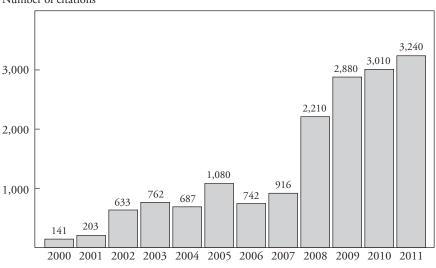
Introduction

Vallejo, California (2008), Prichard, Alabama (2010), and Central Falls, Rhode Island (2011) have filed for bankruptcy, with commentators citing pension promises to public employees as a major cause (see box).¹ A Googling of the words "state," "pension," and "crisis" found more than a twentyfold increase between 2000 and 2011 (see figure 1-1). The Governmental Accounting Standards Board (GASB) has promulgated new standards that could dramatically change how pension liabilities and costs are reported. Many states have substantially reduced benefits for new employees and increased employee contributions across the board. Yet the majority of states should be able to recover from the devastating impact of the 2008 financial crisis. What is going on here? How did the states and localities facing serious problems get into trouble? How did the others avoid problems? And where problems exist, what changes should be made that would be both effective and fair?

This book tells the story of state and local pension plans over the past three decades. The late 1970s and early 1980s is a good place to start. In 1978, the

1. Although press accounts link Vallejo's bankruptcy with pension costs (see Greenhut 2010; Scheer 2008; and Weber 2011), one reviewer of an earlier draft of this book disagrees. He contends that even though CalPERS (California Public Employees' Retirement System) was the city's largest single creditor, the cost of servicing the city's required pension contribution was not a major factor in its bankruptcy. Rather, the bankruptcy was the result of a collapse of the city's revenue base. This story sounds quite similar to that for Stockton, Calif., which filed for bankruptcy in June 2012. Stockton's financial problems stemmed more from extensive borrowing and the collapse of its real estate market than from pension pressures.

Figure 1-1. Total Number of Google News Citations Using the Terms "State," "Pension," and "Crisis," 2000–11



Number of citations

Source: Google News 2012, database search, March 1.

first comprehensive survey of state and local plans, mandated by the Employee Retirement Income Security Act of 1974, awarded public plans a grade of D:

In the vast majority of public employee pension systems, plan participants, plan sponsors, and the general public are kept in the dark with regard to a realistic assessment of true pension costs. The high degree of pension cost blindness is due to the lack of actuarial valuations, the use of unrealistic actuarial assumptions, and the general absence of actuarial standards.²

It was also a period when the author served as a member of the Massachusetts Retirement Law Commission and witnessed the "Wild West" up close. The then chair of the commission later pleaded guilty to state and federal charges that he engaged in a scheme to defraud the Massachusetts retirement systems.³

From the perspective of the late 1970s and early 1980s, the management of state and local plans has improved dramatically. Plans began to put aside assets

2. U.S. Congress (1978), p. 4.

3. Business Wire (1994).

Cities That Have Filed for Bankruptcy

Vallejo, Calif., population 115,942, filed for bankruptcy in May 2008, the second largest municipal bankruptcy in California history behind Orange County in 1994.

-Bankruptcy was attributed to excessive compensation for police and fire union members; salaries and benefits accounted for nearly 80 percent of the city's budget.

—In August 2011, Vallejo was cleared to emerge from bankruptcy protection after agreeing to restructure nearly \$50 million in debt by reducing pension benefits for new employees, cutting payments for retiree health care, raising contributions for current workers, and creating a rainy-day fund.

—Since 2008, the police department workforce has been slashed by nearly 50 percent, the firefighter workforce has been slashed by 42 percent, and three of eight fire stations have been closed.

Prichard, Ala., population 22,659, filed for bankruptcy in October 2010. The city's decline began in the 1970s as its population shrank by 40 percent and its tax base dwindled.

-Bankruptcy was attributed to the legislature sweetening benefits of the municipal plan over time without paying for them.

-Prichard had been warned since a 2004 actuarial review that continuous underfunding created the risk of default.

—Prichard stopped paying monthly pension checks to its 150 retired workers in September 2010, breaking a state law that requires pension benefits to be paid in full.

-Prichard filed for bankruptcy one month later in response to a lawsuit from retirees; the case was dismissed and is currently being appealed.

Central Falls, R.I., population 19,376, filed for bankruptcy in August 2011. With an unemployment rate near 15 percent, Central Falls is one of Rhode Island's poorest communities.

—Central Falls filed for bankruptcy after failing to negotiate significant concessions from the unionized workforce, which would have required reductions in pension benefits by as much as 55 percent.

—Central Falls faced \$80 million in unfunded obligations and projected \$5 million deficits for the next five years (its annual budget was about \$17 million).

—A receiver negotiated new agreements with the unions and retirees, which reduced pensions by 50 percent. The cuts eliminated the operating deficit and are projected to produce balanced budgets through fiscal year 2016. Bondholders were protected.

to pay for future benefits. Assets started to be managed professionally. Plan sponsors began to provide regular actuarial reports. And many public plan officials became subject to the same fiduciary standards that apply to the private sector. In fact, the preface to a 2001 comprehensive study of public plans from the prestigious Pension Research Council at the Wharton School of the University of Pennsylvania, of which the author is a member, awarded state and local plans at least an A-: "State and local plans in the United States have impressive levels of assets backing their liabilities, they provide reasonable replacement rates to retirees, and they invest in a manner not too different from that of private pension managers."⁴

Two financial crises later—the bursting of the dot.com bubble in 2000 and the collapse of the entire equity market in 2008—it became clear that some state and local pensions were seriously underfunded. The ensuing recession, which decimated state and local budgets, precluded additional contributions to compensate fully for the drop in asset values. States and localities began to cut benefits for new employees, raise employee contributions, and, in some cases, shift to defined contribution or hybrid plans.

The economics profession followed with "I told you so." The issue, among the many complex questions surrounding the provision of pensions in the public sector, that economists pounced on was the rate used to discount obligations. Following the standards established by GASB, state and local plans have used the expected long-run rate of return on plan assets as the discount rate. But finance theory dictates that the appropriate rate should reflect the riskiness of the obligations; the expected long-run return backing those obligations is irrelevant. Using the economists' approach, unfunded liabilities turned out to be \$2.1 trillion in 2008 rather than \$507 billion. Divide the new figure by the number of residents and the problem looks insoluble.⁵

Some problems could have been avoided by discounting obligations *for reporting purposes* by the appropriate rate. For example, California's plans would not have appeared overfunded in the 1990s, and the legislature might not have expanded benefits dramatically. And breaking the link between expected returns and the discount rate might have resulted in lower holdings of equities. But the discount rate is a narrow prism through which to view the hard questions public plan sponsors face.

At the other extreme, a number of governors identified public sector unions as the source of the problem. Wisconsin eliminated collective bargaining for public employees except police and firefighters. Michigan passed legislation that

^{4.} Mitchell and Hustead (2001), p. vii. By the time a more recent Pension Research Council study was published (Mitchell and Anderson 2009), it was clear that conditions had changed.

^{5.} Novy-Marx and Rauh (2011a).

required each collective bargaining agreement to include a provision that allows an emergency manager appointed under the local government to reject, modify, or terminate the collective bargaining agreement. Oklahoma decided that municipal governments are no longer required to bargain, except with police and firefighters. And Ohio abolished the right to strike—a provision that was subsequently defeated by a referendum. Legislation to limit collective bargaining is currently under consideration in many other states.⁶

Unions, like the discount rate, are too narrow a focus for understanding the complex situation facing state and local governments. Consider Illinois, a highly unionized state with generous benefits. Three of its four large state-administered plans are in terrible shape; one is much better off. Why? The answer lies largely in the fact that the sponsors of the plan for municipalities made their annual required contributions each year, whereas the state legislature failed to make the required contributions for the three other plans.

Thus, plans have a number of dimensions, including the generosity of benefits and the extent to which those benefits are funded. But more important, pension benefits are part of the compensation package used to attract and retain a skilled public sector workforce. The risk at this point is that state legislatures will cut benefits too much for new employees, so that public schools and universities, without compensating wage increases, will not be able to compete with the private sector for skilled workers. In order to make good decisions about public plans going forward, it is important to understand them in their full complexity and be able to answer a range of questions:

-How did states and localities get into their current situation?

-Why are some plans in trouble, others not?

-How do pension commitments affect state and local budgets?

-Are public sector workers appropriately compensated?

-Do defined contribution plans have a role in the public sector?

—How can public plans fairly distribute the pain in the case of unsustainable benefit promises?

The answers to these questions matter because public pensions have a significant economic effect on every state, city, and town in the nation: these plans hold about \$2.8 trillion in assets, cover 15 million working members (about 11 percent of the nation's workforce), and provide regular benefits to 8 million annuitants.⁷

6. For example, legislative proposals in Alaska (HB 134) and Rhode Island (S 409) would make both right-to-work states, whereby public employees can choose whether or not to join a union and cannot be penalized for not joining. Bills in South Carolina (H 4194) and New Hampshire (LSR 2114) would prohibit collective bargaining completely for public employees.

7. U.S. Census Bureau, *State and Local Public-Employee Retirement Systems* (2010); and U.S. Board of Governors of the Federal Reserve System, *Flow of Funds Accounts* (2011).

Organization of the Book

This book offers a comprehensive overview of the health of state and local pension plans, outlines the major challenges they face, and proposes solutions that preserve their main strengths while promoting needed reforms. By adopting a broad perspective, the book captures the core issues that should drive the policy debate, rather than more narrow concerns that produce much heat, but little light.

The story of state and local pensions is big and complicated. It cannot be reduced to a single mantra such as discounting obligations by the riskless rate of return or limiting union power. It is a story of plan sponsors with unique histories, resources, and political cultures. The main theme is that many states and localities have provided reasonable benefits and set aside money to pre-fund their commitments, but a few have simply behaved irresponsibly. Whatever differences existed before 2008 were magnified by the financial crisis. However, even the good states face challenges: scaling back their investments in risky assets, maintaining adequate compensation to attract talented workers, and obtaining the flexibility to alter benefits for current workers.

Chapter 2 sets the stage by first discussing the recent history of state and local pensions, from the late 1970s to the present. During the 1980s, most plans dramatically improved their funding and investment practices. But they also increased their holdings of equities in the 1990s and engaged in benefit improvements and funding holidays during the bull market. As a result, they were thrown seriously off course by the twin economic crises of the 2000s. By 2010, the reported funded level for state and local plans was 76 percent; estimates for 2011 suggest a level of 75 percent.8 The chapter next provides a broad picture of the state and local plan universe, highlighting its breadth and diversity. The U.S. Census identifies 3,418 retirement systems that are sponsored by a government entity. State-administered plans, which often cover many local government workers as well as state employees, account for a tiny fraction of all plans but almost all of the participants and assets. While local plans are generally small, they hold more assets per active employee than state plans, likely because they cover police and firefighters who retire earlier and therefore have more expensive benefits. The final section discusses retiree health plans, the other major retirement benefit offered to state and local workers. Most of these plans are unfunded, so they represent a serious claim on future budgets. But due to their complexity and data constraints, retiree health merits a separate study and falls outside the scope of this book.

^{8.} Center for Retirement Research at Boston College (2012a).

Chapter 3 covers the thorny issue of how best to account for the liabilities of public plans for reporting purposes and whether this choice should also influence investment and funding decisions. What may appear as an arcane issue has generated a white-hot debate among economists, actuaries, and practitioners. At issue is how best to measure future benefit promises made to current employees and the corresponding liability to the government.

As noted, most plans, following guidelines established by GASB, discount their obligations by the expected long-term return on the assets held in the pension fund, currently about 8 percent (although plans are beginning to lower their assumed rate of return). Economists argue that because pension benefits are guaranteed under most state laws, the appropriate discount factor is a riskless rate. The economists' approach would produce much higher liabilities than those currently reported by states and localities, and the unfunded liability would triple.

The argument is compelling that the obligations of public plans should be discounted by a riskless rate—for purposes of reporting. Such a change is not only theoretically correct, but would also deter plans from offering more generous benefits during periods when they appear to have "excess" assets and allow plans to reduce their holdings of risky assets without affecting their reported liabilities. And it would improve confidence in the stability of public plans among private sector observers.

The argument about the discount rate pertains to *reporting*; investing and calculating contributions are separate issues. Discounting obligations by a riskless rate does not imply that plans should hold only riskless assets. A number of considerations suggest that state and local plans should continue to invest in equities. If the returns on these equities resemble their long-run historical performance, then, for any given level of contributions, plans' unfunded liabilities would be paid off more quickly than if funds were invested in bonds.

Determining contributions is a trickier issue. Academic models suggest that the calculation should use the riskless rate. But contributing based on the riskless rate and investing in equities produces ever growing funding levels and declining contributions for each successive generation. These outcomes have political ramifications in the real world. Calculating contributions based on the expected rate of return is probably the least bad option and does not conflict with using the riskless rate for reporting purposes.

Building on chapter 2's discussion of the diverse pension universe and chapter 3's perspective on quantifying plan liabilities, chapter 4 analyzes the current funded status of plans to determine why some plans are in trouble while others are not. The discussion identifies the factors that lead plan sponsors to make their full annual required contribution (ARC) and the factors that, given the ARC payment, result in more or less funding. It then explores whether public employee unions have driven up plan costs, a concern expressed by many governors.

Three major conclusions emerge from the funding analysis. First, the notion that all public plans are in trouble is simply not correct. Before the two financial crises of the past decade, most plans were in reasonably good shape. And in the wake of the crisis, plan finances have begun to stabilize. Second, sponsors of seriously underfunded plans, such as those in Illinois, Kentucky, Louisiana, New Jersey, and Pennsylvania, have behaved badly. They have either failed to make their required contributions or used inaccurate assumptions so that their contribution requirements are not meaningful. An equally large number of states-Delaware, Florida, Georgia, Tennessee, and North Carolina-have done a good job of providing reasonable benefits, paying their required contributions, and accumulating assets. Third, it is impossible to identify a link between the poorly funded plans and the two factors others have highlighted as the source of the problem: (1) discounting obligations by the long-run expected return instead of the riskless rate; or (2) the collective bargaining activities of unions. The poorly funded plans did not come close to surmounting the lower hurdle associated with a high discount rate; raising the hurdle is unlikely to have improved their behavior. And union strength simply did not emerge as a significant factor in any of the empirical analyses. Pension funding is simply a story of fiscal discipline.

Chapter 5 puts the funding discussion in a broader perspective by assessing pension expenses as a share of state and local revenues. The important policy question is whether pension spending will squeeze out other priorities. The trade-offs here have become more challenging in recent years given both short-term fiscal pressures and more systemic factors driving up overall spending commitments. States and localities are still struggling to emerge from the budgetary strains that accompanied the financial crisis and Great Recession. Government revenues declined sharply as the economy deteriorated and took several years to begin to recover. At the same time, spending pressures resulting from the downturn have exacerbated structural budget challenges such as health care cost inflation.

Against this backdrop of ongoing fiscal challenges, it is particularly important to understand the burden that state and local pensions represent for their government sponsors. In 2009, overall pension contributions were about 4.6 percent of total state and local revenues. They will account for more in the future. How much more depends crucially on how much sponsors earn on plan assets. If they earn the expected return of 8 percent, pension spending will rise only modestly to 5.1 percent of revenue. If they earn only 6 percent, the share will grow to 9.5 percent. With a 4 percent return, pension contributions will account for 14.5 percent of revenue.

The future budget burden of pensions varies enormously by state. Well-run plans will see little increase in the share of their revenue devoted to pensions.

States that have avoided funding, such as Illinois, will see pension costs soak up a huge share of future revenue. Illinois may end up exhausting its pension assets and reverting to pay-as-you-go funding. New Jersey would have been in a similar position without its 2011 reforms. But the question remains whether New Jersey will stick to its new funding commitments. Both Illinois and New Jersey have issued pension obligation bonds in the past as a response to shortfalls, but this approach offers no real solution, as it may simply increase financial risk in states that are ill-equipped to handle it. California and New York are special cases; they have not been persistently bad actors, but their pensions are very generous and place an enormous burden on the state and its participating localities. Again, for states facing hard challenges, neither changing the discount rate nor curbing union power provides a solution. The path forward is clear: they will have to make tough decisions to distribute pain among current retirees, current employees, future employees, and future taxpayers.

Given the overall budget challenges facing the public sector and the acute pension problems in some jurisdictions outlined in chapter 5, it is not surprising that many proposals have emerged to cut pension benefits. A common presumption in these discussions is that pensions are "too generous." To gauge the accuracy of this presumption, chapter 6 explores total compensation—wages and benefits—in the state/local sector and compares the results with private sector compensation. It also addresses the related question of whether public employees end up richer or poorer than their private sector counterparts in retirement.

In assessing total compensation, one point on which most researchers agree is that wages for workers with similar levels of education and experience are lower for state and local workers than for those in the private sector. Pension and retiree health benefits for public sector workers roughly offset the wage penalty so that, taken as a whole, compensation in the two sectors is generally comparable. But this parity hides enormous variation by wage levels. State and local workers in the lowest third of the wage distribution are paid somewhat more than their private sector counterparts, those in the middle roughly comparable amounts, and those in the top third significantly less. Outcomes at retirement are related to lifetime employment patterns. Those who spend *most of their career* in the state/local sector end up with more wealth and higher replacement rates than their private sector counterparts. Short-term state/local workers actually end up with less wealth and lower replacement rates than similarly situated private sector employees.

The bottom line is that, for the nation as a whole, the difference between state/local and private sector compensation is modest. The implication is that policymakers need to be cautious about making massive changes without carefully studying the situation in their particular state or locality. This caution is particularly relevant for teachers, who make up more than half of the state/ local workforce and earn significantly less than private sector workers with similar education.

Chapter 7 explores how, in the wake of the financial crisis, some public plan sponsors have looked beyond cutting pension benefits or raising contribution rates toward structural change. Such changes would move from the traditional defined benefit system toward a system that includes a defined contribution component, akin to the 401(k) plans that now dominate the private sector. Is this type of shift good or bad? A complete answer to this question requires an understanding of the strengths and weaknesses of both types of pension plans and the rationale for shifting from sole reliance on defined benefit plans. The core issues here are how much risk plan participants should bear compared to plan sponsors and taxpayers and how the structure of benefits should treat shortversus long-service employees.

The main conclusion that emerges is that defined contribution plans have a role to play in the public sector. While defined benefit plans provide the most predictable retirement income for long-service employees, sole reliance on these plans in a political arena puts states and localities at considerable financial risk and creates a reward structure that provides little for shorter-term workers. At the same time, however, the 401(k) experiment in the private sector suggests that a wholesale shift to such plans would transfer too much risk to public sector workers. In order to balance risks and to provide some benefits for mobile workers, some combination of defined benefit and defined contribution plans would enhance the benefit structure in the public sector. The options extend beyond simply cutting back on the defined benefit plan and adding a 401(k)-type plan. Sponsors can consider modified defined benefit plans, such as a cash balance plan or one based on indexed career average earnings, the introduction of explicit risk sharing among plan sponsors, current employees, and retirees, or a "stacked" approach with a robust defined benefit base topped by a 401(k)-type plan.

Chapter 8 proposes solutions to the broad challenges facing all plans as well as the specific problems of severely troubled plans. These suggestions are not simple or painless, but they are feasible and would help ensure the health of the public pension sector for many decades to come.

All plans face three key challenges: the share of their assets allocated to risky assets; the implications of recent cuts in pension benefits for new employees; and legal constraints in adjusting future benefits for current employees. First, many plans have too much of their portfolio in risky assets, almost two-thirds in 2011. This policy undermines funding over time because strong investment returns often lead to pressure for benefit expansions, rather than being set aside to offset future fallow periods. Reducing equity holdings will mean lower returns and the need for higher taxes or lower benefits over the long term, but it will make plans more secure.

The second challenge for plan sponsors is maintaining compensation packages that will attract the best candidates for public sector jobs. This goal has been jeopardized by large cuts in pension benefits for new employees. Such cuts reduce total compensation, making the public sector a less attractive employer. Many of the benefit changes reflect good policy, such as extending the age for full benefits, but they need to be offset by higher wages to avoid eroding the public sector's ability to compete in the labor market.

The third challenge is to alleviate the legal constraints that make it very difficult for plan sponsors to change *future* benefits for current employees. Change is more feasible than generally thought given that in most states the protections are in statutes or derived from case law; they are not established in the state's constitution. The goal should be for public sector workers to have the same protections as private sector workers—namely, benefits earned to date cannot be taken away, but sponsors can amend the plan going forward.

For more troubled plans, a major reform effort is needed to address severe underfunding. A successful reform strategy must be fair. The need for benefit cuts for public employees or retirees must be broadly understood; and the burden imposed by these cuts needs to be distributed equitably among public employees. The responsibility for bringing the system into balance also needs to be distributed fairly between employees and taxpayers. Rhode Island provides a recent example where a fair process brought dramatic reform and moved the system toward a permanent solution.

Finally, even if states and localities solve their pension funding issues, public plans will remain a source of controversy. They simply provide more retirement income than do 401(k) plans in the private sector. However, the goal should not be to bring public sector workers down to the inadequate standards of the private sector, but rather to enhance the retirement system for private sector workers. The public sector pension infrastructure might provide a way to help achieve this goal.