ISSUE BRIEF
October 2008

NATIONAL INSTITUTE ON
Retirement Security
Reliable Research. Sensible Solutions.

Look Before You Leap
The Unintended Consequences of Pension Freezes
By Ilana Boivie and Beth Almeida

Introduction

Americans are increasingly worried about their retirement security in the face of falling home values, turmoil in the financial markets, and general economic instability. This insecurity can, at least in part, be attributed to the fact that fewer workers and retirees are able to count on a secure, predictable monthly pension, as more employers in the private sector have "frozen" participation in their pension plans. The trend away from traditional defined benefit pension plans in the private sector in favor of individual retirement savings accounts (such as those found in defined contribution plans) has left Americans especially vulnerable to the volatility in financial markets.

With the economy becoming weaker, many state and local governments will be facing fiscal challenges in the months and years ahead. These challenges will undoubtedly prompt governments to carefully examine all aspects of their budgets, including pension costs for state and local workforces. Policymakers may be wondering, "Are secure retirement benefits for our employees still affordable?" or "Should we consider shifting to a defined contribution approach?"

This brief explores important factors public employers should keep in mind when making decisions about their retirement programs. We conclude that caution should be the watchword for governments that might be tempted to follow the trend in the private sector to abandon defined benefit (DB) pensions in favor of defined contribution (DC) plans.

Key Findings

We find that freezing DB plans can have several serious, unintended consequences.

- Freezing a DB pension and moving to a DC plan can increase costs to the employer/taxpayer at exactly the wrong time. This is because …
    - Maintaining two plans is more costly than operating just one;
    - Forgoing and undermining the economic efficiencies of DB pensions drives up retirement plan costs; and
    - Accounting rules can require pension costs to accelerate in the wake of a freeze.
- Freezing a DB pension and moving to a DC plan can worsen retirement insecurity, potentially damaging recruitment and retention efforts.

Because of this, most states that have studied whether to freeze a DB and switch to a DC plan have found continuation of the DB plan to be in the best interests of employers/taxpayers and employees.

The Anatomy of a Pension Freeze

An employer "freezes" a pension plan when it limits the ability of employees to earn benefits in the plan. An employer may have the option to "freeze" a pension by ending benefit accruals in the plan for all employees (sometimes described as a "hard freeze"), or to close the plan to newly-hired employees only (a "soft freeze"). Generally speaking, employers in the private sector have some latitude in deciding whether and how to freeze a plan. In the public sector, because of differences in the legal protections of benefits, employers are often limited to restricting freezes to new hires (soft freezes). Many employers have established new DC plans (or enhanced existing DC plans) in the wake of a pension freeze.

According to the Government Accountability Office (GAO) nearly half of private sector DB pension plans are currently closed to new entrants.[1] Although employers often establish a new DC plan after freezing a DB pension plan, researchers have found that the replacement DC plans typically offer much less generous benefits than the DB plans being frozen.[2] Thus, given the high number of firms choosing to freeze their plan, it appears that fewer and fewer workers will receive secure retirement benefits in the future.[3] When DB pension plans are frozen, workers can experience grave consequences. Although the precise impact of a DB to DC switch hinges on specific plan provisions and benefit formulas, in general, mid-career and older workers will see the largest reductions in retirement income when a DB pension is frozen and replaced with a DC plan.[4]

In contrast to the unfortunate chill that has settled in over private sector DB pension plans, public sector plans are still faring well. Some 80 percent of public sector workers are still covered by a traditional pension, and, according to a recent GAO report, the majority of public sector pension plans have been fiscally sound, with a funded ratio of 80 percent or higher.[5] The consulting firm Wilshire Associates found that funding levels for 125 state pension plans increased to 95 percent in 2007 from 88 percent in 2006.[6]

Despite the health of pension plans in recent years, state or local governments may be looking down the road to a tighter budget environment, especially in these tough economic times. When this occurs, proposals can surface to freeze DB pension plans and switch to DC plans as a way to save money. However, a careful examination of just what a plan freeze entails shows that freezing the plan will typically cause costs to *increase* significantly in the short run—not exactly the desired result for a state or municipality that is already in economic turmoil.

Freezing a Pension Plan Can Increase Costs

Freezing a DB and moving to a DC plan can actually increase costs to public sector employers (and therefore, taxpayers) for several reasons.

First, there is the simple fact that maintaining two plans is more costly than operating just one. State and local governments typically do not have the option of transferring all employees out of a DB plan and into a new DC plan. Because of legal protections, it is often the case that only newly-hired employees may be "frozen out" of a DB plan in the public sector.[7] This means the employer/ taxpayer will have to bear administrative costs for two plans, at least until the DB plan is finally phased out completely, a process that could take many decades as employees in the system complete their careers, retire, and ultimately die.

Second, employers that switch to DC plans will forgo the built-in economic efficiencies inherent in DB plans, and freezing a DB plan will actually undermine the economics of a frozen plan over time. The economic efficiencies embedded in DB plans are substantial and stem from the pooled, professionally managed nature of these plans. DB plans save money by pooling risks and achieving greater investment returns, as compared with DC plans. According to one estimate, a DB plan can provide the same retirement income at about half the cost of a DC plan.[8] Thus, when a DB plan is frozen and replaced with a DC plan, far greater contributions from both employers/taxpayers

and employees will be required to maintain the same level of benefit in the DC plan.

Of course, employers/taxpayers could save money by cutting retirement benefits, but by forfeiting the economic efficiencies embedded in DB plans, a switch to a DC will entail an even greater reduction in benefits than what would otherwise be required if benefits in the DB plan were modified. Moreover, benefit cuts (whether within a DB plan or as part of a DB-to-DC switch) would not be without repercussions (a point to which we return later).

Worse still, the frozen DB plan will, over time, see its economic efficiency erode. This is because freezing the plan prematurely accelerates the age profile of the plan, which can force changes to how the plan's assets are invested.

To illustrate this process, consider the advice that individuals in DC plans typically receive to gradually change their investment mix as they approach retirement age, forgoing higher return/higher risk assets like equities in favor of lower return/lower risk assets like bonds. While this is done for a good reason (to protect against market shocks later in life) it necessarily involves the sacrifice of some expected return. Unlike individuals, open (i.e. non-frozen) DB plans do not age. An open DB plan will have a mix of younger, middle-aged, and older participants, and for a mature plan, this mix will not change much over time. This means that an open DB plan can achieve better returns by maintaining a more diversified portfolio over time, as compared with individuals in DC plans who must shift to a more conservative asset allocation as they get closer to retirement age. Freezing the plan sacrifices valuable investment earnings employers/ taxpayers could have profited from had newer hires still been covered by the plan.

The third reason why freezing a DB plan can drive up costs has to do with the accounting rules that govern public pension plans. These rules can cause an acceleration of required pension contributions—specifically, those to cover "unfunded liabilities"—in the wake of a freeze.

"Unfunded liabilities" exist in a DB plan when the value of assets in the pension trust is smaller than the value of plan's benefit obligations. A gap between the value of the assets in a plan and the plan's obligations can emerge for several reasons. For instance, unexpected events, such as a drop in the value of the fund's assets resulting from a shock to financial markets can lead to unfunded liabilities. But decisions on the part of the employer can also play a role—for instance an employer that fails to make required contributions to the plan, or that improves benefits in the plan without making commensurate contributions to pay for these, can also see unfunded liabilities develop in the plan.

Whether a DB plan is open or frozen, the obligation to pay for benefits earned in the past will remain. However, all the benefits in a pension plan do not become payable right away, because employees will only gradually become eligible to start drawing pension benefits. Accounting rules recognize this fact and allow these obligations to be paid for over time. But the Government Accounting Standards Board (GASB) does have rules prescribing exactly how this may occur.[9]

According to GASB, the payment period to fund these liabilities may be no more than 30 years and payments can be made either in level dollar amounts, or as a level percentage of the projected payroll of the active employees in the plan. In an open plan, payroll can be expected to continue to grow over time, as retiring employees are replaced by new hires, and average pay increases each year.

As a result, payment schedules in open plans can see the dollar amount of payments gradually increase, at the same rate as the growth in payroll. But once a plan is frozen to new entrants, the number of active members in the plan will steadily fall, as individuals retire, meaning an ever-smaller payroll base over which to spread payments. Because of this, accounting rules require that if a plan is frozen to new entrants, either the unfunded liability must be paid in level dollar amounts, or as a level percent of a decreasing payroll.

In practice, this means that payments to retire any unfunded liability in a frozen plan will tend to be more front-loaded, as compared with an open plan that spreads these costs over a growing payroll base. In other words, a pension freeze can have a similar effect of a household refinancing a 30-year mortgage into a 15-year mortgage. By making larger payments sooner, the debt is paid down faster. While a household may have good reasons to want to retire its mortgage debt sooner, it probably would not do so if it was experiencing a temporary economic rough patch. Similarly, accelerating pension payments is unlikely to be a helpful strategy for a state or local government looking for ways to manage through a difficult fiscal environment.

Accounting rule-driven spikes in pension contributions can be significant, as the State of Alaska found out when it froze participation in its DB plans in 2005. The freeze forced additional contributions to the Teachers Retirement System to the tune of 14% of payroll, and required contributions to the Public Employees Retirement System totaled an additional 9% of pay.[10] These amounts were on top of the contributions that were otherwise required.

Ultimately, when the additional costs involved in a DB plan freeze—and a DC implementation—are known and accounted for, such a drastic move can be revealed as not only unnecessary, but as counterproductive.

A DB to DC Switch Can Hurt Retirement Security for Employees, Recruitment/ Retention Efforts for Employers

As noted earlier, an employer can obviously reduce its pension costs by reducing the generosity of the benefits it offers, but doing so will have consequences. In theory, reducing employer costs by cutting benefits could be accomplished either by reducing benefits in a DB plan or as part of a switch to a DC plan. But the effect of any given reduction in employer cost will be more severe under a DB to DC switch than if benefits in the existing DB plan were reduced. Thus, a DB to DC plan switch will have a far worse impact on workers' retirement security. As a result, such a switch will likely have repercussions that impact negatively on recruitment and retention efforts.

The recent experience in West Virginia is instructive. In 1991, the West Virginia Teacher's Retirement System (TRS), a DB plan, was frozen, and all newly hired teachers were put into a new plan, the Teachers Defined Contribution Retirement System (TDC).[11] The impetus for the freeze was large unfunded liabilities in the DB plan, which were the result of the failure of the state and many of the county school boards to make required contributions to the pension system for many years. In fact, for some years, from 1979 onward, the state and many of the county school boards failed to match even employee contributions to the retirement fund.[12] West Virginia continued adding new teachers to the TDC plan until 2004, after the state's Consolidated Public Retirement Board realized that many teachers had amassed very little in the way of assets for retirement. The average TDC account balance stood at just $41,478, with a mere 105 of the 1,767 teachers over 60 years old having accumulated over $100,000. (An account balance of $100,000, if converted to an annuity, would provide a very modest monthly income of only about $600 starting at age 65.) The most common reason cited by the teachers and school personnel for these "pitifully small" balances was their unfamiliarity with investing.[13] The state, concerned that teachers with inadequate retirement income would require some form of governmental assistance—either in the form of an increased retirement benefit or welfare and Medicaid[14]—decided that effective June 30, 2005, all newly hired teachers would be enrolled in the traditional DB pension plan, TRS, which had historically proven to offer greater and more secure retirement income.[15]

The enhanced security offered by DB plans appears to be highly valued by public employees. Public employees consistently express strong preferences in favor DB plans, according to national public opinion polls.[16] And when public sector employees are given a choice between a

traditional DB pension and DC plan, overwhelmingly the workers choose the DB plan.

A mere 3.3% of employees, for example, in the Ohio Public Employee Retirement System (PERS) elected the DC plan over the DB pension when offered, while 63% of Washington State PERS members chose an all-DB plan over the default of a combined DB and DC plan.[17]

And, as lawmakers in West Virginia found out, the preference among state employees in favor of DB plans can actually work to the state's financial advantage as well. After the once-frozen DB plan (TRS) was reopened to new hires, the state allowed teachers who had been hired into the DC plan (TDC) to choose whether they wanted to remain in TDC, or switch over to TRS. The state's retirement board had estimated that 10 percent or fewer of younger teachers (under 40 years old) would opt back into the DB plan, given the widely held notion that DC plans are more popular among younger workers. But an overwhelming number of these younger teachers—over 75 percent of them—decided to make the switch back to the TRS. Because so many younger employees made the switch, this had the effect of reducing the cost of re-opening the DB plan. A far cry from its initial $78 million cost estimate, West Virginia is now estimating that the switch to the DB will actually save the state $22 million.[18]

These revealed preferences for DB plans suggest that the plans are very important in attracting and retaining public sector employees. Thus, experts warn that freezing these plans and switching to DC plans can hamper recruitment, and even result in high turnover rates, labor shortages, increased training costs, and lower levels of productivity.[19]

Studies Have Found that Freezing DB Plans and Switching to DC Costs More

Time after time, when states have studied whether to freeze a DB pension plan and move to a DC plan, they have found the cost of switching to be prohibitive. In Kansas, for example, a recent feasibility study found that moving to a DC plan would be significantly more expensive than a DB system, so a new, modified DB plan was implemented for new hires instead.[20]

A 2007 study conducted for the Employees' Retirement System of Rhode Island (ERSRI) found that, should the DB plan be frozen, the state would have to substantially *increase* payments to the ERSRI for several years in order to stay in compliance with governmental accounting rules. After some time, the study's authors found, payments to ERSRI may decline; however, they did not take into account any costs of administering or contributing to a replacement DC plan, costs that would undoubtedly offset much of these savings.[21]

In 2005, a similar study examined whether New Mexico should freeze its DB plan and adopt a DC plan for newly-hired teachers. It found that such a move could "not produce 'same or better' benefits," and that the change would result in either a decrease in retirement benefits, an increase in the plan's total cost, deterioration of the funded position of the frozen DB plan, or some combination of these three scenarios.[22]

Conclusion

Considering the costs and complexities of freezing DB plans and switching to DC plans, it is perhaps not surprising that most state and local governments have chosen to retain their pension plans. Although some public employers have had to make the difficult decision to reduce benefits because of tight budgetary constraints, they have generally found that modifying benefits within the existing DB pension framework has been the more cost effective option, rather than freezing the pension plan and instituting a new DC plan.

Certainly, the private sector trend of freezing DB plans and moving to DC plans is an unfortunate trend that has had serious, negative ramifications for many workers' retirement security prospects. The current economic turmoil has magnified this insecurity. Luckily, public sector employers can avoid the same regrettable results for their workforces by exercising caution, and allowing the facts to guide decision-making. In other words, policy makers are wise to look before they

leap, since freezing DB plans and switching to DC plans may carry unintended consequences.

Time and again, states that have carefully studied the issue have concluded that, even in tough economic times, continuing to provide retirement benefits via cost-effective DB plans meets the joint interests of fiscal responsibility for employers/taxpayers and retirement security for employees.

Endnotes

[1] U.S. Government Accountability Office. 2008. *Defined Benefit Pensions: Plan Freezes Affect Millions of Participants and May Pose Retirement Income Challenges*. GAO-08-817. Washington, DC: U.S. Government Accountability Office.

[2] Ghilarducci, T., & Sun, W. 2006. "How defined contribution plans and 401(k)s affect employer pension costs." *Journal of Pension Economics and Finance*, 5(2), 175-96. Blake, D. 2000. "Does it matter what type of pension scheme you have?" *The Economic Journal*, 110(461), F46-F81.

[3] The Pension Benefit Guaranty Corporation. 2005. *An Analysis of Frozen Defined Benefit Plans*. Washington, DC: The Pension Benefit Guaranty Corporation.

[4] Van Derhei, J. 2006. "Defined Benefit Plan Freezes: Who's Affected, How Much, and Replacing Lost Accruals." *EBRI Issue Brief No. 291*. Washington, DC: Employee Benefit Research Institute.

[5] U.S. Government Accountability Office. 2008. *State and Local Government Retiree Benefits: Current Funded Status of Pension and Health Benefits.* GAO 08-223. Washington, DC: U.S. Government Accountability Office.

[6] Wilshire Consulting. 2008. *2008 Wilshire Report on State Retirement Systems: Funding Levels and Asset Allocation.* Santa Monica, CA: Wilshire Associates Incorporated.

[7] Wojcik, J. 2008. "Public entities generally keep traditional pension plans." *Business Insurance.* August 12, 2008.

[8] Almeida, B. and W. Fornia. 2008. *A Better Bang for the Buck: The Economic Efficiencies of Defined Benefit Pension Plans.* Washington, DC: National Institute on Retirement Security.

[9] GASB. 2007. *Governmental Accounting and Financial Reporting Standards – Volume II.* Statement 25, Paragraph 36(f) and Statement 27, Paragraph 10(f). Norwalk, CT: GASB.

[10] Alaska Retirement Management Board. 2006. Minutes of October 2-4, 2006 Meeting. at http://revenue.state.ak.us/treasury/programs/programs/other/armb/meetings.aspx

[11] Consolidated Public Retirement Board & Buck Consultants, LLC. 2008. *Individual Voluntary Option for Members of the Teachers' Defined Contribution (DC) Retirement System to Transfer to the Teachers' Retirement System (TRS).* Retirement Choice Decision Guide, CPRB.

[12] Mathis, N. 1989. "W. Virginia pension fund going broke, union says." *Education Week*. September 28, 1989.

[13] Levitz, J. 2008. "When 401(k) investing goes bad: Teachers in West Virginia offer a valuable lesson for what not to do." *The Wall Street Journal*. August 4, 2008.

[14] Anderson, J.D. 2005. "State: Reviving teacher benefit plan will save money." *The Intelligencer*, June 21, 2005.

[15] Consolidated Public Retirement Board & Buck Consultants, LLC. 2008. *Individual Voluntary Option for Members of the Teachers' Defined Contribution (DC) Retirement System to Transfer to the Teachers' Retirement System (TRS)*. Retirement Choice Decision Guide, CPRB.

[16] Matthew Greenwald & Associates, Inc. 2004. *Retirement Plan Preferences Survey: Report of Findings.* Schaumburg, IL: Society of Actuaries. Almeida, B., K. Kenneally and D. Madland. 2008. "The New Intersection on the Road to Retirement: Public Pensions, Economics, Perceptions, Politics, and Interest Groups." *Wharton Pension Research Council Working Paper.* WP 2008-12. Philadelphia PA: University of Pennsylvania.

[17] Olleman, M.C. 2007. "Defined contribution experience in the public sector." *Benefits & Compensation Digest*, 44(2), 20-24.

[18] Kabler, P. 2008. "State to save $22 million in teacher pension switch." *Charleston Gazette.* August 26, 2008.

[19] Gabriel, Roeder, Smith, and Company. 2005. *New Mexico Educational Retirement Board: Defined Contribution Retirement Plan Study.* Dallas, TX: Gabriel, Roeder, Smith, and Company.

[20] Wojcik, J. 2008. "Public entities generally keep traditional pension plans." *Business Insurance.* August 12, 2008.

[21] Gabriel, Roeder, Smith, and Company. 2007. *Projections of ERSRI with Frozen Participation.* Irving, TX: Gabriel, Roeder, Smith, and Company.

[22] Gabriel, Roeder, Smith, and Company. 2005. *New Mexico Educational Retirement Board: Defined Contribution Retirement Plan Study.* Dallas, TX: Gabriel, Roeder, Smith, and Company.

About the Authors

Ilana Boivie is a Policy Analyst with the National Institute on Retirement Security. Prior to joining NIRS, Ms. Boivie worked with the Arrowhead Center at New Mexico State University and at the Center for American Progress in Washington, D.C., conducting economic development and public policy research. Ms. Boivie began her career in publishing, as an editorial associate with Humanist, a nationally published bimonthly magazine. Ms. Boivie holds a M.A. in Economics from New Mexico State University, with a concentration in applied econometrics and experimental statistics, and a B.A. in English from Binghamton University, where she graduated Magna Cum Laude.

Beth Almeida is the Executive Director of the National Institute on Retirement Security. Before joining NIRS, she served as assistant director for strategic resources and as senior economist with the International Association of Machinists and Aerospace Workers (IAM) where she was instrumental in transitioning some 40,000 airline employees out of terminating or freezing pensions into the IAM's multi-employer defined benefit pension plan. Earlier in her career, Ms. Almeida led research initiatives at academic centers in Germany, France, and her home state of Massachusetts. She has authored numerous economic and pension publications and is a frequent speaker at academic and industry conferences, both in the US and abroad. Beth earned a B.A. in international business from Lehigh University and a M.A. in economics from the University of Massachusetts Amherst.

About NIRS

National Institute on Retirement Security is a non-profit research institute established to contribute to informed policy making by fostering a deep understanding of the value of retirement security to employees, employers, and the economy as a whole. NIRS works to fulfill this mission through research, education, and outreach programs that are national in scope.

National Institute on Retirement Security
1730 Rhode Island Avenue NW, Suite 207
Washington, DC 20036
tel 202.457.8190 fax 202.457.8191
www.nirsonline.org