



SOCIETY OF ACTUARIES

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Canadian Institute Cont'd.

security of financial promises, and a resultant concern that regulators will intervene to prevent additional losses. Canadian actuaries must continually demonstrate that our standards are appropriate in theory and practical application.

Poppel: *Does an increase in standards constrain the actuary's freedom of professional judgment?*

Crawford: That concern has been raised by some Canadian actuaries. Others feel just as strongly that different times and different public expectations require a different response from our profession. It's a balancing act; we need to put fences around the corral to tighten things up, but leave in enough flexibility so that actuaries can and must use professional judgment.

Poppel: *What is the role of the CIA in all of this?*

Crawford: The CIA is trying to take an assertive role in developing more explicit standards of practice. We have a series of committees charged with developing standards and making sure they are given sufficient hearing.

Poppel: *When will new standards be in place?*

Crawford: Some are already in place. Standards for transfer values under pension plans are approaching the end of a one-year trial period. Along with several valuation technique papers, drafts of two major papers dealing with scenario testing for solvency standard purposes and provisions for adverse deviations in life company reserves have just been sent to valuation actuaries for comment. These will be debated and revised over the fall and winter, leading to adoption in mid-1988 for application in 1989.

Poppel: *How in practicality will the new standards work? Who will make sure they are followed?*

Crawford: The CIA will be responsible for monitoring to make sure that standards are being followed. How exactly that will be done is still being debated. The regulators clearly have a strong interest in making sure that standards are being followed, and they will rely to a great extent on members of our profession.

Poppel: *What implications does this have for the future of the profession in Canada?*

Crawford: The implications are profound. All these developments are reinforcing the fundamental respon-

sibilities that actuaries have to clients, employers, regulators and, most importantly, to society as a whole. The role of the valuation actuary employed within a life company is unique. He or she is typically a senior member of the management of the company but at the same time is accountable to the public through the regulatory process. The effective balancing of this dual role will be a key to the acceptability of the position of the valuation actuary.

This is a time of change and transition which presents the profession with important opportunities. While there are always risks at times like this, I am confident that actuaries in Canada will measure up to the challenges ahead.

New Funding Rules for Pension Plans in Canada

by Michael Cohen

The last couple of years have been busy for pension plans in Canada, with the passage of federal and provincial acts improving minimum standards for plans under federal jurisdiction (for example, those of banks, interprovincial and international transportation and telecommunication) and those under provincial jurisdictions in Alberta, Nova Scotia and Ontario. While these acts, which are essentially uniform in most aspects, contain many features of actuarial interest, I will describe changes to the detailed funding rules for defined benefit pension plans found in the regulations of these various acts.

Let me begin by summarizing the previous rules, which, of course, are still required in jurisdictions where the new-style pension benefits acts are not yet in force. An actuarial valuation is required every three years. The actuary is required to calculate the current service cost, using an acceptable actuarial cost method and going-concern actuarial assumptions, including an assumption regarding salary increases and indexation, in plans where this is relevant. The actuary is also required to calculate any unfunded liability caused by benefit increases, basis strengthening or experience losses. If any such unfunded liabilities were to be revealed, those caused by benefit

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increases or basis strengthening could be amortized as a level dollar payment over a period not exceeding 15 years, while experience losses were to be amortized over 5 years or less.

It should be noted that acceptable valuation methods in Canada include the unit credit method, the entry age and attained age methods, and aggregate methods. This latter family of methods fits less well into the regulatory scheme, since unfunded liabilities by origin are difficult to identify.

These rules have served well, however. Few plans have terminated with unfunded liabilities since the original inception of pension benefits legislation in the mid-1960s, and funding levels in most plans are high. Indeed, a large percentage of plans are fully funded on a going-concern basis. Nonetheless, it was felt that some manipulation was possible. For example, with a little foresight prospective experience deficiencies could be turned into basis strengthening, thereby extending the amortization period. It was also felt that more flexibility could be given to well-funded plans, while tightening up on other plans, such as flat-benefit plans. The latter have traditionally been of concern to pension regulatory authorities (and no doubt to the plan actuaries as well).

The essence of the reform is to permit 15-year amortization of all types of going-concern unfunded liabilities, however caused, on a percentage of payroll basis, and a level dollar amount, subject to meeting a solvency valuation test. If, however, the plan has a solvency deficiency, this deficiency must be funded over 5 years, with the balance of the going-concern unfunded liability, if any, funded over 15 years. Current service costs would be calculated on a going-concern basis as before.

Liabilities for the solvency valuation would be calculated on a unit credit method, using reasonably current interest rates (either streamed or blended to reflect current and long-term expected rates) but without termination rates or salary increase assumptions. The retirement age assumption would be expected to reflect experience should the plan actually terminate. In addition, if any special benefits were triggered by plan termination, these should be valued as well.

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Assets would include invested assets, of course, valued on a market-related basis. The assets would also include the value of future amortization payments, limited to those due in the 5 years following the valuation. All amortization payments, however, could be taken into account 1) in respect of past service granted on the initiation of a plan, and 2) in respect of amortization arising under the old legislation. (The former (1) is so that the establishment of new plans with past service benefits would not be discouraged, and the latter (2) would serve as a transitional measure to avoid retroactive application of the solvency valuation test.)

The general effect of these new rules is to ensure that plans continue to be well-funded on a going-concern basis, while also ensuring that any greater flexibility permitted in funding going-concern unfunded liabilities will not have a negative effect should the plan terminate. In addition, the rules will generally ensure that all plans are targeted to be fully solvent on a termination basis within 5 years.

In my estimation few final average plans will show solvency deficit, since valuation on current interest rates without salary scales will more than overcome any strengthening effects of the solvency basis. The effect on career average plans is less certain, but also not expected to be significant, because these plans tend to be well-funded already. Flat benefit plans, however, will have their funding flexibility cut back severely, in many cases. This is because a greater number of elements in the basis will need to be strengthened, compared to those where some weakening would be possible. Principal among these would be a generous early retirement provision. Furthermore, many of these plans increase accrued benefits on a regular basis through collective bargaining and amortize the cost of these increases over the maximum period. The effect of these rules could be to reduce this period to 5 years in some cases.

In summary, new funding rules are now in effect in the federal jurisdiction and Alberta and will shortly be in effect in Ontario, Nova Scotia and possibly Quebec. These rules will permit greater flexibility in funding pension plans, while at the same time introduce funding standards on a plan

termination basis which will ensure 1) that plans are either able to meet all their obligations on a plan termination, or 2) that plans at least are targeted to be in this position within 5 years. The aim is to allow flexibility so that plan sponsors are encouraged to increase benefits, while safeguarding, to the extent possible, the rights of pension plan members.

Michael Cohen is Director of the Pension Benefits Division at Financial Institutions Canada. He is also a member of the CIA Pension Standards Committee and the Joint Task Force of the Canadian Institute of Chartered Accountants and the Canadian Institute of Actuaries, which is investigating pension accounting issues for the public sector.

Non-Traditional Marketing Meeting to be Held

On December 10, 1987, the Non-Traditional Marketing Section will jointly sponsor a seminar with the Direct Mail Insurance Council (DMIC). The meeting will be held in Hartford, Connecticut, and will be hosted by The Travelers. A dinner for all meeting participants will take place on December 9.

The title for the meeting is "Relationship Marketing: The Essential Strategy for Successful Direct Marketing of Insurance." Speakers from both the DMIC and our Section will explore the total value of an insurance customer and not simply the profit potential from the sale of one product to the customer. Michael Shumrak and Jay Jaffe will represent our Section.

The meeting marks the first time that the Non-Traditional Marketing Section has jointly sponsored a seminar with a non-SOA group. We hope this will be the first of several sessions with groups whose membership along with our membership will benefit from an exchange of ideas.

The seminar is open to all SOA members. Section members will receive a special notice describing the meeting. Anyone else desiring further information about the meeting should contact Jay M. Jaffe, Actuarial Enterprises, Ltd., Suite 333, 600 Central Avenue, Highland Park, IL 60035 (312/831-6603).

"Travel Time" Under the New Examination System

by M. David R. Brown

With the implementation of the new Flexible Education System (FES) for the Associateship exams, there has been concern on the part of students, employers and the E&E Committee that the new system may result in longer "travel time" to progress through the examinations. The Spring 1987 exam results showed a sharp drop in the number of new ASAs to a total of 88 from the level of recent spring exam administrations (about 250). This prompted the Society education staff to investigate whether the new system is hindering or helping candidates' progress through the system. The results of this investigation were as follows.

A total of 767 candidates could have become ASAs by passing all exams for which they were registered. Here is what happened to them:

- (a) 159 did not write all exams for which they registered.
- (b) 88 became ASAs.
- (c) 99 failed all the exams they wrote.
- (d) 103 would have become ASAs under the old system since their combined scores would have passed them, but they failed one or more "sub-parts."
- (e) 151 would not have become ASAs but did pass two or three of the four "sub-parts" of former Part 5.
- (f) 167 would not have become ASAs but did pass one of the four "sub-parts" of former Part 5.

Categories (a), (b) and (c) were not affected by the introduction of FES. The 346 candidates in these categories (45.1% of the total) are in the same position under the new system as they would have been under the old.

Category (d), with 12.9% of the total, was adversely affected by the introduction of the new system, but categories (e) and (f), with 41.5%, were favorably affected. Individuals in the categories now lack one to three sub-parts to complete their ASAs under the new system; many of them will

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