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## Public Pensions, Version 2.0

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By Kerry Pechter      Thu, Aug 8, 2013

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*In New Brunswick, Canada, city officials and union leaders are experimenting with a new, more frugal kind of public pension that's based on the principle of "Shared Risk."*

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Judging by the recent news from Chicago and Detroit, the future looks bleak for public pension plans. But all may not be lost. About a year ago, two small cities in New Brunswick, Canada, along with their unionized workers, replaced their traditional pensions with a new type of plan that may actually be sustainable. Whether the idea can or will be transplanted to the U.S. remains to be seen.

The new plan design is called Shared Risk, and it was inspired by a local crisis that was small by U.S. standards but large by the standards of New Brunswick, a small, heavily wooded Canadian province of only about 750,000 people just northeast of Maine.

Thanks to rising longevity in Canada and the impact of the Great Recession, New Brunswick's public pensions were in trouble. Moody's downgraded the credit rating of the province itself in 2009. St. John, the biggest city in New Brunswick, faced a reported \$195 million gap in the funding of its municipal workers pension.

"St. John was at the point where the required pension contribution could have risen to 50% of payroll," said Paul McCrossan, an actuary and former Canadian legislator who helped solve the problem. "The city couldn't afford it, and it couldn't cut back staff or services. Since cities in Canada can't declare bankruptcy, the provincial government would have taken over."

In 2010, the incoming provincial premier, David Alward, named a three-member task force consisting of McCrossan, a labor lawyer and a University of New Brunswick professor. Taking a lesson from the Netherlands, where such plans originated, they proposed a strategy where the investment risk would be shared between the plan sponsor and the participants. In effect, the basic benefit would be smaller and annual adjustments for inflation would be contingent on the investment performance of the plan.

"We met with all the local leaders in St. John and told them, 'This is the worst-funded pension we've seen in Canada, but we have some ideas for fixing it.' We started in July 2012 and by December we had the agreement of the city manager, the elected officials and the unions. The city would have to pay more and the city workers would have to take less," McCrossan told *RIJ* this week.

If defined benefit pension plans survive at all, they may all eventually come to look like this. Even though New Brunswick's plans are tiny—one of the hospital unions involved has just 5,000 or so retirees—the principles of Shared Risk are scalable.

A transition to Shared Risk in the U.S., however, might require fundamental changes in plan design: the loosening of inflexible guarantees, the adoption of market-based (but not risk-free) discount rates, the institution of new risk management techniques, and the transfer of control over the pension assets to

neutral parties.

## **How risk is shared**

Before their conversion to Shared Risk, New Brunswick's public pensions, like many public pensions, were too rich to survive the combined impact of increasing lifespans, market volatility and low interest rates that followed the bumper years of 1982 to 2000.

Workers and employers, such as hospitals and municipalities, each paid 6.17% of their pay toward the pension funds, which the municipalities controlled and the provincial government was ultimately responsible for. The basic pension benefit was based on a percentage of final salary (1.97% per year of service before 1967 and 1.4% per year afterwards). There was a guaranteed 2% annual cost-of-living adjustment in retirement. The benefits earned under that plan prior to July 2012 will be honored.

Since then, however, the contribution levels have been raised to 9% of earnings for workers and 10.1% for employers. (The increase will help amortize the existing pension deficit over the next 15 years.) In place of a benefit based on final salary, they will have a core benefit based on 1.4% of average salary. And instead of a guaranteed COLA in retirement, increases will be based on the performance of the underlying assets and the funding level of the plan.

"If the base benefits are 105% funded, they can use one-sixth of the assets between 105% and 140% of funding to either add a cost-of-living adjustment, or to make up for adjustments foregone in the past, or reduce an increase in the contribution rate," said Steve Sass of the Center for Retirement Research at Boston College, who co-authored (with CRR Director Alicia Munnell) an article on the Shared Risk plan in New Brunswick. "The actuaries say that 'the risk is borne by the benefits.'"

The terms for early retirement are also less generous under the new plan. Under the old plan, workers could retire at age 60 with a full pension and as early as age 55 with a 3% reduction in benefits for each year shy of 60. Under the new plan, workers can still retire as early as age 55, but they lose 5% of the benefit for every year shy of age 65. The full pension benefit isn't available until age 65.

"Our group is satisfied with it," said Doug Kingston, the secretary-treasurer of CUPE Local 1252, one of the hospital unions that agreed to the new plan. "Our plan was in a mess and we had to do something." A hypothetical person who entered the plan after July 2012 and worked 25 years at an average salary of \$50,000 would receive an annual benefit equal to \$17,500 a year (1.4% x \$50,000 x 25 years), plus whatever increases were justified by the health of the fund. "The pensions aren't overly exorbitant," Kingston told *RJJ*. "That's a common misbelief. We're not fat cats making big money." Participants in his plan can also collect the Canadian national pension as early as age 60.

## **Stress tests**

Underneath the hood of the plan, the pension task force instituted several risk-management techniques that had been lacking in the past. In fact, according to one of the task force documents, "With the launch of the new Shared Risk Pension Model, New Brunswick has become the first jurisdiction in North America to

develop comprehensive funding and risk management procedures in the administration of pensions that cover both asset and liability management.”

“Most of the pensions in North America are based on expected returns and simple arithmetic averages, with very little stress testing,” McCrossan told *RIJ*. The New Brunswick pensions began using the risk-management techniques that included a switch to risk-based capital requirements and stress tests that involve Monte Carlo simulations that subject the fund to thousands of hypothetical market scenarios out to a horizon of 15 years. The fund has to be able to cover the base benefit at least 97.5% of the time.

These techniques were similar to those required of Canadian banks since 1998, which helped them weather the 2008 financial crisis with relatively little damage. The pension plans also had to adopt a discount rate based on the market rate in Canada for double-A rated corporate bonds, which is between 4.25 and 4.5%. That’s more conservative than the relatively arbitrary rate range of 6.5% to 8.5% used by some U.S. states for their public plans, and more liberal than the risk-free rate advocated by observers who would like to make the potential underfunding of public pensions look as dire as possible.

“Stress testing the plan strikes me as a more sophisticated test of solvency than the funded ratio. The funded ratio is a terrible yardstick. Stress testing is a requirement under a Shared Risk plan, and it ought to give a better sense of the long-term liability,” said Sass, who thinks Shared Risk makes a lot of sense. “The target is to replicate a final salary benefit, but if you miss the target, there’s no panic. You don’t offer wage-related or cost-of-living increases that year and you’re still solvent. When things bounce back, you send checks to people for the missed COLAs.”

In St. John, the unions would probably not have accepted the Shared Risk program, McCrossan said, had the city not agreed to relinquish control over the pension fund to professional trustees who are overseen by a board consisting of four representatives of the city and four representatives of the union, with an impartial individual appointed in advance to break the tie in case of an impasse.

“In New Brunswick, there was a history 30 years ago of the government using the teachers’ pension fund for highway spending. The unions supported this because there are real assets, with strict funding rules. The government had controlled the funding decisions, and in some years they didn’t put in funding. Under Shared Risk, the contributions will be determined by the risk-management needs. The unions see that as quite valuable,” he said.

### **Wider application**

Interest in Shared Risk is growing, but how far it will spread remains to be seen. So far, the CUPE Employees of New Brunswick Hospital Pension Plan, the Pension Plan for Certain Bargaining Employees (CBE) of New Brunswick Hospitals Plan, the New Brunswick Pipe Trades Pension Plan, and the Cities of St. John and Fredericton have applied for or adopted Shared Risk plans. Co-op Atlantic, a cooperative wholesaler in New Brunswick, is the first private-sector firm to show an interest.

Could U.S. defined benefit plans use the Shared Risk method? “One of our policemen spoke publicly about Shared Risk, and he was asked by police union representatives from Philadelphia and Chicago to come

down to their cities and talk about it," McCrossan told *RIJ*. "We've had some expressions of interest from North America, but none of a serious nature," he said. "One impediment might be that several of the U.S. states guarantee their pensions and unions aren't inclined to give up those guarantees. That will likely be tested in the Detroit bankruptcy process."

At least one U.S. state, Maine, has developed a provisional plan for applying Shared Risk principles to its state pension plan and integrating the plan with Social Security. But the Maine legislature has not reviewed or acted on the plan.

Sass believes that this type of risk management would, during adverse periods like the current one, make it easier for pension fund managers and sponsors in the U.S. to tell whether their plans have fundamental design problems or if the problems are created by extreme but temporary market conditions.

"When plans like the ones in Detroit or Chicago have big deficits, it's assumed to be a long-term structural problem. But we know that there's a cyclical aspect determined by unemployment and the interest rate. We just don't know how much is structural and how much is cyclical," he said. Sass thinks the Shared Risk model, by requiring annual reviews, a 15-year planning horizon and flexible payout regimes, could mean fewer pension funding crises.

"Shared Risk could be a way to ease the crisis in state and local defined benefit plans," said Sass. "It will let them grope their way through what is a structural problem and what isn't, and it could help win back the hearts and minds of younger union members and taxpayers. This kind of plan could also be very attractive to corporate defined benefit plan sponsors. It could help stop the attrition of defined benefit plans in the U.S."