CENTER *for* RETIREMENT RESEARCH at BOSTON COLLEGE

STATE AND LOCAL PENSION PLANS — NUMBER 33, AUGUST 2013

NEW BRUNSWICK'S NEW SHARED RISK PENSION PLAN

*By Alicia H. Munnell and Steven A. Sass**

INTRODUCTION

Employer defined benefit pension plans have long been an important component of the U.S. retirement system. Although these plans are disappearing in the private sector – replaced by 401(k)s – they remain the prevalent retirement plan arrangement in the public sector. But these public sector defined benefit plans are currently under financial pressure, as two financial crises since the turn of the century have caused liabilities to soar and assets to plummet. The response so far among state and local plan sponsors has been to suspend or eliminate cost-of-living adjustments, cut back sharply on benefits for new employees, and raise employee contributions. Some states have also introduced a defined contribution component. While the cutbacks have sharply reduced future costs, they have been ad hoc and unexpected. The question is whether a more orderly and predictable way can be devised to share risks, and perhaps head off trouble in advance. The Netherlands certainly offers one model of risk sharing; this brief discusses an adaptation of the Dutch approach closer to home – namely New Brunswick's Shared Risk Pension Plan introduced in May 2012.

The discussion proceeds as follows. The first section reviews the problem of risk in employer defined benefit plans. The second section describes New Brunswick's response – the Shared Risk design and the regulatory framework for supervising such plans. The third section discusses the response of union representatives of workers covered by the new program. The fourth section considers what lessons U.S. plans can draw from the New Brunswick approach. The final section concludes that the Shared Risk approach is an important evolutionary step, and potentially an attractive alternative to the traditional defined benefit plan design.

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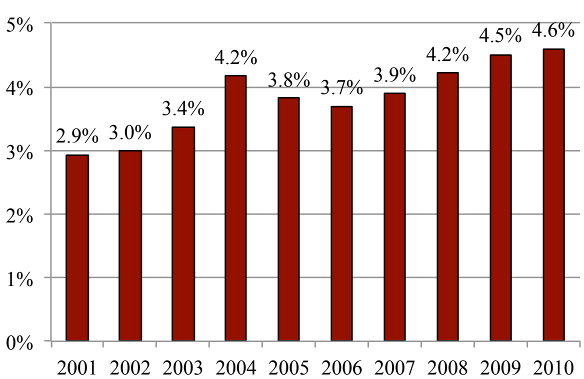
The Risks in Defined Benefit Plans

Defined benefit plans promise workers a fixed pension payment that lasts as long as they live, providing retirees a valuable source of security when their working days are done. The cost of these plans, however, has risen sharply. One reason is that retirees now live longer: U.S. workers retiring in 2010 can expect to live about four years longer than workers retiring in 1970.[1] Most plans also have generous early retirement provisions, with less-than-actuarial reductions for the increased length of time that early retirees collect a pension.

Defined benefit plans have also become increasingly risky as equity holdings have risen and the maturation process has increased the number of retirees and older long-service workers relative to the plan's funding base. Risky means outcomes can be good as well as bad. In the 1990s, when the stock market boomed, the value of pension assets generally rose well above the value of plan obligations. As a result, many employers, in both the private and public sector enjoyed "contribution holidays" and increased benefits. In the 2000s, when financial markets tanked, significant underfunding suddenly became the norm. As a result, employers had to sharply increase contributions(see Figure 1).

Figure 1. State and Local Pension Contributions as a Percent of Own Source Revenues, 2001-2010



Source: Authors' calculations from U.S. Census Bureau (2001-2010a) and (2001-2010b).

In both Canada and the United States, government regulations require private employers to eliminate underfunding within a specified number of years. As defined benefit risks increased over time, governments sharply reduced that timeframe – in Canada from 15 years in the mid-1970s to five by the end of the century. This demand for large sums of cash, when cash is hard to come by, has further increased the risks to sponsors of defined benefit plans.

Given the difficult financial conditions since the turn of the century, defined benefit sponsors have been hard pressed to quickly fill funding shortfalls. The Canadian provincial governments, which set the minimum funding rules for private defined benefit plans, responded by relaxing or even exempting employers from making "required" deficit-reduction payments. As these make-shift measures dragged on, the New Brunswick provincial government in 2010 created a "Task Force on Protecting Pensions," and added the province's own public sector plans to the agenda one year later. The members of the Task Force then asked for and received a mandate to "fix" the problem, not just issue a report. Their "fix," designed to make both private and public employer plans "secure, sustainable and affordable for both current and future generations," was the Shared Risk Pension Plan, announced in May 2012.[2]

Sharing the Risk

New Brunswick's Shared Risk program has three key elements: 1) a new design that splits plan benefits into highly secure "base" benefits and moderately secure "ancillary" benefits; 2) protocols that require pre-determined actions to change future benefits, contributions, and asset allocations in response to changes in the plan's financial condition; and 3) a new risk management regulatory framework to keep these plans on track. The "base" and "ancillary" benefit design is based on the widely admired approach developed in The Netherlands. The new regulatory framework is largely based on Canada's "stress-test" methods for supervising banks and insurance companies.[3] The key innovation is to combine these elements into a coherent pension program.

New Brunswick's Shared Risk Plan Design

The Shared Risk plan guarantees base benefits, but only grants ancillary benefits if allowed by the plan's financial condition. The funding program is then designed to ensure that both base and ancillary benefits will be paid with a high degree of likelihood. But the plan sponsor also specifies protocols for responding to changes in the plan's financial condition: how to increase contributions, change asset allocations, and reduce benefits in response to funding deficits; and how to reduce contributions, change asset allocations, and restore benefits, including restoring previous benefit reductions, and grant ancillary benefits when the plan's financial condition improves.[4]

When the new program was announced, four New Brunswick defined benefit plans – three public sector plans and one private sector plan – declared that they were adopting the Shared Risk design. These plans introduced a new benefit formula that made a significant portion of future benefits ancillary and dependent on the plan's financial condition. The plans, which had initially based benefits on the employee's final salary, now adopted formulas that base benefits on the employee's much lower career average salary, but provide much the same "final salary" pension by indexing employee earnings to wage growth or inflation. These indexing increments are ancillary and granted only when the plan's finances exceed specified benchmarks. For an example, see the Box for the sequence of steps to be taken in the case of under- or over-funding for one New Brunswick plan.

New Brunswick's Shared Risk Regulatory Framework

Existing regulations in both Canada and the United States assess safety and soundness based on a plan's current funded ratio. A fully funded plan, with pension fund assets equal to the present value of plan obligations, is only required to contribute amounts needed to cover the additional benefits currently earned by active workers. Underfunded plans must eliminate shortfalls within a specified number of years. This approach ignores how risky a plan's assets and obligations might be or how they might change over time. It makes no difference whether the plan's assets are invested in penny stocks or government bonds, or whether its obligations could spike, say if large numbers of workers suddenly claim sweetened early retirement benefits.

New Brunswick's regulatory program for Shared Risk uses a "stress test" to assess the ability of Shared Risk plans to pay promised benefits. To test the plan's ability to pay benefits, each year the plan actuary must run at least 1,000 20-year simulations using

How Risk is Shared

This example gives the sequence of actions to be taken by the New Brunswick Hospitals' plan (Canadian Union of Public Employees Local 1252) in response to changes in its financial condition.

If the funded ratio falls below 100 percent for two years in a row or the plan fails to meet the risk management goals of a Shared Risk plan:

1. Increase contributions up to 1 percent of earnings, split evenly between workers and the employer.
2. Change the rule for calculating early retirement benefits, for those not currently eligible for such benefits, to a full actuarial reduction.
3. Reduce "base benefit" accrual rates for future service up to 5 percent.
4. Reduce base benefits for all members, including benefits based on past and future service, in equal proportion until the plan meets the risk management goals.

If the funded ratio rises above 105 percent, a portion of the surplus can be used as follows, if the plan can still meet the risk management goals:

1. Reverse previous deficit-recovery measures in the following order:
   a. Reverse any increase in contributions.
   b. Reverse any reduction in base benefits.
   c. Reverse any reduction in early retirement benefits.
2. Index pensions and base benefit accruals up to the full Consumer Price Index (CPI).
3. Increase individual benefits, as needed, so that all retirees receive a benefit based on final five-year average salary, indexed to the CPI.
4. Provide lump-sum payments to offset past shortfalls relative to a benefit based on final five-year average salary, indexed to the CPI.[5]

Source: Mann (2013).

reasonable estimates of relevant financial parameters. The simulations must show that over this 20-year horizon: 1) base benefits will be paid in full at least 97.5 percent of the time; and 2) at least 75 percent of ancillary benefits will be paid, on average, over all scenarios. Plans that fail this forward-looking test must modify their investment, funding, or benefit rules until they pass. This annual review is expected to identify changes in the plan's financial condition much earlier than the traditional funded ratio approach and produce smoother responses to changing conditions.[6]

The Shared Risk regulatory program also includes funded ratio yardsticks. However, the measure of plan obligations used as the funded ratio denominator excludes ancillary benefits, such as indexing. The Shared Risk program requires the actuary to project the plan's annual funded ratio over the next 15 years. For new plans, the projected ratios must never be less than 100 percent of plan obligations. In subsequent years, the projected ratio must equal or exceed 100 percent of plan obligations at the end of the 15-year planning horizon and must never fall below that level two years in a row. These requirements, and the mandatory stress test, effectively raise current funding targets for Shared Risk plans to about 115 percent of base benefit obligations.

Union Support for the Shared Risk Program

It is easy to see why employers would welcome New Brunswick's Shared Risk program – the new approach would allow them to better manage their finances. Workers, however, were switching from a defined benefit to a "target benefit" program. Nevertheless, the new plans were adopted with union support.[7]

The unions embraced the shift to Shared Risk plans because:

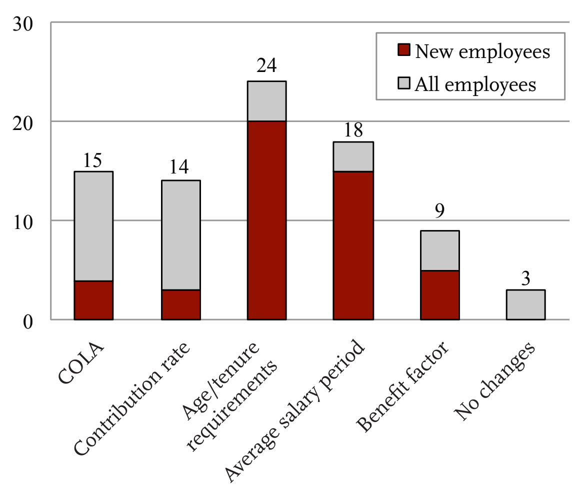
- As private sector workers were losing defined benefit plan coverage, public employees feared that taxpayers would target their plans.[8]
- Their defined benefit plans were stressing the finances of plan sponsors, raising the prospect of significant benefit cuts.[9]
- Young workers increasingly viewed rising pension contributions as funding the pensions of older workers and retirees, not their own benefits.[10]
- The Shared Risk plan offered much greater security than the likely alternative – a 401(k)-type retirement savings plan.

The Government of New Brunswick has been negotiating with public sector unions to move all of its plans to the Shared Risk design, and many of these unions have agreed to the change. Two municipalities, Saint John and Fredericton, have also adopted Shared Risk plans with union support. In addition, one private sector plan has applied for registration as a Shared Risk plan. And a half dozen others are exploring conversion to the new design.

Lessons for the United States

U.S. state and local governments have responded to the large deficits in their pension programs in dramatic and unpredictable ways. Some states have cut or eliminated cost-of-living adjustments for current as well as future retirees. Some have increased mandatory employee contributions, sometimes on all employees and sometimes only on new employees. Many have sharply reduced future benefits – primarily for new employees – by raising age and tenure requirements, lengthening the average salary period, and/or reducing pension benefit factors (see Figure 2). In many cases, the cuts for new employees will produce lower benefits than provided before the financial crisis.[11] And just like the permanent benefit

Figure 2. Pension Changes Made by a Sample of 32 State-Administered Plans, by Type of Change



Source: Munnell et al. (2013).

expansions that occurred during the good times of the 1990s, nearly all states made the cuts permanent adjustments to their pension program.[12]

New Brunswick's Shared Risk program offers a different approach. First, it makes responses to pension shortfalls far more predictable. The plan design clearly spells out how the sponsor would respond, and by sharing the burden among the employer (i.e. the taxpayer), employees, and pensioners, it moderates the burden borne by each. Moreover, ancillary benefits not granted in bad years can be expected to be fully restored in good years. In fact, pensioners will receive checks in good years that will compensate for COLAs missed in bad years. Second, the required risk management tests function as an early warning system, helping plans minimize the size of any needed adjustments by heading off trouble in advance.

For U.S. state and local plans to adopt a risk sharing approach, sponsors must develop specific rules for adjusting benefits, contributions, and investment allocations; these rules need to be fair to workers in different cohorts and income groups; and they need to be communicated effectively to plan participants. Establishing such rules is a thorny and difficult task, but is likely to produce a much more sensible outcome than lurching toward generous benefit expansions when times are good and dramatic benefit reductions when times are bad.

Conclusion

New Brunswick's Shared Risk program is a promising innovation. It makes changes in benefits and contributions more orderly, moderate, predictable, and reversible.

The New Brunswick program does not solve all of the challenges facing defined benefit plans. A large enough shock would no doubt also overwhelm the adjustment rules and risk management procedures of Shared Risk plans. Nevertheless, Shared Risk plans could be expected to weather such shocks much better than traditional defined benefit programs or individuals with a 401(k).

The New Brunswick Shared Risk approach provides an attractive model for governments, employees, and pensioners that find current procedures for handling risk in defined benefit plans unworkable, and for workers who might otherwise end up with a 401(k).

Endnotes

1 U.S. Social Security Administration (2013).

2 The three members of the Task Force were Susan Rowland (Chair), a pension attorney with extensive experience in restructuring troubled plans; W. Paul McCrossan, former head of the Canadian Institute of Actuaries; and Pierre-Marcel Desjardins, a Ph.D. economist active at the Canadian Institute for Research on Public Policy and Public Administration. The addition of public plans to the Task Force agenda in 2011 was in part a response to downgrades of New Brunswick government debt by bond rating agencies due to the Province's mounting pension liabilities. See Government of New Brunswick (2012, 2013).

3 Government of New Brunswick (2013).

4 For a discussion of the Dutch models and related "Defined Ambition" plan designs, see van Rieland and Ponds (2007); Ambachtsheer (2007); Kocken (2011); and Kortleve (2013).

5 If all these steps have been taken and the funding ratio is greater than 140 percent of plan obligations, the plan would establish a reserve to cover 10 years' contingent indexing; then reduce contributions by up to 2 percent of earnings; then improve various benefits, including early retirement benefits. The plan document also suggests more permanent adjustments could be in order.

6 Dutch plans strengthened their risk management methods in the early 2000s, adopting a Value-at-Risk yardstick with a one-year horizon and a confidence level of 97.5 percent (Kortleve, Mulder, and Pelsser 2011). Dutch plans, however, failed to accommodate the sharp financial shock that accompanied the Great Recession and, like plans in New Brunswick, were forced to relax their "deficit recovery" rules (Kortleve and Ponds 2009). The Canadian Office of the Superintendent of Financial Institutions, which had no regulatory authority over employer plans, in 2011 had recommended the use of stress tests to manage risks in defined benefit pension plans. New Brunswick's regulatory program for Shared Risk plans was the first to require such tests, at least in North America; see Government of New Brunswick (2012, 2013); Office of the Superintendent of Financial Institutions Canada (2011); and McCrossan (2012).

7 Public sector plans adopting the Shared Risk design covered workers represented by "Certain Bargaining Employees" of New Brunswick Hospitals and the Canadian Union of Public Employees, New Brunswick Hospitals. A private sector plan covering union workers, the New Brunswick Pipe Trades Pension Plan, also adopted the Shared Risk design. The Task Force consulted with unions representing the hospital workers when developing the Shared Risk program, and these unions endorsed the shift to the Shared Risk design. The pension plan covering members of the New Brunswick legislature also adopted the Shared Risk design: the politicians supporting the new design felt it important to accept the same risks borne by other Shared Risk plan participants, a decision supported by an all-party consensus. The Task Force recommended the conversion of all government plans to the Shared Risk design, and the government also announced its desire to do just that. The Task Force report also called for changes in public sector plans to reduce their costs, including an increase in the retirement age and reductions in subsidized early retirement benefits, albeit introduced over a 40-year period. These changes were accepted in the public sector plans that adopted the Shared Risk program. See Government of New Brunswick (2013).

8 As the government of New Brunswick noted, "Many in the public complained openly about the generosity of these schemes and the fact that they have to pay extra taxes to cover pension deficits for benefits that they cannot afford for themselves." See Government of New Brunswick (2013).

9 The New Brunswick government declared its defined benefit plans to be "no longer sustainable." See Government of New Brunswick (2012).

10 Government of New Brunswick (2012).

11 Munnell et al. (2013).

12 Of those plans that have increased employee contributions since 2009, only a few have stated that the increases are likely to be temporary. Of those that have cut pension COLAs during this period, only a handful explicitly link future COLAs to the plan's financial condition. One state, Wisconsin, has always linked its COLA to the rate of return on pension assets.

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The research reported herein was supported by the Center's Partnership Program. The findings and conclusions expressed are solely those of the authors and do not represent the views or policy of the partners or the Center for Retirement Research at Boston College.