WILL PUBLIC SECTOR RETIREE HEALTH BENEFIT PLANS SURVIVE? ECONOMIC AND POLICY IMPLICATIONS OF UNFUNDED LIABILITIES

Robert L. Clark
Professor
Department of Economics
Box 7229
North Carolina State University
Raleigh, NC 27695

Telephone: 919-515-4568 FAX: 919-515-6943 e-mail: Robert_clark@ncsu.edu

AEA Session: Pensions and Health Care: The Fiscal Challenge for State and Local

Governments

Session Chair: Jeffrey R. Brown, University of Illinois

Authors in Session: Jeffery Brown and David Wilcox; Deborah Lucas and Stephen Zeldes;

Robert Clark

Session Discussants: Joshua Rauh, Olivia Mitchell, Kent Smetters

Presented to Annual Meeting of the American Economic Association

January 2009

WILL PUBLIC SECTOR RETIREE HEALTH BENEFIT PLANS SURVIVE? ECONOMIC AND POLICY IMPLICATIONS OF UNFUNDED LIABILITIES

Robert L. Clark*

Recent articles have reported a large and growing financial crisis associated with retiree health plans offered by state and local governments and expressed alarm over their impact on the financial status of these governmental units (Goldman Sachs 2007; Zion and Varshney 2007). The concern about the unfunded liabilities of retiree health plans follows from a change in the public accounting rules issued by the Governmental Accounting Standards Board (GASB). GASB 45 requires state and local governments to report unfunded accrued liabilities and annual required contributions needed to fully fund the retiree health promises. The GASB 45 statements produced by state governments indicate that unfunded liabilities for state employees and retirees total approximately \$500 billion. This does not include additional liabilities associated with retiree health plans for local governments and public school teachers with plans that are not managed at the state level. The explicit acknowledgement of these liabilities and their absolute and relative size has created considerable concern and debate among economists, policymakers, and voters. This article presents data from state actuarial reports on the size of retiree health liabilities, examines the key assumptions used to determine the unfunded liabilities, and then assesses the potential future of retiree health plans in the public sector.

I. WHAT IS GASB 45?

In 2004, the Government Accounting Standards Board approved Statement No. 45 (GASB 45) requiring public employers to produce an actuarial statement assessing the

^{*} Robert L. Clark, Professor, Department of Economics, Box 7229, North Carolina State University, Raleigh NC 27695. Robert_clark@ncsu.edu.This research is funded, in part, by a grant from the Center for State and Local Government Excellence. Research assistance on this project was provided by Christina Robinson.

financial status of retiree health plans using generally accepted accounting standards (GASB 2004). GASB 45 requires in these statements to report the unfunded actuarial accrued liability of the plan (UAAL) and the annual required contribution (ARC). The UAAL is the difference between all actuarial accrued liabilities and any assets that the employer has set aside in an irrevocable trust. Obviously, if the plan is completely pay-as-you-go, the UAAL is equal to the AAL because there are no assets. The ARC is the amount of annual contributions needed to pay the cost of health care in a fiscal year plus the amount needed to amortize the existing unfunded liability over a 30 year period. ARCs and UAALs have been growing over time in most states and are now a major public policy issue for some states. GASB 45 does not require states to move toward full funding of their plans or even to establish trust funds for retiree health plans. Thus, while states must report the UAAL and the ARC, they are free to continue using pay-as-you-go financing of their retiree health plans. The primary objectives of the new accounting standards were to make the liabilities due to the promise of health insurance to retirees more transparent and to recognize the liabilities during the years of service of employees.

II. IS THERE A FUNDING CRISIS?

While most previous reports have highlighted the total unfunded liabilities of retiree health plans in the public sector, the actuarial reports and their importance are specific to individual governmental units. The aggregate debt has much less meaning and importance than the UAAL faced by each state and local government employer. Data from the actuarial reports prepared by states in accordance with the GASB 45 guidelines indicate that a few states have large unfunded liabilities that could have significant adverse effects on their future budgets, bond ratings, and the ability to fund other priorities. In contrast, the UAALs

of many other states are relatively small, are much more manageable, and are unlikely to produce adverse financial effects on these governments.

A review of the unfunded liabilities for the states that reveals that the magnitude of the unfunded liabilities associated with these programs varies substantially across the states ranging from less than \$100 million to over \$60 billion. A total of six states have UAALs of less than \$250 million with North Dakota (\$31 million), Wyoming (\$72 million), and South Dakota (\$76 million) reporting the lowest unfunded liabilities. In comparison, there are six states with UAALs exceeding \$20 billion with New Jersey (\$68.8 billion), New York (\$49.7 billion), California (\$47.9 billion) and Michigan (\$38.9 billion) having the highest unfunded liabilities. The substantial variation in unfunded liabilities is a function of the size of the state work force, the types of public employees included in the state plan, and the percent of the premium paid by the state.

The aggregate unfunded liability for the states as reported in the actuarial statements approaches \$500 billion. Robert Clark (2008) provides a detailed discussion of these reports and notes that some of the reports include teachers while in other states, teachers participate in local plans or in separate state-managed plans. In a separate paper, (Clark 2009) examines the unfunded liability for public school teachers. Teacher retiree medical plans add considerable additional unfunded burdens to the large states of California, Ohio, and Texas.

To better illustrate the magnitude of these liabilities and their importance to the various states, the implied per capita debt for each of the states and the UAAL as a percent of the state budget are calculated. Each of these relative measures also indicates a bimodal distribution of retiree health liabilities. Nine states have a UAAL per capita in excess of

\$3,000 while 10 states have a per capita debt of less than \$200. Alaska and New Jersey have the highest per capita UAAL associated with their retiree health plans with values of \$8,723 and \$7,947 respectively. They are closely followed by Hawaii with a UAAL per capita of \$7,652 and Connecticut with \$6,224 per capita. States with the lowest per capita debt are North Dakota (\$49), Arizona (\$74), Iowa (\$74), Oregon (\$85), and South Dakota (\$97).

The unfunded liability as a percent of the annual state budget in nine states is less than 2.0 percent. In comparison, the UAAL exceeds 100 percent of the state budget in three states. States with the highest values of UAAL as a percent of the state budget include New Jersey (140 percent), Hawaii (115 percent), and Connecticut (107 percent). States with the lowest UAAL as a percent of their budget include North Dakota (0.9 percent), Iowa (1.6 percent), Oregon (1.6 percent), Wyoming (1.8 percent), and Arizona (1.8 percent). The bimodal distributions of these fiscal measures clearly indicate the difference in absolute and relative size of the unfunded promises made by the states.

The primary determinant of the relative size of these liabilities is the percentage of the total premium paid by the employer. The states with the highest liabilities generally pay 100 percent of the premium for health insurance for their retirees while states with relatively low UAALs usually require the retiree to pay 100 percent of the premium. Christina Robinson, et al (2008) provides a detailed description of the characteristics of retiree health plans of each state including eligibility conditions and premiums. A careful review of the state actuarial reports reveals that any potential funding crisis is limited to those states that have promised to provide health insurance to their retirees without requiring the retired state employee to pay any of the premiums.

III.DISCOUNTING FUTURE LIABILITIES: DOES FUNDING MATTER?

To assess the present value of the promise of health insurance in retirement, one must project future costs and then discount these future expenditures into today's dollars. This calculation requires the actuary or analyst to select an appropriate discount rate. GASB 45 guidelines indicate that the appropriate discount rate is a rate consistent with the return on funds used to pay these benefits. If a state has adopted a pay-as-you-go approach, the appropriate discount rate is the yield on assets from which funds are drawn to pay the health benefits for retirees, typically around 4 percent. If the state establishes a dedicated fund for its retiree health plan, GASB guidelines allow the actuary to assume a rate consistent with the return on these funds. In this case, actuaries have typically selected a rate of 7 to 9 percent.

GASB has established similar guidelines for valuing pension liabilities and the assessment of the funding ratio of public pensions. Since all states have trust funds for their pensions, actuaries usually adopt a discount rate of approximately 8 percent to determine the liabilities of state pension funds. In the pension literature, there is currently a debate on the appropriateness of using the assumed return on pension assets to discount future liabilities. Economists tend to argue that the present value of pension liabilities should be considered as an obligation similar to long term bonds. Thus, the present value of these future obligations should be "marked to market" using a rate similar to the interest on state bonds, or a discount rate closer to 4 percent. This issue is the primary focus of other papers in this session. Applying the same reasoning to the promise of health insurance implies that UAALs should be calculated using the interest rates on bonds offered by the government. Following this line of reasoning, the

appropriate discount rate would be approximately 4 percent whether or not the state chose to prefund their retiree health plan.

In comparison to public pension plans, most states are currently using the lower discount rate for determining the liabilities associated with their retiree health plans.

However, many of the state actuarial statements show the impact of assuming a higher discount rate. Clark (2008) reports the discount rate used in each of the actuarial statement along with how the UAAL changes when the statements provide estimates using alternative discount rates. This sensitivity analysis is most often presented in the reports of states considering the establishment of a trust fund or where there are specific proposals concerning prefunding. The reduction in UAAL and ARC associated with using a higher rate is described as being an advantage of establishing a trust for these plans and beginning to fund for future health care costs. The central elements of the discounting debate on public sector pensions are applicable to determining the liabilities associated with retiree health insurance. As more states establish trust funds for these plans, it is important to recognize changes in UAALs that result from actual plan changes compared to reductions that follow from the actuary adopting a higher discount rate allowed by the accounting standards.

Most of the actuarial reports prepared by the states assume a discount rate between 4 and 5 percent; however, some states have chosen to adopt higher discount rates in their basic reports based on the assumed rates of return for their trust funds. States with trust funds that have adopted higher discount rates to calculate liabilities include Alaska, Arizona, Colorado, and Ohio. Several states have adopted a higher discount rate even though they have not established a trust fund or the fund has only limited assets. Obviously, the higher discount rate used in the calculation, the smaller the projected liability associated with retiree health

plans. If the UAALs of states using discount rates of 6.0 percent or higher were calculated using a 4.0 or 4.5 percent discount rate, the total UAAL for all states would be increased by approximately 10 percent. If more states adopt a higher discount rate to estimate their unfunded liabilities, the potential for underestimating the UAAL will grow.

The aging of the population is associated with an increase in the ratio of retirees to workers throughout the economy and in the public sector. Thus, if states do not establish trust funds for their retiree health plans and continue to use pay-as-you-go funding, the annual expenditure from their general funds will increase as a percent of state budgets and as a percent of total compensation for public sector employees. Establishing a trust fund and making annual payments equal to the ARC will move states toward fully funded plans and the returns on these funds would lower the annual charges against the general funds of the states. The desirability of prefunding should be judged on the basis of sound fiscal policy and not whether it allows actuaries to adopt a higher discount rate that reduces measured liabilities.

IV. HEALTH CARE INFLATION AND PROJECTED LIABILITIES

The assumed rate of increase in the per capita cost of medical care is another major determinant of the projected future cost of providing retiree health benefits. In the actuarial statements, the health care cost trend rate is typically defined as the rate of change in per capita health claims costs over time as a result of factors such as medical inflation, utilization of health care services, plan design, and technological developments. Over the past few years, the total cost for employer-provided health care has been increasing at annual rates in excess of 10 percent. Virtually all of the actuarial reports for state retiree health insurance plans assume that the medical cost rate will decline from its current level of

10 to 14 percent per year to a rate of around 5 percent within ten years. Of course, lower assumed rates of inflation result in lower liabilities and annual required contributions thus making the state's financial position look rosier.

The statement for Hawaii illustrates the importance of the inflation assumptions. Baseline assumptions indicated an UAAL of \$9.7 billion. A one percentage point increase in the health care inflation rate raises the UAAL to \$11.6 billion or an increase of almost 20 percent. If the rate of inflation for health care were to continue at its current rate, all projections of state UAALs and ARCs would be much higher. The sensitivity of these estimates to only a one percent faster rate of inflation in health care should alert policy analysts to the potential of considerably higher liabilities for these plans.

V. WHEN SHOULD A PROMISE BE CONSIDERED A LIABILITY?

Is the promise of future health insurance to state employees a liability? GASB standards require that the UAAL and ARC be calculated using the health insurance plan that is currently offered to retirees; however, these plans can be changed by the state in response to new economic realities. Retiree health plans do not have the same legal status as pensions. All states have legal protections for their pension plans that limit the ability of a legislature to substantially alter the generosity of the pension (U.S. General Accounting Office 2008). The majority of states have constitutional provisions that describe how their retirement plans are to be funded, protected, managed, or governed. However, retiree health plans are not accorded similar protected status. Reductions in or the elimination of retiree health benefits may be constrained by collective bargaining contracts but in general, legislatures have more flexible to reduce and modify retiree health benefit plans for public sector employees. For example, the Ohio 2007 Comprehensive Annual Financial Report

(Ohio 2007, p. 32) states "unlike pensions, the health care benefits OPERS provides (with the exception of Medicare B reimbursement) are not a guaranteed benefit....OPERS continues to make changes to the plan design of the health care benefits..."

The ability of a state to terminate or modify retiree health plans is limited by the need to attract and retain employees and in some states, by collective bargaining agreements. Most states have been amending their health plans for active workers and retirees in response to rising health care costs. Periodic changes to retiree health plans include higher deductibles and higher co-payments. More significant changes include shifting a greater proportion of the premium from the employer to the retiree and requiring more years of service to qualify for retiree health plans. These latter changes tend to be phased in over time and often apply only to new employees. However, financial pressures may result in further changes that affect current workers even those close to retirement. In May, Rhode Island decided to require state employees retiring after September 30, 2008 to pay a greater percentage of the health insurance premium (Stateline.org, 2008). The ability to modify retiree health plans provides states with some options to moderate their projected costs and thus, reduce the UAAL and ARC presented in these actuarial statements.

Several of the state actuarial statements show the impact of changes in plan design and modifications in the discount rate and the rate of inflation. The Alabama report indicates that changes were made in assumed rates of withdrawal, disability, retirement, and mortality, the discount rate was increased from 4.0 to 5.0 percent, the medical cost trend was modified, and retiree contributions were increased. The changes in assumptions and plan design resulted in a reduction in the reported UAAL from \$19.9 billion in 2005 to \$15.6 billion in 2006. Similar changes adopted by Georgia lowered their reported UAAL from

\$18.0 billion in 2004 to \$15.0 billion in 2005 and by Kentucky resulted in a decline in the UAAL from \$7.6 billion in 2006 to \$4.8 billion in 2007.

The ability to modify retiree health plans raises the questions of whether the promise of future health insurance should be considered a liability and reported as part of state financial statements or instead, they are merely promises which can be reduced or eliminated depending on the economic and political conditions of the state. A related question is whether knowing the value of these promises should encourage states to prefund these programs. In many regards, these promises by state and local governments are similar to the promise of Medicare at the Federal level. Congress can and does change Medicare benefits and retiree contributions but the ability to modify the program does not eliminate the need to know the present value of future benefits based on the current program.

VI. WILL RETIREE HEALTH PLANS SURVIVE IN THE PUBLIC SECTOR?

All states offer retiree health insurance to their retirees. The aggregate unfunded liability as reported in GASB 45 actuarial statements is approximately \$500 billion. This estimate does not include similar programs at the local level and probably is an underestimate due to favorable assumptions on medical cost inflation in all state reports and the use of higher discount rates by some states. While the aggregate debt is large, the story varies substantially across the states.

At one extreme, some states have established plans that allow their retirees to have access to the state health insurance system but at the full cost of this insurance, i.e. the retiree pays 100 percent of the premium. By GASB accounting standards these states typically have small unfunded liabilities associated with the implied subsidy of allowing retirees to pay the average premium for all workers and retirees. Some states end coverage

when retirees become eligible for Medicare at age 65 and other based post-65 premiums on a separate retiree pool thus eliminating the implied subsidy. Given that the retiree pays virtually all the cost of purchasing their health insurance, these states are likely to maintain their plans as currently structured and the continuation of retiree health plans in these states is unlikely to impose significant fiscal pressure on state budgets in the future.

In contrast, there are states that pay 100 percent of the health insurance premium for all retirees who have met certain age and service restrictions. These states face a much different fiscal future. Due to the generosity of their retiree health plans, these states have accrued significant unfunded liabilities and these liabilities imply that a large and growing proportion of future state budgets will be allocated to this employee benefit. Many of these states have altered their health plans in an effort to moderate the growth of expenditures. Some have adopted significant changes increasing the number of years of service required to receive the 100 percent subsidy, but these changes are often made effective only for new employees so their impact on unfunded liabilities and current costs are only minor (Clark 2008).

These states are facing a fiscal challenge that requires benefits for current workers be reduced, taxes raised, or other state priorities go unmet. The most direct method of reducing the cost of these plans is to shift some of the premium to retirees. It is likely that in the future, policy changes in these states will amend their health programs to increase the number of years of service to qualify for the 100 percent subsidy while offering smaller subsidies to retirees with relatively few years of service. Eventually, future retirees, even those with long service, probably will be required to pay some of the premium for retiree medical coverage.

REFERENCES

Clark, Robert. 2008. "Financing Retiree Health Benefits in the Public Sector," unpublished paper, North Carolina State University.

Clark, Robert. 2009. "Teacher Retiree Health Insurance After GASB 43 and 45." Paper to be presented at *Teacher Retirement Benefit Systems*, Vanderbilt University, February.

Goldman Sachs. 2007. *The Trillion Dollar Question: What is your GASB 45 number?*New York: Goldman Sachs.

Government Accounting Standards Board. 2004. Statement No. 45. Accounting and Financial Reporting by Employers for Post-employment Benefits Other Than Pensions (OPEB) http://www.gasb.org/st/index.html

Ohio Public Employees Retirement System. 2007. *The Comprehensive Annual Financial Report*.

Robinson, Christina, Robert Clark, Jerrell Coggburn, Denis Daly, and Rick Kearney.

2008. "Retiree Health Plans: A National Assessment," published by the Center for State and Local Government Excellence. http://www.slge.org

Stateline.org. October 3, 2008. "State workers face bleak budget picture," http://www.stateline.org/live/details/story?contentId=345474

U.S General Accounting Office. 2008. State and Local Government Retiree Benefits: Current Funded Status of Pension and Health Benefits. GAO-08-223. January.

Zion, David and Amit Varshney. March 22, 2007. You Dropped a Bomb on Me, GASB. Credit Suisse.