



---

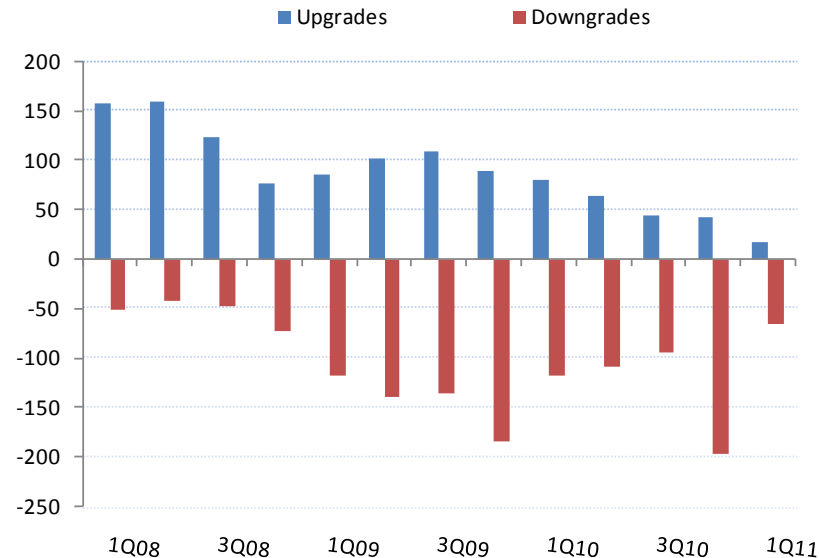
# U.S. Municipal Market – The View From the Markets

Presentation to the Federal Reserve Banks of Chicago, New York and Philadelphia

# Unprecedented financial stress across municipal sectors

- Municipal market is broad and has diversity of credit risks
- Economic recession is tepid – state and local governments are lagging in recovery
- End of federal stimulus makes 2011 an even more stressful year for state and local governments
- Moody's has had negative outlooks on state and local governments for 3 years
- Downgrades have outpaced upgrades for 9 consecutive quarters

Rating Changes by Number



Source: Moody's

# Very few rated municipal bonds have defaulted

- » From 1970 to 2009, 54 Moody's rated municipal issuers defaulted
  - » Nearly 80% were in non-profit hospital or housing project sectors
- » Average recovery on defaulted municipal bonds has been 59% of par, compared to 37% for defaulted corporate bonds

## Default Counts by Purpose

Purpose	Ratings Outstanding	Defaults
Housing	1,041	21
Health Care	650	21
Electric, Water or Sewer Enterprise	1,645	3
Higher Education	843	1
Recreation	93	1
City, Town, County – Non-General Obligation	2,342	4
General Obligation	8,610	3
<b>Total</b>	<b>15,224</b>	<b>54</b>

Source: Moody's

# Defaults are higher among unrated bonds

- » Only 2 Moody's rated municipal issuers defaulted in 2010
- » No rated defaults year to date in 2011

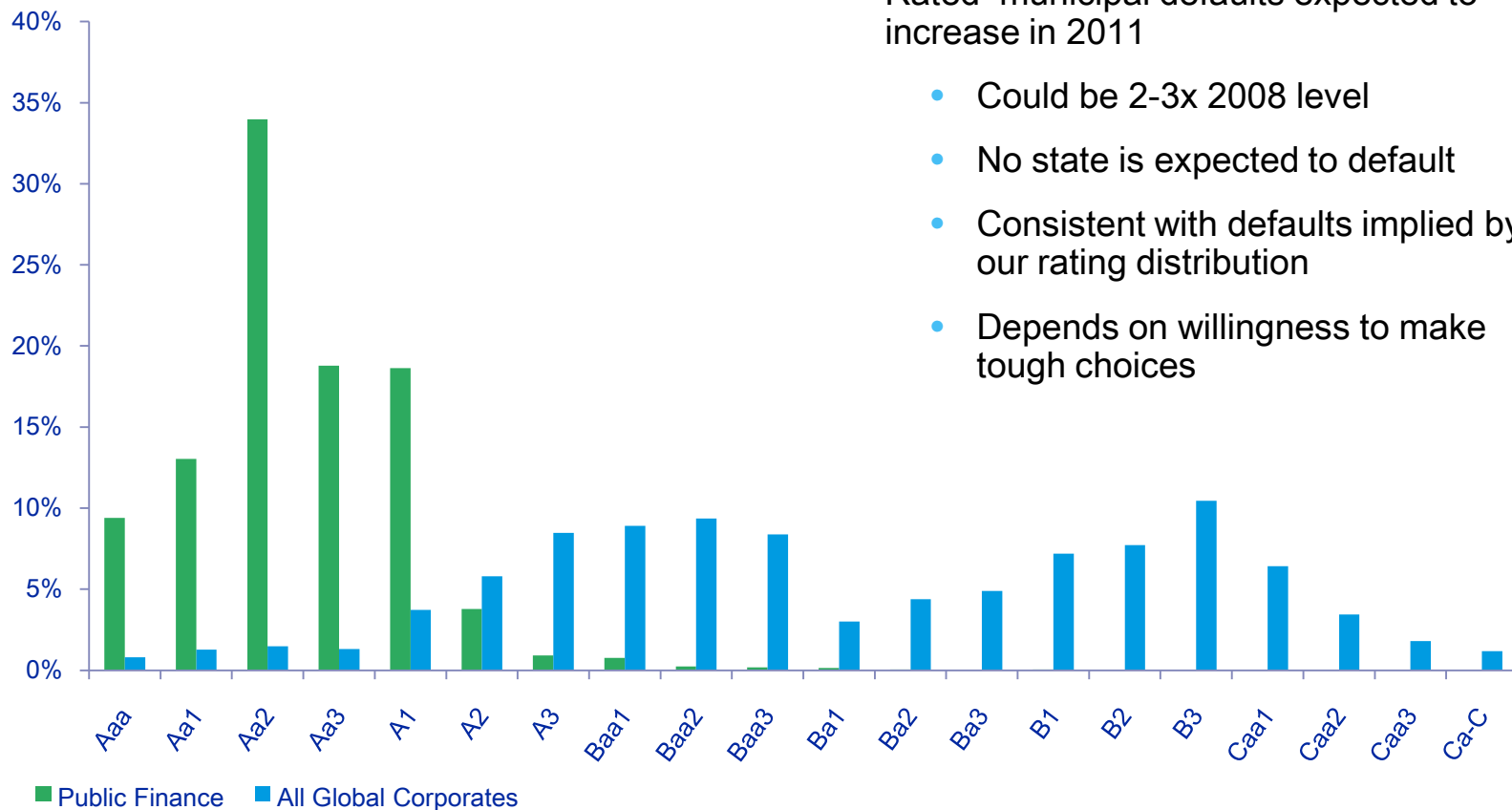
## Recent US Municipal Defaults

	2008	2009	2010	2011 YTD
<b>Issuers (#)</b>				
Rated by Moody's	5	1	2	0
Unrated and Rated by Moody's	167	207	82	14
<b>Volume (\$millions)</b>				
Rated by Moody's	\$ 3,678	\$ 24	\$ 40	\$ -
Unrated and Rated by Moody's	\$ 8,518	\$ 1,688	\$ 3,233	\$ 605

Source: Moody's and Income Securities Advisor, Inc.

# Rated defaults expected to increase in 2011

## Municipal vs. Corporate Ratings

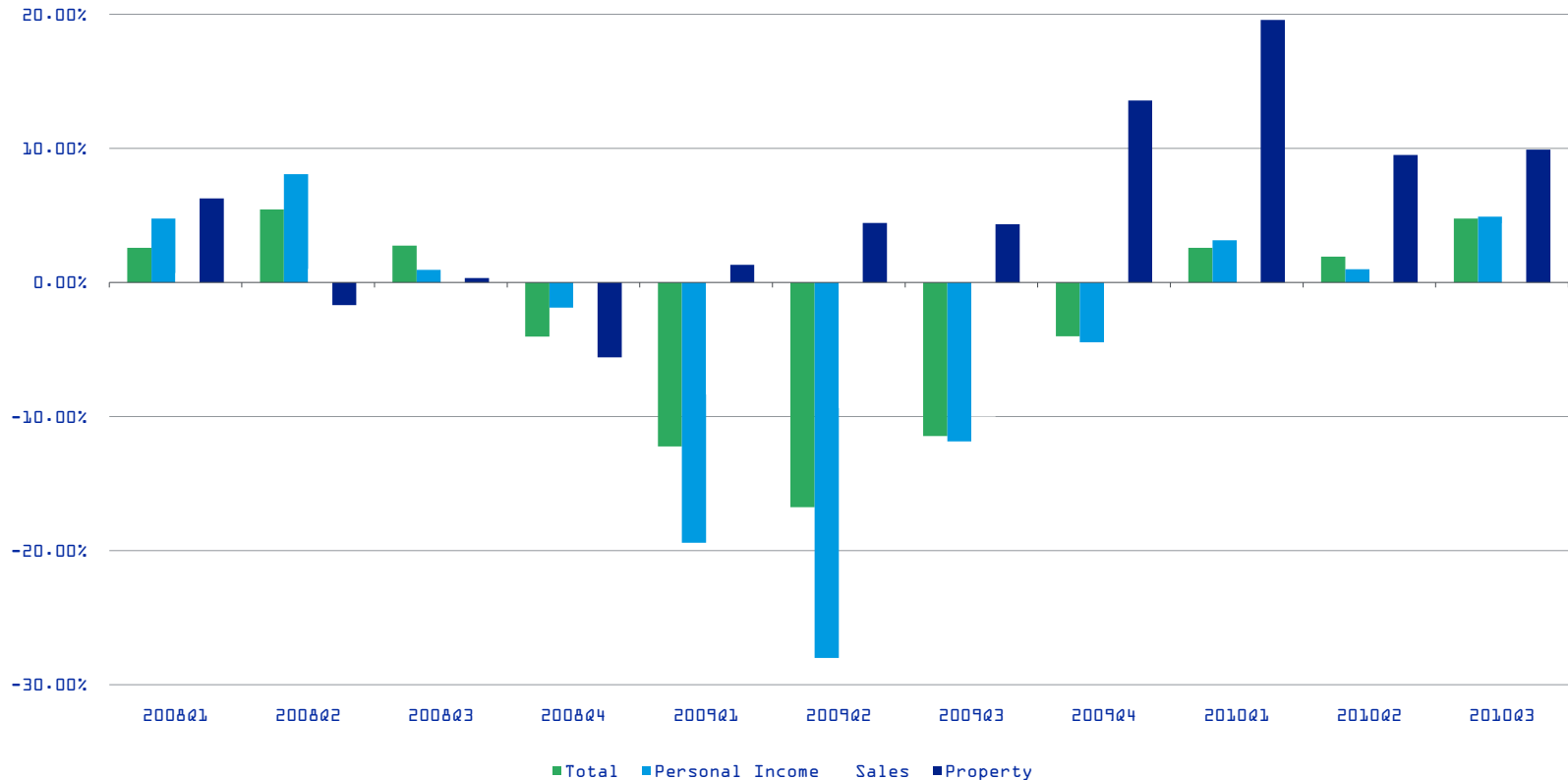


- Rated municipal defaults expected to increase in 2011
  - Could be 2-3x 2008 level
  - No state is expected to default
  - Consistent with defaults implied by our rating distribution
  - Depends on willingness to make tough choices

Source: Moody's

# States face a revenue and spending crisis, not a debt crisis

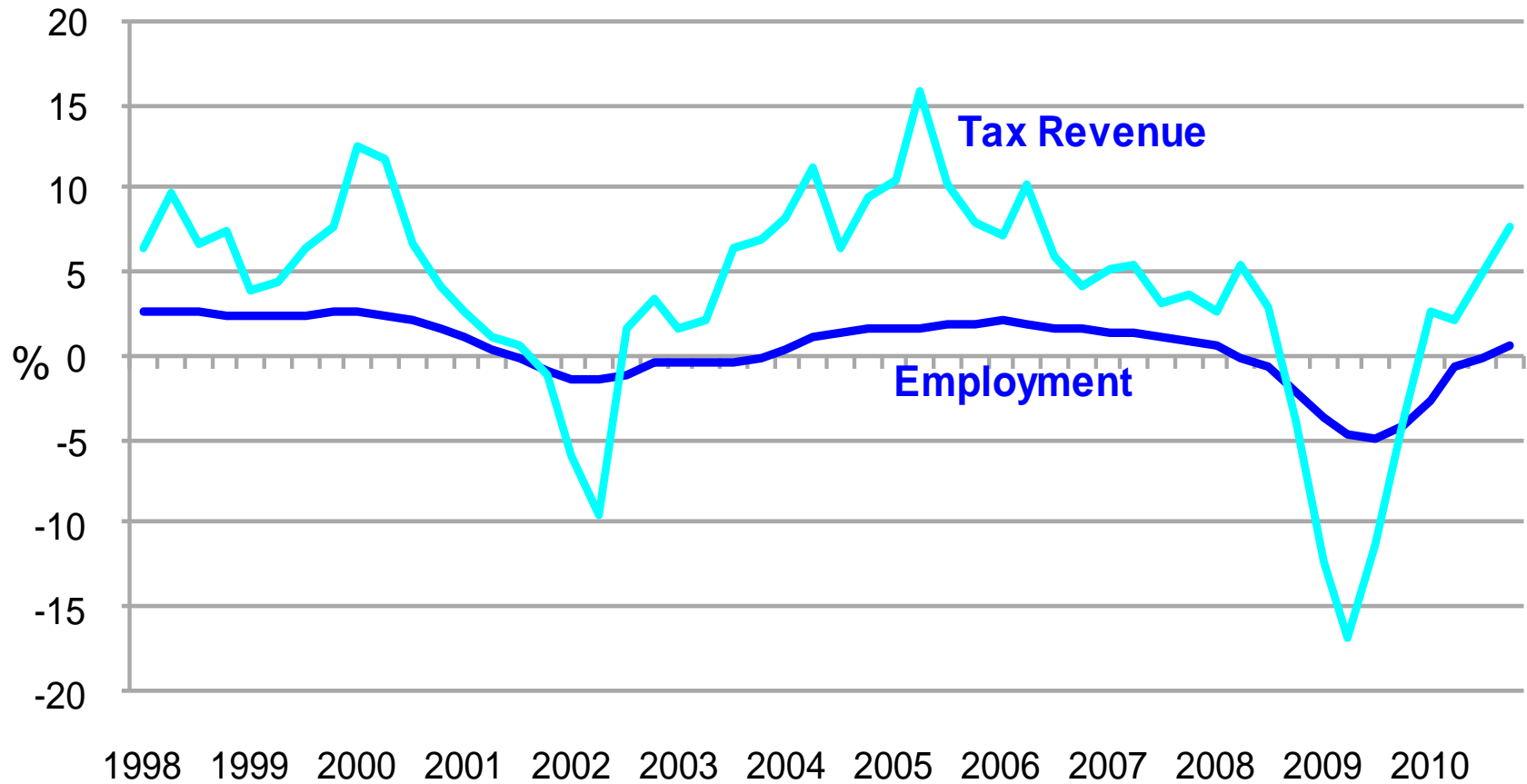
## State and local government quarterly tax revenue performance



Source: Bureau of Census

# State revenues improving, but will not solve problem alone

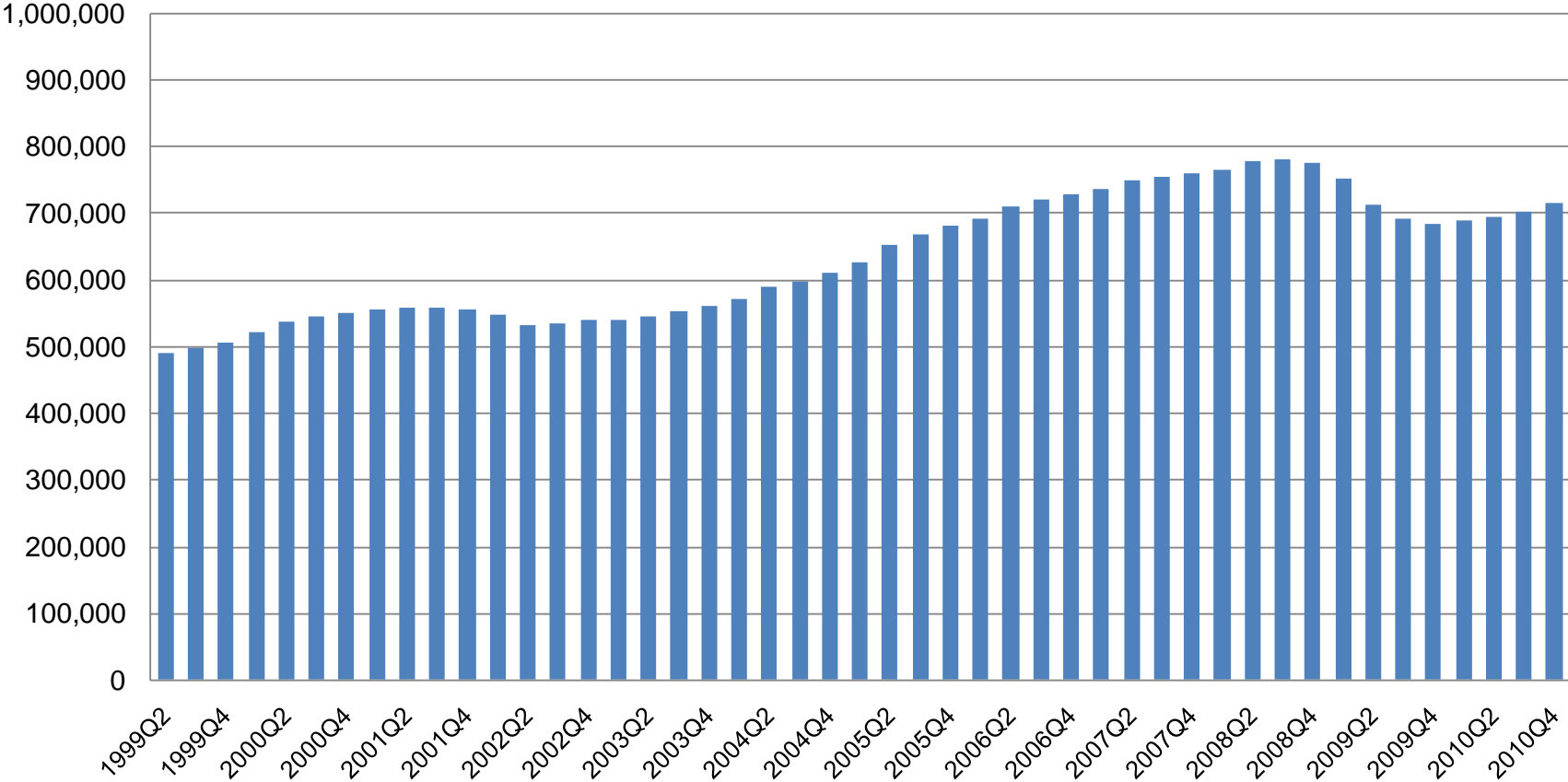
Year over year % change in state quarterly tax revenue performance



Source: U.S. Bureau of Census, Bureau of Labor Statistics

# State revenues still below pre-recession peak

Total U.S. State Tax Revenue (\$Mil)

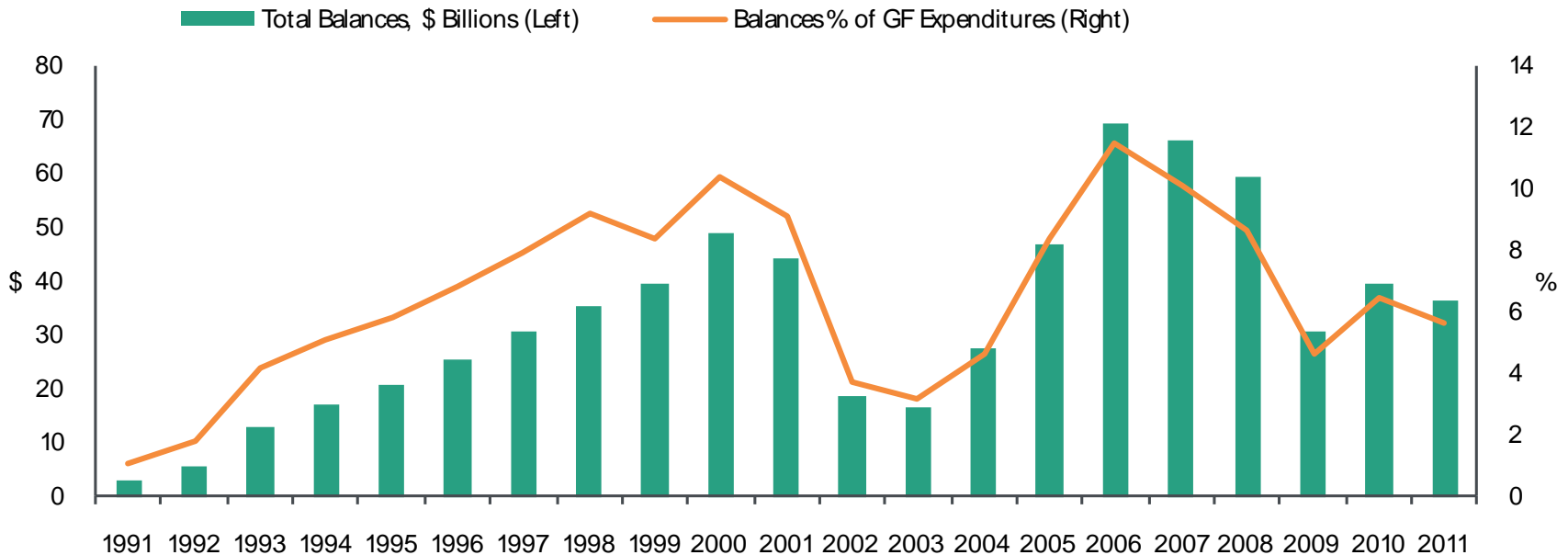


Source: Bureau of Census



# State reserves are half of pre-recession levels

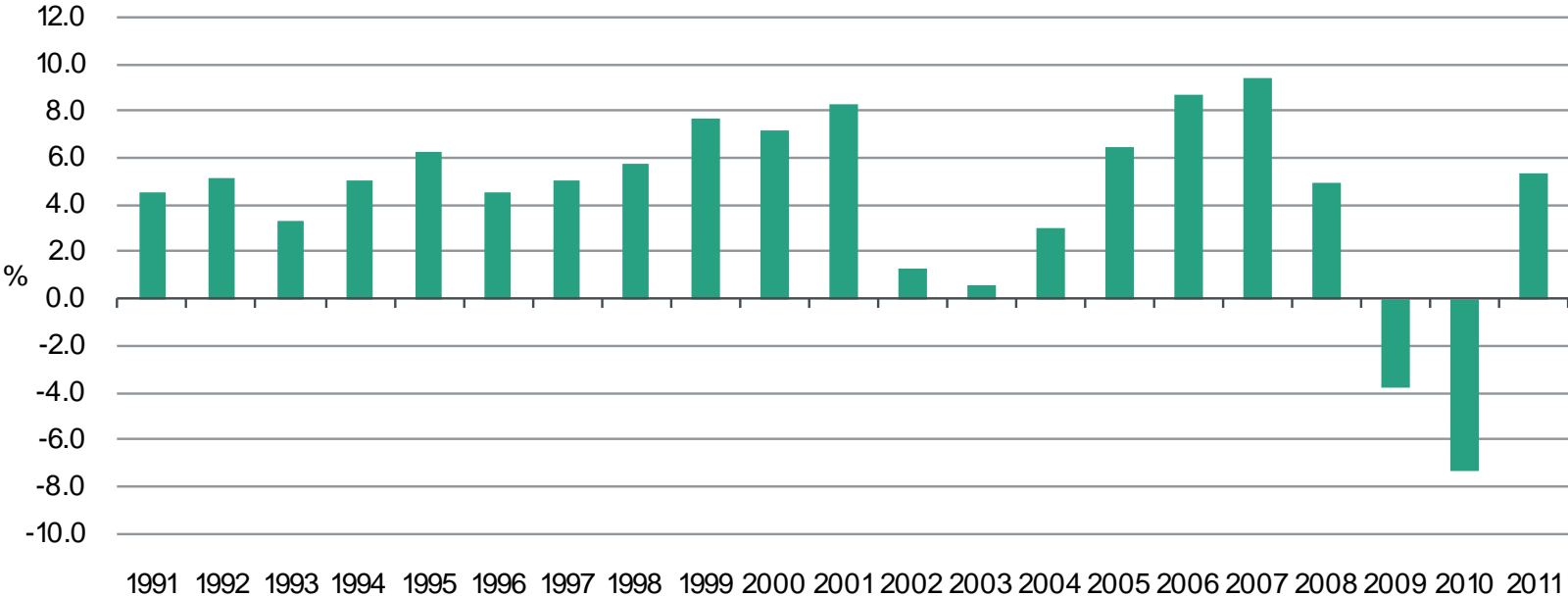
Fiscal Year-End Balances+Reserves as Percentage of General Fund Expenditures



Source: National Association of State Budget Officers

# States face difficult choices

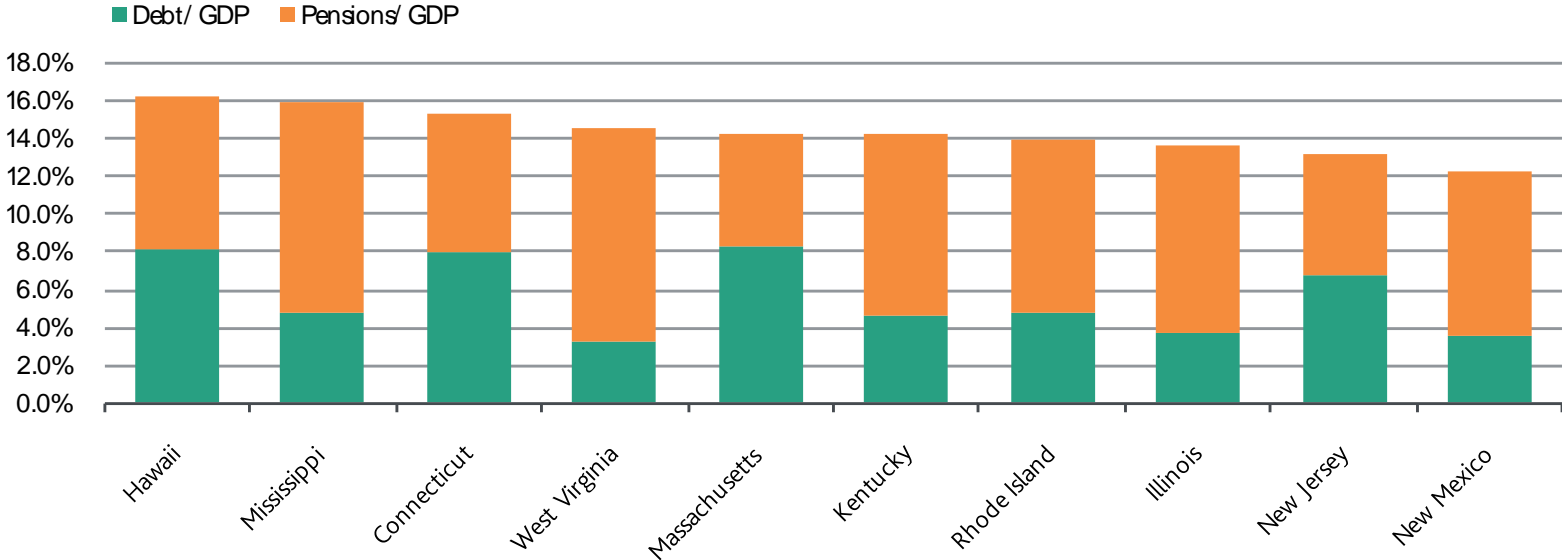
Annual Percentage Change in State General Fund Spending by Fiscal Year



Source: National Association of State Budget Officers

# Pensions are growing problem, but not a short-term issue for most

Combined Liabilities as Share of GDP – Top 10 States



Source: Moody's Investors Service

# Despite credit pressures, state and local governments have inherent strengths

- Governments exist in perpetuity
- Federal monetary policies benefit state and local economies
- State economies and those of some large cities are broad-based and diverse
- State and local governments have strong incentives to pay bond debt
- Debt service, even when combined with unfunded pension liabilities, is a small share of expenses
- State and local governments have a variety of powerful fiscal management tools at their disposal

# Moody's views are based on certain assumptions

- State and local governments will:
  - honor their contractual obligations to make bond payments because of strong incentives to do so
  - be able to continue accessing financial markets on roughly the same terms currently available
  - continue to have sufficient budget flexibility to meet the contractual obligations associated with their bonds (e.g., cutting costs and/or increasing revenues)
- Bankruptcy laws will not change
- The economic recovery will not be derailed by, e.g., an oil price shock

# What are we watching? What could change?

- » **States:** Revenues still below pre-recession levels. Most will manage by adjusting revenues and spending, and using reserves and any remaining federal stimulus money
  - **Risks:**
    - » Expiration of federal stimulus funds in June 2011 creates large gaps
    - » Entitlement spending for pension, OPEBs, Medicaid continues to grow
    - » Material shift in market confidence
    - » Economic recovery is fragile
    - » Impact of federal debt ceiling / deficit reduction plans
  
- » **Local Governments:** Small, weaker issuers will be most stressed, some distressed
  - **Risks:**
    - » Further state aid cuts
    - » Some have exposure to enterprise risk with outsized debt levels
    - » Exposure to financial institutions, liquidity and credit facilities expiring
    - » Breakdown in political process that results in failure to pay debt, bankruptcy filing
    - » Impact of federal debt ceiling / deficit reduction plans

---

# MOODY'S

INVESTORS SERVICE

[moody.com](http://moody.com)

Gail Sussman  
Managing Director  
New York office: 212-553-0819  
[Gail.sussman@moody.com](mailto:Gail.sussman@moody.com)



© 2010 Moody's Investors Service, Inc. and/or its licensors and affiliates (collectively, "MOODY'S"). All rights reserved.

CREDIT RATINGS ARE MOODY'S INVESTORS SERVICE, INC.'S ("MIS") CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES. MIS DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL, FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. CREDIT RATINGS DO NOT CONSTITUTE INVESTMENT OR FINANCIAL ADVICE, AND CREDIT RATINGS ARE NOT RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. CREDIT RATINGS DO NOT COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MIS ISSUES ITS CREDIT RATINGS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT. All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. Except as expressly stated otherwise, MOODY'S has not verified, audited or validated independently any information received in the rating process, nor will it do so. Under no circumstances shall MOODY'S have any liability to any person or entity for (a) any loss or damage in whole or in part caused by, resulting from, or relating to, any error (negligent or otherwise) or other circumstance or contingency within or outside the control of MOODY'S or any of its directors, officers, employees or agents in connection with the procurement, collection, compilation, analysis, interpretation, communication, publication or delivery of any such information, or (b) any direct, indirect, special, consequential, compensatory or incidental damages whatsoever (including without limitation, lost profits), even if MOODY'S is advised in advance of the possibility of such damages, resulting from the use of or inability to use, any such information. The ratings, financial reporting analysis, projections, and other observations, if any, constituting part of the information contained herein are, and must be construed solely as, statements of opinion and not statements of fact or recommendations to purchase, sell or hold any securities. Each user of the information contained herein must make its own study and evaluation of each security it may consider purchasing, holding or selling. NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY SUCH RATING OR OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

MIS, a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MIS have, prior to assignment of any rating, agreed to pay to MIS for appraisal and rating services rendered by it fees ranging from \$1,500 to approximately \$2,500,000. MCO and MIS also maintain policies and procedures to address the independence of MIS's ratings and rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold ratings from MIS and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at [www.moody's.com](http://www.moody's.com) under the heading "Shareholder Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

Any publication into Australia of this document is by MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657, which holds Australian Financial Services License no. 336969. This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001.