Robert Novy-Marx and Joshua Rauh – whose analysis last year contained flawed methods reflecting an inaccurate understanding of public sector finance and operations\textsuperscript{i} – released a new paper that makes more dramatic projections about the condition of public retirement systems and their effects on state taxes. The paper, *The Revenue Demands of Public Employee Pension Promises*, \textsuperscript{ii} uses underlying assumptions that understated revenues, inflate costs, and ignore other available public policy options. As a result, the paper's conclusions bear little resemblance to the actual practices of most state and local governments, or their pension plans, and again have limited application for policymakers wishing to address the financial impacts of the Great Recession.

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**Revenues Understated**

**Asset Growth Inconsistent with Actual Diversified Portfolios.** Over time, a majority of public pension fund revenues come from investment earnings. The paper assumes state and local pension trusts, which currently have $3 trillion in assets, will generate investment returns roughly commensurate with bond investments rather than the diversified portfolios actually in use. Public pensions typically assume that such diversified portfolios will earn a real (after inflation) return of 4.0 to 4.5 percent annually, depending on their asset mix. Long-term investment returns actually exceed this assumption, even after incorporating losses from the 2008 market decline.\textsuperscript{iii} Yet, the Rauh-Novy-Marx paper assumes these portfolios will generate a real return of only 1.71 percent, well below not just historic norms, but also below projections made by investment experts, as
shown in Figure 1. The result of this bearish assumption for pension plans is lower investment earnings and higher required contributions.

**Overly Pessimistic Economic Growth Projections.** As shown in Figure 2, the authors’ assumption for future economic growth is well below levels projected by such experts as the Federal Reserve, the Congressional Budget Office, and the Social Security Board of Trustees. Using a pessimistic assumption for future economic growth implies larger employer contributions relative to revenue, payroll, and total economic output.

**Other Sources of State/Local Revenue Disregarded.** Taxes comprise only about half of state and local government revenues; other sources include fees, tuition, grants, and direct payments for programs shared with other levels of government. By excluding these other sources of state revenue, the Rauh-Novy-Marx paper presents a false and misleading picture regarding both the fiscal effects on states and local governments of unfunded pension liabilities, as well as the options available to policymakers to address those unfunded liabilities.

**Costs Inflated**

**Overstated Actual Government Cost.** Consistent with accounting and actuarial standards, governments determine future pension costs using estimates of inflation, wage growth, workforce composition, mortality, investment earnings and other future demographic and economic events. By contrast, Rauh and Novy-Marx estimate the future cost of pensions by calculating a spot price based on current interest rates. In times of low inflation, such as now, this theoretical value shows far greater liabilities compared to actuarial projections of actual government cost.
Incorrect Normal Costs and Uniformity. The paper cites a normal cost (the cost of benefits earned each year) for some plans that exceeds—in some cases by up to 35 percent—the actual normal cost calculated by the plans’ own actuary. The degree to which these additional discrepancies affect the paper’s conclusions and further exaggerate future costs is unclear and difficult to validate. The paper’s use of identical assumptions regarding key factors for every plan also results in inaccurate cost projections. For example, Rauh-Novy-Marx assume that employees in every state will retire at age 60, yet the normal retirement age in Minnesota, for instance, is 66, and is 65 in Virginia and Wisconsin.

Improbable Social Security Costs. Many public employees receive their state or local government pension in lieu of Social Security— including nearly half of teachers and the vast majority of firefighters and public safety officers. The paper assumes that all such employees will join Social Security and that employers (taxpayers) will pay the full 12.4 percent payroll tax rather than sharing the cost equally as required under federal law. Conservative estimates of the added expense of federally mandating even just newly hired public workers into Social Security is over $44 billion in the first five years alone, vi which would worsen the financial condition of the sponsoring governments and their pension systems. To assume that all jurisdictions will choose (or be federally mandated) to cover all their employees ignores fiscal realities and long-standing federal, state and local policies on this matter. To disregard the fact that federal law requires Social Security to be a shared expense between employers and employees is grossly misleading.

Range of Solutions Ignored

Not only do Rauh-Novy-Marx dismiss the availability of alternative policy options beyond increasing taxes and cutting services, their projections do not take into account many such changes already made by 42 states since 2009 (see Figure 3). vii

In the last decade, virtually every state has made significant changes to their retirement program. States have managed their costs in a variety of ways such as by increasing employee contributions, adjusting benefits, limiting or eliminating cost of living adjustments (COLAs), increasing retirement ages, furloughing or laying off employees, and reducing hiring.

Policymakers need practical information pertaining to the cost of funding pension plans—not the unrealistic projections the Rauh-Novy-Marx paper presents with its bearish and pessimistic estimates about future economic events. Given the differing plan designs and pension financing arrangements across the country, a variety of tailored solutions will be required—and are being approved—to secure the viability of state and local governments and their retirement systems for the long-term. Information that ignores existing financing structures, reasonable future return expectations for capital markets and common public fund portfolio construction, as well as other available policy options to increase long-term sustainability of state and local retirement systems, is misleading and unhelpful.

2 Paper is accessible at http://www.kellogg.northwestern.edu/faculty/rauh/research/RDPEPP.pdf


5 Federal Reserve, “Economic Projections of Federal Reserve Board Members and Federal Reserve Bank Presidents,” April 2011; Congressional Budget Office, “Preliminary Analysis of the President’s Budget and an Update of the CBO’s Budget and Economic Outlook,” Table 2-6, 2008; Social Security Board of Trustees, “2011 Trustees Report,” Table V.I.6.- Selected Economic Variables, Calendar Years 2010-86


7 Figure 3: National Conference of State Legislatures, “Pension and Retirement Plan Enactments in 2011 State Legislatures,” May 2011; The Pew Center on the States, “Pension and Retiree Health Care Reform in the States,” 2009 and 2010

See also
State and Local Pension Funds: An Overview of Funding Issues and Challenges, Center for State and Local Government Excellence, January 2011; and The Miracle of Funding of Funding By State and Local Pension Plans, Center for State and Local Government Excellence, April 2008.

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