
NATIONAL REPORT FOR CANADA

by Laurence E. Coward

Of the many interesting developments that have affected the work of Canadian consulting actuaries in the last two years, two major events stand out.

The first event was the worldwide collapse of stock market prices on Black Monday, October 19, 1987. The fall in the prices of Canadian common stocks was the sharpest since 1929, reducing the market value of pension fund investments by some \$10 billion over a few days. Fortunately the fear that the crash would trigger a serious recession accompanied by business failures, high inflation and high unemployment has proven unfounded. Indeed, the stock market indices had recovered nearly all the lost ground by the end of 1989. However, the stock markets have been volatile and a mood of greater caution prevails among the investment counselors as a result of the scare.

The second major event was the signing of a Free Trade Agreement between the United States and Canada. In an extraordinary action the Senate of Canada refused to proceed with a bill to implement the agreement which had been passed by the House of Commons, on the ground that the government had no mandate from the people to enter into such an agreement. This forced the government to call an election in the fall of 1988, in which the Free Trade Agreement soon became the principal issue. After particularly heated election campaigns, the Progressive Conservative party, headed by Brian Mulroney, was returned to power with a small majority. The free trade bill was reintroduced and became law just before the end of 1988.

During the ten year transition period some Canadian businesses should gain and others lose as a result of the agreement. More mergers and company reorganizations may be expected and in the long run there may be more integration on U.S. and Canadian business practices. The workload of Canadian actuaries will undoubtedly be increased by the amendments to employee benefits that will be required. The allegation that the Canadian social security system, including pensions, medicare, unemployment insurance and workers compensation, will be adversely affected has little foundation. Indeed, the increased prosperity that is expected to result from the Free Trade Agreement should make it easier for Canada to finance these programs and maintain its distinctive institutions.

Economic position

Some key indicators of Canada's economic situation are shown below.

	<u>Mid 1987</u>	<u>Mid 1989</u>
Exchange rate in U.S. dollars	0.75	0.84
Inflation rate	4.7%	5.4%
Interest rate on long Canada bonds	10.23%	9.60%
TSE Common Stock Index	4000	3760

The average industrial wage in 1989 was about \$25,000 Canadian.

The sharp increase in interest rates in 1989, together with tax increases and spending restraints in both the federal and some provincial budgets, gave rise to concern at the possibility of a business recession. Very large deficits have resulted in an increasing part of the national revenue going to pay interest charges on the federal debt.

Government pensions

Canadian residents who have reached age 65 are entitled in July 1989 to receive the Old Age Security (OAS) benefit of C\$323.28 a month (U.S.\$275) if they have 40 years residence or come under a grandfather clause. The benefit is indexed quarterly and is reduced for those with less than 40 years of residence. A married couple, both over age 65, receive two benefits.

In addition people who had earned income are entitled to pensions from the Canada/Quebec Pension Plan (C/QPP), financed by contributions of employers and individuals. Contributions and benefits in 1989 are based on earnings up to C\$27,700 (U.S.\$23,500). Employers and employees are each required to pay 2.1% of contributory earnings. The maximum pension at age 65 in 1989 is C\$556.25 a month (U.S.\$473); the pension may be taken at any time between age 60 and 70 in an adjusted amount.

In addition to the OAS and C/QPP pension, low-income pensioners may be entitled to a Guaranteed Income Supplement (GIS) subject to an income test. OAS and GIS are financed entirely from federal taxes. Some provinces provide additional pension subject to a test of earnings.

The federal government's programs (OAS plus CPP plus GIS) produce a maximum pension in 1989 at age 65 of C\$879.53 a month (U.S.\$748). A single person who meets the residence test is guaranteed a minimum income of C\$707.47 a month (U.S.\$601).

Other Social Security programs

Canada has a national system of medical and hospital insurance covering all residents, financed jointly by the federal and provincial governments. Two provinces, Alberta and British Columbia, require contributions from individuals and employers. The medicare system covers all basic services that are medically required, but not dentistry, eye-care or drugs. There is scope for supplementary medical insurance outside the government plan.

Unemployment insurance is a national program which generally pays 60% of claimants' previous earnings to a maximum of \$339 a week, for up to 52 weeks. The program is financed by contributions from employees and employers except for some special benefits paid for by the federal government. Employees contribute 2.35% of weekly earnings up to a maximum; the employer contributes 1.4 times the employee's rate or 3.29%.

Workers Compensation is provided separately in each province or territory. Compensation under the Acts replaces the employee's right to sue the employer for injuries arising from employment. Attempts are being made to relate the benefit more closely to net after-tax loss of earnings, rather than to pay specified amounts for specified disabilities. All the costs of workers compensation are paid by employers in the covered industries. The assessments vary by industry, ranging from 20 cents to \$10 or even more per \$100 of covered payroll.

Provincial Pension Legislation

The process of reforming the laws applicable to private pension plans in Canada is continuing. Several provinces have recently passed pension legislation or amended their regulations or announced further proposals.

It must always be remembered that under Canada's Constitution property and civil rights, including matters of employment, hours of work, compensation and employee benefits, fall under the jurisdiction of the ten provinces, not the federal government. Excluded from this general rule are federal employments, certain works and undertakings of national importance and employment in the Yukon and North West Territories; these are regulated by the Government of Canada. Thus each of the eleven jurisdictions has power to regulate pension plans and other employment conditions in the way it considers best.

Unfortunately the advantage of uniform legislation across the country is sacrificed under this system, to the great inconvenience of national companies. The Canadian Association of Pension Supervisory Authorities (CAPSA) has tried to promote uniformity but with only limited success. One awkward question as yet unresolved is whether each province's legislation continues to apply with respect to pension benefits earned in the province by employees who leave the province (the checkerboard principle) or whether the legislation of the province in which the employee terminates employment or retires should apply to all the employee's pension (the final location principle).

Consulting actuaries have been increasingly engaged in amending pension plans to comply with new legislation, preparing reports for government and setting up administrative systems. In many cases they have been retained to convert defined benefit pension plans to defined contribution plans - or even to wind up pension plans and transfer the assets to Registered Retirement Savings Plans. These are individual tax-sheltered savings arrangements which can, however, be operated on a group basis. A great increase in the number of defined contribution plans has been caused by the complexity of the various acts, the lack of uniformity between the provinces and the threat that further liabilities will be created. Another significant trend is the elimination of employees' contributions.

Ontario's Pension Benefits Act

Ontario, with one third of Canada's population, drastically revised its Pension Benefits Act in 1987. Other jurisdictions are moving in the same direction although uniformity is noticeably absent. A number of features of the Ontario Act are worth noting:

- o Employers do not have to set up pension plans, but if they do their employees have the right to become members after two years of service. This applies also to qualified part-timers.

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- o Pensions arising from service or plan amendments after 1986 must be vested when the member completes two years of plan membership; pensions earned before 1987 must be vested by age 45 subject to ten years service. These vested pensions may not be commuted for cash (unless the amount is trivial), but members have portability rights.
 - o Employer contributions must provide at least 50% of each pension earned after 1986.
 - o Pensions must be joint and survivor, with at least 60% continuing to the survivor after the first death, unless both the member and spouse sign a waiver.
 - o All forms of sex discrimination are prohibited.
 - o Solvency valuations, determined as if the plan were wound up, are required in addition to the regular valuations on an ongoing basis. Unfunded liabilities shown in the solvency valuation must be liquidated by the employer within five years.

Ontario's Pension Benefits Act also regulates retirement ages, credited interest, death benefits, integration with government pensions, commuted values and the use of surplus.

Investment Policy Statements

The government of Ontario has made a fundamental change in its regulation of pension fund investments. The detailed restrictions on the quantity and quality of investments have been replaced effective in 1988 by the principle that the fund manager must be prudent and by requirements for increased reporting and disclosure.

The Ontario legislation, expected to be followed by other provinces, requires every plan sponsor to prepare a Statement of Investment Policies and Goals. The statement must be filed with the authorities, followed by the fund manager, available to the plan members and revised annually. The statement must set out the policy with respect to the diversification of investments, asset mix, rate-of-return expectations, conflicts of interest, voting rights etc. The authorities intend to question the plan sponsor if the actual rate-of-return falls outside what they consider to be normal limits.

Indexing for inflation

While employers were still struggling to adjust to the 1987 amendments, Ontario proposed yet more amendments. The chief feature of this proposal is a requirement that pensions for service after 1989 must be partially indexed for inflation. The indexation formula will apply to defined benefit pension plans. Members of money purchase and multi-employer plans must be given the choice of an indexed pension or a level pension of equal value.

Although Ontario's pension initiatives have often been followed by other provinces, none of them seem interested in the indexation proposal.

The pension increases required under Ontario's draft act would be 75% of the increase in the Consumer Price Index, less 1%. The maximum increase in the CPI to be taken into account would be 8%, so if the CPI rose by 8% or more the required increase for the year would be 5%. There would, however, be a carry forward of "unused" CPI increases to future years when inflation was less than 8% a year. There is a limit on the amount of pension that must be indexed; it is 2% of the Canada Pension Plan ceiling times the number of years of service.

The indexation will apply to the pensions of terminated employees, both in the deferred period and after the pension commences.

The required indexation is not retroactive: it does not apply to pensions for service before 1990. However, a number of inducements are included in the act to encourage retroactivity. Among the inducements are a lower cap on the indexation formula, longer periods for liquidating liabilities and allowing the employer access to part of the pension plan surplus.

Starting in 1987, indexed pensions were included in the collective agreements of a number of major companies in the pulp and paper, automobile, steel and other industries. The increases are automatic for pensioners during the life of the agreements, which are almost certain to be renewed when they expire. The negotiated indexation is different from that proposed by Ontario law, in that it applies to pensions for service in the past, but is usually limited to the pensions paid while the agreement is in force.

Valuations for accounting purposes

In addition to the regular valuation of a pension plan for funding purposes and the solvency valuation to satisfy the pension authorities, yet another valuation may be needed for accounting purposes. The Canadian Institute of Chartered Accountants has adopted a Guideline on Accounting for the Cost and Liabilities of Pension Plans to be followed in the financial statements of public companies. The accounting valuation must be on an accrued benefit basis with projection of salaries, using assumptions that represent the employer's best estimate of the various factors.

Income tax reform

The federal tax system is also being substantially reformed. Part of the job has already been accomplished; the income tax rate has been lowered and reduced to three brackets, while deductions from taxable income have been changed to tax credits in order to assist those with low incomes. At the same time the 13½% Manufacturers' Sales Tax will be abolished. The lost revenue from these two changes will be made up by a federal Goods and Services Tax of 9% on a wide range of goods and services (except exports, food and health aids). The new GST will become effective in 1991, if the government's plans do not have to be altered as a result of the strong objections raised by the opposition parties and the provinces.

In addition, a new system of taxation of retirement savings has been proposed, to put a limit on the total tax shelter an individual may obtain from all such savings. The limit is equal to the lesser of 18% of salary and a dollar amount which will be \$15,500 in 1993. This is the maximum tax sheltered amount of employee contributions plus employer contributions for the individual to pension plans, profit sharing plans and RRSPs. (Note that employee contributions to registered pension plans are tax deductible in Canada). A seven year carry forward of unused contribution room is allowed.

In applying this new maximum where the individual is a member of a defined benefit pension plan, a defined benefit equal to 2% of salary is deemed to be equivalent to a contribution of 18% of salary. Thus, to translate pension benefits to contributions for tax purposes one uses a "9 times factor".

The maximum pension allowed from a defined benefit pension plan will be limited to \$1722.22 a year multiplied by the number of years of credited service (i.e. \$60,000 a year for 35 years of service). This limit will be unchanged until 1993 and will be only twice the average industrial wage, far below what was allowed when the limit was established. In consequence much attention is being paid to supplementary pension arrangements for senior employees, which are not registered under the Income Tax Act and are generally not filed with the provincial pension authorities.

Membership

The number of Fellows of the Canadian Institute of Actuaries rose from 1,414 in June 1987 to 1,502 in June 1989.

A survey questionnaire, answered by nearly all the non-retired Fellows of the Institute in 1989, revealed that 468 or 39% of the total were engaged in consulting work, as shown below:

Analysis of Qualified Canadian Actuaries by Occupation

	<u>Number</u>	<u>Percentage</u>
Insurance Company	624	53%
Consulting Organization		
Pensions	331	
Group Insurance	27	
Life Company	36	
Management	16	
Other	<u>58</u>	39%
Government	47	4%
Teaching, industry and other	<u>44</u>	<u>4%</u>
	<u>1,183</u>	<u>100%</u>

Among the consulting actuaries 30% prefer to receive their communications from the Canadian Institute of Actuaries in French; the Institute follows a policy of full bilingualism (English and French).

Non-traditional consulting

Increasingly consulting actuaries are engaged in non-traditional assignments. While the traditional position of the actuary as the unchallenged expert in the design and valuation of pension plans has been eroded, new avenues for actuarial skills are opening up. The computer has changed the way in which valuations are performed and has allowed a more detailed analysis of the effects of different factors. Cash flow projections, what-if scenarios and monte carlo methods are all feasible and affordable.

At the same time, the discretion of the actuary in choosing assumptions and methods is increasingly restricted by legislation and by the legal and accounting professions. Frequently this means that several valuations of the same arrangement are necessary for statutory, accounting and solvency purposes. Explaining these complicated rules to clients is no easy task.

Pension plan consulting is still, of course, of prime importance to consultants, but non-pension activities are growing:

- o group insurance consulting from an actuarial viewpoint;
- o pricing of benefits included in flexible benefit programs;
- o analysis of investment risks and risk tolerance;
- o actuarial evidence in legal actions;
- o division of assets on marital breakdown;
- o estimating the liabilities for post-retirement benefits;
- o valuation of life and casualty insurance companies;
- o executive compensation and benefits;
- o government assignments on unemployment insurance, workers' compensation, health care utilization and other special benefits.

An interesting recent assignment for a consulting firm concerned automobile insurance. An Ontario Act regulated automobile insurance premiums, required age, sex and marital status to be ignored as classifications and allowed insurers no more than a 12½% return on equity. The consultant reported that a general rate increase of 30% would be necessary, but the government would only allow 7.6% while researching a no-fault system. It is now clear that substantial future rate increases are inevitable.

To sum up, the scope for actuaries to use their expertise in matters involving probability and finance appears to be unlimited, but to take advantage of the opportunities actuaries must expand their horizons and take a world view of their responsibilities.