

## David Dodge: A sound pension system – handling risk appropriately

Remarks by Mr David Dodge, Governor of the Bank of Canada, to the Conference Board of Canada 2007 Pensions Summit, Toronto, 10 May 2007.

\* \* \*

Good afternoon. I'm happy to be here to talk about the importance of Canada's pension system. It goes without saying that a sound system of private pensions is important from the perspective of pensioners who rely on a given plan for their retirement income. For firms, a pension plan can help to attract and retain staff, and so the business community also counts on a sound pension system. And as a central banker, I know that a sound pension system is important from the perspective of economic and financial market efficiency. Given the significance of our pension system, policy-makers in Canada need to keep working on improving its operation. Ultimately, it is crucial for all Canadians that our pension system function as well as possible.

But what is it that makes a system of private pensions function well, or not? As I see it, a key to answering this question is understanding how pension plans deal with risk, in all of its many forms. So today, I want to spend some time discussing private pensions and risk, and suggest what needs to be done to make sure that those who have to bear risk also have the right incentives to deal with it in the most appropriate manner.<sup>1</sup> I will focus on who is best placed to bear risk, and on how risk management can be better supported.

### Risks and challenges

Let me start with a fundamental question: Why do people save for their old age? Essentially, people save during their working years so they can retire at some point and not suffer a precipitous drop in income and living standards. Economists might put it somewhat less elegantly, saying that people save in order to smooth their lifetime consumption.

In the absence of any kind of pension system, individuals, businesses, and society as a whole would all face a number of challenges and risks. I want to spend a few minutes talking about the challenges and risks from these three perspectives, beginning with individuals.

First, individuals without a pension plan would have their personal savings as their only source of retirement income, aside from income from the publicly funded Canada Pension Plan/Quebec Pension Plan and the Old Age Security/Guaranteed Income Supplement. And so, individuals would naturally be exceedingly cautious with their investments, particularly as they approached retirement age. In short, individuals without pensions would likely be too **risk-averse** with their savings to generate a sufficient rate of investment return.

Second, individuals can recognize that they lack the expertise to handle their investments in the most effective way, and so will try to acquire this expertise. This could come by way of an investment adviser, or by investing their savings in managed, diversified retail investment vehicles such as mutual funds. The challenge posed by this approach is that it can be **costly**, since individuals outside a pension plan have to purchase investment advice and ongoing funds management retail, not wholesale.

Third, individuals without a pension plan face **market risk** in a couple of ways. Market conditions could be such that at the time of retirement, the value of their assets could be abnormally low. Or interest rates could be abnormally low at the time of retirement. In either case, the person would need to spend a much greater amount to purchase an annuity or other guaranteed stream of income compared with a period when market conditions were more favourable.

The fourth point is related to the third. Sellers of annuities have to deal with the risk that those individuals who expect to live much longer than actuarial tables would suggest are the ones who buy annuities. To deal with this **adverse selection problem**, sellers compensate for the risk by charging

---

<sup>1</sup> For a broader discussion of pension issues, including public pension plans, see my speech to l'Association des MBA du Québec on 9 November 2005 (<http://www.bankofcanada.ca/en/speeches/2005/sp05-14.html>).

significantly more for the annuity. In other words, the cost of an annuity is much greater for an individual than it is for members of a group.

Both of these last two points demonstrate that without a pension system, individuals would need significantly higher levels of savings to ensure adequate funding for their retirement. And all of these points I raised demonstrate that pensions generate enormous benefits by making it much simpler for individuals to successfully save for retirement.

But while the benefits of pension plans are obvious for individuals, let's not lose sight of the benefits for businesses and for society as a whole. From the perspective of business, pension plans are typically thought of as a recruitment and retention tool. But historically, pensions were also the way that good employers helped workers to save so that they could avoid penury in old age. And with a pension plan, older workers had the ability to retire, and thus did not need to keep working well beyond the point of their greatest productivity.

As for society as a whole, pensions provide a couple of important benefits. First, no society wants to see large numbers of its senior citizens relying entirely on government transfers, although there is fairly universal agreement across most countries that it is desirable to have some degree of public income support for people in their old age. Beyond that, however, a well-functioning pension system is an important source of the long-term risk capital that is essential to finance growth.

### **Mitigating risks – defined-contribution plans**

Most of the challenges and risks I've mentioned can be mitigated, to a greater or lesser extent, through the pooling effect that a pension plan provides. Of course, different kinds of pension plans deal with risks in different ways. First, let me briefly discuss defined-contribution plans and the way they deal with risks.

A defined-contribution plan mitigates, at least partially, many of the challenges and risks I mentioned for individuals. For example, the costs of funds management and investment advice are pooled. Further, pooling helps to mitigate the risk that individuals will not have saved enough to purchase an appropriate annuity.

However, a defined-contribution plan leaves individuals completely exposed to market risk. The value of a member's contribution could fall sharply just before retirement, or an individual could retire during a period of abnormally low interest rates.

Defined-contribution plans reduce, but do not eliminate, risks for employers.<sup>2</sup> Because of market risk, this type of plan can fall short of the goal of ensuring adequate retirement income for all employees. The retirement incomes of two people with identical work histories can differ greatly, if they retire at separate times when the prevailing market conditions are very different. Finally, defined-contribution plans do significantly mitigate risks for society as a whole, but there may still be a less-than-optimal investment of the pools of contributions. I will come back to this point in a minute.

In summary, defined-contribution plans can mitigate a number of risks to individuals, businesses, and society as a whole. However, appropriately structured defined-benefit plans can do better.

### **Mitigating risks – defined-benefit plans**

Now let's turn to defined-benefit plans. I'll spend the balance of my remarks today discussing these plans and how they mitigate various risks. A properly structured defined-benefit plan mitigates all the risks for individuals that a defined-contribution plan does, for essentially the same reasons. But, in one crucial area, defined-benefit plans provide an important additional risk-mitigation benefit to individuals, because they are much better-structured to mitigate market risk. Since defined-benefit plans pool risk across all plan members – past, present, and future – the precise retirement income of a plan member can be defined in advance and does not depend on market conditions at the time of retirement.

However, defined-benefit plans do not eliminate **group-longevity risk**, which is the risk that all members of a pension plan could live longer than the actuarial tables predict. For individuals, there

---

<sup>2</sup> This includes the legal risk associated with the advice implied by the way a plan is set up.

also remains a risk that the plan sponsor will be unable, for some reason, to deliver on its promise to pay the defined pension benefit. Still, defined-benefit plans do a better job of mitigating risks for individuals than do defined-contribution plans.

For society as a whole, defined-benefit plans can also mitigate risks more effectively. While defined-contribution plans typically offer members a limited range of investment choices, the managers of defined-benefit pension plans have both the ability and the incentive to invest in the kinds of assets that the average individual investor might not normally consider. This helps to reduce the possibility I mentioned earlier that these pools of contributions could be invested in a less-than-optimal way; that is, that there could be a reduced supply of long-term risk capital for the economy. Further, pension managers are more likely to invest in alternative asset classes and to engage in arbitrage between markets. All of these activities make financial markets more complete, and thus enhance their efficiency.

But how do defined-benefit plans aid employers? They can serve as a powerful tool for attracting and retaining staff. And, if they function well, defined-benefit plans can eliminate the risk of employees retiring with very low incomes. But defined-benefit plans represent the transfer of a lot of risk to the plan sponsors. And for some sponsors, the liability associated with a defined-benefit plan can dwarf the sponsors' net worth. So for employees, employers, and society as a whole to fully realize the benefits of defined-benefit plans, three conditions must be met. First, sponsors need the ability and incentives to manage their risks appropriately. Second, the risk that a sponsor will be unable to fulfill its promise must be properly managed. And third, the group-longevity risk I spoke of earlier must be dealt with in some manner.

Some of the risks I've spoken about are managed according to laws and regulation. For example, there are laws that protect employees from the risk that a sponsor might be unable to pay a pension because the pool of contributions was used for some other purpose. And we have regulations that prescribe how large these pools have to be relative to the benefits promised, and that place conditions on how they must be managed. Beyond the legal and regulatory frameworks, there are accounting, actuarial, and economic frameworks that support the management and assignment of various types of pension risk. And generally, Canada's legal and regulatory framework has served Canadian workers and employers well, certainly better than those in many other OECD nations.

But there are some shortcomings in our frameworks today. And these shortcomings are putting a great deal of pressure on the sponsors of defined-benefit plans. Sponsors have been scaling back or restricting new entries into these types of plans, largely because they do not have the right incentives to maintain or operate defined-benefit plans.

So what needs to be done to improve the incentives for sponsors of defined-benefit plans? Going forward, how can we promote the proper assignment and management of risk? In answering these questions, we should keep in mind two principles of effective risk management. First, it's important to be clear about who bears the consequences of a risk and, by implication, who owns that risk. The party that owns the risk needs to have the proper incentives to manage it. Second, the owner of the risk needs to have sufficient flexibility to effectively manage that risk. Let me underline six main areas of concern about the current incentives for the assignment and management of risks. In doing so, I will *not* be able to address all the issues facing defined-benefit pension plans. But I do want to touch on the issues I see as being most important.

### **Getting the incentives right**

First, Canadian sponsors of trustee defined-benefit plans have been reluctant to make special contributions to cover actuarial deficits. There are a number of factors at work here, but I will focus on just two of them. One is that there is often a great deal of uncertainty about the legal status of any actuarial surplus. While the ownership of any surplus depends on the specific wording of the rules that govern a given pension plan, in general, provincial and federal pension law has evolved to increasingly give employees rights to pension surpluses, even though employees typically bear none of the responsibility for any deficit. Another factor is that tax regulations discourage sponsors from building surpluses in excess of 10 per cent. Partly as a result of these two factors, sponsors of defined-benefit plans have incentives to keep plans only minimally funded and to avoid surpluses. But it is entirely appropriate, from time to time, for defined-benefit plans to run significant surpluses – or deficits – given the way they pool risks across all members – past, present, and future.

Secondly, sponsors can be hampered by regulations that do not always take sufficient account of their ability to make contributions in the future. Regulators typically determine funding adequacy in one of two ways. One method assumes that the sponsor is a going concern and will be around to make up any shortfall in pension obligations before they come due. The other method assumes that the sponsor could become insolvent at any time, and so sufficient funds to cover actuarial liabilities must always be available to cover that risk.

But the use of the solvency test can, in some circumstances, place an inappropriate burden on sponsors that are unlikely to become insolvent. Consider what happens when asset values are temporarily depressed relative to liabilities. In this case, the solvency deficit can be significantly larger than the going-concern deficit. This would require the sponsor to make a special contribution that should be reversed once asset values recover. But if the sponsor does not have access to the surplus, and so cannot reclaim this special contribution once asset markets recover, then the sponsor's expected costs are raised inappropriately.

The third area of concern relates to accounting rules, or perhaps more specifically, to our use of these rules. This area is becoming increasingly important to pension plan sponsors because international accounting standard setters are examining a move to unsmoothed, so-called "fair-value" methods. These accounting rules are intended to replace rules that smooth changes in asset and liability values with rules that focus on values at a point in time. But it is not at all clear how useful or relevant it is to determine point-in-time values of assets and liabilities in a defined-benefit plan. For plans as a whole, what we are interested in is not today's values, but expected values far into the future.

If this review results in changes to accounting standards, it could make sponsor balance sheets and income statements much more volatile. So sponsors will have an increased incentive to hold assets with low volatility. This incentive may make pensions more expensive because sponsors would be less likely to take on assets with higher expected returns. Put another way, plan sponsors could be given the incentive to become overly risk-averse, meaning an increase in the cost of providing for future liabilities.

A fourth concern relates to the group-longevity risk I spoke about earlier. It may seem odd to consider the notion of people living longer to be a huge problem. Nonetheless, increased longevity poses a tremendous risk for sponsors. This risk can be mitigated in a number of ways. For example, contribution rates can be adjusted to reflect changes in average life expectancy. Or, the level of benefits can be adjusted, as can the date at which a person becomes eligible to collect a pension. Making these adjustments is often unpleasant, but it is necessary. And so sponsors and plan members both need to have the incentives to deal with group-longevity risk properly.

The fifth concern relates to the fourth. In the past, there have been labour agreements that called for improvements to defined-benefit pensions, without matching funding provisions. How the cost of a new benefit promise will be covered should be made crystal clear to shareholders, workers, and regulators, at the time the change occurs.

Finally, and very importantly, many sponsors may be too small to adequately manage the risks and costs of sponsoring a defined-benefit plan. But risks can be mitigated by sponsors forming multi-employer plans, thus pooling risks across a number of plan sponsors. This is a very important point, because at the moment, smaller employers are simply unable to offer defined-benefit plans to their employees. If structures such as large multi-employer pension plans could be created, this could help them to pool both costs and risks, making it easier for smaller employers to sponsor defined-benefit plans. It could also provide a measure of increased pension portability for employees.

## **Conclusion**

These are six areas of particular concern for the management of risk in defined-benefit pension plans. As I said, this is not an exhaustive list. But it does capture what I see as the most important challenges facing defined-benefit plans. Now to conclude, let me point to a number of steps that should be considered to address these issues.

First, we should reduce the disincentives for sponsors to run actuarial surpluses in good times that will offset actuarial deficits in other periods. More clarity regarding the legal ownership of surpluses is needed, so that the sponsor that owns the risks also owns the benefits from taking those risks. In addition, we should examine the rules governing the tax treatment of contributions when plans are in actuarial surplus. Second, we should accept the fact that some defined-benefit plans run by

creditworthy sponsors will have substantial solvency deficits from time to time, and make these easier to handle. In this area, I would note that there has been real progress in some jurisdictions, since sponsors are now allowed greater use of letters of credit to cover temporary solvency deficits. Third, we should ensure that our accounting rules – and most importantly, how we make use of these rules – are appropriate for defined-benefit plans. What we are interested in is not today's values, but expected values far into the future. Fourth, we should strengthen incentives to share group-longevity risk between plan sponsors and members. Fifth, the costs of plan improvements should be made clear to shareholders and workers at the time they are promised. Finally, we could examine mechanisms that facilitate the formation of multi-employer plans so that risks can be pooled across a number of plan sponsors. After all, municipalities in Ontario pooled together to form OMERS, and we should examine ways to construct similar pension arrangements for private sector employers.

As I said, an effective defined-benefit pension system is a tremendous asset for individuals, for employers, and for our society as a whole. Putting these plans on a sustainable footing involves strengthening the legal, regulatory, accounting, actuarial, and economic frameworks that determine how these plans operate. If we get it right, these changes would give sponsors the appropriate degree of flexibility needed to manage risk effectively. And, ultimately, Canada can have a better-managed pension system that is good for members, good for employers, good for the economy, and good for Canadian society.