

# Analysis of Joshua Rauh's Paper "Are State Public Pensions Sustainable?"\*

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*In his paper "Are State Public Pensions Sustainable?," Northwestern University Assistant Professor Joshua D. Rauh concludes that "many state systems will run out of money in 10-20 years if some attempt is not made to improve the funding of liabilities that have already accrued." Subsequently, in a May 19, 2010 presentation at a University of California Retirement Security Institute conference, he recommended that: 1) state and local governments should close their defined benefit pension plans and issue debt to finance their pension liabilities; 2) the federal government should subsidize the debt issued by state and local governments to fund pensions; and 3) all newly hired governmental employees should be enrolled in Social Security and covered by defined contribution plans.*

## **We disagree with his analysis for the following reasons:**

1. A primary factor that allows Rauh to project the dates of impending insolvency is his assumption that future contributions will be sufficient only to fund the public plans' normal costs, and that no contributions will be used to pay down unfunded liabilities. He assumes that future contributions "will be sufficient to fully fund newly accrued or recognized benefits ... but no more."

To support this assumption, he contends that since not all public pension plan sponsors are making their full annual required contribution (ARC), it is reasonable to assume that future contributions will not include any payments to amortize unfunded liabilities. Yet, based on Public Fund Survey data, the average ARC paid by more than 100 plans, from FY 01 to FY 08, is 92 percent, including 86 percent in FY 08. That same year, the average ARC paid to the 10 public plans with the largest pension liabilities was 94 percent, and eight paid their full ARC or more.

In addition, Rauh defines the normal cost using the Accumulated Benefit Obligation (ABO) cost method. Under the ABO method, normal costs are low when a member first joins the plan but increase rapidly as the member approaches retirement age. Although this is one way to fund retirement benefits, the vast majority of public plans use a different method: the entry age normal (EAN) cost method. Under the EAN method, the normal cost is determined as a level percent of pay over the member's career, which is a more conservative funding approach than the ABO method. Consequently, based on the funding method most public plans use, we believe they have been receiving contributions that (1) are enough to cover the normal cost, and (2) help amortize the unfunded liability. Moreover, if public plans had been funded using the ABO method, they would have fewer assets than they do currently.

As a result of recent investment experience, employer and employee contributions will likely have to rise in the next few years and/or benefits will need to be modified. We believe the increases in these contributions will be used to additionally help amortize the unfunded liability, and not to fund the normal cost (which in the majority of cases is already being fully funded).

Therefore, Rauh's assumption that plan sponsors will pay only the cost of newly accrued benefits, and not any of the cost to amortize their unfunded liabilities, is unsupported by the facts.

2. Rauh's analysis fails to provide important information necessary to identify and analyze his underlying assumptions regarding modeling of future cash flows. This leaves the basis for his projections unclear. For example, it is unclear whether the data he uses to estimate new liabilities related to service costs in Figure 2 of

his paper includes changes in liabilities related to changes in plan assumptions. For example, if a plan lowered its discount rate in 2007, it would increase the plan's liabilities in a way that is unrelated to service costs. For an apples-to-apples comparison, the underlying data would need to be adjusted for changes in assumptions; otherwise the new liability related to service costs would be overestimated.

3. Rauh's financial analysis does not account for changes that have been made and undoubtedly will continue to be made, that reduce public pension liabilities and increase contributions from both employees and employers. More than one dozen states this year alone have made fundamental changes to their pension plan benefit or contribution rate structures, or both.
4. We believe that issuing debt to fund pension benefits adds risk. After the debt is issued, it becomes a liability for the sponsoring government. If the markets fall after the funds are invested, the government now has two sets of liabilities, the outstanding debt and the pension liability. Even with a federal subsidy, we believe this would be a risky approach.
5. Although defined contribution plans are a useful means of supplementing pension benefits, we do not believe they are an effective or efficient vehicle for providing adequate retirement security over retirees' lifetimes. By pooling mortality and investment risks, defined benefit plans lower participants' risks of outliving retirement benefits. Defined contribution plans require each individual to bear these risks alone, consequently requiring higher contributions for the same level of retirement security than if the risks were pooled.

Moreover, defined benefit plans offer disability and death benefits while defined contribution plans do not. These benefits are especially important for state and local government employees in hazardous occupations such as firefighters and police officers who may die or become disabled in the line of duty. Switching to a defined contribution plan would mean these benefits would have to be provided through commercial insurance, likely at a higher cost to the employer.

Finally, some of the broader points Rauh makes with regard to the relative size of public pension liabilities and their possible solutions are based on inconsistent or misleading comparisons. For example, he states,

*[T]he gap between assets and already-promised liabilities in state pension funds alone was over \$3 trillion at the end of 2008. This compares to \$1.00 trillion in other forms of recognized state debt under U.S. Census Bureau measures.*

The 116 state-based public pension plans account for roughly 90 percent of all state and local government pension assets and liabilities. This is because most state-based pension plans include local government employers and employees, and these plans rely on contributions from these sources. Thus, a more accurate analysis would include 90 percent of state and local government debt, not just state debt, which would be approximately \$2.16 trillion.

Although we share Professor Rauh's concern over the difficult financial situation that state and local governments face in the current economy, we do not believe his analysis or recommendations are helpful for addressing the situation.

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