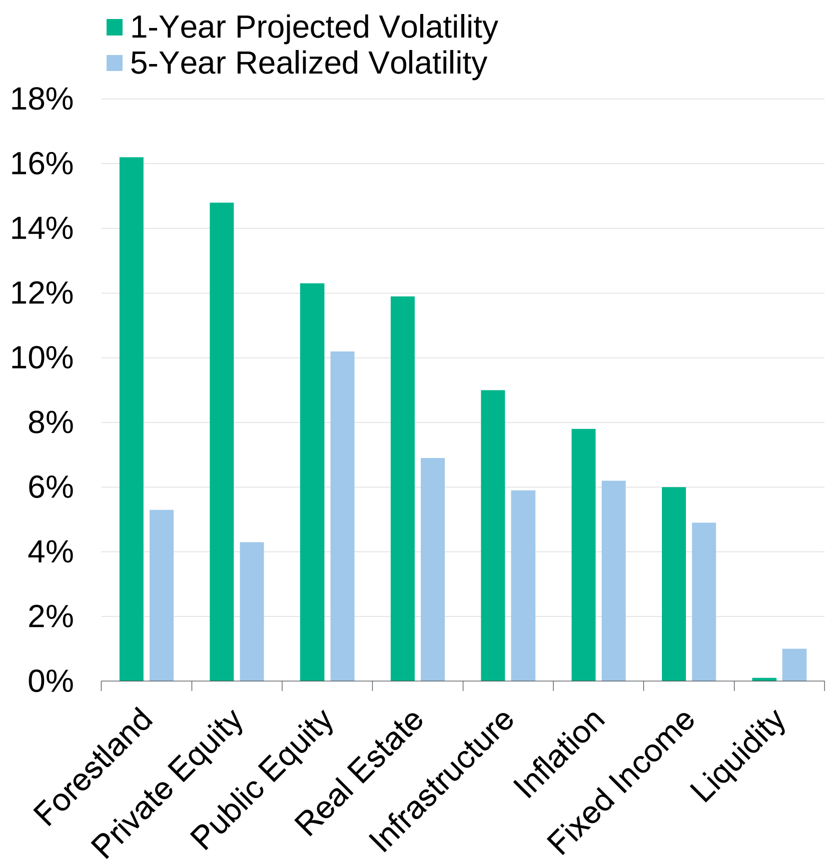
# Favorable FY 2017 Returns Were From Relatively Volatile Asset Classes

## CalPERS' weighted returns

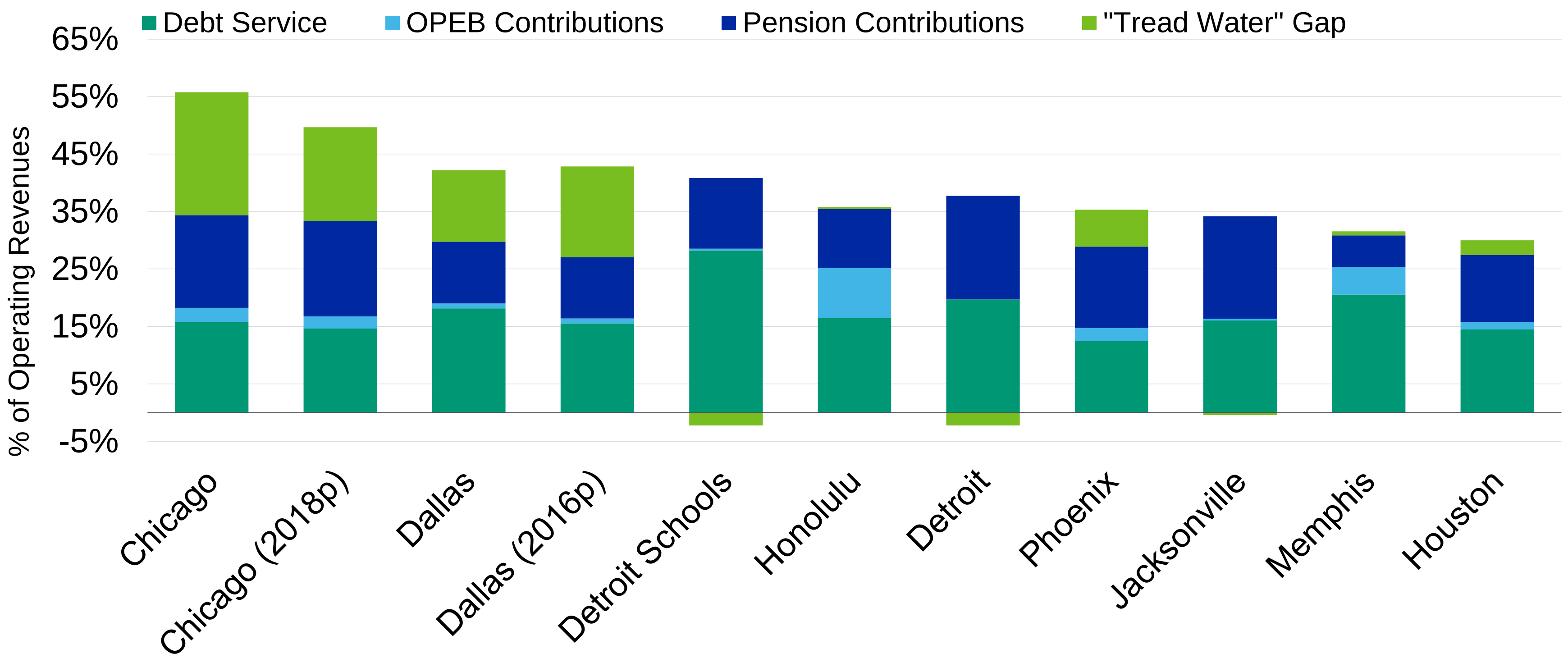



*Source: CalPERS*

## CalPERS' return volatilities



# Nationally, Fixed Costs Exceed 30% of Operating Revenues for the Most Heavily Burdened Large Local Governments

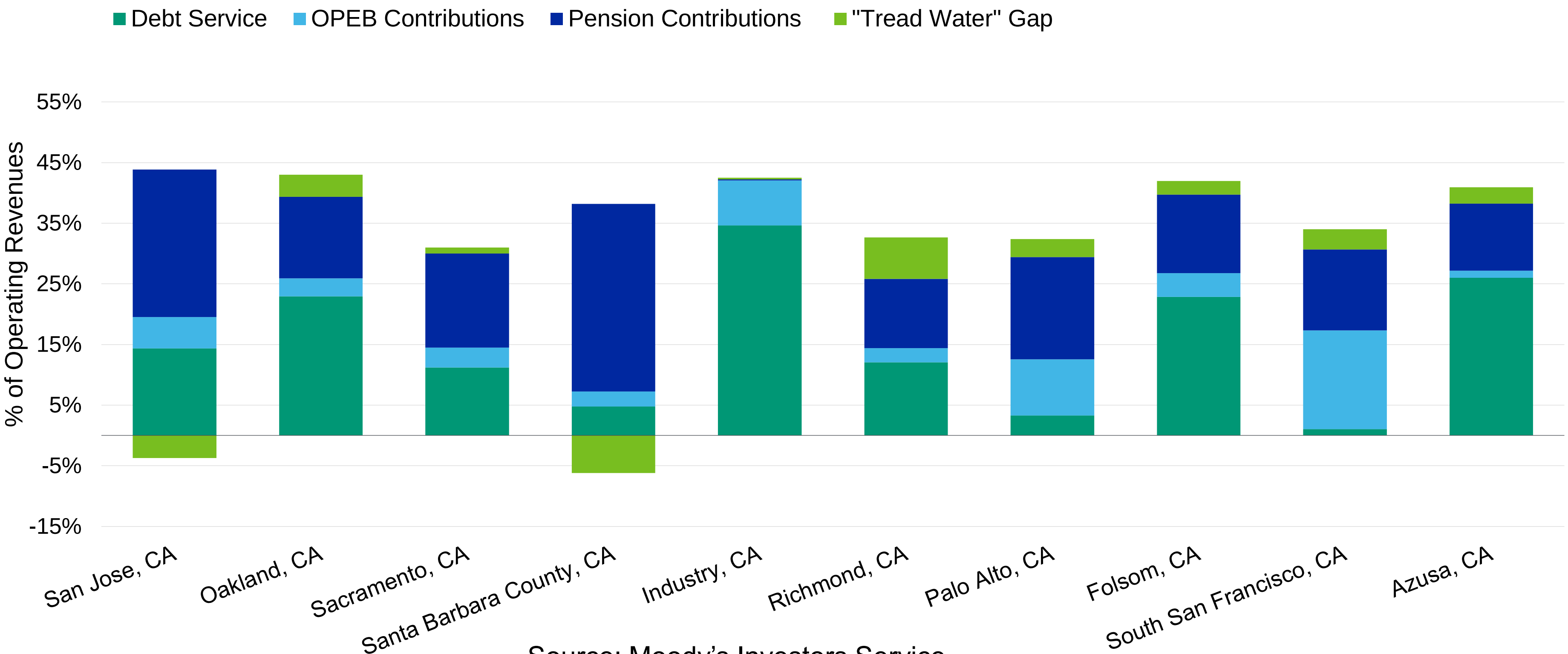



Source: Moody's Investors Service

# Some California Local Governments Also Have Very High Fixed Cost Burdens

» Ten Moody's-rated California cities and one county have fixed cost burdens greater than 30%

» Median fixed cost burden for California cities and counties is 19.5%




Source: Moody's Investors Service

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