PUBLIC PENSION LIABILITY: WHY REFORM IS NECESSARY TO SAVE THE RETIREMENT OF STATE EMPLOYEES

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SUMMARY:
... Will public workers today receive their retirement benefits tomorrow? For state employees, the 2005 Wilshire Report indicates the answer is "no." ... In fact, after studying the pension choices of faculty at a state public university over a twenty-three year period, Robert Clark and Melinda Pitts concluded that younger professors chose the defined contribution plan over the defined benefit plan to avoid mobility risk. ... The problem of public pension liability stems solely from the government-sponsored defined benefit plan where the investment risk is born by the state. ... Market asset to liability funding ratios between states varied from as high as 116% in North Carolina to as low as 40% in West Virginia. ... Based on these experiences, Illinois, California, and any other state or local retirement system should be cautious in issuing bonds as a bandage to cure the financial woes of its public pension funds. ... With more than half of federal workers currently enrolled in the contribution plan, the federal retirement system is foreclosed from the unfunded pension liabilities facing state and local governments. ... Existing public employees are also allowed to convert from the defined benefit plan to the defined contribution plan. ... The Colorado General Assembly recently created a defined contribution plan as an alternative to its defined benefit plan. ...
contribution plans, in which employees manage and bear the risk of their own retirement savings, defined benefit plans obligate employers to provide employees retirement income regardless of market performance. Since 2000, the funding ratio of defined benefit plans has declined. Even more alarming, the number of such pension plans that are underfunded has more than doubled. This means that, nationwide, state and local pension plans do not have sufficient assets to cover projected liabilities. The net effect of these phenomena is that government workers may never receive their expected retirement income.

This article addresses the pernicious problem of public pensions and suggests some solutions for funding the future. Part I provides an overview of pension plans. It explains what they are and how they work. Part II details the data in the Wilshire Report and its troubling implications. This part also highlights and compares the financial dilemmas facing particular states in all regions of the country. The public pension situations in California and Illinois, in particular, are explored. California is significant because it has the largest pension system measured in assets. Illinois is noteworthy for another reason - its system has one of the largest liabilities and, accordingly, is confronting the most difficult financial recovery.

Part III proposes changes to the pension paradigm. It draws on the experiences of the federal government, states like Florida, and the major shift that has occurred in the private sector. Given the ongoing instability of the economy, this part cautions against the continued use of bonds to fix the failing financial status of public pensions. Moreover, instead of offering only defined benefit plans, Part III supports the movement to optional or exclusive defined contribution plans, coupled with an employee education program describing the distinction. It further urges the universal acceptance of mandatory disclosure laws: The lack of information on the government-pensions crisis is perhaps the reason the public has not paid attention to the disastrous condition of their state retirement systems. This article concludes that the degree of financial distress evidenced in the recent Wilshire Report confirms that the issue can no longer be ignored. It aims to end the silence and begin the debate about public retirement plans.

I. Overview of Public Pension Plans

Public pension plans vary by state in terms of their formulas for retirement benefits and eligibility. State governments may also offer separate pension systems within the state for different kinds of employees. Thus, the police pension fund may differ from the teachers' fund, which may differ from the funds of other public workers.

The defined benefit plan remains the primary pension plan offered in these systems. An alternative retirement plan increasing in popularity is the defined contribution plan. Both kinds of pension plans are explained below.

A. Defined Benefit Plan

Defined benefit plans place the onus on the government to provide retirement income to its employees based on a formula involving the employee's service and salary histories. While plans differ in details, the general formula, at retirement, entitles an employee to an annual income equal to a percentage of the employee's final average salary, multiplied by the number of years of employment.

A defined benefit plan provides for employer, and sometimes employee, contributions to a trust fund administered by a trustee. In the public sector, the trust fund manager is generally a politically appointed or member-elected retirement board that makes investment decisions and determines funding levels and contribution obligations. Upon retirement, periodic payments ("defined payments") are paid from the fund for the duration of the participant's life and potentially that of his or her spouse.

Defined benefit plans provide deferred income that is not taxed until distribution to an employee. It is an employer's duty to fund the plan. As a result, employers bear the risk of market fluctuation and must contribute additional funds when necessary to ensure proper pay-outs. Market decline, an aging work force with an increasing
amount of retirees, and insufficient funding result in accrued pension liabilities. n24

B. Defined Contribution Plan

Defined contribution plans are the predominant pension plan offered by private employers. n25 Some state systems also sponsor this form of retirement plan. n26

In contrast to defined benefits plans, which provide an output to the employee, defined contribution plans specify an input. n27 An employer's only obligation is to make the "contribution" to the employee account. n28 In some cases, these plans are largely self-funded by an employee's salary-reduction-contributions to his or her own account. n29 In other cases, defined contribution plans are designed to permit an employer to decide annually how much, if anything, it will contribute to an employee's account. n30 Hence, defined contribution plans are always fully funded.

Rather than a trustee or board managing an employer-owned trust fund, employees make the investment decisions and otherwise manage their own retirement accounts. n31 While employees (and not employers) bear the risk of market fluctuation, defined contribution plans are advantageous for workers who change jobs. n32 In fact, after studying the pension choices of faculty at a state public university over a twenty-three year period, [n33] Robert Clark and Melinda Pitts concluded that younger professors chose the defined contribution plan over the defined benefit plan to avoid mobility risk. n33 The accumulated account can be transferred to their new employer, and employees do not suffer a decrease in potential retirement benefits because such benefit distribution does not depend on length of service. n34 While most contribution plans distribute retirement benefits in a lump sum, employees can choose to annuitize payments to eliminate the risk that they will outlive their retirement resources. n35 It is even better for employees if the plan provides for the annuitization of distributions, so that the government is responsible for purchasing annuity contracts at a lower overall cost than public participants individually. n36 Defined contribution plans offer the same tax-deferred income as defined benefit plans. n37

II. Defining the Pension Problem

The problem of public pension liability stems solely from the government-sponsored defined benefit plan where the investment risk is born by the state. It bears repeating that most state pension systems use the defined benefit plan. As discussed above, these plans require employees to rely on employers for their retirement income. n38 In theory, the promise of a pension benefit, under a defined benefit plan, creates a concomitant duty on the part of the state. n39 In reality, however, the danger that state governments will fail to contribute the funds necessary to finance adequate retirement benefits - the "funding risk" - falls on the employee. n40

Unlike defined benefit plans offered by private companies, state government plans lack both oversight by the federal government and an insurance program to provide benefits if the plan fails. n41 The financial status of these public pensions is also difficult to discern. When and how liabilities are reported is subject to vagaries in each state. n42 Not all states publish current data. n43 Moreover, comparisons of the reported information among public pension systems are complicated by the different levels of requisite funding and underlying assumptions that determine pension plan liabilities. n44 These assumptions include demographics, assumed rates of return on investments, as well as other economic indicators and information about the plan. n45 States may also consolidate their systems for purposes of reporting or disclose the data separately for each system within the state. Given the serious funding problems of public pensions, a recent study by Tongxuan Yang and Olivia Mitchell highlighted the lack of national regulation and conformity about funding targets, management of funds, investment alternative, and reporting of performance. n46

[*315] Despite these differences, the predominant calculation used to evaluate defined benefit plans is the funding ratio. n47 This ratio measures a plan's financial health by dividing the market or actuarial value of assets by the liabilities. n48 If liabilities exceed assets, the plan is underfunded. n49

A. 2005 Wilshire Report Results
In 2005, Wilshire Associates Inc. published a report of 125 public pension systems sponsored by the fifty states and the District of Columbia. \(n^{50}\) The report is the tenth of its kind to study state retirement system liability. \(n^{51}\) It concluded that an overwhelming majority of pension plans are underfunded. \(n^{52}\) Not only do they lack sufficient assets to cover anticipated liabilities, but their collective deficit measures in the hundreds of billions of dollars. \(n^{53}\)

The lack of assets is attributed to the decline in the stock market beginning in 2000. Since that time, overall asset values in public pensions have fallen to $1.7 trillion while liabilities have grown to $2.1 trillion. \(n^{54}\) The number of underfunded plans has also risen. \(n^{55}\) In fact, from 2000 to 2003, the percentage of underfunded plans almost tripled. \(n^{56}\) While the percentage of \([*316]\) underfunded plans decreased in 2004, \(n^{57}\) the overall funding ratio of these plans declined as it had the year before. \(n^{58}\)

Without significant reforms, the downward trend can be expected to continue. The growing number of retirees alone will strain the system. Growth among employees who are at the age of retirement is growing almost four times faster than the total population. \(n^{59}\) In more than half the states, the population of persons sixty-five years and older will double by 2030. \(n^{60}\) Thus, in less than twenty-five years, the number of persons in this age category will double in size and represent about 20% of the total population, compared to only about 12% today. \(n^{61}\) In fact, almost one in five Americans - some seventy-two million people - will be sixty-five years or older. \(n^{62}\)

**B. State-by-State Summary**

Funding ratios and levels vary within and between states. The most recent comparative data available by state is provided in the 2004 Wilshire Report. \(n^{63}\) It reported that only two states had pension assets that exceeded liabilities. \(n^{64}\) It also ranked \([*317]\) retirement systems, and their states overall, by funding ratio. \(n^{65}\) Market asset to liability funding ratios between states varied from as high as 116% in North Carolina to as low as 40% in West Virginia. \(n^{66}\) Like North Carolina, New Jersey and Georgia also appear to have good aggregate funding ratios, at 97% and 98% respectively. \(n^{67}\) Nevertheless, the allegedly positive financial health of their retirement systems is suspect, given that the most recent data reported from these states is from 2001. \(n^{68}\)

Independent assessment of the latest reported state data shows that funding levels in the four plans sponsored by South Carolina had ratios that ranged from 63.7% for judges and solicitors to 91.5% for police officers. \(n^{69}\) In Kansas, the highest funding ratio for one of its plans was 85% and the lowest was 63%. \(n^{70}\) Kansas's overall funded ratio for all state retirement systems declined 5% between 2003 and 2004, from 75% to 70%. \(n^{71}\) The State Teachers Retirement System of Ohio fared a bit better with a funded ratio of 74.8%, as of fiscal year ending June 30, 2004, but dropped to 72.8% for 2005. \(n^{72}\) The situation for teachers in Illinois, however, is bleak, with funded ratios of 49.3% in 2003, ratios of 61.9% in 2004, and ratios of 60.8% in 2005. \(n^{73}\)

\([*318]\) By comparison, Arizona's state retirement system had a funded status of 97% in 2003. \(n^{74}\) In 2004, the funding level dipped to 91%. \(n^{75}\) While Arizona public employees should feel safer in their promised benefits than employees in other states, the funded ratio of all Arizona systems was consolidated for reporting purposes. Aggregate statistics can mask the fiscal weakness of individual plans because assets in well-funded plans are not transferable to underfunded plans. \(n^{76}\) Therefore, the financial health of a single system may be less certain.

Comparing the unfunded liabilities to the state budget puts the financial distress of the majority of state retirement systems into greater perspective. \(n^{77}\) Dividing unfunded liabilities by the annual state budget shows what, if any, funds are available to cover unfunded liabilities. An amount greater than 100% means that unfunded liabilities exceed the budget. Nevada, for example, has unfunded liabilities in its retirement systems that are 2.69 times its annual budget, or 269%. \(n^{78}\) In 2003, all but two states had pension liabilities that exceeded their state budgets. \(n^{79}\)

**C. Illinois Pension Plan**
The Illinois Retirement System provides benefits to approximately 647,000 members in five retirement systems. Each of these plans offers a defined pension benefit that takes into account compensation levels, years of service, and whether the employee is covered by Social Security.

While most state retirement systems are in serious financial trouble, the funding problem in Illinois is the worst. Illinois's unfunded pension liabilities are greater than those of any other state. In 2004, its retirement systems collectively posted liabilities of $90 billion. All Illinois pension systems had a 60.9% funded ratio. Combined, these retirement funds had $54.7 billion in assets, $89.8 billion in liabilities, with a resulting $35.1 billion in unfunded liabilities. The retirement systems in Illinois rank in the bottom ten plans, as compared against the hundreds of other state plans.

Illinois's unfunded pension debt is greater than all of its bonded debt combined. Illinois's unfunded liabilities are also 1.97 times its annual budget, a ratio of 197%. The underfunding problem was caused from annual state contributions of less than the necessary actuarial amount, increased pension benefits, investment losses, and a downturn in the economy. For instance, from 1995 through 2003, Illinois failed to make adequate contributions to its retirement systems, resulting in a shortfall of $10.6 billion. Not only were pensions underfunded during a strong economic environment, but in 2002, early retirement incentives were added during a time of economic downturn. The Illinois retirement funds have experienced investment losses of $6.4 billion since 1995. Yet, during the same time frame, the state also increased pension benefits by $5.8 billion without introducing funding to cover additional costs.

D. California Pension Plan

In comparison to Illinois and a host of other states, the California Public Employees' Retirement Systems (CalPERS) is in relatively good financial health. As of June 2004, the funded ratio was 84.1% for state employees and 92.7% for school employees.

Like Illinois and most other states, CalPERS is a defined benefit retirement system and provides benefits based on a member's years of service, age, and highest compensation. It provides retirement and health benefits to more than 2,500 employers and more than 1.4 million employees, retirees, and their families. With defined contribution assets of $168.320 billion, CalPERS was the largest public or private pension fund in the United States in 2004.

However, even multiple millions of dollars in assets will not preserve the retirement income of California's public employees in the future. The cost of retirement benefits rose from $160 million in 2000 to $2.6 billion, in 2005, with a projected $3.5 billion in 2009. Confronting the same economic and demographic indicators as other states, Californians are attempting to reform their retirement system before the situation becomes a financial disaster, like that in Illinois.

III. Solutions to Public Pension Liability

A typical response for states attempting to address the funding problem of their retirement systems is to issue bonds that will fund contributions and provide capital for monthly payments. For example, the Illinois state retirement system issued a $10 billion pension bond at the beginning of fiscal year 2004. This bond issue reduced the retirement systems' unfunded liabilities from $43 billion to $34 billion and increased the funding ratio from 48.6% to 57%. California even used a $900 million pension obligation bond to help cover its debts due to increased benefits and fiscal mismanagement.

Notably, the use of pension-funding bonds involves a wager that markets will perform during the life of the bonds. Based on this assumption, pension-investment-performance offsets interest and debt service payments. With poor market performance, however, pension-funding bonds will fall short of expected benefits. This was unfortunately the case for the retirement systems in both New Jersey and Pittsburgh. Based on these experiences, Illinois, California,
and any other state or local retirement system should be cautious in issuing bonds as a bandage to cure the financial woes of its public pension funds. \textsuperscript{105} Rather than bonds as a stop-gap measure that gambles on economic upswings or other unlikely uncertainties, \textsuperscript{106} states should focus on fool-proof pension reform. \textsuperscript{107} These measures would account for the increasing number of retirees and safeguard against a stagnant or declining economy.

State and local retirement systems should consider two reforms. \textsuperscript{108} First, public pensions should sponsor defined contribution plans in lieu of, or in addition to, the traditional defined benefit plans. Second, states should require mandatory public disclosure of the financial status of their pension funds. The two reforms are discussed below.

A. Exclusive or Optional Defined Contribution Plans

State and local governments should begin sponsoring exclusive or optional defined contribution plans for their new employees. Especially in those states that will allow their employees to choose between defined benefit and contribution plans, public pension reform should be accompanied by an education program explaining the distinctions between the plans in order to encourage participation. \textsuperscript{109}

As discussed in Part I.B, defined contribution plans do not accumulate unfunded liabilities. An employer’s only obligation is to make the requisite contribution to the employee’s account. State governments offering a defined contribution plan would not be at the mercy of market performance or subject to any other subsequent event. In this way, costs are known in advance and can be included in the budget.

Employees would no longer be forced to rely on a trustee, pension board, or other quasi-political body to safeguard their retirement savings. Rather, these plans allow them to manage and bear the risk of their own retirement funds. Certainly, some new older public employees may balk at the idea of a defined contribution arrangement. \textsuperscript{110} With their proximity to retirement, older employees may perceive an advantage in the defined benefit plans given the appearance of security in the government’s promise to fund their pensions along with the longevity-linked pay and benefits. \textsuperscript{111} Nevertheless, even public employees have been exposed to the increasing amount of pension and tax legislation over the last thirty years that has allowed for the creation of individual accounts for retirement savings, healthcare, and education. \textsuperscript{112} These accounts operate like defined contribution plans, and public familiarity with them has revolutionized the way people think about retirement. \textsuperscript{113} The newly enacted Pension Protection Act of 2006 also includes incentives for their increased use. \textsuperscript{114} Consequently, the assumption of responsibility (and reward) may prove politically palatable.

Given the increasingly mobile workforce, another benefit to employees is portability - the ability to take their accounts with them to a new employer. Defined contribution plans become fully vested immediately so that employees may keep the full amount of an employer’s contribution. As such, employees are not penalized by job hopping because their pension benefit upon retirement is not tied to years of service for a single employer, pursuant to the defined benefit plan.

The favorable attributes of defined contribution plans have not gone unnoticed in the public or private sector. Currently, contribution plans are the retirement vehicle of choice in corporate America. \textsuperscript{115} Legislative changes have also eased company transitions from defined benefit to either defined contribution plans or hybrid plans that limit employer responsibility and liability for retirement benefits. \textsuperscript{116}

These changes are necessary due to the dramatic increase in underfunded company-sponsored defined benefit plans. \textsuperscript{117} Moreover, while the retirement benefits of private workers are partially covered by the Pension Benefit Guarantee Corporation (PBGC) in the event their company terminates the defined benefit plan and is unable to make up the deficiency, \textsuperscript{118} the PBGC, too, is experiencing heavy unfunded liabilities. \textsuperscript{119} Again, poor market performance, as well as the weakness and resulting termination of retirement plans in such industries as steel and air transportation, accounts for the deficit. \textsuperscript{120}
As early as 1986, the federal government also saw the wisdom of sponsoring an alternative contribution-type plan to public employees and made changes to its retirement system. With more than half of federal workers currently enrolled in the contribution plan, the federal retirement system is foreclosed from the unfunded pension liabilities facing state and local governments.

Several states are following the trend away from defined benefit plans and attempting retirement reform via defined contribution plans. In 2002, for the first time, Florida offered defined contribution plans as an option to its employees. New hires are automatically enrolled in the defined benefit plan but may, within five months following the date of hire, elect to participate in the defined contribution plan. Existing public employees are also allowed to convert from the defined benefit plan to the defined contribution plan.

The Colorado General Assembly recently created a defined contribution plan as an alternative to its defined benefit plan. Beginning January 1, 2006, state employees in Colorado have the option of choosing between the defined benefit or contribution plan for their retirement savings. Defined contribution plans will be offered to higher education employees hired in 2008. Likewise, Hawaii created a defined contribution plan for new public employees. In contrast to Colorado, however, Hawaii’s defined contribution plan serves as the exclusive retirement account for new hires.

In Illinois, conversion from a defined benefit to a defined contribution system appears imminent. The Pension Commission recommended replacing all or part of the state's defined benefit plans with defined contribution plans. Recall that Illinois is experiencing the worst unfunded pension liabilities of any state in the nation. The Commission concluded that a defined contribution plan would "significantly reduce unfunded liabilities." Therefore, it urged that this alternative form of retirement plan be "strongly considered," in the near term, for both new hires and current employees.

Although not yet facing the financial woes of Illinois, California's proposed solution is to no longer offer defined benefit plans. Instead, the state government would offer all new hires defined contribution plans. Governor Arnold Schwarzenegger spearheaded the plan to privatize California's pension fund to help reduce the state's $9.1 billion budget deficit. The governor cited "huge costs and the open-ended liabilities" for the taxpayers for keeping the defined benefit plan in the future. The proposed change, however, required a constitutional amendment that was opposed by the CalPERS Board of Administration. Given the opposition, Schwarzenegger later abandoned his proposal to change to a defined contribution plan. Thus, California continues to operate under the defined benefit retirement system. Even the Golden State, however, is not immune to declining investment returns and rising pension costs and benefits due to demographics that demonstrate that it, too, will tackle pension reform in the near future. Consequently, California and other states should strongly consider offering the defined contribution plan to state employees as one measure to reduce the fiscal stress on their retirement systems.

### B. Mandatory Uniform Disclosure

In addition to sponsoring an optional or exclusive defined contribution retirement plan for public employees, states should enact uniform laws mandating periodic disclosure by those managing the public pension systems. Financial transparency is key. Without it, those with an interest in monitoring the system are unable to do so. The absence of mandatory review today is arguably one of the reasons for the state of emergency of most public pensions. Only meaningful review of state and local pensions can timely identify underfunding issues and facilitate solutions.

The uniformity of the disclosure laws across the country also aids understanding and enables governments to better solve their pension problems. As discussed in Part II, pension funds vary widely, with different sets of laws for each system. The laws differ with respect to vesting requirements, fiduciary standards, and reporting rules. Adopting the same criteria for reporting within and between states allows a comprehensive comparison of each separate system. It may also serve as a check on government action that may weaken pension systems, such as when states borrow from...
public pension funds or reduce contribution rates. n142

Even before the current crisis in public pension systems, the goal of transparency - to permit public monitoring - led the National Conference of Commissioners on Uniform State Laws [*330] to approve the Uniform Management of Public Employees Retirement Systems Act (UMPERS) in 1997. n143 UMPERS establishes the standards of fiduciary conduct and the disclosure duties of public pension funds. n144

The reporting obligation requires three types of reports to be produced and distributed by each retirement system: a summary plan description, an annual disclosure of financial and actuarial status, and an annual report. n145 The summary plan description provides an explanation of the retirement program and its benefits. n146 It must be distributed to plan participants and beneficiaries and made available to the public. n147 The annual disclosure of financial and actuarial status is a more detailed compilation of the retirement system and its financial position. n148 Due to the costs involved in gathering such information, the disclosure need not be published. n149 It must, however, be available at the principal office of the system and at a central repository where reports of all systems in a state are filed. n150 The annual report must contain specific financial and actuarial information. n151 It has the same wide distribution requirements as the summary plan description. n152

Despite the importance and logic of the foregoing disclosure requirements, UMPERS has not been popular. To date, only Wyoming n153 and Maryland n154 have adopted the contents of [*331] the uniform law. n155 UMPERS should be adopted, or at minimum, state and local governments should enact their own financial disclosure reforms to protect the retirement savings of their public employees. These disclosures should include periodic statements of account balances, other important information specific to the employee's retirement plan, and the availability, if any, of alternative plans. n156

Obviously, both of the foregoing reforms are long-term solutions to the problem of public pension underfunding. In the short-run, state governments must contribute more money to their pension funds to accommodate participants still within their defined benefit systems. n157

Conclusion

Compared to pensions in corporate America, there has been relatively little research on the financial status of government pensions. n158 Yet the 2005 Wilshire Report shows that public plans are confronting even more serious and pressing retirement issues than private plans. n159

[*332] It is significant that nine of the ten largest pension funds in the United States are public pensions. n160 These funds hold more than $2 trillion in assets and affect the lives of over seventeen million Americans. n161 Public pensions also have a long tradition in this country. They were offered for the first time to veterans of the Revolutionary War and have since become part of our national history. n162 In exchange for better retirement earnings, workers employed in the public sector often accept lower pay to do the same job as in the private sector. n163 To date, historical evidence supports the idea that their expectations have not been unreasonable. n164 But the retirement savings of public workers are no longer secure. The Wilshire study data now available discloses that state government employees are at risk regarding their retirement plan benefits.

This article suggests that sponsoring defined contribution plans will help close the divide between decreasing assets and increasing liabilities to restore the long-term financial health of public pensions. It also supports the enactment of state uniform disclosure laws so that pension funds will be subject to an ongoing meaningful review.

Various statistics were analyzed to identify the problem. Legal reforms were proposed as part of the solution. Of course, to what extent these reforms will be adopted rests, not in the realm of law, but in politics. Like the same transformation occurring in the private sector, a shift from the defined benefit modality to a defined contribution one will revolutionize the way state [*333] employees experience and contemplate retirement. n165 Therefore, the question
of public pension liability will ultimately be answered as a matter of public policy.

Legal Topics:

For related research and practice materials, see the following legal topics:

FOOTNOTES:


n2. Id. at 1; see also id. at app. A (listing retirement systems included in the study). There are 2,670 public retirement systems for state and local employees in the United States. U.S. Census Bureau, U.S. Dept. of Commerce, Employee-Retirement Systems of State and Local Governments: 2002, at 14 (2004).


n4. Id. at 4 (reporting fifty-four of sixty-four systems are underfunded). 102 of the 109 systems reporting data for 2003, or 94%, are also underfunded, with collective liabilities exceeding assets in the amount of $ 375.6 billion. Id. at 3-7.

n5. Id. at 3.


n7. See 2005 Wilshire Report, supra note 1, at 4. The report includes only state-sponsored defined benefit retirement systems. Id. at 3.
n8. See, e.g., Alicia H. Munnell & Annika Sunden, Coming Up Short: The Challenge of 401(k) Plans 2 (2004); see also discussion infra Part I.B.

n9. See, e.g., Edward A. Zelinsky, The Defined Contribution Paradigm, 114 Yale L.J. 451, 457 (2004); see also discussion infra Part I.A.

n10. See 2005 Wilshire Report, supra note 1, at 4-5 (relating funding ratios based on actuarial value of assets). Market value funding ratios dropped dramatically between 2000 and 2002 and remained relatively flat over the next two years. Id. at 5.

n11. See id. at 4. Underfunded plans based on actuarial value also increased from 53% in 2000 to 77% in 2004. Id.

n12. While state governments are arguably a good credit risk and may find ways to finance the retirement of their workers from other public resources, taxpayers ultimately suffer the repercussions of poorly performing public pension funds. The Other Pension Crisis, Wall St. J., Aug. 18, 2006, at A14 ("Public pensions only have one source of money - the taxpayer."). In the interim, low funding levels negatively impact tax rates, property values, investment ratings on government bonds, and salary negotiations with public employees. Stephen P. D'Arcy et al., Optimal Funding of State Employee Pension System, 66 J. Risk & Ins. 345, 345 (1999).

n13. The article discusses the status of retirement systems in Arizona, California, Colorado, Florida, Georgia, Hawaii, Illinois, Kansas, Nevada, Mississippi, New Jersey, North Carolina, Ohio, Oklahoma, South Carolina, and West Virginia.

n14. See Olivia S. Mitchell et al., Developments in State and Local Pension Plans, in Pensions in the Public Sector 11, 15 (Olivia S. Mitchell & Edwin C. Hustead eds., 2001). Plans are different because they cover employees with different characteristics. For the police and firefighters whose jobs are physically demanding, retirement plans provide for retirement at earlier ages in order to preserve a younger workforce. Id. Social security will also affect retirement benefits. Those systems whose participants do not pay social security will have higher retirement benefits to make up for not receiving social security benefits. Id. Teachers typically accrue benefits after thirty years of service and receive 57.7% of the final average salary, while public safety workers generally receive 66.6% of the final average salary. Id. at 20-21.

n15. Id. at 11. Ninety percent of public employee plans are defined benefit plans. Gordon Tiffany, Public Employee Retirement Planning,
n16. See Zelinsky, supra note 9, at 456-57.

n17. Edward A. Zelinsky, The Cash Balance Controversy, 19 Va. Tax Rev. 683, 687-91 (2000); see also Schweizer Aircraft Corp. v. Local 1752, 29 F.3d 83, 84 (2d Cir. 1994) (providing details of a private defined benefit plan). The final-pay provision bases benefits on earnings averaged, for example, over the last three years of employment or over the three consecutive years in a ten-year period immediately prior to retirement in which earnings are the highest. Compare California’s relatively simple state retirement system formula - 2% x Years of Service x Final Average Salary - with Ohio’s more complicated formula - 2.2% x Final Average Salary x Years of Service up to thirty years and 2.5% x Final Average Salary x Years of Service after thirty years. National Education Association, Characteristics of Large Public Education Pension Plans 60, 63 (2004), available at http://www.nea.org/takenote/images/char2004.pdf. Another common method is the career-pay provision that bases benefits on earnings averaged over the entire career of employment. For an explanation of the various types of defined benefit formulas used in calculating plan benefits, see Everett T. Allen et al., Pension Planning: Pension, Profit-Sharing, and Other Deferred Compensation Plans 229-34 (9th ed. 2003), as well as Comm. on Retirement System Research, Society of Actuaries, Survey of Asset Valuation Methods for Defined Benefit Pension Plans (2001), available at http://www.soa.org/ccm/content/?categoryID=1079102 (surveying asset valuation methods used in Canada and the United States for defined benefit plans).

n18. See Allen et al., supra note 17, at 441-53. Other funding instruments to hold and accumulate assets (besides trusts) include custodial accounts or insurance company contracts. Id.

n19. See Edwin C. Hustead & Olivia S. Mitchell, Public Sector Pension Plans: Lessons and Challenges for the Twenty-First Century, in Pensions in the Public Sector, supra note 14, at 5, 8; Jun Peng, Public Pension Funds and Operating Budgets: A Tale of Three States, 24 Pub. Budgeting & Fin. 59, 64 (2004). Board of trustee composition at state and local pension systems falls into three categories depending on how they were selected: plan member-elected, politically appointed by the governor or legislative committee, or ex officio trustees who serve because they hold a particular public office such as the state treasurer or controller. David Hess, Protecting and Politicizing Public Pension Fund Assets: Empirical Evidence on the Effects of Governance Structures and Practices, 59 U.C. Davis L. Rev. 187, 195 (2005); see also Michael Useem & David Hess, Governance and Investments of Public Pensions, in Pensions In The Public Sector, supra note 14, at 132 (noting that state retirement systems differ in the use of external or in-house money managers, board oversight of investment strategy, and investment performance of public plan assets).

n20. Zelinsky, supra note 9, at 454.

n22. Zelinsky, supra note 9, at 457.

n23. Id.


n25. Zelinsky, supra note 9, at 470; see also Allen et al., supra note 17, at 52-54 (listing various kinds of defined contribution arrangements, such as the 401(k) plan). The percentage of employees participating in defined contribution plans is roughly double that of defined benefit plans. Zelinsky, supra note 9, at 470. The assets held by employer-sponsored defined contribution plans also exceed the assets of defined benefit arrangements by $2.1 trillion. Id. at 470-71. For an analysis of the workplace and market trends that have contributed to the popularity of defined contribution plans, see Allen et al., supra note 17, at 424-25.

n26. See Hess, supra note 19, at 189 n.9; see also Staff, Profiles of the Top Public Defined Contribution Plans, Pensions & Investments, Mar. 31, 2003, at 16-18; see also discussion infra Part III.A.

n27. Zelinsky, supra note 9, at 455.

n28. Munnell & Sunden, supra note 8, at 2; Forman, supra note 24, at 193-94. However, an employer should structure an appropriate investment program, select suitable investment managers, monitor investment performance, and communicate critical investment provisions to employees. See Allen et al., supra note 17, at 436.

n29. Zelinsky, supra note 9, at 454.

n30. Id. at 455 (noting that defined benefit plans are a fixed cost unrelated to profitability).
n31. Employers are better able to absorb the risks of investment performance due to economies of scale resulting in lower transaction costs and the ability to average out investment results among a number of retirees. See Daniel Halperin, Employer-Based Retirement Income - the Ideal, the Possible, and the Reality, 11 Elder L.J. 37, 61 (2003). There is also some evidence to suggest that employers are better at managing investment accounts than their employees. See Richard L. Kaplan, Enron, Pension Policy, and Social Security Privatization, 46 Ariz. L. Rev. 53, 83 (2004). In public pension systems, however, empirical studies suggest otherwise. See Paul Myners, Institutional Investment in the United Kingdom: A Review (2001), available at http://www.hm-treasury.gov.uk/media/843F0/31.pdf. In fact, the most recent study of state and local pension systems in the United States proposes not only to minimize the political pressures on the governing boards of trustees of public pensions by changing their composition, but also, to improve their training. See Hess, supra note 19, at 216-20. For advice on investment objectives and guidelines for investment managers or boards, see Allen et al., supra note 17, at 402-05.

n32. See, e.g., Allen et al., supra note 17, at 441-53; Munnell & Sunden, supra note 8, at 2; see also Patrick J. Purcell, Cong. Research Serv., Library of Cong., Pension Issues: Lump-Sum Distributions and Retirement Income Security (2003) (noting that a typical twenty-five-year-old today will work for seven or more employers before reaching retirement age).


n34. Munnell & Sunden, supra note 8, at 2-3. Defined benefit plans can also be designed to provide distribution in one lump sum, but most do not. See Zelinsky, supra note 9, at 473-74. For a discussion of employer flexibility in plan design, see Allen et al., supra note 17, at 25-43.

n35. Jeffrey R. Brown et al., Mortality Risk, Inflation Risk, and Annuity Products, in Innovations in Retirement Financing (Olivia S. Mitchell et al. eds., 2002); Zelinsky, supra note 9, at 463.

n36. See Colleen E. Medill, Challenging the Four "Truths" of Personal Social Security Accounts: Evidence from the World of 401(k) Plans, 81 N.C. L. Rev. 901, 959 (2003) ("Annuity providers will price the traditional annuity at a higher cost to account for this systematic increased risk of longevity among purchasers of traditional annuities."); see also Zelinsky, supra note 9, at 463-64 (noting that the option is rarely used).

n37. Under either the defined benefit or the contribution plan, the deferral of income taxation until retirement benefits the retiree by providing a higher after-tax return on investment earnings and a lower tax bracket on distribution due to the fact that the retiree is no longer working. See, e.g., Daniel I. Halperin, Interest in Disguise: Taxing the "Time Value of Money", 95 Yale L.J. 506 (1986).
n38. See discussion supra Part I.A.

n39. See Lawrence A. Frolik & Kathryn L. Moore, Law of Employee Pension and Welfare Benefits 34-35 (2004); see also discussion supra Part I.A.

n40. See Allen et al., supra note 17, at 401-02; see also Zelinsky, supra note 9, at 458-65 (comparing defined benefit and contribution arrangements based on the risks of investment, funding, and longevity (i.e., that a participant will outlive his or her retirement resources)). For evidence that states are omitting or reducing contributions to their pension funds, see John E. Petersen, In an Era of Uncertainty, States and Localities are Looking to Some Unusual Options, Governing, June 2004, at 54, 55-56, as well as Janice Revell, The $366 Billion Outrage, Fortune, May 31, 2004, at 130.

n41. See, e.g., Useem & Hess, supra note 19, at 132.

n42. See 2005 Wilshire Report, supra note 1, at 3.

n43. See generally 2005 Wilshire Report, supra note 1; see also id. at 3 (noting that even for those systems seeking to report in a timely manner, it often takes six months to a year for actuaries to determine values).

n44. See id.; see also Mitchell et al., supra note 14, at 23-25 (discussing various methods used by actuaries to determine pension plan liabilities).

n45. National Education Association, supra note 17, at 70-71. For instance, in retirement systems for teachers, different actuarial methods for calculating retirement benefits include age at entry, projected unit credit, and aggregate cost. See id. at 70-77. Assumed inflation rates ranged from 2.5% to 5% and assumed interest rates ranged from 7% to 12.9%. See id.

n47. See 2005 Wilshire Report, supra note 1, at 3; Mitchell et al., supra note 14, at 25.

n48. See 2005 Wilshire Report, supra note 1, at 3. The actuarial value of assets is often determined using a smoothing method to reduce the effects of market volatility when calculating contribution rates. See id. at 9. For an explanation of the different valuation methods (current market, actuarial, or variations of the two), see Allen et al., supra note 17, at 253-54.

n49. See 2005 Wilshire Report, supra note 1, at 3.

n50. Id.

n51. Id.

n52. See id. at 1; see also supra note 4 and accompanying text.

n53. See 2005 Wilshire Report, supra note 1, at 1; see also supra note 5 and accompanying text.

n54. See 2004 Wilshire Report, supra note 6, at 1.

n56. Id. (showing the increase in underfunded plans in terms of market value of assets).

n57. Id. (reporting that underfunded plans based on market value of assets declined from 97% to 84%). The number of underfunded plans based on market value of assets doubled from 2000 to 2004. Id. The number of underfunded plans based on actuarial value of assets remained steady at 77% between 2003 and 2004. Id.

n58. The funding ratio based on actuarial value of assets declined from 87% in 2003 to 85% in 2004. See id. The funding ratio based on market value of assets increased from 77% in 2003 to 83% in 2004. Id.

n59. See Projections Branch, U.S. Census Bureau, State Interim Population Projections by Age and Sex: 2004-2030 tbl. 4 (2005), available at http://www.census.gov/population/projections/PressTab4.xls (projecting the change in the total population of the United States between 2000 and 2030 at 29.2% and the change in the population of those sixty-five years and older at 104.2%).

n60. See id. at tbl. 5 (providing the number of elderly persons sixty-five years and older for 2000 and making projections for 2010 and 2030).


n64. Id. at 2.

n65. Id. at apps. B, C (showing market value of assets). The latest 2005 Wilshire Report did not contain this information.

n66. Id. at app. C (indicating ratio of assets at market value to liabilities).

n67. Id.

n68. Id. at 6.


n70. Kan. Public Employees Retirement System, Long-Term Retirement Funding Update (July 20, 2005), (on file with authors) (listing the state group with the highest funding level and the school group with the lowest). The report cites 2001 and 2002 investment losses as one of the reasons for the decline. Id.


n73. Ill. Teachers' Retirement System, General Information Administration, http://www.trs.state.il.us/subsections/general/admin.htm (last visited Feb. 8, 2007) (2003 statistics were available on the same website as of May 2005); see also 2004 Wilshire Report, supra note 6, at 6 (Exhibit 5). The worst state retirement system for teachers in 2003 was West Virginia with a 19% funding ratio. See id. Indiana (42%) and Oklahoma (49%) were also at the bottom in terms of funding. Id.


n76. 2005 Wilshire Report, supra note 1, at 4.

n77. 2004 Wilshire Report, supra note 6, at 8.

n78. Id. Mississippi (210%), Oklahoma (206%), Illinois (197%), and Colorado (196%) round out the bottom five. Id.

n79. Id. at 7-9; see also id. at app. E. Another metric to measure the financial health of retirement systems is found by comparing the size of the unfunded actuarial accrued liability (UAAL) relative to covered payroll. Statistics from 2000 to 2005 show that the UAAL increased as a percentage of payroll, indicating the deteriorating financial condition of most state systems. See 2005 Wilshire Report, supra note 1, at 7-8 (Exhibit 7).

n80. The Governor's Pension Commission, Pension Reform Report and Recommendations 3 (2005), available at http://www.state.il.us/budget/Pension%20Commission%20Final%202.11.05.pdf [hereinafter Governor's Pension Commission] (The Governor's Pension Commission was mandated by Illinois State Governor Rod Blagojevich.). These plans include the Downstate Teachers' Retirement System (TRS), State Universities Retirement System (SURS), State Employees' Retirement System (SERS), General Assembly

n81. See Hynes, supra note 80.

n82. Governor's Pension Commission, supra note 80, at 3.

n83. Id. at 7.

n84. Hynes, supra note 80.

n85. Id.

[The Downstate Teachers' Retirement System] holds over half of the assets and is responsible for over half of the liabilities. At the end of the fiscal year 2004, TRS had a 61.9% funded ratio with $ 50.9 billion in liabilities, $ 31.5 billion in assets, and $ 19.4 billion in unfunded liabilities. SURS had a 66.0% funded ratio with $ 12.6 billion in assets versus $ 19.1 billion in liabilities and SERS had a 54.2% funded ratio with $ 10.0 billion in assets and $ 18.4 billion in liabilities.

Id.

n86. See 2004 Wilshire Report, supra note 6, at app. B. The state itself ranks second to last by funding ratio. See id. at app. C.

n87. Governor's Pension Commission, supra note 80, at 4. The mandate of the Governor's Pension Commission was to review the financial condition of the State of Illinois's Retirement Systems and make recommendations to improve the financial condition and affordability of the system. Id. at 2.
n88. 2004 Wilshire Report, supra note 6, at 8 (Exhibit 8).

n89. Governor's Pension Commission, supra note 80, at 8-9.

n90. Id. at 8.

n91. Id. at 9.

n92. Id. at 8.

n93. Id.


n95. Id.


n97. See The Top 200 Pension Funds/Sponsors, Pensions & Investments, Jan. 24, 2005, at 16-18 (ranking the top two hundred pension funds and sponsors by total assets).

n99. See discussion infra Part III.A (discussing the proposed constitutional amendment to change new public employee pensions from defined benefit to defined contribution plans).

n100. Governor's Pension Commission, supra note 80, at 3. The bond issue provided $2.16 billion in state contributions for years 2003 and 2004. The balance contributed $7.3 billion toward reducing the five public employee retirement systems' unfunded liabilities. Id.

n101. Id.

n102. Richman, supra note 98. Other public pension systems have been spotlighted recently for poor financial behavior. See Editorial, Pension Fund Shenanigans, Wall St. J., Aug. 20, 2004, at A12 (discussing trustee mismanagement costing state pension systems multiple millions of dollars); The Other Pension Crisis, supra note 12, at A14 (detailing SEC report regarding San Diego's pension fund scandal).

n103. Richman, supra note 98. A bond, in effect, forces the state to make necessary contributions to plans but burdens it with debt payments for the contributions, which last to the bond's maturity.

n104. Id.


n106. See Richard W. Johnson, Pension Underfunding and Liberal Retirement Benefits Among State and Local Government Workers, 50 Nat'l Tax J. 113 (1997) (discussing that state and local pensions have an incentive to underfund pension systems because residents will leave the community before benefits are paid).
n107. See, e.g., The Other Pension Crisis, supra note 12, at A14 ("The long-term solution is for government to follow the private sector and wean public workers from the defined-benefit pension model to a defined-contribution plan where an individual worker owns and controls his [or her] own retirement investments."). Incremental improvements may be made by increasing employer and employee contributions or by other measures. Arizona, for instance, increased employer and employee contribution rates in its retirement system, from 7.4% to 9.1%, due to past benefit increases, lower investment returns, and the changing demographics. See Ariz. State Retirement System, ASRS Weekly Report (June 16, 2006), available at http://www.azasrs.gov/web/pdf/weekly reports/20060616.pdf. In order to address solvency issues without using taxpayer dollars, the Colorado Public Employees Retirement Association (PERA) employee-members gave up 3% of their cost of living raises over the next six years, and future PERA members must work an additional five years to become eligible for retirement. Lynn Bartels, 'Win-win' Pension Deal: Owens, Lawmakers Reach Pact, Avoid Tax Rescue of PERA, Rocky Mtn. News, May 6, 2006, at 4A (discussing Colorado Senate Bill 235). These and other reforms (including the offering of defined contribution plans) are expected to solve the system’s $11.3 billion in underfunding by 2051. Id.

n108. Other reforms may be important as well, depending on the situation of any given retirement system. Recent legal scholarship suggests that reforming the structure of public pension boards may contribute to the financial security of state systems. See generally Hess, supra note 19.


n110. See Clark & Pitts, supra note 33, at 44 (concluding that older new hires at a public university were more likely to enroll in the defined benefit plan).

n111. See Zelinsky, supra note 17, at 720.

n112. Zelinsky, supra note 9, at 482-508. Defined contribution plans have been called "individual account" plans because an employer pays into a separate employee account. See 1 Gary I. Boren & Norman P. Stein, Qualified Deferred Compensation Plans §1:6 (2001).

n113. Zelinsky, supra note 9, at 457-58 ("The shift from the defined benefit modality to the defined contribution one has altered in a
fundamental manner the way in which Americans experience and think about retirement savings."); see also Theo Francis, DuPont Aims to Slash Pension Plan, Wall St. J., Aug. 29, 2006, at A2 (discussing DuPont's decision to move from a defined benefit plan to a defined contribution plan for the "principal reason" of being "competitive in the workplace" and being able to "attract and retain employees").


n115. Munnell & Sunden, supra note 8, at 3. These authors note that 58% of households rely exclusively on defined contribution plans, 19% rely exclusively on defined benefit plans, and 23% participate in both types of retirement plans. Id. at 1-2 n.1. For a history of private pension funds, see Robert L. Clark, Lee A. Craig & Jack W. Wilson, A History of Public Sector Pensions in the United States 5-6 (2003) (discussing early company pensions provided by General Electric and American Express) and James A. Wooten, “The Most Glorious Story of Failure in the Business”: The Studebaker-Packard Corporation and the Origins of ERISA, 49 Buff. L. Rev. 683, 686 (2001) (noting that comprehensive pension coverage in the private sector did not begin until the end of World War II when approximately 20% of corporate employees participated in a pension plan).

n116. Private employers find defined benefit hybrid plans attractive in part due to the tax penalty potentially incurred should they convert to a defined contribution plan. See generally 26 U.S.C. §4980 (2000) (requiring an employer to pay income tax on overfunded plans and a 50% tax penalty). Hybrid plans include pension equity plans, life cycle pension plans, and the popular cash balance plan. See Allen et al., supra note 17, at 345-53. Cash balance plans create hypothetical accounts for employees based on their contributions at a specified rate of interest. Id. at 345-46. If the account earns more interest on the funds, the employer keeps the excess. If the account earns less interest, the employee is still guaranteed the specified interest rate. See Treas. Reg. §1.401(a)(4)-8(c)(3)(i) (2001). For further discussion of cash balance plans, see Zelinsky, supra note 17, at 683; see also Daniel J. Sennott, Note, Finding the Balance in Cash Balance Pension Plans, 2001 U. Ill. L. Rev. 1059 (2001).


n120. PBGC pays a monthly amount up to a statutorily defined pension benefit "just under $44,000 for pensions beginning at age 65 and significantly less for pensions beginning earlier." Iwry, Hearing Before the H. Comm. on Education and the Workforce, supra note 119, at 50. PBGC may also obtain a court order to terminate a plan the employer has not voluntarily terminated. Id.


n124. Hustead & Hustead, supra note 123, at 66-70. The Board of Actuaries for the federal retirement system estimates that by 2015, over 95% of federal employees will be covered under the 1986 plan. Id.
n125. In states that continue to offer the conventional defined benefit plan, many are offering a supplemental defined contribution plan. See I.R.C. §457 (2002); see also Zelinsky, supra note 9, at 505 (discussing government use of I.R.C. §457 plans).

n126. Fla. Retirement System, Summary Plan Description: FRS Investment Plan 6 (2005). The new contribution plan requires a 9% employer contribution and no employee contributions. Id. The defined contribution plan has more favorable vesting rules than the defined benefit plan. Vesting under the former plan occurs after one year of service while the latter plan requires six years of service. Id.

n127. Id. Perhaps due to the lack of education concerning the contribution plan, but see Press Release, Florida State Board of Administration, Update on Choice in the Florida Retirement System (Dec. 31, 2006), available at http://www.sbafla.com/pdf%5Cnews%5CUpdate%20on%20Choice.pdf (discussing financial guidance program and ongoing efforts to help employees make informed retirement plan choices), less than 5% of participants chose to transfer to the defined contribution plan. Id. at 3.

n128. Id. Between September 2002 and June 2003, eight percent of new participants chose the defined contribution plan. See id. at 4. Twenty percent actively elected the same plan from July through December 2006. Id. at 3-4.


n130. Bartels, supra note 107, at 4A.


N132. Governor's Pension Commission, supra note 80, at 15.

n133. See discussion supra Part II.C.
n134. Governor's Pension Commission, supra note 80, at 15.

n135. Id.

n136. See discussion supra Part II.D.


n140. Due to the failing financial health of pensions in the private sector, proposed regulatory initiatives and the newly enacted legislation also contain additional disclosure rules. See Pension Protection Act of 2006, supra note 114, at tit. 5; see also H. Comm. on Education & the Workforce, 109th Cong., Bill Summary of the Pension Protection Act (H.R. 2830): Strengthening Retirement Security, Protecting Taxpayers by Fixing Outdated Worker Pension Laws (Mar. 8, 2006); But see Hess, supra note 19, at 218 (noting empirical evidence to suggest that at least some automatic disclosure to members may have negative implications on fund financial performance); see also Ricardo Bayon, Show Us The Money: Lawsuits are Prying Open the Hidden Investments of Public Pensions, But Disclosure Comes at a Price, Legal Aff., May-June 2005, 23 (discussing benefits and pitfalls of several lawsuits in California, Texas, and Michigan that are aimed at state university pension funds and prompting disclosure of their financial performance).

n141. See generally Cynthia L. Moore, Public Pension Plans: The State Regulatory Framework (2d ed. 1993) (discussing various disclosure and reporting requirements in states). In a survey of state and local government pension funds by the Government Finance Officers...
Association and the Public Pension Coordinating Council, 90% had an annual report, but half of those systems distributed it only on demand. Hess, supra note 19, at 191, 210.

142. See Olivia S. Mitchell & Robert S. Smith, Pension Funding in the Public Sector, 76 Rev. Econ. & Stat. 278, 278 (1994) (discussing state government borrowing from public pension funds); Peng, supra note 19, at 68-69 (explaining how New York City used a pension fund surplus in the late 1990s to reduce its contribution to the fund that then became underfunded); John M. Broder, Sunny San Diego Finds Itself Being Viewed as a Kind of Enron-by-the-Sea, N.Y. Times, Sept. 7, 2004, at A14 (creating a $1.15 billion pension deficit due to the diversion of plan assets in San Diego). The extent to which state governments use their pension funds for other budgetary matters is controversial. Compare Hess, supra note 19, at 204 (reviewing studies that "consistently show that state and local governments use their pension funds as safety valves") with Alicia H. Munnell & Annika Sunden, Investment Practices of State and Local Pension Funds: Implications for Social Security Reform, in Pensions in the Public Sector, supra note 14, at 153, 174 (concluding that it is a rare occurrence and usually corrected).


144. See Willborn, supra note 143, at 141.


146. See id. §16.

147. See id. §13(b)(2)-(3); see also id. §14(a)(1)-(3).

148. See id. §17.
n149. See id. §§13(b), 14.

n150. See id. §18.

n151. See id.

n152. See id. §§13(b)(5), 14(a)(4).


n154. Interestingly, Maryland's pension fund management had been subject to public scrutiny. See, e.g., Stephanie Hanes, Chapman Draws 7-Year Prison Term, Baltimore Sun, Nov. 2, 2004, at 1A; Michael Dresser & Jon Morgan, Md. Pension Trustees Are Often Absent, Baltimore Sun, Nov. 18, 2001, at 1B; Jon Morgan et al., Questions Abound in Pension's Fiscal Skid, Baltimore Sun, Nov. 15, 2001, at 1A.


n157. In addition to bond financing, see discussion supra notes 100-05 and accompanying text, options include raising taxes as well as reducing benefits and/or delaying their commencement. Cf. Anenson & Lahey, supra note 122, at 527-28 (proposing lowering private pension insurance benefits to maintain the financial integrity of the Pension Benefit Guaranty Corporation). Similar suggestions have been made to cure the financial insecurity of the Social Security system. See Henry J. Aaron, Social Security: Tune It Up, Don't Trade It In, in
n158. D’Arcy et al., supra note 12, at 347 (comparing the volume of research done on private pension funding with the lack of research on state pension funding).

n159. 2005 Wilshire Report, supra note 1, at 1.


n161. U.S. Census Bureau, supra note 2, at 16-17. Over three million state and local employees receive retirement benefits and another fourteen million employees participate in these systems. Id. at 17.


n163. See Johnson, supra note 106, at 113.

n164. Id. The ratio of pension benefits to earnings is twice as high in the public sector as it is in the private sector. See id. at 114 (noting that pension wealth is 80% higher for state employees compared to their private employee counterparts).

n165. See Zelinsky, supra note 9, at 454 (“While the emergence of the defined contribution society has been a quiet, largely unheralded revolution, a revolution it has been, incrementally but fundamentally changing the manner in which Americans think about tax and social..."
policy and in which their governments formulate such policy."); see also id. at 457-58, 469.