



# Joint Economic Committee *Republicans*

Representative Kevin Brady *Vice Chairman*  
Senator Jim DeMint *Senior Republican Senator*

## REPUBLICAN STAFF COMMENTARY

### STATES OF BANKRUPTCY

#### *Part I: The Coming State Pensions Crisis*

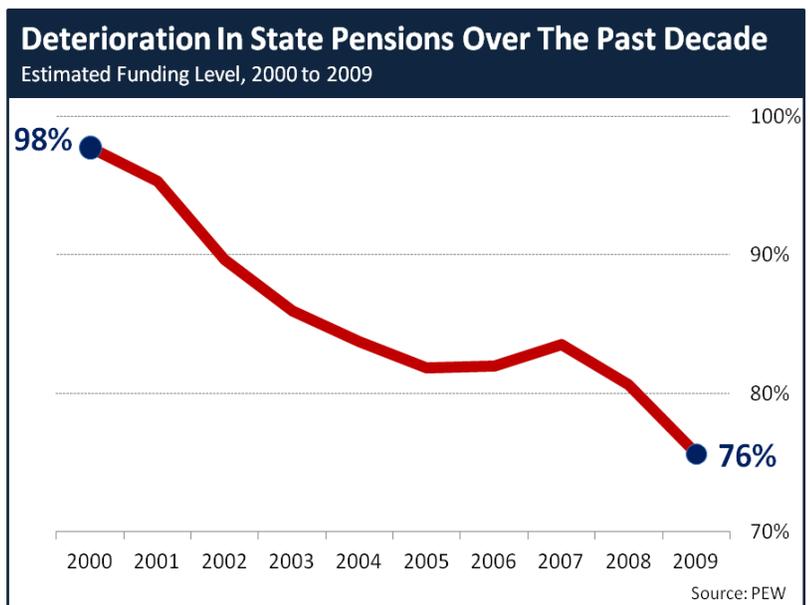
December 8, 2011

#### State and Local Government Pensions

While private businesses have shifted away from defined-benefit retirement plans and toward defined-contribution retirement plans in recent decades, virtually all state and local government employees still participate in defined-benefit plans. These plans are funded by contributions from employees as well as the government (i.e., taxpayers). In 2010, employee contributions to state and local pension plans represented 30% of total contributions while taxpayers were responsible for the remaining 70%.<sup>1</sup> Even if the contributions that state and local governments and their employees make to defined-benefit pension plans and the investment income such contributions generate fall short of the funds necessary to pay promised pension benefits, state and local governments are nonetheless required to pay promised benefits in full by either raising taxes or cutting other spending. While no large state public pension fund has yet to run dry and test what would happen in the absence of available pension assets that will soon change as a number of plans are projected to run out of money in just over five years based on private sector accounting standards.<sup>2</sup>

#### Deterioration in State and Local Pension Finances

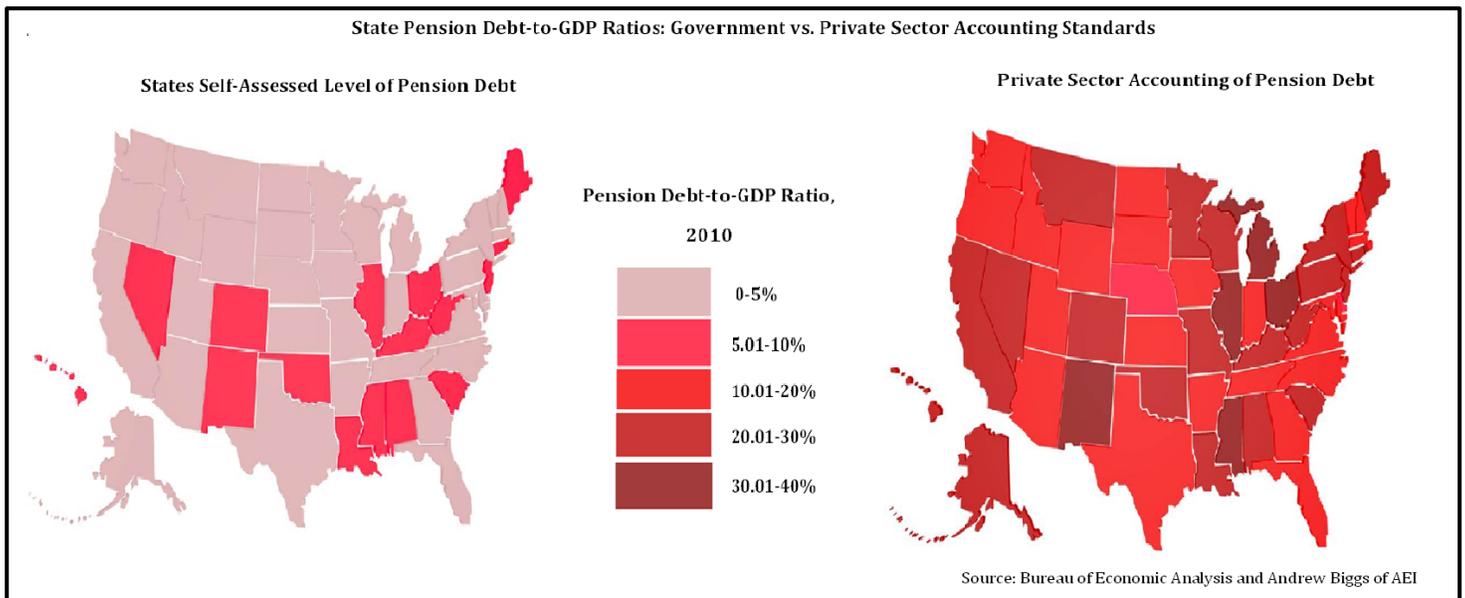
Deterioration in state and local government pension plans began in the late 1990s when high investment returns during the stock market bubble made pension plans appear fully or even over-funded. As the stock market boomed, many states and localities reduced their contributions, increased benefits, and goosed their assumptions going forward. The bursting of the stock market bubble and, later, the housing bubble, caused significant deterioration in the financial status of state and local government pension funds. Based on data from the Pew Center on the States, the average state pension funding level



(the percent of promised benefits that are projected to be payable by existing assets) declined from 98% in 2000 to 76% in 2009.<sup>3</sup>

### Improper Accounting Methods Understate Pension Liabilities

According to their own figures, state and local pension systems are in trouble but those numbers barely scratched the surface of the true scale of the shortfalls, as the map of the United States shows below. The left map details what states admit their unfunded pension liabilities are but under private sector accounting methods, as shown by the right map, the situation is much worse. Unlike retirement plans offered to the employees of private businesses or the federal government, state and local government pension plans are not required to abide by any particular set of accounting standards. Most states and localities conform to the General Accounting Standards Board (GASB). The problem with GASB, however, is that unlike FASB (the Financial Accounting Standards Board) and ERISA (the Employee Retirement Income Security Act), which govern private sector pensions and accounting, GASB primarily specifies disclosure standards and other guidelines as opposed to strict rules. For example, GASB allows states desiring higher investment returns to assume those returns simply by investing in riskier asset. It also allows plans to delay full accounting and reporting of assets over a number of years to minimize the impact of large market swings (as a result, the consequences of the 2008-2009 downturn will not be fully reported on pension balance sheets until as late as 2014).



According to the National Association of State Retirement Administrators *Public Fund Survey*, the 126 large plans (which make up about 85% of state and local pension assets and participants) represented in the survey had a combined unfunded pension liability of \$767 billion for FY 2010.<sup>4</sup> The \$767 billion gap amounts to an aggregate funding ratio of 77%, meaning current assets are projected to provide only 77% of promised benefits. Even with this inaccurate accounting and overly generous assumptions, nine “large” state and local pension plans in 2010 were less than 50% funded.<sup>5</sup> These plans included: the

Illinois State Employees Retirement System (37%), the Kentucky State Employees' Retirement System (40%), the Missouri Department of Transportation and Highway Patrol Employees Retirement System (42%), the Indiana State Teachers Retirement Fund (42%), the Connecticut State Employees Retirement System (44%), the Illinois State Universities Retirement System (46%), the West Virginia Teachers Retirement System (47%), the Oklahoma Teachers Retirement System (48%), and the Illinois Teachers Retirement System (48%).

The average rate of return assumed by state and local government plans is 8%. While this may not be far off from historical returns, the recent financial crisis and predicted slower-than-normal future economic growth in the U.S. and industrialized world is likely to produce a much lower rate of return. Economists Joshua Rauh of the Northwestern University Kellogg School of Business and Robert Novy-Marx of the University of Rochester calculate a one-third probability that a portfolio which has an "expected return" of 8% will actually achieve that return, while the probability of achieving a return of 6% or lower is 50%.<sup>6</sup>

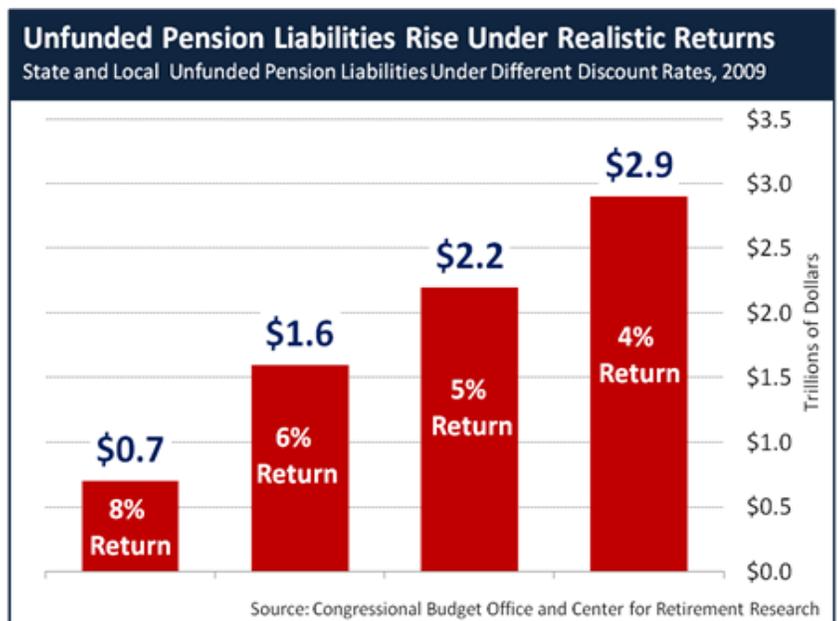
If states were forced to use private sector market value liabilities (MVL), their projected unfunded liabilities would rise exponentially over time. The market value liability of a plan refers to the amount the market would charge in order to take on the liabilities of a plan, including its assumed rate of return and other parameters. If states were forced to use market value liabilities, they would have to report their funding status of their pension funds based on the market value of their assets, not on risky assumptions of high returns. Even the CBO has endorsed the use of market value liabilities to assess the true amount of budget shortfalls. Current accounting methods assume pension funds can earn high investment without risk, typically 8%. When pension liabilities fall short, taxpayers are required to make up the undisclosed difference.

### Unfunded Pension Liabilities Rise Under Realistic Expectations

A study by the Congressional Budget Office (CBO) looked at the effects of using different discount rates on states' pension liabilities. With an 8% discount rate, unfunded liabilities amounted to \$700 billion for state and local pension plans. If the discount rate were 5%, the unfunded liability more than triples to \$2.2 trillion (55% funded) and with a discount rate of 4%, the unfunded liability more than quadruples to \$2.9 trillion (less than 50% funded).<sup>7,8</sup>

To put the magnitude of overly generous return assumptions into perspective,

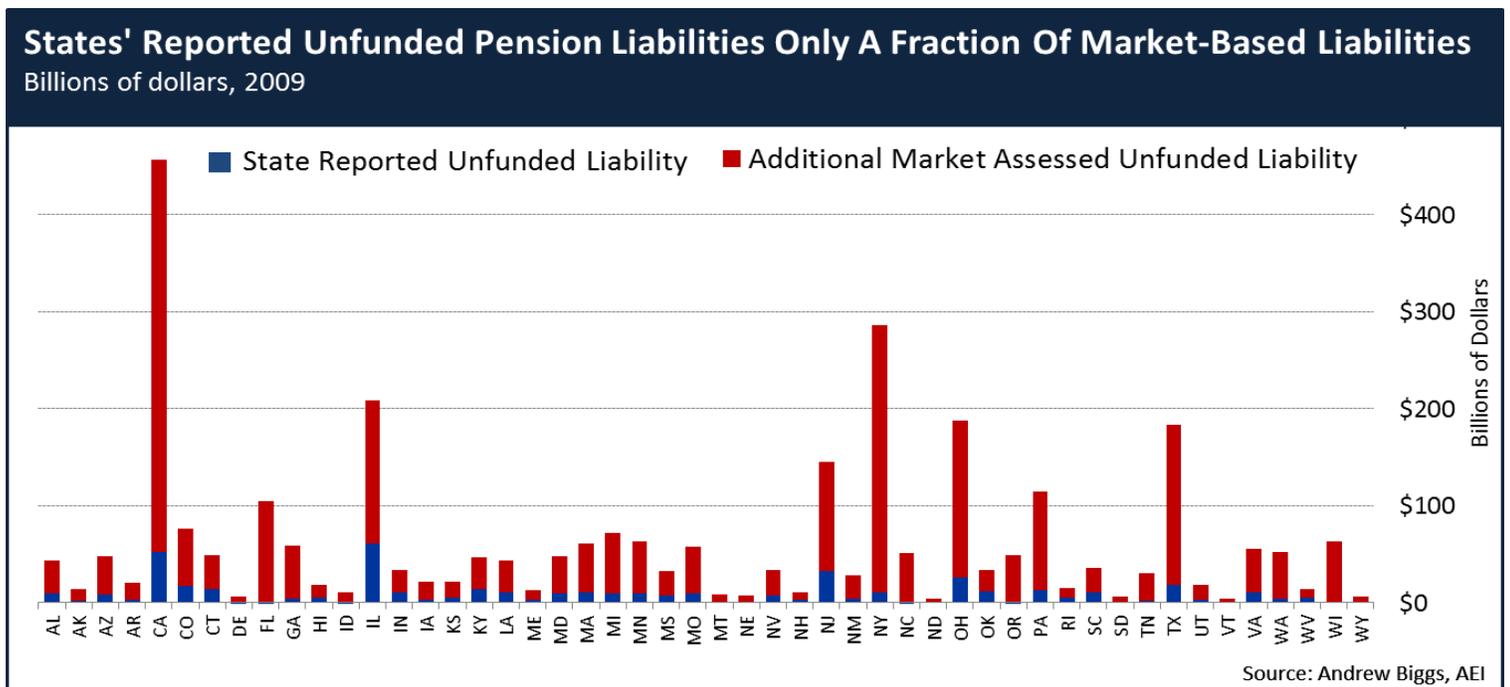
consider a new worker who is deciding how much to save for retirement. Suppose that worker earns



\$60,000 a year and wants to retire with \$1,000,000 (in today's dollars). If that worker assumes he will earn 8% annual returns, he needs to contribute \$3,638 towards his retirement each year. However, if he assumes he will only earn 4% per year, his required annual contribution amount more than doubles to \$9,039.<sup>9</sup> So, by assuming an 8% return rather than a 4% return, the worker contributes about \$5,400 less per year. If the worker bases his contributions on an 8% return assumption but only achieves a 4% return, he will be left with less than \$400,000 in retirement, rather than the \$1,000,000 he had hoped for and assumed. States will soon face similar shortfalls in their pension systems as a result of their unrealistic return assumptions.

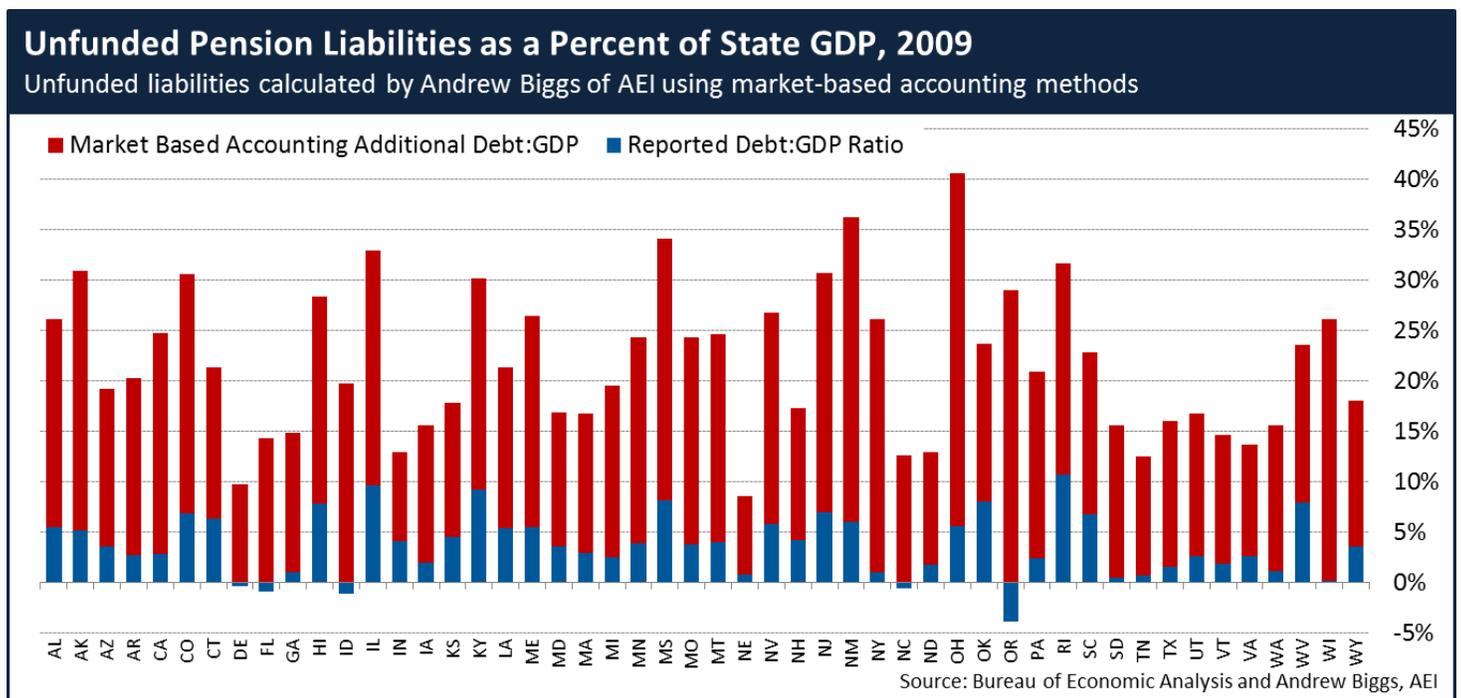
According to CBO, the appropriate discount rate was 4% in 2010 and 5% in 2006 before the financial crisis. CBO estimates the total 2009 unfunded liability of state and local pensions to be \$2-\$3 trillion, based on an accounting approach that, "more fully accounts for the costs that pension obligations pose for taxpayers."<sup>10</sup>

Other economists have similarly estimated state and local unfunded pension liabilities of around \$3 trillion. Professor Joshua Rauh of Northwestern University estimates an unfunded liability of more than \$3 trillion.<sup>11</sup> Eileen Norcross of the Mercatus Center at George Mason University estimates an unfunded liability of \$3.5 trillion.<sup>12</sup> And Andrew Biggs of the American Enterprise Institute (AEI) estimates that the combined 2009 unfunded liability of state and local pension funds was \$3.0 trillion.<sup>13</sup>



## The Magnitude of Unfunded Pension Liabilities

Measuring states' unfunded pension liabilities as a percentage of state GDP provides perspective on states' abilities to handle these unfunded pension liabilities. Using Biggs' estimates of market-based unfunded liabilities and 2009 state GDP, the median pension debt-to-GDP ratio among the states was 21%, with Nebraska having the lowest ratio of 9% and Ohio having the highest at 41%. Given the deterioration in most state pensions since 2009, as well as budget cuts contributing to a decline in the number of state employees paying into pensions, proper accounting standards are likely to show that some states' unfunded pension liabilities are already approaching 50% of GDP.



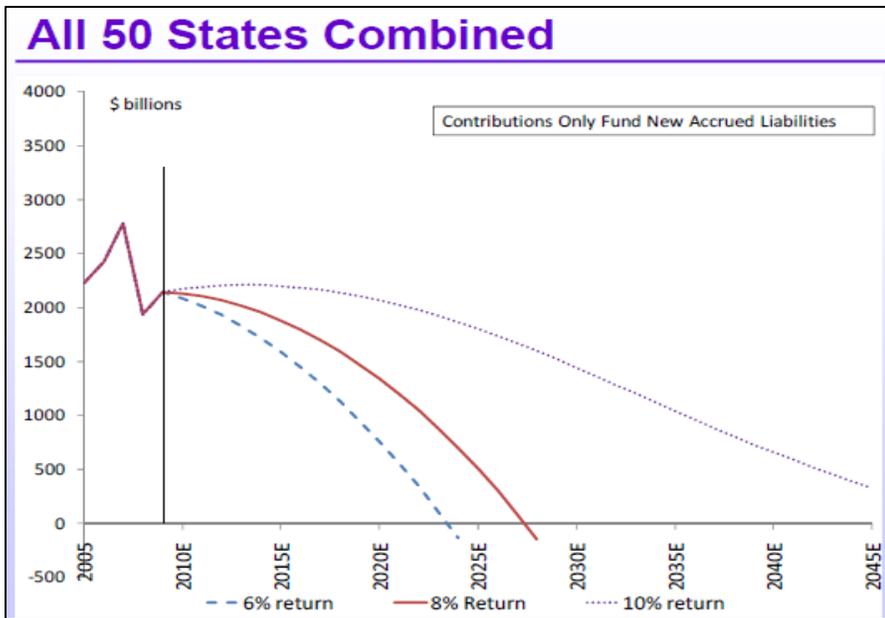
Because these unfunded liabilities are essentially sunk costs, they can effectively be added on to states' existing debt levels, which in 2009 had a median value of 17.5% of GDP. Thus, the combined median level of existing debt plus unfunded pension liability debt was 38.5% of GDP.

The combination of existing state debt, unfunded pension liability debt, and the 100% of GDP federal debt makes the U.S. debt load worse than that of Europe.

### Which States Are In the Worst Trouble?

The day of reckoning for state pension plans is rapidly approaching. According to estimates by Joshua Rauh, pension plans in five states—Louisiana, Oklahoma, New Jersey, Illinois, and Connecticut—will run dry by 2018, and half of all state pension plans will run dry within twelve years (see chart on following page).<sup>14</sup>

Yet even these projections are likely overly optimistic, as they assume the funds will achieve 8% returns and that the plans will be fully funded going forward (that is, that new contributions will fully offset new accrued benefits). More realistic assumptions suggest state pension funds could begin to run dry within a few years.



The chart to the left shows Professor Rauh’s estimates of when the combination of all state funds runs dry based on 6%, 8%, and 10% returns. The states’ standard 8% return assumption results in the combined state funds running dry in about 2027 whereas a more realistic (yet perhaps still optimistic) 6% return moves that date up about four years to 2023.

According to estimates by Professor Rauh, the cost of providing pension benefits in Oklahoma and Louisiana in 2018, the year after the funds are

projected by Rauh to run dry, would amount to 31% and 28% of each state’s respective tax revenues.<sup>15</sup> And in the three states of Illinois, New Jersey, and Connecticut, which are projected to run dry the following year (2018), their pension payments will equal an average of 39% of incoming tax revenues. Additionally, the recent decline in state and local employment caused by the recession may hasten the pension crisis. From a peak in August of 2008, state and local employment has declined by 639,000 (3.2%).<sup>16</sup> Fewer employees mean fewer pension contributions that can be used to pay benefits to current and near-retirees.

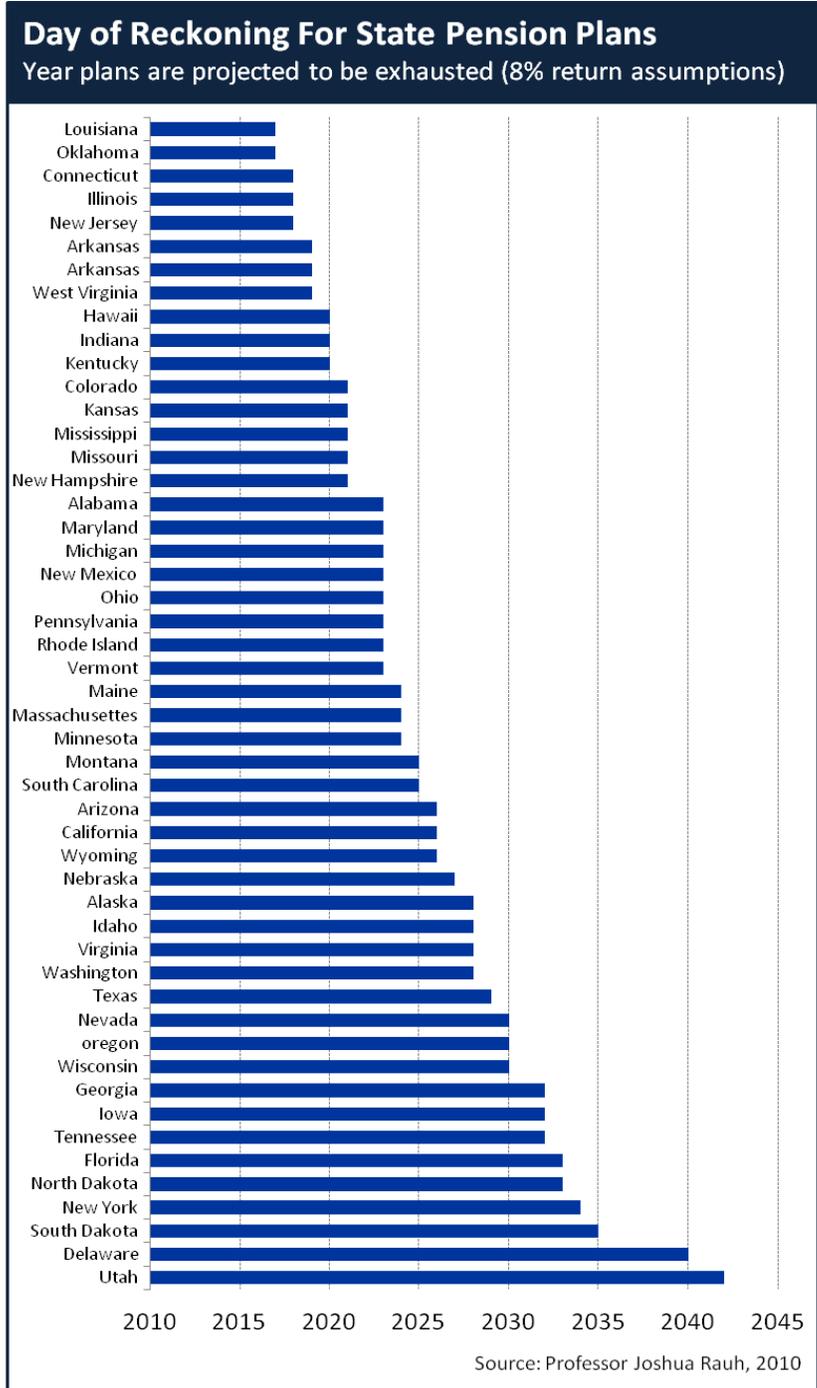
When pension funds run dry, states and localities will be hard pressed to come up with the additional revenue needed to keep their pension promises without imposing massive tax increases and spending cuts. In the near future, then, taxpayers in these states will find themselves paying for two or even three government bureaucracies at the same time – one that actually administers the government, and one or two “shadow” bureaucracies of retirees who used to.

And unfortunately, states with the least fiscally sound pension plans often also have among the worst overall economic and fiscal outlooks: high debt levels and high interest payments on debt, lower credit ratings, high tax rates, low employment growth, and low economic growth. These states most in peril will be least prepared to deal with unfunded pension liabilities when they come due.

The combination of massive unfunded liabilities and poor economic policies are setting many states up for a Greek-style fiscal death spiral. Attempting to close fiscal gaps and meet unfunded liabilities through higher taxes will drive away the most productive individuals and businesses, leaving those states with even less economic dynamism and a smaller tax base than before. Over time, states who try to solve large fiscal problems with large tax increases will be left with a citizenry comprised of public sector workers and pensioners, but no private sector job-creators and taxpayers to pay for them.

**Future Reports**

The state pension crisis is virtually unavoidable, but the federal government’s role in bearing the burden of irresponsible states can be mitigated through preemptive actions that will help prevent a taxpayer bailout of state pension systems. Future reports will examine the prospects for pension reform (including promising measures to confront existing unfunded liabilities and to establish fully sustainable pension plans), roadblocks that have prevented credible reform, and possible preemptive actions by the federal government to prevent a taxpayer bailout for irresponsible state and local governments.



<sup>1</sup> Congressional Budget Office, “The Underfunding of State and Local Pension Plans,” May 2011, <http://www.cbo.gov/ftpdocs/120xx/doc12084/05-04-Pensions.pdf>

In 2010, contributions to the 100 largest state and local pension plans (representing 90 percent of state and local plan assets) totaled \$117 billion, of which 70% came from employer contributions and 30% from employee contributions.

<sup>2</sup> Joshua Rauh, “The Day of Reckoning for State Pension Plans,” March 22, 2010, <http://kelloggfinance.wordpress.com/2010/03/22/the-day-of-reckoning-for-state-pension-plans/>.

<sup>3</sup> Pew Center on the States, 2009 Pension Funding Levels accessed through Haver Analytics. These funding levels are likely higher than estimates made by economists using private sector accounting methods as the Pew Center reports a total unfunded state pension liability of \$1 trillion in comparison to the approximately \$3 trillion unfunded liability estimated by other economists.

<sup>4</sup> National Association of State Retirement Administrators, *Public Fund Survey*, 2010, <http://www.publicfundsurvey.org/publicfundsurvey/actuarialfundinglevels.asp>.

In this survey, 48 states report FY 2010 figures while Hawaii reports FY 2008 and Rhode Island reports FY 2009.

<sup>5</sup> Ibid.

<sup>6</sup> Joshua Rauh, "Statement of Professor Joshua Rauh for the hearing on 'The Role of Public Employee Pensions in Contributing to State Insolvency and the Possibility of a State Bankruptcy Chapter'," Congressional Testimony before the Subcommittee on Courts, Commercial, and Administrative Law, Monday, February 14<sup>th</sup>, 2011, <http://judiciary.house.gov/hearings/pdf/Rauh02142011.pdf>.

<sup>7</sup> CBO defines fair value accounting as, "what a private insurance company operating in a competitive market would charge to assume responsibility for those obligations."

<sup>8</sup> Congressional Budget Office, "The Underfunding of State and Local Pension Plans," May 2011, Table 1, <http://www.cbo.gov/ftpdocs/120xx/doc12084/05-04-Pensions.pdf>.

<sup>9</sup> Calculations based on the following assumptions: the worker is age 22 and will retire at age 65. He has annual nominal income growth of 5% over his working career. Inflation is 2.5% annually.

<sup>10</sup> Congressional Budget Office, "The Underfunding of State and Local Pension Plans," May 2011, <http://www.cbo.gov/ftpdocs/120xx/doc12084/05-04-Pensions.pdf>.

<sup>11</sup> Joshua Rauh, "Public Pension Promises: How Big are They and What are They Worth?," October 8, 2010, [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1352608##](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1352608##).

<sup>12</sup> Eileen Norcross, "State and Municipal Debt: The Coming Crisis?," Testimony before the House Committee on Oversight and Government Reform, February 9, 2011, <http://mercatus.org/publication/state-and-municipal-debt-coming-crisis>.

<sup>13</sup> Andrew Biggs, "The Market Value of Public-Sector Pension Deficits," American Enterprise Institute, April 2010, <http://www.aei.org/files/2010/04/06/2010RPOno1g.pdf>.

<sup>14</sup> Joshua Rauh, "The Day of Reckoning for State Pension Plans," March 22, 2010, <http://kelloggfinance.wordpress.com/2010/03/22/the-day-of-reckoning-for-state-pension-plans/>.

<sup>15</sup> Ibid.

<sup>16</sup> Bureau of Labor Statistics, data based on data through November 2011.