The Actuary

February 1979 – Volume 13, No. 2

The Actuary
The Newsletter of the Society of Actuaries
VOLUME 13, No. 2 FEBRUARY, 1979

PERMUTATIONS AND COMPUTATIONS

Life Insurance Marketing and Cost Disclosure. U.S. House Subcommittee Report on Oversight and Investigations, Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 (Stock Number 052-070-047887).

by E. J. Moorhead

This is the first in a series of articles. The first three will be limited to highlights of the Moss Report. After that our columns will be open for discussions and suggestions of what actuaries, individually or collectively, might do about responding to the report's various recommendations.

Last year the House Subcommittee on Oversight and Investigations (a Congressional entity to which the Federal Trade Commission reports) decided to look into the effectiveness of state regulation of life insurance marketing practices—especially into the extent to which life insurance buyers are sold the products they need and are enabled to compare prices to their own advantage. As recently as ten years ago these marketing questions were not in the regulatory arena at even the state level, which shows that there is indeed a tide in the affairs of men.

Chairman John E. Moss (D.-Calif.) conducted hearings in August 1978, the organization of which was mainly in the hands of Subcommittee Counsel Jay C. Shaffer. This observer's impression is that Mr. Shaffer established a first class reputation for himself in his study of the subject, in his colloquies with testifiers, and, most of all, in the composition of the ensuing report that is the subject of this series.

The report consists of (i) 64 pages of main text arranged in three chapters; (ii) six pages of the dissenting views of Rep. James M. Collins (R.-Texas), who was formerly president of Fidelity Union Life Insurance Company; and (iii) 31 pages of appendices.

(*Continued on page 4*)

ANNOUNCING A CONTEST TO MARK OUR NINETIETH ANNIVERSARY!

The Actuarial Society of America came into existence at a meeting of its twenty-seven founders at the Astor House in New York City on April 25th, 1889. To mark our 90th birthday, *The Actuary* offers an exciting and potentially useful contest between the following important groups of Society members:

NEW FELLOWS, CLASS OF 1978

vs.

FORMER MEMBERS OF OUR BOARD OF GOVERNORS

The object is to determine which of these two groups can send in the largest number of the best quality of *mentions of any of the words, "actuary", "actuaries", "actuarial"*, found by them in the general press during our birthday week, *Sunday, April 22nd to Saturday, April 28th, inclusive.*

Such items, to qualify, must be in a Canadian or United States magazine or newspaper of general distribution, and clearly must not have been inserted by an actuary, an insurance company or association, an actuarial firm, or an employment agency.

Submissions must consist of the original or a copy of the article, and must identify the paper or magazine and its date of publication. In case of duplicate submissions, a modest effort will be made to ascertain which was sent in first.

Quality will be rated for contest purposes on a scale from one to five. High ratings will be for statements that indicate the writers' appreciation of what an actuary is and does.

Decisions of the Editor will be regarded, at least by him, as final. Submissions must be mailed no later than May 4, 1979, to: E. J. Moorhead, 2594 Woodberry Drive, Winston-Salem, NC 27106, U.S.A.

Winners, and the findings, will be announced in the May *Actuary.* □

DISPARATE ORIGINS OF LIFE AND NON-LIFE INSURANCES

A view by
Robert E. Beard, F.I.A., A.S.A.

Ed. Note: The Actuary believes our readers will find food for thought in Mr. Beard's succinct analysis, reprinted here with the author's permission from JIA 105 p. 107.

"The success of actuarial science with life assurance stems from the combination of the invention of the life table, and the recognition that this was an appropriate model on which to build, with a technical fault in the construction of of an early life table through which mortality rates were overestimated. This unsuspected margin built into the premiums resulted in the emergence of surplus, the distribution of which provided the key for operating an enterprise built on contracts under which the amounts were known but the time of payment was a random variable. In effect, the with-profit contract was a very happy device by which the insured provided his own risk capital. The main actuarial function was then to set premium rates high enough to provide a margin over the likely experience so that profit was not distributed before it was earned and so that trends in experience could be measured and reflected in management decisions.

"Non-life insurance evolved in a different way because the underlying risk process is different. Two main streams may be discerned. The first, and in market terms the smaller, may be described as simple or domestic risks. These are fairly numerous and comprise reasonably homogeneous groups, evolving historically from local mutual societies. In some respects the business resembled sickness insurance, the main difference being the frequency rate of claim and the dependence of benefit on value rath-

(*Continued on page 8*)

Disparate Origins

(Continued from page 1)

er than a fixed amount. These differences make it desirable to analyze experience in terms of claim rate and claim costs rather than the combined figure as used, for example, in Friendly Society studies. With simple risk business it is reasonable to develop classifications suitable as risk groups in respect of which sufficient cases exist for numerical estimates of claim expectations to be made.

"It is the second main stream which generates the difficult problems of non-life management. For convenience this will be termed commercial risks, although it will include industries and marine risks. The spread of risks, by nature and size will be much greater than for the simple risks. In insurance many of the risks will be unique and the concept of expectation has to be assessed in subjective terms. The principle of randomness is largely secured by the legal background (utmost good faith and absolute warranties) but aggregation of risks for experience purposes is still a largely unsolved problem . . .

"This subjective aspect is far less significant with life business but it does alter the model in a subtle way. The actuarial premium is based on an underlying life table and the claims are algebraically related to it. For a great deal of non-life business the premium and claim expectation are linked by the subjective judgment of the underwriter . . .

"The essential stochastic variable in life assurance is the time of payment of the event concerned and we know that in suitable circumstances this variability can be neutralized, so reducing the problem to deterministic terms. In non-life business we cannot eliminate the stochastic element, and our models must make specific allowance for it. If we attempt to use simple deterministic forms we may expect to find strange results. The essence of management control, and this is what we are talking about, is to determine the non-random effects separately from the random effects, and this cannot be done unless the random effects are first measured. This means that there is a fundamental difference between the two classes of insurance and it is far from obvious that this can be done by extrapolation from one to the other . . ." □

COMMITTEE CHAIRMEN

We are glad to provide an up-to-date list of Chairmen of Committees in advance of publication of the 1979 Year Book.

Standing Committees	*Chairman*
Administration and Finance	Ardian C. Gill
Admissions	L. Blake Fewster
Board of Publications	John C. Angle
Editorial Board *The Actuary*	Ernest J. Moorhead
Editorial Board ARCH	Arnold F. Shapiro** Courtland C. Smith, Jr.**
Editorial Board *Record*	Francis P. Lemery, Jr.
Editorial Board *Transactions*	Anthony T. Spano
Career Encouragement	Eugene M. Woodard
Complaints and Discipline	C. Lambert Trowbridge
Continuing Education	Robert E. Hunstad*
Computer Science	Hugh G. Johnston
Economics and Finance	Malcolm R. Reynolds
Health and Group Insurance	Stephen T. Carter
Life and Health Corporate Affairs	Nathan H. Epstein
Life Insurance and Annuities	James L. Lewis, Jr.
Research	Richard W. Ziock
Retirement Plans	Barnet N. Berin
Social Insurance	Arthur W. Ericson
Education and Examination	John W. Paddon
Education Policy	Barbara J. Lautzenheiser
Elections	Robert T. Jackson
Futurism	Wilfred A. Kraegel
Mortality and Morbidity Experience Studies	
Aviation and Hazardous Sports	Frederic Seltzer
Individual Health Insurance	Francis T. O'Grady
Individual Ordinary Insurance and Annuities	John H. Cook
Group Annuities	Robert M. Chmely
Group Life and Health Insurance	Simone Matteodo
Self-Administered Retirement Plans	Paul H. Jackson
Papers	Paul E. Sarnoff
Pensions	Stewart G. Nagler
Professional Conduct	Chandler L. McKelvey
Professional Development	Thomas H. Dancy
Program	Richard A. Burrows
Public Relations	Leonard E. Tandul
Review of Literature	Grace V. Dillingham
Standard Notation and Nomenclature	Frank G. Reynolds
Theory of Risk	John C. Wooddy
Special Committees	
Accident and Health Valuation Principles	Spencer Koppel
Credit Insurance	Harvey S. Galloway, Jr.
Dividend Philosophy	Edwin B. Lancaster
Recommend New Mortality Tables for Valuation	Charles A. Ormsby
Recommend New Disability Tables for Valuation	William J. Taylor
Reorganization	William A. Halvorson
Valuation and Related Problems	C. Lambert Trowbridge

*General Chairman

**Joint Editors