



SOCIETY OF ACTUARIES

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TRUTH IN LENDING — AN ANALYSIS OF THE ACT

by Daniel S. Harris

Exhaustive publicity has been given the Truth in Lending Act. Banks have sent pamphlets to depositors informing them of the Act. Credit card holders have received notices. Finance companies, in their advertisements, have called attention to the Act. Magazines, periodicals and newspapers have published articles (in some cases, quite lively articles). The Truth in Lending Act, with its attendant regulations and interpretations, is complex and lengthy and not as simple as some of the publicity might imply.

Some General Features

What is the Truth in Lending Act?

Public Law 90-321, signed by President Johnson on May 29, 1968, is entitled the *Consumer Credit Protection Act*. Title I of P. L. 90-321 has the descriptive heading, "Consumer Credit Cost Disclosure" but the law also provides that Title I may be called the "Truth in Lending Act" and this is the popular name Title I has acquired.

This article will deal only with Title I and will refer to Title I and its attendant regulations and interpretations as the Act.

The Truth in Lending Act is now law, fully effective as of July 1, 1969.

What does the Act do?

Mainly, it tries to make creditors "tell it like it is." Where a consumer borrows, say, \$100, and is required to repay \$108 within a year in 12 equal monthly installments, i.e., \$9 a month, this can no longer be called an 8% add-on. The borrower must be told that the nominal annual rate (in this case, 12 times the

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Social Security Notes

Robert J. Myers, *SMI Benefit Experience for 1966-68 as Shown on Payment Records*, Actuarial Note No. 55, pp. 4, Social Security Administration, Washington, August 1969.

This Actuarial Note presents an analysis of the tabulation of Supplementary Medical Insurance payment records in the 0.1% Actuarial Sample made for all such records processed through March 1969. Included are monthly data on number of records, reasonable charges, and reimbursement amounts.

The average reimbursement amount per payment record was \$50 for 1966, \$45 for 1967, and \$47 for 1968, while the average monthly reimbursement amount per capita was \$4.12 for 1966, \$5.56 for 1967, and \$4.80 for 1968 (the latter amount being relatively low because not all data had yet been recorded). These averages can be compared with the monthly income to the system from the enrollee premiums and matching government contributions (\$6 per capita for July 1966 through March

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MORTIMER SPIEGELMAN

The American Public Health Association recognized the great contribution that Mortimer Spiegelman had made in the public health field by holding a specially named session in his memory at their recent Annual Meeting. The subject of the session was "Methodological Issues in Health Statistics" and six papers were submitted, including one describing Mr. Spiegelman's contributions to public health statistics.

An audience of more than 100, including Mr. Spiegelman's two sisters, Miss Julia Spiegelman and Dr. Anna Spiegelman, and his former secretary, Miss Theresa Hilb, joined in this fitting tribute to the late Associate Editor of *The Actuary*.

EDUCATION AND EXAMINATION OF PROSPECTIVE ACTUARIES

by Edwin B. Lancaster

A good deal of activity is underway on both the education and examination of prospective actuaries. The tempo of activity no doubt arises from the fast approaching date of January 1, 1970. During 1970 admission to the American Academy of Actuaries is conditional upon passing examinations in subjects corresponding to the associateship syllabus of the Society of Actuaries or the Casualty Actuarial Society. Regardless of the reason for the pace of education and examinations review activity, it seems opportune to broadly review the Society of Actuaries' education and examination process. This review is in four sections.

Geographical Spread

While the Society's students obviously place substantial emphasis on passing the examinations, the Committees which administer the system regard it fundamentally as an educational process with the examinations occupying the secondary albeit necessary role. A unique characteristic of the Society's education process is that the student body is spread across the length and breadth of the North American continent. A state and provincial distribution of the undergraduate institutions of higher education attended by the May 1968 Parts 1 and 2 candidates shows the candidates coming from 41 states and 7 provinces. Some 75 percent of the candidates are from the United States and 25 percent from Canada.

The relatively small number of the

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Education and Examination

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Society's students (as compared with other professions) and their widespread geographic dispersion require that our educational material be as "self-teaching" as possible. In short, the educational material is designed for self-study rather than for formal classroom instruction. Thus a tremendous amount of effort is devoted to the preparation of study notes, the encouragement of the writing of textbooks and the review of textbook manuscripts. The requirement of self-study educational material imposes some rather severe restraints on the committee—especially in the areas of mathematical subjects.

System under Continuous Review

No activity of the Society of Actuaries is subjected to more continuous, thorough and oftentimes critical review than the education and examination activity. Within the Society of Actuaries there are rather sharply differing views. One view which rises to the surface periodically is that the examination system unduly restricts the inflow of new Fellows—an opposing view is that the examination standards are, in fact, quite low. Likewise, there are all kinds of pressures exerted to change the syllabus content to satisfy the various actuarial interest groups—computer people, life underwriters, annual statement/financial analysis people, employee benefit plan people, etc. Some of the major reviews of the Society's education and examination effort are described below.

The first major review which I shall briefly describe culminated in the changes that became effective in 1947. These changes were twofold. The so-called preliminary actuarial examinations were substituted for the former 10-tough-question mathematical examinations. The preliminary examinations are designed to be taken by an undergraduate while in college.

The Society retained the Educational Testing Service to help in preparing the examinations and also retained knowledgeable consultants (one for the general mathematics examinations and another for the probability and statistics examinations) to advise (1) on developments in elementary undergraduate

mathematics curricula, (2) on keeping the Society syllabus in harmony both with the needs of actuarial students and with undergraduate mathematics teaching, and (3) on the preparation of the examinations. The second recommendation of the committee was that for examinations beyond life contingencies the Education and Examination Committee should prepare a comprehensive set of study notes rather than relying principally on papers in the Transactions as the chief educational media.

The second major review is the Report of the Committee to Review Membership Requirements. That committee, which made a thorough review of the entire education and examination system, submitted its final report to the Board of Governors in November 1959. The result of that review was to reduce the scope of material to be covered in each examination beyond life contingencies. The consequence of this was to increase the number of examinations to ten. A related change was to provide for specialization in the last two examinations.

A third review of the education and examination process which has probably been too little publicized but one which I consider highly significant was a review made by the Educational Testing Service and reported on in March, 1964. In this review the Society sought two things—(1) an independent review of the examination process by a group of testing experts and (2) assistance from independent experts in dealing with examinations beyond life contingencies which had been purely essay type examinations.

At that time the Education and Examination Committee was faced with a substantial increase in the number of candidates sitting for the examinations. This presented them with serious concerns with handling the sheer volume of papers to be read and of maintaining consistency in the examination results both between the various parts and from year to year. The result of this review was to adopt a combination multiple choice-essay examination for Parts 5 through 8 as contrasted with the purely essay type examination that has been used prior to that time. At present about half of the examination points on Parts 4 through 8 are multiple choice and the other half are essay type questions. The "Principal Findings and Recommenda-

tions" section of the report contains the following statement:

"It is clear from a review of the Society's examination program that the Education and Examination Committee has, over the years, gone to great lengths to develop a carefully planned and carefully managed set of examinations. Considerable attention has been given to the many details which must be considered in order to insure that the examinations are both sound and fair."

The fourth review that I will refer to is a report made to the Board of Governors in March 1969 summarizing the recommendations of a "Study Group on the Mathematical Content of the Syllabus." This report made a number of observations and recommendations. The one which I will recount here is to increase the number of hours in the Part 3 examination from two to three and to substitute numerical analysis for finite differences.

A fifth review which I will mention is one made by a committee of the Canadian Institute of Actuaries. While this review was intended principally from the viewpoint of the suitability of the system for Canadian students, it took on many of the characteristics of an independent broad-gauged review of the education and examination system for a binational body.

How Program Is Organized

The education and examination effort is carried on by three closely integrated groups of people. The largest group, numbering about 140 Fellows, is the Education and Examination Committee, which is charged with carrying out both the education function and the examination function. A second group, numbering between 20 and 25 people—all but two of whom are Fellows—are the consultants to the Education and Examination Committee. These people are specialists in their respective fields and provide invaluable guidance to all phases of the education and examination work. The third group is a separate committee known as the Advisory Committee on Education and Examinations. This committee is made up of people about half of whom have had long experience on the Education and Examination Committee, with the other half having had little

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or no such experience. This committee's main function is in recommending education and examination policy to the Board of Governors. These three groups number about 175 Fellows or just over 10 percent of the total number of Fellows of the Society. In short, the Society of Actuaries is a rather substantial educational organization.

The Future

Up to this point I have confined myself largely to a recording of selected facts with limited editorializing. In this last section of the paper I will offer more in the way of personal views.

As it is presently constituted, the American Academy of Actuaries could not, in my opinion, undertake a major education and examination effort comparable to that offered by the Society of Actuaries. The Society of Actuaries is a binational body of long standing; its officers and board of governors and committee members are residents of both Canada and the United States. As such it is an acceptable body to establish admission standards for Canadians and Americans without distinction.

The American Academy of Actuaries is a purely United States body and would not be an acceptable admission standards body for Canadians. Furthermore, since the American Academy of Actuaries is largely a "shell" type of organization—it does not meet as a deliberative body—it could not sponsor a major education and examination effort. The history of the Society of Actuaries indicates clearly that education and examination of its students is a major source of discussion, argument and deliberation by its membership. I am told that the same situation applies to the Casualty Actuarial Society. As now constituted the American Academy does not provide a forum for such deliberation.

My own view is that the best solution to the admission and standard-setting problem now present in the actuarial profession in the United States is for the bodies to develop a jointly sponsored education and examination system. For the "life" side of the actuarial profession, this simply means that other actuarial bodies would set up committees which would operate in concert with the

Society of Actuaries' Education and Examination Committee. Achieving this goal will require a degree of statesmanship on the part of all six North American actuarial bodies. I cite the joint sponsorship by the Casualty Actuarial Society and the Society of Actuaries of their first two examinations as an excellent precedent.

Looking down the road I can foresee the day when educational institutions will take over some of the education work now handled by the Society. I do not visualize educational institutions taking over all of such work in the near future even for just the Associateship examinations. The problem of paucity of numbers of students in many of the states and provinces implies to me that the traditional self-study apprenticeship approach to actuarial training must continue for many years to come. Even with a dual education approach we will eventually have to reckon with a state sponsored examination system for students from both the educational institution route and the traditional Society self-study route if we are to achieve the goal of accreditation by the states.

As I understand it, accreditation of an individual to practice a profession is a privilege granted that individual by a state and the accrediting state can delegate neither to an educational institution nor to a private body its accrediting and admission-standard-setting power. Thus, as I see it, we must still develop a system of state sponsored examinations not unlike that which has been developed by the accounting profession. □

Social Security Notes

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1968 and \$8 thereafter), although it should be realized that not all benefit payments are on payment records (about 6% are not) and that administrative expenses are also financed by the system's income.

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Bertram Oppal and Margaret A. Lannen, *Present Values of OASI Benefits in Current Payment Status*, 1968, Actuarial Study No. 66, April 1969, pp. 24. Social Security Administration, Washington, D.C.

This study presents a valuation of old-age and survivors insurance benefits in current payment status at the end of various years through 1966, with preliminary estimates for 1967 and 1968.

Robert J. Myers, *Current Experience of SMI Program on a "Cash" Basis*, Actuarial Note No. 57, pp. 2, Social Security Administration, Washington, August 1969.

This Actuarial Note presents a comparison, on a cash basis, between income and outgo of the SMI Trust Fund for the period April 1968 through June 1969, for which the standard premium rate had been promulgated at \$4 per month. For the period as a whole, it appears that, on an incurred basis, the \$4 premium rate was not quite adequate (with the deficiency being about 4%).

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R. J. Myers and F. Bayo, *Disability Incidence Rates Under OASDI System for Disability Onsets Occurring in 1956-64*, Actuarial Note No. 58, August 1969, Social Security Administration, Washington, D.C., pp. 7.

This note briefly analyzes the incidence experience for disabilities with onset in the period 1956-64. The data are based on actual awards made before 1967 and on projections of awards after 1966. Values of the number of disability awards and of the incidence rates are presented by sex and by five-year age groups for each calendar year in the period.

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F. Bayo, *Retirement Experience of Old-Age Beneficiaries, 1958-68*, Actuarial Note No. 59, August 1969, Social Security Administration, Washington, D.C., pp. 3.

This note briefly analyzes the retirement experience of workers under the Social Security system for the years 1958-68. The "prevalence of retirement" among eligible workers has been relatively stable for females in the last 9 years. For males, the rates increased up to 1964, but have levelled off since then.

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Robert J. Myers, *Accrued Cost of SMI Program for 1966 and 1967*, Actuarial Note No. 56, pp. 3, Social Security Administration, Washington, August 1969.

This Actuarial Note analyzes the experience of the Supplementary Medical Insurance program during 1966-67 with respect to the adequacy of the standard premium rate of \$3 per month that was applicable then. The average per capita cost on an incurred basis for the 18-month period, July 1966 through December 1967, is estimated at \$6.50 per month, or 8% in excess of the combined premium rate and matching government contribution.

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Copies of these notes may be obtained gratis from Robert J. Myers, Chief Actuary, Social Security Administration, Washington, D. C. 20201. □