SOCIETY OF ACTUARIES

Article from:

The Actuary

December 1968– volume 2 - Issue 10

The Actuary

The Newsletter of the Society of Actuaries

VOLUME 2, No. 10 DECEMBER, 1968

ABOUT ACTUARIAL CLUBS AND THE SOCIETY NEWSLETTER

(This is the substance of the talk given by A. C. Webster at the recent Seminar on Actuarial Clubs at the Annual Meeting in Washington).

The Actuary, the Newsletter of the Society of Actuaries, in the judgment of the present Editors has three functions:

(1) to be a means of communication between the Board of Governors and the members of the Society;

(2) to provide a forum for discussion of all matters affecting the Society and to provide space for articles, book reviews, etc.;

(3) to be a channel of communication between the Actuarial Clubs and the Society and among the Clubs themselves.

The results under (3) have not been too good and the Editors would like to bring to the Clubs some suggestions for improving this performance. We recognize that the Clubs are autonomous and that their membership is not necessarily restricted to members of the Society. From the viewpoint of *The Actuary* this is no disadvantage because we welcome contributions from non-members. Much good material is produced at Club meetings and some of it certainly deserves a wider circulation. Such material need not be restricted to Life, Health, and Pensions. We can sometimes profit by the discussion of other forms of insurance.

Our first suggestion is that each Club appoint a reporter who will be responsible for sending material to *The Actuary*. Discussions should be suitably digested where necessary, but any papers submitted should be sent in full.

(*Continued on page* 6)

To All Our Readers,

A Happy New Year

The Editors

BOOK REVIEW

J. Jewett and C. B. Lindquist, *Aspects of Undergraduate Training in the Mathematical Sciences,* Vol. I, 1967, Conference Board of the Mathematical Sciences, Washington, D.C. (*Copies may be obtained from the Board at* 834 Joseph Henry Building, 2100 Pennsylvania Ave., N.W., Washington, D.C. 20037, $1.75.)

by E. A. Lew

The first of a three-volume study being prepared by the Survey Committee of the Conference Board of the Mathematical Sciences (of which the Society of Actuaries is an affiliate member) recently became available. It features the findings of a survey of undergraduate programs in mathematics in 250 four-year colleges and 100 two-year colleges.

The survey disclosed a strong proportionate increase in mathematics courses beyond the calculus, particularly in computer-science mathematics, probability and statistics, modern and linear algebra, as well as a trend for many of these courses to be taught at an earlier level.

There has been a rapid expansion in the number of students graduating with bachelor degrees with a major in mathematics (from about 13,100 in 1960-61 to 21,100 in 1965-66) in the face of a decline in the number of bachelor degrees in engineering and a relatively small increase in the number of degrees in physical sciences.

There has also been a substantial rise in the number of mathematical course

(*Continued on page* 7)

LIFE INSURANCE TAXATION IN CANADA

by J. Ross Gray

The early issues of *The Actuary* reported on the Royal Commission on Taxation—the Carter Report. In that Report many suggestions were made for a complete revision of the taxation system in Canada. The Report stated that the tax treatment of life insurance was inappropriate and unsatisfactory, and suggested tax methods intended to make the tax on life insurance comparable to the tax on other investments.

The Government has now introduced a budget resolution providing for new taxation of life insurance in Canada. The taxes apply only to life insurance in Canada and apply both to foreign and domestic companies. The emphasis has changed from taxing the policyholder directly to taxing him indirectly through the interest earnings of the company.

The amount of the tax is heavy. For example, the Royal Commission estimated that the earnings of the life companies after dividends in 1964 were $90 million, whereas the new tax is estimated to produce $95 million out of 1969 earnings. The probable reductions in dividends and increases in non-participating premiums have been recognized and mentioned by the Minister of Finance.

The reader not familiar with Canadian practice should know that Canadian companies can issue both par and non-par life contracts and that separate accounts are rendered for these.

The taxation proposals take three forms: a tax on the policyholder in certain circumstances; a tax on the investment income of the companies; and a

(*Continued on page* 7)

Taxation in Canada

(Continued from page 1)

tax on the profits of the companies.

In Canada a government-sponsored budget resolution is followed by an Act of Parliament. Some minor amendments may be made and some items are settled by Regulations. The following statements must not be taken as being definitely settled.

Policyholder Tax

Up until now, policyholders have paid income tax only in certain circumstances. Payments out of a registered pension plan have been taxable in full, but the employee obtained income tax relief on his contributions. Payments out of an individual policy registered as Retirement Income have been taxable in full, but the policyholder obtained income tax relief when he paid his premiums. An immediate or a vested annuity has its payments divided between interest and an exempt portion. A deferred annuity has been taxable on any gain of its surrender value over premiums less dividends, but its interest gain has not been taxable on death or on its conversion into a vested annuity.

The new proposals provide for taxation of the proceeds of a life insurance policy "on surrender of a policy, other than on death of the person insured" in excess of the premiums paid less dividends paid or credited. The Minister stated that the taxation of annuity payments would be brought into line. The intention is to tax the gain in a life insurance policy either on surrender or maturity as an endowment, and, one could guess, either to bring the cash option of a deferred annuity into the same type of treatment, or to calculate the exempt portion of the payments by reference to the premiums less dividends rather than to the cash option. On policies already in force any gains on surrender or maturity will be calculated from the first policy anniversary following Oct. 22, 1968, with allowance for any net gain on the policy (i.e. cash value minus premiums paid) existing at that anniversary.

Investment Income Tax

There is a 15% tax upon the investment income less deductions. These deductions are:

- (a) investment expenses;
- (b) investment income applicable to non-participating policies in force on Oct. 22, 1968;
- (c) (*i*) the portion of taxable income attributable to participating life insurance business; (*ii*) the excess, if any, over (b) above, of the portion of taxable income attributable to non-participating life insurance business;
- (d) amounts credited to funds held in trust under a registered pension plan or a registered retirement savings plan;
- (e) that portion of dividends received from taxable Canadian corporations attributable to life insurance business in Canada;
- (f) the amounts paid or credited during the year as taxable proceeds of a life insurance policy or annuity contract.

It may be assumed for the present that "life insurance business" probably includes annuity business; "taxable income" in (c) (*i*) and (*ii*) is as defined in the tax on profits; "funds held in trust" probably means the reserves or other funds held on policies rather than being limited to "in trust"; "dividends received from taxable Canadian corporations" provides somewhat the same relief which the individual taxpayer receives on corporation dividends. These are taxed only at the source. Something like this is needed to make stocks as attractive to life insurance companies as they are to the individual; "amounts paid or credited" are presumably the amounts on which the policyholders must pay tax on surrender and on annuity payments, and on the interest credited to dividends or proceeds on deposit.

Profits Tax

The third tax on profits will be at the usual rate for business—50% on the taxable income from Canadian operations. This would seem to be premium and investment income, less expenses, claims, maturities, etc., and less

- (a) increase in reserves of life insurance policies;
- (b) the amount payable under the 15% investment income tax;
- (c) the amount paid or credited as policy dividends attributable to its life insurance business, not exceeding the profit for the year that is attributable to its participating life insurance business.

Again several comments may be made. "Life insurance" probably includes annuities. This is particularly important in (a) where "policies" has been used rather than "business." "Reserves" have been stated by the Minister to be at the same rate of interest as is implicit in the cash surrender values. This is in contrast to the Royal Commission's suggestion of a rate higher than 4% for all reserves. It leaves unsolved the few cases where perhaps 4% cash values are promised but reserves cannot be at higher than 3½%.

One of the reasons given for the imposition of these taxes is to make savings through life insurance comparable (tax-wise) with other modes of saving. No allowance has been made for the fact that savings through life insurance are subjected to a tax of 2% on each premium paid, except in so far as that tax may be a permissible expense under the third portion of the new tax. □

Book Review

(Continued from page 1)

enrollments by students majoring in the biological, social and management sciences, notably linked to computers.

The volume just published should be of interest to all engaged in recruiting and in actuarial education. The second volume will deal with graduate education in mathematics and the third with the role of mathematical scientists in industry and government, and with mathematical manpower more generally. □

Michigan Actuarial Faculty

In our November 1968 issue we published an article, "Actuarial Education at University of Michigan," by the Michigan Actuarial Faculty.

The members of the Faculty are Professors Carl H. Fischer, Allen L. Mayerson and Cecil J. Nesbitt; Associate Professor Donald A. Jones, and Assistant Professor Newton L. Bowers Jr. □