



SOCIETY OF ACTUARIES

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COMMITTEES

Editor's Note: This is another report on the operations of the Society's Committees. Mr. Biggs is Chairman of the Committee on Review.

Committee on Review

by John H. Biggs

A good scholarly journal is characterized first by its excellent papers and discussions. An important secondary characteristic of such a journal is the material included in its book review section. In this material the members of the profession have the chance to comment on the various new texts in their field and on a broad ranging variety of texts that impinge on their subject. The principal job of the Committee on Review is to make sure that the *Transactions* includes a complete and lively series of book reviews on actuarial and other mathematical texts. Responsibility for the Society's library is also vested in this committee.

We recently defined for the Society's Board of Governors the following purposes for our committee:

1. We should be sure to obtain competent reviews of all significant actuarial texts.
2. We should identify texts which are not of an actuarial character but of interest to a significant number of actuaries. We should obtain reviews or digests of these texts.

(The underlying purpose of both (1) and (2) is to make the book review section of the *Transactions* useful, educational, and interesting to the members of the Society.)

3. Since the *Transactions* is a part of every actuary's "research data base" we should make sure that reviews, references, and digests form a complete and comprehensive source.

(Continued on page 6)

The Board of Governors has received numerous enquiries about the Society's position in the Equity Funding situation. The Board has appointed an investigating Committee to keep in touch with developments and with the various authorities conducting investigations. The Committee will report back to the Board when the final results of the various investigations are available. Because of the many complexities in the situation it will likely be some time before these investigations are completed.

Thomas P. Bowles, Jr.
President

PENSIONS

Congressman John N. Erlenborn of Illinois, ranking Republican on the General Subcommittee on Labor of the House Education and Labor Committee, is pleased to announce appointment of

RUSSELL J. MUELLER, F.S.A.

Actuary and Minority Legislative Associate for the Pension Task Force.

Mr. Mueller is interested in receiving individual comments from concerned actuaries on any of the pension reform bills now pending before Congress. These comments will be considered as the Task Force continues its studies into the vesting, funding, and plan termination insurance areas. Copies of the Subcommittee Report, *Estimates of the Cost of Vesting in Pension Plans*, by Professor Howard E. Winklevoss of the Wharton School, are available upon written request to Mr. Mueller at: House Pension Task Force, 112 Cannon House Office Building, Washington, D. C. 20515.

DISABILITY AND PROBABILITY

by Robert L. Whitney

Jack Moorhead has urged me, partly in my capacity as Chairman of the Committee on Experience under Individual Health Insurance, to comment on the sales promotion statements that follow the format of:

"For a man age 35 there is a 50-50 chance that he will be disabled for at least 90 days continuously before he reaches age 60."

With the help of many members of the Committee, particularly Jim Olsen and Ben Helphand, the following is what I have learned.

An early use of the above type of probability statement appeared in an article by Robert A. Brown, Volume III (1953), of the *CLU Journal*:

"A further study of the hazard of disability based on the 1952 Society of Actuaries report reveals that, of a thousand persons who are age 35, 33% of them will suffer a long term disability (three months or longer) before 65."

The methodology used to determine the 33% involved starting with a radix of 10,000 individuals at age 35 and applying q_x and r'_x to obtain the numbers dying and the numbers becoming disabled during each of the years of ages between 35 and 65. The mortality basis for this double decrement table was the 1946-49 Ultimate Basic Table. The disability rates were the Benefit 2 rates shown on page 94 of the 1952 Report of Mortality and Morbidity Experience. The methodology used here is quite reasonable and practical. Refinements might have been introduced in applying the r'_x to reflect the effect of multiple disabilities. I am inclined to agree with Ben Helphand, who was responsible for the

(Continued on page 7)

Letters

(Continued from page 5)

manual be accurately and completely filled out.

Specific information will be sent to all members of the Society preceding each exam period. We expect to be mailing this information by July 1 this year, with order forms, price, and availability date for all of our publications.

Richard L. London
Assistant Professor
Northeastern
University

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Survivor Benefits for the Uniformed Services

Sir:

Mr. Kriss Cloniger, III, gives an interesting description of the new legislation on Survivor Benefits for the Uniformed Services in the April issue. This plan, replaces the previous Retired Serviceman's Family Protection Plan. This last was intended to be on an actuarial-equivalent basis, fully paid for by the retired members, but was not widely used—probably because of the lack of a "barrier" to the participants. The cost of the new plan is more than implied by the Survivor Benefits since the Government has, in addition, to pay for non-contributory retirement and disability pensions and for the employer's share of Social Security.

The new SBP closely parallels the provisions for survivor benefits for pensioners under the Civil Service Retirement Act. Mr. Cloniger cites the reason for the automatic adjustment of benefits, the CPI increase plus 1%, as being "meant to recognize the lag time in the adjustment process." Careful analysis indicates that this is not so. To accomplish this result would require such an increase to be made for each pensioner only the first time that an adjustment is applicable to him.

The same fallacious reasoning was given by the House of Representatives when it enacted this provision for Civil Service Retirement. When the error was pointed out in the Senate consideration of the legislation, the same basis was retained, but the "rationale" was changed—the 1% supplement was "justified" as letting the pensioners have a share in the increased productivity of the nation (as reflected by wages generally rising more rapidly than prices).

Robert J. Myers

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Committee on Review

(Continued from page 1)

- We should coordinate closely with the editor of *The Actuary*, in providing good book review coverage, on a more timely basis in *The Actuary* and of a more permanent comprehensive character in the *Transactions*.
- Another important objective is to extend the usefulness of the Society's library. Hopefully the recent addition of the computer bibliography prepared by the Society's Committee on Computer Science will further this aim.

The committee includes ten members who each follow a category of actuarial interest for new texts and for good reviewers. One member of the Committee is responsible for liaison with the Society library. It is not necessarily the job of a member of the Committee to prepare a review himself; a more usual procedure is for him to find an able reviewer with a special interest in the text. We want to share the burdens and pleasures of reviewing among as many members of our Society as possible.

One of the more difficult tasks of the Chairman of the committee is to define the kinds of books for which we will prepare reviews. Several examples may illustrate the kind of judgment that is involved.

- We have decided in general not to review the vast outpouring of texts on consumer issues in life insurance. This decision was reached with some reluctance since clearly an actuarial viewpoint might be useful in evaluating some of the more radical statements and proposals. Nevertheless, we felt that we would overwhelm the *Transactions* if all texts related to life insurance and in particular to the price disclosure and other consumer issues were covered.
- We did decide to review a few carefully chosen books in the literature on ecology. In the Fall 1972 *Transactions* we included two reviews on books related to pollution and population. They were the Club of Rome book, *Limits to Growth* and the important text of the Presidential Commission on *Population and the American Future*.

The Editor of *The Actuary* has also included some texts on the environment and has also reviewed some consumerist items. We hope through the combination

ARCH

The list of contents for the latest issues (1973.2 and 1973.3) is given below.

Issue 1973.2

Comments: on G. Berger's "Asset Shares and Anderson's Concept" Richard W. Ziock

Financial Projections and the Pricing of Life Insurance Frank Irish

A Stochastic Model of Bond Prices, Richard W. Ziock

Transcripts from the Waterloo Actuarial Research Conference on Time Series Analysis, 1972 September 28-30

- On the Relevance to Actuaries of Research on the Long Term Interest Rate, James C. Hickman
- Discussion of Fama's paper, Risk Return, and Equilibrium Empirical Tests, Paul M. Kahn
- Box-Jenkins Models for Hospital Insurance, Donald A. Jones
- Overview, J. L. Lewis, Jr.
- Overview, Newton L. Bowers, Jr.

Issue 1973.3

This is a Special Issue of the written material for Hilary Seal's *SHORT COURSE IN RISK THEORY* for the Actuaries' Club of New York, March, 1973.

Contents

- Risk Theory: Input
 - Risk Theory: Output
 - Practical forms for $p_n(t)$ and $B(\cdot)$
 - Numerical Calculation of $F(x,t)$
 - Computer Output
 - Numerical Calculation of $U(w,t)$
 - Computer Output
- Annotated Bibliography

Subscriptions can still be sent to David G. Halmstad, Area 222, Metropolitan Life Insurance Company, One Madison Avenue, New York, N. Y. 10010. □

of our two publications we will satisfy the tastes of most actuaries.

The Chairman of the Committee on Review welcomes suggestions of texts from all members of the Society and also welcomes any volunteers who wish to prepare reviews. Assignments can easily be made to the proper individual on the Committee on Review. We hope our work provides an important service to the Society's membership, and we think broad participation in reviewing can best assure fulfillment of that hope. □