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CANADA PENSION PLAN SUBSIDIES

By T. H. Dancy

The following table demonstrates the built-in subsidy to a male individual contributor to the Canada Pension Plan. Disability and survivor benefits have been excluded although it has been assumed that the contributor will survive to age 65 and contribute in all years. Earnings are based on the Years Maximum Pension Earnings level each year which is based on the average industrial wage. Under the Canada Pension Plan the greatest subsidy exists for those at or above the Y.M.P.E., and the amendments at January 1, 1974 increased that subsidy.

The Y.M.P.E. is currently being increased rapidly to account for previous wage increases and, the illustration has been based on a Y.M.P.E. of $13,000 for 1981 as a starting point for a single male then aged 25 years. The calculations use two sets of assumptions included in the Actuarial Report for the Canada Pension Plan as at December 31, 1973.

Assumptions

	Reasonable Stability	*Moderate Inflation*
Salary scale	3½%	5½%
Interest rate	4½%	6½%
Cost of Living Index	1%	3%
Post-retirement interest rate net of inflation	3½%	3½%

Mortality: G.A. 51 projection C to retirement (70 years from 1951)

Benefits: Unguaranteed life annuity (no other benefits)

Table

	Reasonable Stability	*Moderate Inflation*
Accumulated Contributions (1981 to retirement)	$81,748	$175,046
CPP Pensions at age 65	12,433 p.a.	26,255 p.a.
Pension from accumulated contributions only	6,270 p.a.	13,426 p.a.
Pension provided by subsidy	6,136 p.a.	12,799 p.a.
Present value of subsidy		
at retirement	80,349	166,865
at entry	13,812	13,439
Value of the subsidy at retirement in 1974 dollars	50,336	41,593

Clearly, these figures indicate the need for an increase in the contribution rates from the present 1.8% of salary up to the Y.M.P.E. by both the employer and employee. No such scheduled increase has been announced by the Government. The Statutory Actuarial Report #3 as at December 31, 1973 indicates that current contributions will cease to cover benefits and expenses by 1982 and that the fund will start to decrease in 1990 until exhausted by the year 2000.

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CIVIL SERVICE RETIREMENT SYSTEM

The Fifty-Second Annual Report of the Board of Actuaries of the Civil Service Retirement System, House Document No. 94-203; U.S. Government Printing Office, 1975.

by Thomas P. Bleakney,

and Richard R. Joss

Both the title and the dull format in the usual Government Printing Office style would seem to insure this document's instantaneous consignment to dead storage. However, behind the cover of this small pamphlet is a concise, well-written report discussing a number of the issues facing not only federal pension programs at the present time, but all pensions in an inflationary economy. For example, several of the 11 pages devoted to the main report discuss the implications of "static" assumptions (ignoring inflation) as opposed to "dynamic" assumptions (including inflation).

The report is a valuation of the Civil Service System as of June 30, 1972. In addition to presenting conventional cost figures consistent with previous reports, it also expands substantially upon this in several ways:

(1) In spite of the fact that the 1972 normal cost rate (13.64%) turned out to be less than the agency-employee contribution rate (14%), the Board of Actuaries recommended no reduction in the last, due to the uncertainties surrounding the other matters discussed in the report.

(2) The Board pointed out that under the static assumptions, future inflation was not considered on the liability side of the ledger (in the form of an inflationary salary scale). On the other hand, the current inflationary trend

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Letters

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The program is now supported by contributions from 17 Nebraska and 14 out-of-state insurance companies and consulting firms as well as by a number of individuals. These contributions are used, to provide an advisory grant to the Professor of Actuarial Science, to supplement the salary paid by the University, to provide for expenses of the program and of the professor not covered by the University, to provide scholarships for non-Nebraskan students, and to provide a program of rewards to students passing actuarial exams.

The purpose and program of the Committee have expanded over the years. Although its main function is to continue to obtain the necessary financial support for the program, the Committee is also involved in (1) promoting careers in actuarial science among the high school and college students in Nebraska, (2) promoting the actuarial science program in the states surrounding Nebraska, particularly through the actuarial clubs in those states, (3) assisting the Professor of Actuarial Science in curriculum development, and (4) working with the Chair of Actuarial Science to see that actuarial science courses, particularly basic actuarial mathematics courses, are available to home office employees in both Lincoln and Omaha.

The Chair has been fortunate in its occupants since it was founded. Dr. Robert E. Larson was the first professor and he was followed by Stephen G. Kellison. The current occupant following Mr. Kellison's departure in 1975 is Cecil D. Bykerk.

The Committee is most appreciative of the support it has received. We are grateful not only for the financial support from individuals, firms and companies both in and out of Nebraska, but also for the time given by members of the Nebraska Actuaries Club who work closely with the Committee. Without the assistance of these companies and these actuaries, we would not continue to have the outstanding program in actuarial science that now exists at the University of Nebraska.

Frederick Rickers, Chairman,
Committee for the Chair of
Actuarial Science

Ann Arbor Actuarial Conference

A conference on Classification Analysis and other topics in multivariate analysis will be held in the Chrysler Center for Continuing Education at the University of Michigan, Ann Arbor, Sept. 2, 3, and 4, 1976. The conference is sponsored by Casualty Actuarial Society, the Committee on Research of the Society of Actuaries, and the Departments of Mathematics and Statistics of the University of Michigan. Members of the Society of Actuaries, the Casualty Society and others interested in the subject are invited to attend. Attendance will be limited to approximately 100 persons.

The principal topic is classification of cases by the statistical analysis of many variables. Of particular interest will be methods which have developed rapidly with the availability of faster and larger computers in recent years. These include both general topics such as cluster analysis, logistic regression, discriminate analysis, and multi-dimensional scaling, as well as specific computer algorithms for these and other data ransacking procedures. Real applications to insurance data will be presented by the staff of the Life Insurance Marketing and Research Association.

Complete information can be obtained from Donald A. Jones, Department of Mathematics, University of Michigan, Ann Arbor, Mich. 48109.

Chicago

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a Society meeting have the chance to meet at least a couple of them, in addition to Bern and myself. Two of the staff travel to each meeting to work behind the registration desk, handling the many questions and problems which arise, as well as doing the routine work of laying out badges, selling banquet tickets, and the like. This is but a small part of the work they have had to do for the meeting. Prior to the meeting, they and the others on the staff have prepared badges, mailed meeting notices, collected and recorded registration fees, and performed dozens of other tasks, all designed to make the meetings run smoothly.

The Society office staff is also responsible for handling the office work of the American Academy of Actuaries and the Conference of Actuaries in Public Practice. One person is responsible for the Academy, another for the Conference, although, of course, the rest of the st are available in case they need help. The Academy and Conference pay the Society for these services under the terms of a service agreement.

With all that they have to do, occasional errors are made; this might have happened to you. If it does, just let us know, so that we can correct the situation. In spite of the occasional error, I'm sure you'll agree that the staff does a very efficient job handling their many responsibilities. *P.W.P.*

Canada Pension Plan Subsidies

(Continued from page 1)

Increasing the contribution rate to cover current benefits and expenses as a minimum would lead to an eventual contribution rate of 3.95% by both the employer and his employees by the year 2025.

Earlier this year the Canadian Labour Congress proposed that the Canada Pension Plan be expanded to provide pensions of 75% of earnings up to the Y.M.P.E. commencing at age 60. The government has estimated that such a benefit level would increase the eventual contributions required to over 15% for both the employer and employee. Clearly, this would be a distortion of national priorities in favour of the retired segment of the population and drastically diminish the role of private pensions and the accumulation of productive capital. The initial respo of the government was to oppose these changes but subsequently two steps have been taken:

(1) It was announced that the private pension plan system should be studied, and

(2) The Liberal Party, which is the party in power, adopted a resolution in favour of an increase in Canada Pension Plan benefits from 25% to 40% of covered earnings over a 10 year period. □