

**Living today's demographic reality:  
Leadership in pension funding innovation**

An address by

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To

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Thank you, (xxx) and good afternoon everyone.

It is a pleasure to join you today at this National Pension Reform Summit. When I received the invitation to speak today and saw the six questions to be addressed:

- How are pensions being made more sustainable in Canada?
- What must we do to protect pensions, without damaging public or corporate finances?
- How do we ensure inter-generational equity in an era of shifting demographics?
- How can we best address a private sector savings gap?
- What can be learned from the New Brunswick reform experience?
- Can this model be emulated elsewhere?

my first thought was – finally! Someone’s got the answers we’ve been looking for and debating ad nauseam all these years!! Or then again, maybe misery just loves company....

Seriously, though, as you saw in the trailer to our documentary, we Canadians are not alone in our contemplation of these pension issues. What is wonderful news to me, is that so many of us are gathered here

in Fredericton today to consider these issues, and most importantly, not to blame anyone, but rather to talk positively about finding the most effective solutions for Canadians.

Because I sincerely believe there are answers, not just questions. I am most impressed by the progress that New Brunswick has made on this front. In fact, Marilyn Quinn and Sue Rowland are two of my heroes, and both are featured in our documentary. And Gerry's contribution last night was also refreshing. I'm also a big fan of Gina Raimondo, Rhode Island's General Treasurer. I think that maybe the most important lesson we can learn from both New Brunswick and Rhode Island is that when your collective back is against the wall, creative juices start flowing in search of constructive answers.

The challenge facing many of us today, however, is how to accept the necessity for change before our backs are against the wall ... because given today's high longevity and low growth, change is inevitable ... The question is not whether or not to change: it's when and by how much.

Let me be the first to say that change is hard. Change that means you might get a little less than you have or might think that you have – or perhaps a little less than others who went before you – is sometimes an almost impossible pill to swallow voluntarily. It certainly is politically unpalatable. The temptation is always there to cross your fingers, close

your eyes, hope that “things will get better next year,” and instruct the actuaries to assume the problem away... We only need to look to most of the US states to see where that gets you – to the edge of a cliff! Or in most cases, half way down to a hard landing!

A very public debate has already emerged, as we are hearing here today, and those of us in the business hear every day. It is a three-pronged debate, addressing: pension coverage for Canadians, cost and funding sustainability .... The subtexts of retirement security, pension affordability, realistic contribution and benefit levels, intergenerational fairness, social responsibility, and retirement age, echo through all.

To contribute to this discourse, we have produced a documentary video as part of Teachers’ Thought Leadership series. This short video first frames the issues facing Defined Benefit plans around the world and then details Teachers’ response. The documentary is now available on our website <http://www.otpp.com/web/guest/pension-plan-evolution> and we have also arranged for each of you to receive a hard copy. I believe that you will find it useful as we contemplate these issues.

I’m going to talk to you today about the pension debate in the context of two main issues:

- First, I’ll look at today’s pension reality.

and

- Second, at what we at Teachers' are evolving to deal with that reality.

First, the pension reality.

To date, the pension debate has unfortunately been defined by the two extremes:

- Defined Benefit, or DB, where all risk is borne by the sponsor (or in Teachers' case, sponsors), and
- Defined Contribution, or DC, where the day you retire, you open the box to see how much money you have to live on for the rest of your life. We all can name friends who have had to postpone their retirement because their savings were ravaged by the 2009 recession – in other words, they no longer had enough “gold” for the “golden years.”

If you listen to most politicians and commentators it's as if there are only two alternatives: DB or DC - black or white – haves and have nots. Fortunately there are a growing number of those who have been capable of more imaginative thinking – who have started to address how we can achieve the right balance between retirement security,

affordability and equitable risk sharing – in other words, sustainability, by choosing the best attributes of both extremes.

Teachers' has started on that journey. Because we are at the leading edge of the baby boom wave, our membership reflects the reality of a graying Canada where the number of 15 to 24 year olds is set to slip below the number of 55 to 64 year olds this year. Let me give you a snapshot of Teachers'.

At Teachers' we have over 300,000 active and retired teachers depending on us for their future or ongoing retirement security. Teachers' is a "mature and maturing pension plan." We have a declining number of active members *contributing* to the fund compared to the number of members who are *collecting* pensions from the fund. We currently have a 1.5-to-1 ratio of active-to-retired members and are moving towards a 1.1-to-1 ratio over the next decade or so. To put that into perspective, that ratio was 10-to-1 in 1970 and 4-to-1 in 1990.

Our maturity affects our risk tolerance. We simply do not have enough active members amongst whom to share material losses should they occur... So, for example we have had to reduce our allocation to equities, the highest risk/reward asset class, to 45%. This is lower than most other pension plans.

Our individual members are scheduled to contribute an average of 13% of their salary annually to the plan. That is matched by the government, bringing total saving for retirement to 26% of salary.

We administer one of Canada's largest annual payrolls, at \$4.9 billion. We receive only \$2.8 billion in contributions annually, however. That's a considerable gap, and it means the first \$2.1 billion we earn every year is automatically earmarked for paying the difference between what is *contributed* and what is *distributed*. But more importantly, it means that the investment growth of that \$2.1 billion must be foregone. And it is the investment returns on contributions that fund the pension plan.

The average age for our new retirees today is 59. Each will have worked about 26 years at retirement. They are expected to receive their pension for about 32 years, and a survivor pension may be paid for an additional three or so years. The average starting pension in 2012 was \$45,400. And as I said, it is a Defined Benefit. It is jointly sponsored by the Ontario Teachers' Federation and the Ontario government, who together determine contribution rates and benefit levels.

Let's take a look now at some pension history in Canada.

Pension plans - public and private – were devised when “retirement longevity” was an oxymoron. Pensions were meant to bridge the gap between work cessation and death ... a short distance, given life expectancies at the time. According to demographer Dr. David Foot, Canada chose a retirement age of 70 in the 1920s ... when life expectancy was 61. So, on average, you were dead for nine years before you could receive your pension! In 1951, a means-tested pension was made available at age 65 ... when average life expectancy was 68 and a half. When the Canada Pension Plan was introduced in 1966, life expectancy was 72.

That was then. Today’s life expectancy rates are very different. Think of it this way: World life expectancy has more than doubled over the past two centuries. According to the World Health Rankings, a Canadian woman who was 60 years old in 2012 can expect to live to age 86, while today’s 80-year-old woman can expect to celebrate her 90<sup>th</sup> birthday.

In the case of Teachers’, we now have 2,675 pensioners in our membership who are over the age of 90. And that includes 107 who are over 100 years of age ... a 5% increase over 2011. Our oldest collecting member turned 110 last week. I checked, and Hallmark doesn’t make a card for that! .... But in all seriousness, it highlights the issues of benefit sustainability and intergenerational equity.

Last year, *The Economist* told the story of the late Gertrude Janeway, of the United States. Mrs. Janeway died in 2003. Until then, she had been receiving a \$70 a month Veterans' Administration pension. Not much, you say. Well maybe not.... Until you take into consideration the fact that her late husband was a soldier in the American Civil War ... which ended in 1865! She married him in 1927, when he was 81... and she was 18. So, as *The Economist* reported, that particular pension entitlement actually spanned *three centuries*.....

An extreme case, for sure. But it makes an important point, of which our actuaries and investment managers are acutely aware: we must consider the plan's long term *liabilities*, not just its assets.

Given that our liabilities are growing faster than our assets, our sponsors have been faced with making the tough decisions that shortfalls demand:

- reducing benefits, or
- raising contribution rates, or
- both.

But contributions are at the practical maximum for both teachers and the taxpayer.

So, in 2009 our sponsors' adopted Conditional Inflation Protection as the first step in the direction of more equitable risk sharing. At that time, the sponsors agreed that inflation protection for future service would be guaranteed at 50%, rather than the previous 100%. And then, earlier this month they eliminated our 2012 shortfall of \$10 billion by expanding Conditional Inflation Protection to 100% ie eliminating the inflation guarantee altogether for all future service. This creates somewhat of a Defined Benefit-Defined Contribution hybrid: the base pension is still guaranteed – a DB concept; inflation protection is still our goal but it is no longer guaranteed: it is conditional on the financial wherewithal of the fund – sounds like a DC concept to me... And it balances the risk more equitably.

Because we are at the front end of the pension maturity curve, our sponsors have had to make these pragmatic decisions sooner than some other plans. They are the right decisions, made in all members' best interests. But they have not been able to solve the problem, because liability growth continues to outpace asset growth. More changes will be needed, to ensure that new and future members, as well as older and retired members, are sharing the funding risk fairly.

Although our financial results are not yet public, we know that we will be reporting a small shortfall in 2013, because interest rates have

continued to decrease. Today, a 1% change in the interest rate assumption has a \$25 to \$30 billion impact on the cost of teachers' pensions.

In response, the sponsors also announced that they are constituting a task force to study all of the factors that contribute to funding shortfalls, including:

- increased teacher life expectancies that have created the significant imbalance between the average number of years worked versus those spent in retirement, and
- intergenerational risk – the fact that the young and yet to be hired teachers have in effect pledged their pensions as co-guarantors of the pensions for retirees and older teachers.

Dr. Harry Arthurs, whose name many of you will recognize as Chair of the Ontario Expert Commission on Pensions, among other positions of distinction, will assist the sponsors in this study, as will our own senior management.

As part of this process, the sponsors will be surveying active plan members this fall to better understand their perspectives on these issues.

This work will be completed well before the plan's next required valuation filing in 2015.

Let me stress that Teachers' is not in any short term financial crisis. We have over \$125 billion in assets and can pay pensions for decades without any changes. And our team's investment success is second to none in the world – literally. At 8.4%, our 10-year total fund returns as of the end of 2011 were the highest of the more than 370 pension funds around the world studied by CEM Benchmarking, the world's leading authority on pension fund measurement.

And since inception in 1990, our returns have been over 10%... But still, as I said, we have found ourselves dealing with recurring shortfalls over the past decade, because the growth in our pension obligations is outpacing our asset growth. One thing we know for sure: investment success alone cannot fix this problem. We can't do much better than #1. The fix lies in plan design - what these shortfalls are telling us is that we likely need a small course correction today that will translate into a large difference some 70 years from now. As Barbara Zvan, our head of asset mix and risk, likes to say: "we're a long term pension plan, where the short term matters."

And we are looking for solutions in an environment that is very different from the 1990s and early 2000s – when markets were flourishing and their potential seemed limitless. For example, in 1990, real rate bond yields were 4.5%. Today they're 0.50%. And remember that I said that a 1% change at this level moves our liabilities by \$25 to \$30 billion. Our 10-year real return outlook in 1990 was 6.4%. Today it's 3.4% ... with any luck.

When rates are low, it costs a lot more to pay pensions. At 4.0% interest rates, you need \$650,000 to pay for a typical \$40,000 pension. When that rate drops to 1.0%, the cost spikes to almost \$1 million.

As an aside, that is why it is important to understand the discount rate assumption when people are throwing around numbers about pension surpluses or deficits. Our small projected 2013 deficit assumes a discount rate of real 2.75%. Other Ontario plans use 4% real. And most of the almost bankrupt US plans use over 6% real (or *unreal*, as I like to say!).

Some of those differences are explained by plan maturity – but some are just plain kidding themselves – and putting future generations at great jeopardy.

I am confident that our sponsors will continue to make the right decisions on our members' behalf. As such, I'm not as concerned for our members as I am for the millions of Canadian private sector workers reported to have *no* employment-based pension plans whatsoever. And RRSPs have not proven to be the solution – average RRSP balances are woefully short of the levels they need to be in order to fund retirement.

Former Bank of Canada Chairman David Dodge and his co-authors in a C.D Howe Institute study in 2011 sounded similar alarm bells when they wrote:

“The longer the post-retirement period, and the fewer earning years over which savings accumulate, the higher the fraction of earnings that must be saved.”

They go on to say that Canadians generally must decide to save *more* or save *longer*, or both, and on the other side of the ledger, decide to accept less, if they do not.

Dodge suggested that Canadians needed to save between 10% and 21% of their income annually for 30 to 37 contributing years to reach an acceptable income replacement target - remember, I said that teachers are scheduled to save 26% because they're required to, but that is only for 26 years.

Unfortunately many want to confuse this discussion by a DB vs DC debate. We must not allow “pension envy” to define these deliberations. There is a danger that this could happen, however, as the private sector increasingly moves toward Defined *Contribution* plans - and *away* from the Defined *Benefit* model - claiming it is unaffordable.

The truth is that the DB model is a far less expensive vehicle for pension saving. I know that this flies in the face of conventional wisdom, but it is true.

A report by the US National Institute on Retirement Security finds that there are four main reasons for this:

- Individuals in a DC Plan must plan to live a long life – out to the maximum on the actuarial table, as you don't want to run out of money part way through your retirement! Because individuals can't pool longevity risk, like DB plans do, they're forced to accumulate more in their DC plan than would be necessary to fund an equivalent DB plan, which can be based on actuarial averages.
- Because DB plans are ageless, they can perpetually maintain an optimally balanced investment portfolio. Individuals, on the other hand, must downshift dramatically in order to lower their risk/return as they age. Transaction costs of such rebalancing are very high.
- By pooling their savings in a DB Plan, the participants can afford to engage professional investment advisors – something that the average worker with a DC Plan or RRSP cannot afford. When I compare the returns I have realized in my own self-managed RRSP with those of Teachers', I know I could use some expert advice.

- DC Plans and RRSPs are usually invested in retail products that carry large administrative fees – sometimes as high as 2% per annum. Contrast that with the cost at Teachers’ of around 50 basis points, including all fees to third parties. The extra 1.50% over a working lifetime is a huge cost - amounting to just under 30% of the total funds you could have for your retirement.

There is debate about how much savings these factors represent in aggregate or whether or not some of those advantages can be obtained under a DC format with financial engineering. That notwithstanding, it is the future social costs of shifting the entire risk to employees that has not been widely acknowledged. Members of such plans will likely retire with inadequate retirement incomes imposing enormous obligations on future governments (read: taxpayers) for further retirement income assistance.

So, we as a society are in a pickle: Defined *Benefit* plans are being terminated and replaced by Defined *Contribution* plans which are inadequate.

But a wholesale shift back from pure DC to pure DB is not a panacea, either.

It's time to take a look at the hybrid model.... To a model that reflects today's pension reality and shares the risk more equitably between the employer and employee and amongst all members.

We now are looking at the confluence of two major forces: boomers, such as myself and many of you, who are retiring ... and are used to getting our way ... with the fallout from the worst economic crisis in the lifetime of the majority of Canadians. As such, our pension funds offer not just a measure of *market* stability, but a respected voice for pension reform ... which could in turn lead to national *retirement funding* stability. Canada's retirement system has many strengths. But there are opportunities for improvement, especially for those individuals without workplace pensions. All Canadian workers should have the opportunity to maintain their desired post-work standard of living. They should be able to participate in low-cost, well-managed, collective pension arrangements. Canada's current public pension structure – Old Age Security, CPP, QPP – is a good start. But supplementary pension arrangements are needed.

With that in mind, the federal government introduced a framework for Pooled Registered Pension Plans a couple of years ago and which was tabled in the House last year. The federal government believes that this new defined contribution concept will improve the range of

retirement savings options for Canadians. But from what we have seen so far, I fear it falls short of providing the level of retirement security our aging population requires. That is likely why the provinces have not moved forward, as they are still trying to figure out how to make it work to address the real underlying issues. Unfortunately, it smells an awful lot like a big RRSP (which have not worked). It does not address the question “How do we get people to save?” “How do we get costs down?” “How can we share risks?. “If RRSPs are not fully used, why do we think PRPPs will experience take up?”. “How confusing is it for consumers confronted by a plethora of four letter acronyms: RRSPs, TFSAs, RESPs and PRRPs?”. And since defined contribution plans place the investment risk on individual investors, it is still too much of a lottery.

Pensions, like any species that wishes to survive through time, must adapt to the environment. That means we must ensure that benefits and contributions are fair and correlated; that assets and liabilities can be balanced; that expectations are realistic and success is achievable.

And we must do all of this with both our younger (and even yet to be born teachers) as well as our older plan members in mind. As the administrator of the Teachers’ Plan, we do not set contribution rates or benefit levels. But we do concern ourselves with risk and sustainability

– in fact that is our responsibility as advisor to the two sponsors. In that respect the Teachers' Plan is also different in that our members are both the recipients of a guaranteed pension AND the co-guarantor of fellow members' pensions, including all retirees. Think of it this way: every young and future teacher has pledged their pension as collateral to guarantee all of the older members' and retirees' pensions. That is why we have to keep an eye on the level of intergenerational risk embedded in our plan.

By statute, the younger members are carrying the heavier risk burden in the shadow of possible future tail events. Contribution rate increases would impact them for longer. And because earned benefits cannot be changed, but only future ones can, the young will take the biggest reductions over time. That is to say that, in the event of a weak economy, they could pay much more for much less. As the administrator, it is our job to ask: Is that fair?

Of course times change and we must adapt to our new realities. But shouldn't we all adapt? Shouldn't that burden be shared among all generations at least somewhat?

New Brunswick believes it should. Many European countries have come to that realization as well.

Will others?

It is wonderful, of course, that society in general and our members in particular are living longer and longer. It is terrific news, but we need to adapt to this new reality just as we are in other aspects of living. I am glad to be part of a sector that can help make that change happen. I am even more pleased to be part of a forum that wants

And so I will conclude my remarks with a call to action for the Public Policy Forum.

David, I ask you and your colleagues to pick up the gauntlet and take this conversation viral, as the kids say. Canada needs a blue ribbon team to champion this cause, as we did when the CPP was created and New Brunswick did to come up with their Shared Risk model. You have the organization, credibility and pedigree to do the same for future retirement financing security for all Canadians.

You say the Forum is able to create a 'safe space' that facilitates open and frank dialogue and discussion among leaders from all sectors. So let's talk.... But let's also do! I'll be the first to raise my hand to join you to ensure that we as a country stand up and don't just take notice, but take action.

Thank you, and now I am glad to take your questions.

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