

Pension Funds and the Bond Market

John Sugden-Castillo
Director
Standard & Poor's

National Council on Teacher Retirement
October 11, 2011

S&P's 2011 Outlook For State Governments

Setting the stage for 2011 is the presence of several notable conditions that, in our view, almost all state government issuers will confront. Among these are:

- An economic recovery that we believe will likely continue to be generally weak;
- The persistence of budget gaps that in our view will likely require state and local government issuers to make difficult policy decisions;
- The potential for a more challenging bond market for issuers;
- A new regulatory regime as a result of the Dodd-Frank Financial Reform legislation; and
- **An increased focus on issuer pension and other retiree benefits packages.**

The Perfect Storm

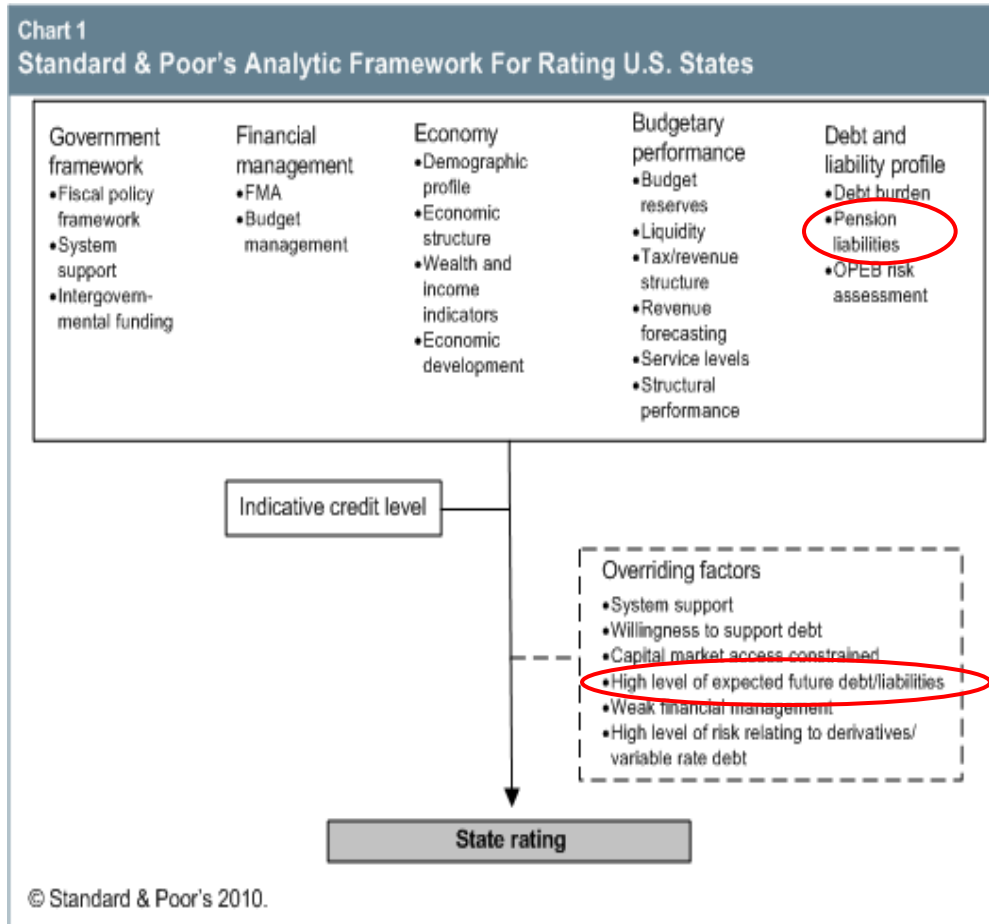
- **Lag between investment losses (or gains) and their budgetary impact on states results in ARC increasing at a time when:**
 - Federal stimulus funding is winding down,
 - Revenues are declining or only increasing marginally and economic recovery forecast is weak and weakening,
 - Rainy Day reserves have been reduced or depleted
 - Increased social service demands are also placing increased pressures on budgets
- **Proposed changes to Regulatory, Accounting and Reporting Changes**
- **Predictions of unprecedented level of defaults in the Municipal market**
- **Risk-free rate of return assumptions increases size of liability and feeds fuel to the fire**

S&P's view on Pensions

- Pensions have historically been a part of our credit analysis
- New state criteria, released Jan. 3rd, 2011, further emphasizes the importance of pensions in our analysis
- Not presently jeopardizing states' capacity to meet their debt service obligations;
- Upward pressure on recommended contributions persists;
- Lower discount rates would increase recommended contributions further;
- Pension reforms efforts are underway in numerous states. Fiscal relief from these reforms remains to be seen;
- Deteriorating funded ratios and a lack of full actuarially required contributions introduce potential for negative pressure on credit.

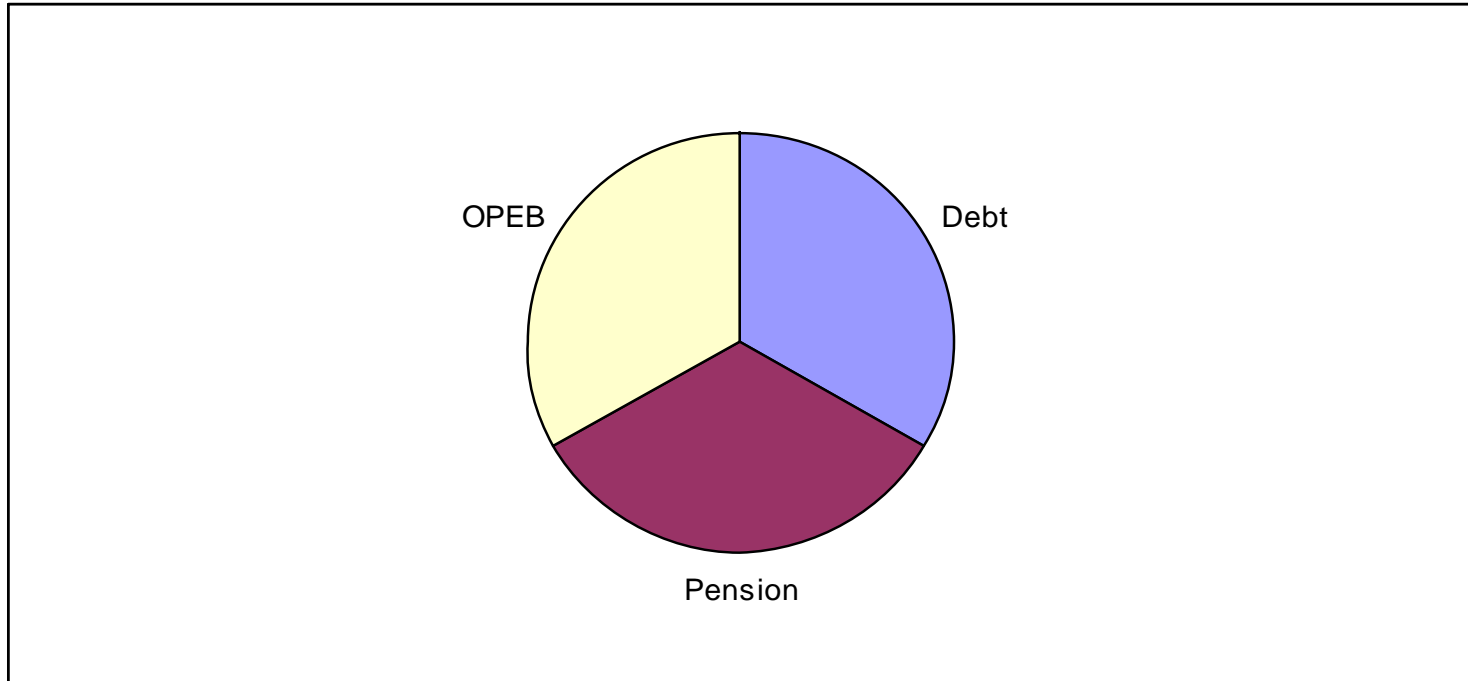
State Criteria And Pension Liabilities

Pensions And State Rating Criteria



Criteria Application: Debt And Liability Profile

Key Metrics (Debt, Pension, and OPEB) scored individually and weighted equally



Pension Liability Metric

- **Key indicators:**

- Pension funded ratio;
- Pension funding (contributions) levels;
- Unfunded pension liabilities per capita;
- Unfunded pension liabilities relative to personal income

Pension Analysis Thresholds

- Pension Funded Ratio
 - Strong: 90% or above
 - Above average: 80%-90%
 - Below average: 60%-80%
 - Weak: 60% or below

Pension Funding Analysis:

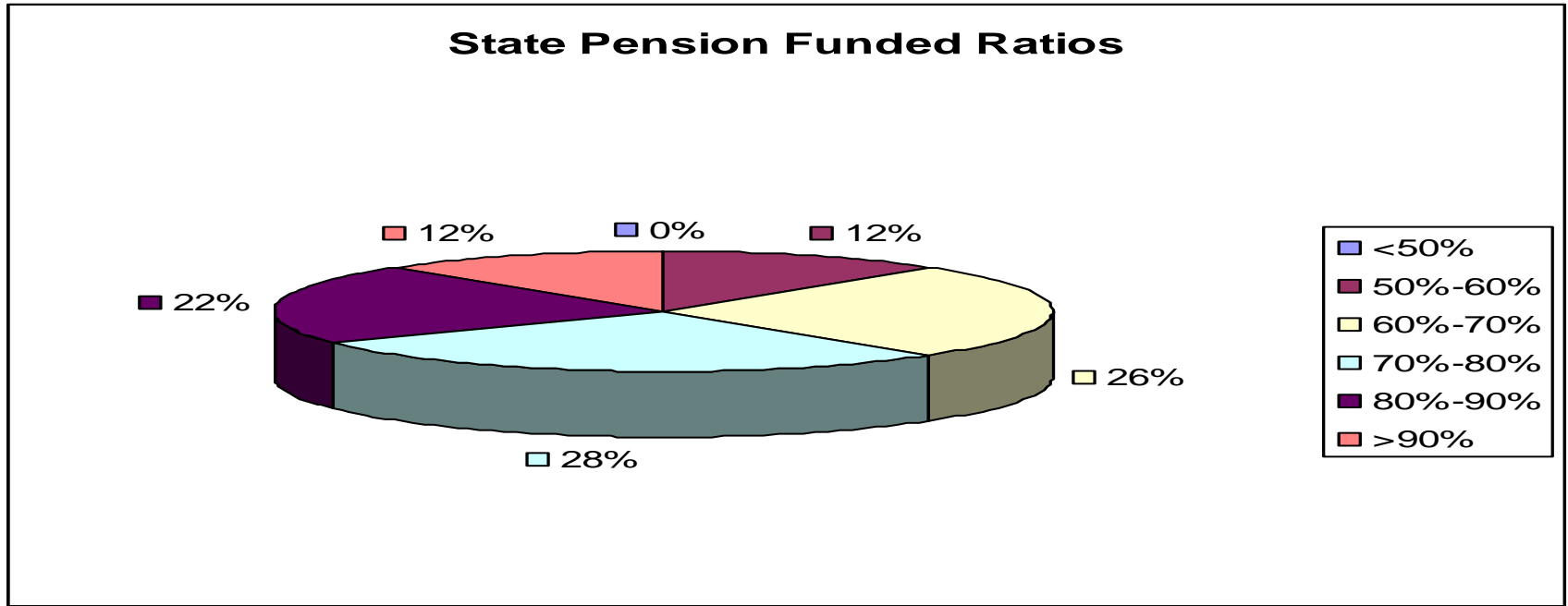
- Pension Funding Levels
 - Strong: Consistently funds annual required contributions (ARC).
 - Above average: Funds ARC in most years but occasionally contributes less.
 - Below average: Has not funded ARC for 3 years.
 - Weak: Has not funded ARC for more than 3 years.

Pension Analysis: Affordability Measures

- Unfunded State Pension Liabilities Per Capita
 - Strong: Below \$500
 - Above average: \$501-\$2,000
 - Below average: \$2,001-\$3,500
 - Weak: Above \$3,500
- Ratio Of State Pension Liabilities To Personal Income
 - Strong: Below 2%
 - Above average: 2.1%-4%
 - Below average: 4.1%-7%
 - Weak: Above 7%

U.S. State Pension Funded Ratios Drift Downward

Pension Survey Findings: As Of Fiscal 2009



- **Average funded ratio for 50-states was 75% for fiscal 2009**
- **According to a Federal Reserve study, aggregate funded ratio of public pensions for states in 1975 was 51%**
- **Funded ratios for FY10 point to a continued decline in funding levels**

Current Credit Implications Of Pension Funding

- **Long-term liability that must be managed now;**
- **Governments that are not addressing their liabilities now could face credit pressure;**
- **Instances of negative rating movement and rating outlook actions linked to management of pension liabilities exist;**
 - Rating action linked to pension pressures to date is gradual in nature reflecting an erosion of credit quality due to poorly managed pension liabilities

STANDARD & POOR'S

www.standardandpoors.com

Copyright © 2011 by Standard & Poor's Financial Services LLC (S&P), a subsidiary of The McGraw-Hill Companies, Inc. All rights reserved. No content (including ratings, credit-related analyses and data, model, software or other application or output therefrom) or any part thereof (Content) may be modified, reverse engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of S&P. The Content shall not be used for any unlawful or unauthorized purposes. S&P, its affiliates, and any third-party providers, as well as their directors, officers, shareholders, employees or agents (collectively S&P Parties) do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P Parties are not responsible for any errors or omissions, regardless of the cause, for the results obtained from the use of the Content, or for the security or maintenance of any data input by the user. The Content is provided on an "as is" basis. S&P PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs) in connection with any use of the Content even if advised of the possibility of such damages.

Credit-related analyses, including ratings, and statements in the Content are statements of opinion as of the date they are expressed and not statements of fact or recommendations to purchase, hold, or sell any securities or to make any investment decisions. S&P assumes no obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. S&P's opinions and analyses do not address the suitability of any security. S&P does not act as a fiduciary or an investment advisor. While S&P has obtained information from sources it believes to be reliable, S&P does not perform an audit and undertakes no duty of due diligence or independent verification of any information it receives.

S&P keeps certain activities of its business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain business units of S&P may have information that is not available to other S&P business units. S&P has established policies and procedures to maintain the confidentiality of certain non-public information received in connection with each analytical process.

S&P may receive compensation for its ratings and certain credit-related analyses, normally from issuers or underwriters of securities or from obligors. S&P reserves the right to disseminate its opinions and analyses. S&P's public ratings and analyses are made available on its Web sites, www.standardandpoors.com (free of charge), and www.ratingsdirect.com and www.globalcreditportal.com (subscription), and may be distributed through other means, including via S&P publications and third-party redistributors. Additional information about our ratings fees is available at www.standardandpoors.com/usratingsfees.

STANDARD & POOR'S, S&P, GLOBAL CREDIT PORTAL and RATINGSDIRECT are registered trademarks of Standard & Poor's Financial Services LLC.