

PUBLIC SECTOR LEGACY COSTS AND THE IMPACT ON MUNICIPAL CREDIT QUALITY

EXECUTIVE SUMMARY

(March 2010)

Recent news reports have raised alarm that state and local governments may be unable to pay for large unfunded pension and retiree healthcare liabilities. Breckinridge believes that while these “legacy costs” are large and growing, states and local governments will ably manage them. It remains highly unlikely that a state government or large municipal bond issuer will default on its debt because of overwhelming unfunded pension or retiree healthcare obligations. This Breckinridge special commentary concludes the following:

- Today’s pension debts are a decades-old, recurring problem. They have been managed in the past, and they are likely to be managed in the future.
- Key indicators signal that the overwhelming majority of pension funds will remain solvent over the long-term despite the market collapse of 2008.
- Pension and retiree healthcare obligations have disparate legal treatment. While pension obligations must be met, governments have significant flexibility to reduce their healthcare obligations.
- Politicians, voters, and public employees have strong incentives to maintain access to the credit markets and avoid cutting bondholders in favor of public employees.
- Small, fiscally distressed municipal bond issuers are the most likely to be swept away by the undertow of unfunded benefit payments.
- As the decade progresses, state credit quality will diverge, as some states are better prepared to tackle their unfunded liabilities than are others.

PUBLIC SECTOR LEGACY COSTS AND THE IMPACT ON MUNICIPAL CREDIT QUALITY

The Great Recession has exacerbated state and local government's unfunded pension and retiree healthcare obligations. Recent news articles question whether cash-strapped governments can pay for these growing liabilities.¹ In FY 2008, unfunded pension and retiree healthcare liabilities exceeded \$968 billion, an amount equal to 50% of all state and local spending.²

Breckinridge believes that the vast majority of state and local governments will capably manage their unfunded retirement liabilities. Defaults that result from overwhelming pension and retiree healthcare debts are likely to be concentrated only in handful of smaller and very distressed local governments.

This special commentary is designed to educate municipal bond investors on the basics of public employee retirement systems and their impact on municipal credit quality. It begins with a discussion of the origins of public sector retirement benefits and their modern design. It then explains how today's large unfunded liabilities arose and concludes with some thoughts on how to resolve them.

THE ORIGINS OF STATE AND LOCAL RETIREMENT BENEFIT OBLIGATIONS

Public sector retirement benefits derive from three traditional features of public sector work: the large concentration of public jobs that require hazardous activities, the need to retain experienced employees while holding payroll to a minimum, and the bargaining clout of public employee unions.

The first public retirement plans were created to provide security for those who undertook debilitating, physical, and dangerous work in support of the public welfare.³ New York City established the first pension plan in 1857. It offered benefits to disabled City police officers and their widows and was eventually extended to all policemen who reached the age of 55 and had served 25 years.⁴ By 1910, over 80 cities provided similar benefits to their police and fire personnel.⁵

Pension benefits for teachers and other civil servants soon followed. Then, as now, taxpayers disfavored high salaries for public employees, and without retirement benefits, administrators were left with mediocre public workers and high turnover. This was particularly true in the teaching profession, predominated by women who often left the workforce after marriage absent the promise of a pension.⁶

Unions have helped protect and expand benefit packages for public employees.⁷ This is especially true for pension benefits. As of 2000, 31 states had 93 constitutional provisions explicitly protecting pensions; another 19 states protected pensions through statute or case law.⁸ Today's pension benefits are essentially inviolate for current workers or retirees. When benefits are reduced, the cuts may apply only to new workers.⁹ Unions have also fought to keep retirement ages constant since the mid-20th century. Public employees' retirement benefits typically vest after only 10 years on-the-job, and workers can often retire at age 55 (or earlier).¹⁰

STRUCTURE OF PUBLIC SECTOR RETIREE BENEFITS

Public sector retirement benefits come in two major forms: pensions and retiree health care benefits. These benefits are managed and financed in different ways. They are also distinct from retirement benefits offered in the private sector and have disparate legal security.

Pensions

State and local pensions are managed as trusts and by boards of trustees. Board members oversee fund assets, set investment strategy, and often approve actuarial assumptions.¹¹ Members typically include political appointees, investment professionals, union officials, and elected officers (such as the state treasurer or city finance director).¹² The largest pension funds are those for state employees and teachers. Some states also manage funds for smaller units of government, for example for their police officers, municipal employees, and firemen. Larger cities and counties typically administer their own, independent funds.

Pension fund obligations are pre-financed through taxes, other revenue, and employee contributions. Government contributions range between 8% and 12% of employees' salaries; employees contribute between 5% and 8%.¹³ Roughly one in four public employees does not participate in social security (pays no social security taxes and will receive no social security benefits); government and employee contribution rates are typically higher for these employees.¹⁴

Annual contribution amounts are prescribed by actuaries who estimate the cost of pre-financing future benefits. Actuaries engage in complex calculations and make a range of assumptions to determine the proper annual contribution. Most pension plans assume an investment growth rate of 8% and a 3.5% inflation rate.¹⁵ Lawmakers almost always have the discretion to authorize government contributions less than the amount prescribed by their actuaries.

Public pension benefits differ from retirement benefits typically offered in the private sector. Public plans provide a "defined benefit" to employees. Regardless of whether pension fund investments return 8% per year or whether the government makes its required contributions, vested employees receive a guaranteed monthly payment upon retirement for the remainder of their lives.¹⁶ However, pension beneficiaries may not pass their lifetime savings onto their heirs. Pension contributions are "owned" by the pension fund, not its beneficiaries. In contrast, most private sector retirement plans offer a "defined contribution" to employees. Under such a plan, vested employees have no guarantee that their savings will last from retirement until their death, but they own their retirement assets and can pass them to their heirs.

Public pension benefits have very strong legal protections. Unlike pension benefits in the private sector, which can be reduced by a new collective bargaining agreement, company insolvency, or corporate takeover, public pension benefits are generally understood to be permanent obligations of the government that promises them.¹⁷

As a general rule, benefits in effect when a public employee begins service are a minimum threshold under which benefits may not drop.¹⁸ It is important not to confuse pension *benefits* with pension *contributions*. Under many plans, employees can be asked (upon renegotiation) to contribute more to their pension or work more hours for the same benefit.

Retiree Healthcare Benefits

Retiree healthcare benefits are usually managed by the government that provides for them, though a handful of states are now placing such benefits in trusts (like pensions). There is tremendous variation in the scale of and management of these benefits.

Governments typically finance retiree healthcare plans on a pay-as-you-go basis, treating these benefits as an operating expense of government. Benefit packages permit retirees to buy into the employees' health plan at subsidized premiums. Upon reaching age 65, a retiree typically becomes ineligible for the benefit and enrolls in Medicare. Some states provide retirees access to a subsidized, supplemental healthcare program after they reach age 65.¹⁹

Healthcare benefits for retirees are rarely offered today in the private sector. Among Fortune 500 firms, employer healthcare coverage for pre-Medicare-age retirees fell from 88% in 1991 to 33% in 2008.²⁰ Most, if not all, of the private sector workers who have such coverage are older members of the workforce.

Legal protections for retiree healthcare benefits are weak relative to pension benefits. State constitutions and statutes are typically silent on the issue of retiree healthcare benefits, and as a general rule, modifications to these benefits are permissible unless the agreement underpinning the benefits was explicit about their permanency.²¹

THE ORIGINS OF TODAY'S UNFUNDED LIABILITIES

Today's unfunded pension and retiree healthcare benefits result from governments' failure to pay for employees' benefits when earned. Policymakers have enabled governments to skirt annual contributions on behalf of employees in four common ways. First, policymakers have routinely opted to "skip" annual required contributions into employees' pension funds. Second, they have offered employees new benefits without increasing the government's annual contributions. Third, they have often assumed unrealistic investment assumptions, and fourth, some retirement benefit programs have never been pre-financed.

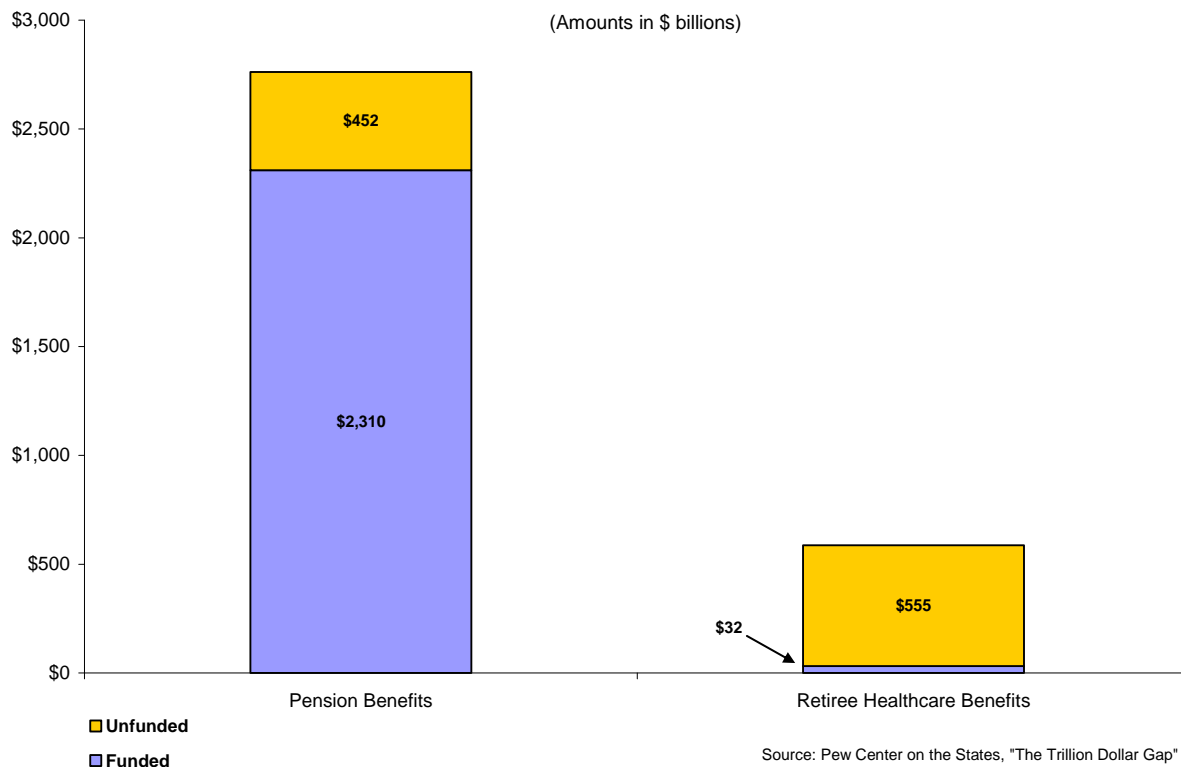
It is common practice for governments to forgo pension contributions both in times of fiscal distress and in times of rising stock markets.²² When budgets get tight, officials commonly reduce (or "skip") the government's contribution for that year, essentially taking a loan from the employees' retirement fund. When stock markets rise, officials often shortchange contributions rationalizing that growth in assets-under-management makes further contributions unnecessary. During the past five years, 21 states have contributed less than 90% of their required annual contributions.²³ In FY 2008, only four states met their required contributions for retiree healthcare obligations.²⁴

Policymakers have also chosen to expand employees' retirement benefits without paying for them. For example, when Pennsylvania experienced strong investment returns during the 1990s, lawmakers approved a 25% increase in retirement benefits for state employees and teachers and a cost-of-living increase for already-retired workers. The state never increased its annual pension fund contributions to offset the increase in benefits (new liabilities) offered to state employees and teachers.²⁵

Pension board trustees and their financial advisors have often compounded problems by authorizing rosy pension fund investment return assumptions. Aggressive investment assumptions permit governments and employees to contribute less-than-adequate amounts to pension and retiree healthcare funds. A significant body of research suggests that assuming 8% annual investment returns in pension funds is too aggressive.²⁶ In the last few years, pension administrators have been reducing assumed returns, adopting a more conservative investment approach.²⁷

Finally, some retiree benefit plans have been financed on a pay-as-you-go basis since their inception, causing costs to rise today as the public sector labor force reaches retirement age. Indiana's Teacher's retirement fund was financed this way until 1996; it makes sense that the fund was only 46% funded at the end of FY 2008.²⁸ Retiree healthcare benefit plans are generally also financed this way. Each year, a new group of recently retired state and local workers begin collecting subsidized healthcare benefits for which governments have failed to save.

**Funded and Unfunded Portions of States' Liabilities
for Pension and Retiree Healthcare Benefits
(2008)**



THE SOLVENCY OF PENSION AND RETIREE HEALTHCARE PLANS

Public pension and retiree healthcare benefits face very different fiscal futures. While pension funds are significantly under-funded, only a handful of governments are at risk of failing to meet their obligations in the near- or long-term. In contrast, promises regarding retiree healthcare benefits are unlikely to be met without swift action by states and localities.

Pensions

Public worry over the solvency of public pensions is as old as pensions themselves. Consider the conclusion of actuary and pension historian Robert Tilove writing in 1976: “Pension legislation for public employees is still as confusing and frustrating a subject as it was [in 1914]. Controversy in every part of the country over the past sixty years is liberally sprinkled with the phrases ‘unsound,’ ‘bankrupting,’ ‘inequitable,’ ‘complex,’ and ‘patchwork.’ The decades have brought significant change, but development of a consistent policy on the pensions of public employees has continued to be a difficult challenge...”²⁹

Modern anxiety regarding public pension funds exemplifies Tilove’s findings. The latest figures signal that the overwhelming majority of large funds will remain solvent over the near- and long-term. Actuaries associate a “funded” ratio of 80% with long-term pension fund solvency,³⁰ and on average, pension funds were 85% “funded” in FY 2008.³¹ Most recent studies indicate that, over the near term (2-7 years), very few pension funds are at risk of insolvency.³² Almost all governments with significant unfunded liabilities have a plan of action to bring pension fund assets to parity with liabilities over time.³³ These strategies include increasing annual pension fund contributions and reducing benefits for new hires.³⁴ While funding ratios for FY 2009 and FY 2010 will be low thanks to the stock market collapse in the fall of 2008, these strategies and practices are sufficient to keep pension funds solvent well into the future.

One important aspect of today’s pension dilemma is that politicians and unions are now publicly tackling the unfunded pension liability issue.³⁵ Alaska and Michigan have converted to 401K systems for new hires.³⁶ Nevada recently negotiated a deal to delay the retirement age for new workers.³⁷ Other states, including Connecticut and Illinois, have chosen to “bond” their liabilities. While not ideal, pension obligation bonds force lawmakers to make annual contributions.

It is also worth remembering that the Government Accounting Standards Board (GASB) required no disclosure for pension liabilities until 1996 and none for retiree healthcare obligations until 2004.³⁸ Journalists, politicians, and voters are now focused on the unfunded liability issue, in part, because the data exists to scrutinize governments’ unfunded liabilities. Many private employers reformed their pension systems and converted their employees to 401K plans after similar accounting rules were adopted for corporations in the years following the Employment Retirement Income Security Act of 1974 (ERISA). Today’s GASB requirements could portend similar pension reforms.

Still, over the long-term, the credit quality of some states and municipal governments may be significantly impaired by unfunded pension liabilities. For example, in Rhode Island and Mississippi, unfunded pension liabilities for state employee and teacher pensions exceed 8% of gross state product.³⁹ For issuers like these states, daunting choices may be required in the near future.

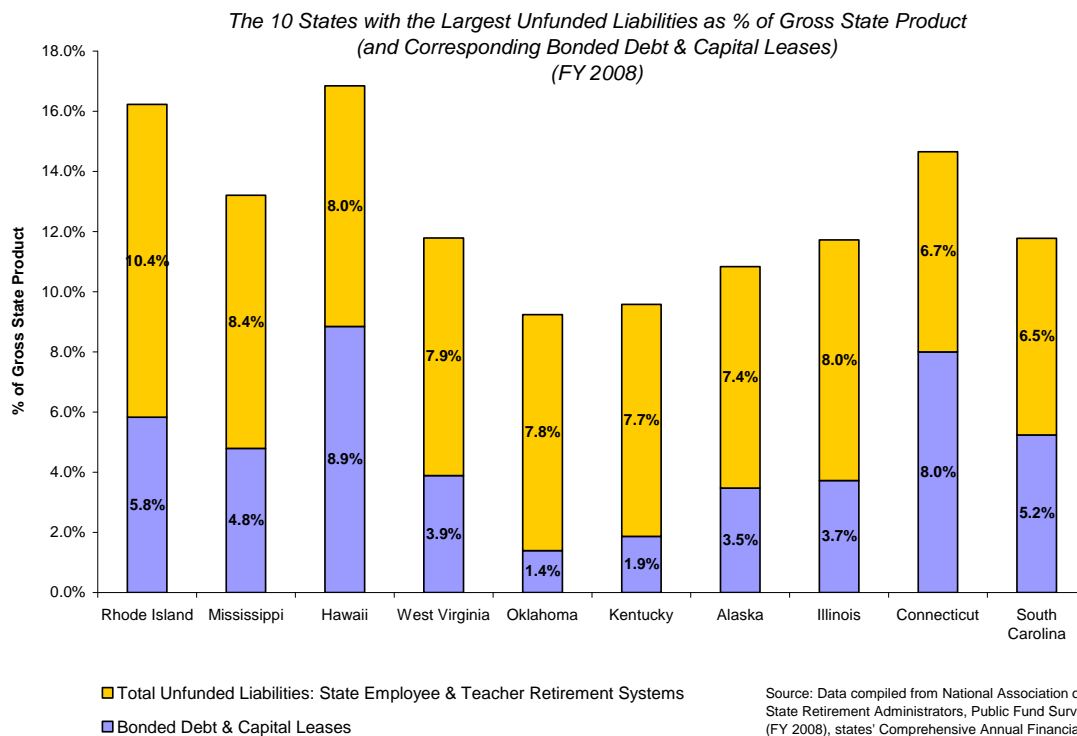
Retiree Healthcare Benefits

Retiree healthcare obligations are essentially “un-fundable” for many states and local governments over the long-term without swift action. It is likely these obligations will be removed from public sector balance sheets over time. The funding ratio for retiree healthcare obligations in 40 states is less than 7.1%.⁴⁰ Healthcare costs are escalating very rapidly each year, and most small issuers will continue to pay for these costs as they come due (on a pay-as-you-go basis). Coupled with the weaker legal status of these obligations and the increasing likelihood that the federal government, or individual state governments, will adopt significant healthcare reforms over the next decade, it seems probable that these obligations will be either reduced through benefit cuts or through structural reform.

WHY A BOND DEFAULT REMAINS VERY UNLIKELY

It remains improbable that a state or large municipal government will default on its bonds as a result of under-funding pension or retiree healthcare obligations. Credit protections for bondholders, including balanced budget requirements, debt caps, and prioritization of debt obligations should compel policymakers to rein in benefit promises before defaulting on bond payments. Outstanding state and local indebtedness (including economically defeased debt and pension obligation bonds) is well within historical norms, at 15% of GDP.⁴¹ While annual debt service payments were up only modestly during the last decade, annual bills for unfunded pension obligations rose 135% between FY 2000 and FY 2008 – and the costs continue to surge.⁴² Moreover, shortchanging bondholders would only exacerbate an issuer’s unfunded liability problems: access to cash and credit would evaporate, the ability to fund employees’ retirement benefits would decrease, and issuing a pension obligation bond would become next to impossible.

There are also significant political risks to forgoing bond payments in favor of public employees’ benefits. Default would force elected officials and labor leaders to confront voters who typically own their government’s debt and who are skeptical of public employees’ benefits packages. For example, most California debt is owned by California residents, and 70% of likely voters in California favor converting new state employees to a 401K system.⁴³ In this environment, California’s politicians are likely to favor reducing retiree benefits to other alternatives, and labor officials are likely to prefer benefit cuts to risking their members’ pension security and jobs. (Remember, “restructuring” a state’s debts is an entirely extra-legal, political endeavor, as states cannot file for bankruptcy protection.⁴⁴) This conclusion is supported by academic evidence showing that public employee strikes (which are another type of extra-legal negotiation) have negative political consequences for the politicians and unions that permit them to occur.⁴⁵ It is also supported by the history of state debt crises. In past state defaults, voter ire was directed at the creditors who created the overburdening debt.⁴⁶ Today, those creditors are overwhelmingly public employees and retirees, not bondholders.



Small, fiscally distressed municipal issuers present a more difficult question. Small counties and cities have less budget flexibility than states. Their revenues are often limited to property taxes, and the services they provide are difficult to cut: police protection, fire services, waste management, etc. Vallejo, California's Chapter 9 proceeding demonstrates that pension and other-post employment debts can overwhelm these kinds of small issuers.

SOLVING THE UNFUNDED LIABILITY PROBLEM

Promising employees guaranteed, long-term retirement benefits has always been a questionable endeavor for employers. When Peter Drucker, the revered management consultant, reviewed General Motors' pension system in the late 1940s, he doubted whether any organization could adequately prepare for liabilities that came due decades into the future.⁴⁷ Corporations rarely live beyond 40 years of age,⁴⁸ and as the managers at General Motors proved, negotiating with unions over future employee benefits is very hard to do successfully. While some of today's debts may be related to the "cozy" relationship between employee unions and lawmakers, the real problem may be that pensions and post-retirement healthcare benefits are inherently risky financial propositions.

Breckinridge's investment philosophy with respect to unfunded pension and retiree healthcare liabilities is premised on the idea less government risk is better for bond investors. States and local governments that offer 401K plans and no retiree healthcare benefits to new employees have taken the most aggressive steps to reduce long-term government risks. However, other policy choices can help reduce long-term, retirement-related liabilities. These policies include:

- Creating a realistic plan-of-action to amortize the government’s unfunded liability over time and demonstrating a commitment to the amortization schedule by shrinking the unfunded liability year-after-year.
- Off-loading retiree healthcare liabilities into a “VEBA” (a voluntary employee beneficiary association).
- Converting new employees to “cash-balance” plans (hybrid defined benefit and defined contribution plans).
- Renegotiating existing contracts with public employee unions to
 - Forgo cost-of-living increases
 - Require higher employee pension contributions
 - Delay eligible retirement age for new workers
- Requiring issuers to contribute the actuarial “required” annual contribution.
- Requiring governments to measure proposed benefit changes prior to enacting legislation that would alter them.
- Raising state or local taxes to pay for increasing unfunded liability payments.
- Bonding unfunded liabilities to force lawmakers to make required annual contributions.

CONCLUSION

Payments for unfunded pension and retiree healthcare obligations will force lawmakers, citizens, and unions to make tough policy choices. State and local workers have labored for years under specific contract terms and have legally earned their pension benefits, if not their retiree healthcare benefits. However, for a generation, governments have chosen not to pay for those benefits when earned. The result is that today’s policymakers will have to renegotiate contracts already made, raise taxes, or cut spending on other programs.

Despite the fiscal stress ahead, the pension and retiree healthcare liabilities of state and local governments can be managed. Pension promises are manageable in the overwhelming majority of states and local governments. Retiree healthcare benefits are an altogether different problem, but there is significant flexibility in dealing with them, thanks to their weaker legal standing.

Breckinridge believes it remains unlikely that any major municipal bond issuer will default on its bond obligations as a result of its pension and retiree healthcare obligations. We invest only in what we believe are the strongest municipal credits and will continue to analyze our holdings to preserve value and generate income over time.

DISCLAIMER: The material in this document is prepared for our clients and other interested parties and contains the opinions of Breckinridge Capital Advisors. Nothing in this paper should be construed or relied upon as legal or financial advice. An investor should consult with an investment professional before making any investment decisions. Factual material is believed to be accurate, taken directly from sources believed to be reliable, such as the U.S. government, official financial reports, academic articles, and official trade organizations. However, none of the information should not be relied on without independent verification.

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- ¹ Amy Merrick, “States Sink in Benefits Hole,” *Wall Street Journal*, February 18, 2010.
- ² Unfunded pension liabilities were 437.5 billion in FY per NASRA’s Public Fund Survey, Summary of Findings for FY 2008, p. 6 (October 2009). Unfunded retiree healthcare costs were \$530 billion per GAO-10-61, “State and Local Government Retiree Health Benefits,” (November 2009). Available at: <http://www.gao.gov/highlights/d1061high.pdf>. See also: Table 3.3. State and Local Government Current Receipts and Expenditures (National Income and Product Accounts), Bureau of Economic Analysis, April 2009. State and local expenditures in FY 2008 were \$2 trillion.
- ³ *Report of the Police Pension Fund of the City of New York*, p. 21 (1913).
- ⁴ Robert Tilove, *Public Employee Pension Funds*, p. 262, Columbia University Press (1976).
- ⁵ Tilove, p. 262.
- ⁶ Roger Lowenstein, *While America Aged*, p. 88, The Penguin Press (2008).
- ⁷ See Lowenstein, p. 101.
- ⁸ See GAO-07-1156, p. 19. As an example, the Illinois constitution states that “Membership in any pension or retirement system of the State... shall be an enforceable contractual relationship, the benefits of which shall not be diminished or impaired.” Illinois Constitution, Article XIII, Sec. 5.
- ⁹ See “Pension and Retirement Plan Enactments in 2009 State Legislatures,” National Conference on Public Employment Retirement Systems, p. 2 (2009 Selected State Legislation Introduced). Available at: <http://www.ncpers.org/GovtAffairs/Overview.asp>.
- ¹⁰ See GAO-07-1156, pp. 32-33.
- ¹¹ See GAO-07-1156, p. 21.
- ¹² See GAO-07-1156, p. 22.
- ¹³ In FY 2008, for social security eligible employees, the median government-contribution rate was 8.7% of salary and the median employee-contribution rate was 8% of salary. For social security ineligible employees, the contributions rates were 11.8% and 8%, respectively. See Public Fund Survey, FY 2008, p. 13.
- ¹⁴ Lise Valentine, “Public and Private Sector Compensation: What is Affordable in This Recession and Beyond?-A conference summary.” The Federal Reserve Bank of Chicago (May 2009). Available at: http://www.chicagofed.org/digital_assets/publications/chicago_fed_letter/2009/cflmay2009_262a.pdf.
- ¹⁵ See Public Fund Survey, FY 2008, Figures N and Q, p. 14.
- ¹⁶ The payment is typically determined by formula and based on the retiree’s years of service and average final salary.
- ¹⁷ Private pensions are governed by federal ERISA law. Under ERISA, when a new pension plan is adopted, the previous plan is usually frozen. Existing employees keep the benefits they have accrued to date, but they cannot continue to participate in the previous plan from that point forward. Public pensions are governed by state law, which generally permits new employees to participate in the previous plan (which is almost always more generous than the new one). See GAO-07-1156, p. 11.
- ¹⁸ For example, “vesting” under California law “accrues upon acceptance of employment. Such a pension right may not be destroyed, once vested, without impairing a contractual obligation of the employing public entity.” See CA Constitution, Article 1, Sec. 9; See also, John E. Sanchez & Robert D. Klausner, “State and Local Government Employment Liability, Part II. Liability Arising From Terms and Conditions of Employment. Chapter 13. Pension and Retirement Benefits.
- ¹⁹ See GAO-07-1156, pp. 13-16.
- ²⁰ Lise Valentine, “Public and Private Sector Compensation: What is Affordable in This Recession and Beyond?-A conference summary.” The Federal Reserve Bank of Chicago (May 2009). Available at: http://www.chicagofed.org/digital_assets/publications/chicago_fed_letter/2009/cflmay2009_262a.pdf.
- ²¹ See *Poole v. City of Waterbury*, 831 A. 2d 211, 227-30 (Conn. 2003). But also note that, in some states, retiree healthcare benefits may be just as protected as pensions. The law may just be unsettled in many states. See John Sanchez, “The Vesting, Modification, and Financing of Public Retiree Health Benefits in Light of New Accounting Rules,” *John Marshall Law Review* (Summer 2008), at 1155-1170.
- ²² Girard Miller, “Top 12 Pension and Benefit Plan Issues for 2009: Part 1,” *Governing Magazine*, February 5, 2009.
- ²³ See “The Trillion Dollar Gap: Underfunded state retirement systems and the roads to reform, Pew Center on the States,” p. 24 (February 2010).
- ²⁴ See “The Trillion Dollar Gap,” p. 25. The states are Alaska, Arizona, Maine, and North Dakota.
- ²⁵ See “The Trillion Dollar Gap,” p. 23.

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- ²⁶ Novy-Marx, Robert and Rauh, Joshua D., “Public Pension Promises: How Big are They and What are They Worth? (December 18, 2009). Available at: SSRN: <http://ssrn.com/abstract=1352608>.
- ²⁷ See Public Fund Survey, FY 2008, p. 14.
- ²⁸ See “The Trillion Dollar Gap,” p. 24.
- ²⁹ Robert Tilove, Public Employee Pension Funds, p. 1, Columbia University Press (1976).
- ³⁰ *State and Local Government Pension Plans*, GAO testimony before the Joint Economic Committee, Thursday, July 10, 2008, Statement of Barbara D. Bovbjerg, Director, Education, Workforce, and Income Security. See GAO-08-983T.
- ³¹ See Public Fund Survey, Summary of Findings for FY 2008, p. 6 (October 2009). \$437.5 billion is 15% of the outstanding liability.
- ³² See GAO reports: GAO-08-983T and GAO-07-1156.
- ³³ GAO-07-1156, p. 30.
- ³⁴ See Figures M and N, Public Fund Survey, Summary of Findings for FY 2008, pp. 12-13. (Oct. 2009). Note also, that in Alaska and Michigan, new employees are now enrolled in 401K plans.
- ³⁵ See Governor Ed Rendell’s proposed FY 2011 budget, p. 20, and “The Trillion Dollar Gap: Underfunded state retirement systems and the roads to reform, Pew Center on the States,” p. 32 (February 2010).
- ³⁶ See “The Trillion Dollar Gap,” pp. 37.
- ³⁷ See “The Trillion Dollar Gap,” pp. 32.
- ³⁸ See GASB statements 25, 27, 43, and 45.
- ³⁹ See Public Fund Survey, Appendix B: Rhode Island’s unfunded liability is 10.4% of GSP; Mississippi’s is 8.4%.
- ⁴⁰ See “The Trillion Dollar Gap,” p. 12.
- ⁴¹ Table L. 211 “Municipal Securities and Loans,” Federal Reserve Flow of Funds Report, Q3, 2009 and BEA for U.S. GDP for Q3, 2009. Long term state and local government debt was \$2.15 trillion compared to \$14.24 trillion in U.S. GDP.
- ⁴² See Table L. 211, Federal Reserve Flow of Funds Accounts of the United States 2001 and Q4 2008 and “The Trillion Dollar Gap: Underfunded state retirement systems and the roads to reform, Pew Center on the States,” p. 21 (February 2010).
- ⁴³ See January 2010 poll, Public Policy Institute of California, p. 22. Available at:
- ⁴⁴ See Breckinridge Capital Advisors Special Commentaries: “The Basics of Municipal Bankruptcy” (October 2009) and “Understanding State Credit Risk in the Great Recession” (December 2009) available at: www.bondinvestor.com.
- ⁴⁵ See Martin Malin, “Public Employees’ Right to Strike: Law and Experience,” *University of Michigan Journal of Law Reform*, p. 323 (Winter 1993).
- ⁴⁶ See Christopher Shortell, Rights, Remedies, and the Impact of State Sovereign Immunity, Chapters 1-3, SUNY Press (2009).
- ⁴⁷ Roger Lowenstein, While America Aged, p. 25, The Penguin Press (2008).
- ⁴⁸ Arie de Geus, The Living Company, p. 1, Harvard Business School Press (2002).