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## REGULATION OF PENSION PLANS IN CANADA SOLVENCY TESTING

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### Executive Summary

- Regulation of Canadian Plans is divided between federal and provincial authorities
- Original concern related to long term funding
- Change in emphasis to Solvency Funding following financial failures
- Standards to be used in Solvency Testing
- Choosing select and ultimate valuation rates
- Appropriateness of procedures
- Volatile results
- Sharp impact on some plans
- Regulatory concerns shifting to emphasize Solvency Testing
- Standards imposed on the profession

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In Canada, the regulation of pension plans falls into two distinct areas. The federal government exercises control over the benefits provisions of plans and also controls the tax-deductibility of contributions of Employers and Plan Participants. The provincial governments control those features of the plan which relate to vesting, protection of widow's benefits and portability provisions. The provincial governments also maintain control, through Regulation, of minimum funding standards. Each province has its own regulations with respect to funding standards, vesting and portability, and it is in the area of funding standards that this paper is directed.

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Confusingly enough, the federal government is also responsible for funding standards for those Corporations who are registered federally as opposed to provincially. The federal government was amongst the first to bring into force legislation and regulations with respect to funding. It is instructive to look at the federal regulations as being indicative of the attitudes of the other legislatures.

Initially the federal regulations with respect to funding were concerned only with long term funding. The regulators were concerned that the funding programs were aimed at full funding within a reasonable period, typically 15 years. Any experience deficiencies that arose during the course of time were to be funded over a shorter period. However, the federal regulators had to deal with a number of financial failures amongst the various financial bodies that it controlled including a bank, a major Trust Company, and an Insurance Company, as well as the termination of a number of larger pension plans.

As the liquidation of these entities proceeded it became clear that on wind up there was a shortfall of funds and the federal government was forced in some instances to provide additional funding. These failures of financial bodies obviously created political problems and so the regulators began to look for ways of improving the financial strength of those organisations under their control.

In the pension area this improved financial strength took the form of requiring the Actuaries to test plans not only for long term strength but also for short term capability. The tests that are required are known as Solvency Tests, and they take the following general form.

The Actuary must assume that the plan terminates on the valuation date, and that all pension benefits for the plan participants are fully vested in their accrued pension benefits at that date. He must assume that the plan members will retire at the earliest possible time and that all favourable early retirement provisions are exercised. The Actuary must use a set of predetermined valuation bases with respect to interest and mortality that are stipulated by the Canadian Institute of Actuaries. It is in these areas that significant problems have arisen which deserve discussion.

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The principal economic assumption which must be used is the valuation rate of interest. This rate is set for the first 15 years from the valuation date to be the annual effective rate equal to the yield on Government of Canada long term bonds plus 0.5%. For periods of discounting in excess of the first 15 years, 6% must be used. These rates are to be used where the benefits are not indexed and have to be adjusted if the benefits have indexing features built into them. As all participants are assumed to be fully vested, it is not necessary to use any assumption as to future rates of termination of employment. A standard table of mortality is stipulated.

As our experience with these valuations has increased it has become clear that these assumptions do not provide a very stable basis for valuation. We are all well accustomed to using valuation standards for pension plans that do not change rapidly from one period to another. Our long term assumptions for the future experience of a plan are exactly that, and while we may have short term deviations in experience we only change assumptions if it is clear that a change is called for.

What has occurred in Canada, though, has been very rapid and very large changes in the yields on government securities. The government securities have been very sensitive to changes in the levels of current inflation, and to government measures to deal with funding its debt levels. As the interest rate on the Government bonds has see-sawed, it has at different times been significantly above the typical long term funding valuation rate and at other times, significantly below.

For those plans which are final average earnings related there has been, for the most part, a sufficient cushion in the accumulated fund to be able to cope with the swings. For younger plans, and in particular those plans whose benefits are not related to final average earnings, problems have arisen. For example, when interest rates fell sharply in 1993, some flat benefit plans found themselves with unfunded liabilities which could only be addressed by reducing the benefits provided by the plan. Long term interest rates shot back up in 1994 and are now expected to fall once again through 1995 and 1996. Successive Solvency Valuations carried out in this period showed huge differences in results. Clearly the use of a rate which is linked to a

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government security has practical problems which need to be addressed.

There is yet another more fundamental problem with the use of these bonds. Consider the position of a pension plan which is being terminated. It is not automatic that all of its invested assets will be re-invested in government securities. It is far more likely that the assets will be invested in a more balanced manner. If this is the case then the assumed rate of interest for the valuation should be based on something other than a government bond. A current rate of return on a government bond is not a reliable indicator of the expected future rate of return on a balanced portfolio.

A second problem is posed by the requirement to use an arbitrary valuation rate of 6% for liabilities more than 15 years from the valuation date. If a single long-term funding rate can be chosen for the basic funding valuation, then there should be no problem in using a single rate for the Solvency Valuation.

The logic for the use of a split-rate valuation rate is, apparently, that many Insurance Companies use or used a select and ultimate rate in calculating single premiums for deferred annuities, and the guidelines that are used for Solvency Valuations were originally prepared as a standard for calculating transfer values when a plan participant left his or her plan. It is an uncomfortable fact that the bases required to be used for Solvency Valuations were designed for another purpose and they may not necessarily be the most appropriate ones.

If the Regulators, as they say that they may, begin to become more interested in the results of Solvency Testing, then the Actuary will face significant problems. The funding basis may well have to include allowances for possible variations in Solvency Valuations. This will mean increased contribution rates or lower benefit levels. More realistically, plan sponsors may well be persuaded to provide defined contribution plans rather than defined benefit plans in order to avoid the regulatory issues.

I am not aware that other jurisdictions require Solvency Testing for pension plans. It would be interesting to hear of other initiatives in this politically sensitive area. What constitutes a reasonable test for a plan's ability to meet

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its obligations? Is a "wind-up" approach a true test of a plan's strength? What test would be less vulnerable to whipsawing interest rates?

More pointedly for the profession, we have yet another instance of an intrusion into the ability of the Actuary to determine his own valuation bases.