

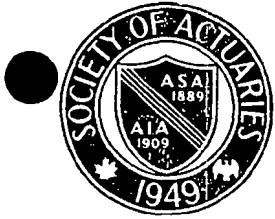


SOCIETY OF ACTUARIES

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RISK VENTURES

by Cecil J. Nesbitt

A Conference on Capitalization of Risk Ventures, sponsored jointly by the Graduate School of Business of the University of Wisconsin and by the Society's Committee on Research, was held October 21-23, 1971 in Madison, Wisconsin. The format of the Conference consisted of three invited lectures and their discussion, a general session on aviation liability insurance, and a general session in which three contributed papers were presented. There were approximately 100 participants including a number of leading members from Europe, the Casualty Actuarial Society, and the University of Wisconsin.

In the first invited lecture, Professor Hans Buhlmann of Zurich gave some wise reflections concerning the reserve needed to reduce the probability of ruin to a given level. He also discussed the effect of taking interest into account for the risk reserve and commented that with a sufficiently large volume of expected claims the effect of interest is negligible because the interest rate per unit of operational time is then small. Dr. Hans Gerber, also from Zurich, followed with a paper "On the Discounted Compound Poisson Distribution" which also considers how to take interest into account in risk theory. This had led him to come up with a "liberal" definition of ruin where hope is not abandoned until the risk reserve is in such a state of deficit that it cannot be restored even if all future premiums were applied to it.

Dr. Hilary Seal entertained the Conference with a discussion of the numerical calculation of three basic formulas of risk theory. In order to get the probability distribution function for aggregate claims, it still seems necessary to go to some transform image function and,

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19th INTERNATIONAL CONGRESS

OSLO, JUNE 19-24, 1972

Arranging an International Congress is far from a simple job, even the elementary chore of providing accommodation for nearly 1700 participants. Add to this the scientific and technical parts of the program. The Organizing Committee for this Congress with Mr. Paul Qvale as Chairman and Mr. Halvor Løken as Secretary seems to have done a thorough job from the detailed announcement of the Congress activities just received.

The Scientific Program could hardly be more topically up-to-date. Such matters as

- (1) Life and Pension Insurance with Variable Sum Assured and Variable Premium;
- (2) Methods for forecasting the development of an insurance company during the next ten years;
- (3) Private Pension Schemes and Social Insurance; and
- (4) the National Reports on the Government Control and Supervision of the Private Insurance Industry

are items of immediate concern to actuaries on the North American continent.

The social events and excursions are always a highlight of the Congresses. Our Norwegian friends make mention of some of the attractions and state categorically (how rare for actuaries!) that "Fine weather has been booked."

The Norwegian actuaries and their wives have been attending language classes to brush up their knowledge of the Congress languages. We hope the Canadian and American actuaries have been brushing up their Norwegian!

Finally for the non-attenders, copies of the proceedings may still be purchased and any reader interested should get in touch with Mr. E. A. Lew. □

ACTUARIAL FEATS AND FOIBLES

by M. B. Hutchison

At their November, 1971 meeting, the Younger Actuaries Committee of the Canadian Institute of Actuaries crossed the generation gap to study the evolution of our profession, through the careers and philosophies (both public and private) of some of the actuarial giants and oddballs (frequently synonymous) of the past. The featured speakers, Mr. Benjamin T. Holmes, Past President, Canadian Association of Actuaries, and Past President, Society of Actuaries; Mr. George Ryrrie, Past President, Canadian Association of Actuaries, and Mr. Arthur Pedoe, Past President, Actuaries Club, themselves candidates for inclusion in at least the former category, provided both an informative and entertaining evening, and some fascinating insights into actuarial idiosyncrasies.

The meeting yielded a number of memorable "words to live by," some of which should undoubtedly be considered for inclusion in the *Guides to Professional Conduct*.

• *Blackbridge on risk theory*

"Poker is a game for gentlemen and a straight flush is to be respected not because you make money on it (I have never seen anyone make money on a straight flush) but because it prevents four aces from being absolutely the winning hand, and thus relieves gentlemen from the necessity of betting on a certainty."

• *Hunter on the presentation of papers*

"There will be ten papers presented at this meeting, nine by myself and one by Mr. Robert Henderson."

• *Kilgour, on the need for surplus in a mutual company (in answer to a question from a shareholder at an an-*

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Feats and Foibles

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nual meeting, as to what will happen to the surplus "when the godly are lifted on high to join our Lord and material things will be forgotten").

"I am quite sure a number of my fellow directors won't be chosen among that godly throng and they will look after the surplus."

- *Jacoby, on professional ethics*
"One thing about an egotist—at least he doesn't go around talking about other people."
- *Gibb, on substituting facts for appearances*
"In 1955, boxcar loadings were up 7%, liquor consumption was up 14%. The obvious conclusion is that more people were getting loaded than boxcars."
- *Beowulf, on new statistical methods*
"It's a good sword, but not my own."
- *Ibn El Bana (13th century Arabian mathematician), on a topical problem*
"The number of 17 ones (11, 111, 111, 111, 111, 111) has only two divisors, and their discovery is an exceedingly heavy task." (Students wishing to look in the back of the book on this one are invited to submit their solutions to *The Actuary*).
- *Holmes, on selection of risks (in answer to a question from an irate agent)*
"We will offer Santa Claus a whole life policy and charge him zero, because he will live forever and we shall save on premium taxes. The commission rate will be 200% of the first premium."
- *Ryrie, on accreditation of actuaries*
"The fact that after ten years of voter registrations I am no longer required to spell the word 'actuary' in answer to the question on occupation, probably indicates improved spelling ability among enumerators."
- *Pedoe, on automation*
"Our trouble is, we leave thinking to the machines. Machines can't think. Not long ago I wanted the answer to a question about mortality. I wrote to the Society and was told, 'Get your answer from the Mortality and Disability Report. There are 103 tables in it.'

Hell's bells! Anybody can put 103 tables together. But they don't answer my question!"

- *and inevitably, an unidentified agent, on his company's chief actuary*

"I know he's not bad enough to be put away in a mental institution but I'm darned sure if he were already in one, he wouldn't be let out."

Readers wishing to pursue this subject further are directed to the following publications (not now part of the course of study)

- A Budget of Paradoxes—Augustus de Morgan
- Fragments—Henry Jackson
- The Complete Poker Player—John Blackbridge
- History of Life Insurance in Its Formative Years—Terrence O'Donnell and to Messrs. Holmes, Ryrie, Pedoe. □

INSURANCE PRIMER

William T. Hold and Jerry D. Todd, *The Foundations of Life and Health Insurance*, the Bureau of Business Research, Graduate School of Business, the University of Texas at Austin (1971), \$2.00.

by Gerry Katz

The Foundations of Life and Health Insurance, written by William Hold and Jerry Todd, would fit perfectly into the category of what we used to call a "trot," except that it is the official text adopted by the State Board of Insurance of Texas as the basis for the life insurance agent's license examination.

In one hundred and twenty-three pages, *The Foundations of Life and Health Insurance* touches every subject from product design, pricing, underwriting, and legal regulation through Social Security, variable annuities, the agency system, and estate planning. Individual, group, industrial, and social insurance are discussed, as well as all types of insurers, including mutual and stock companies, Blue Cross-Blue Shield, savings banks, and fraternal organizations.

As might be expected with this type of undertaking, the book can hardly do justice to any of these topics. Most subjects end in broad summarizing statements which tend to raise more questions than they answer. A brief history of significant legislation and court decisions leading up to the McCarran Act, for example, concludes with, "While it is impossible to describe all the pros and cons of state regulation, it is vital

to realize that some areas of state regulation need to be strengthened and streamlined." We never learn what these pros and cons are, why this realization is so vital, or which areas of state regulation are being referred to.

Another simplistic generalization summarizes the moral obligations of the agent. "If he does not act with the best interests of his clients in mind," we are told, "all of insurance will suffer."

Occasionally, also, the relationship of space devoted to different topics is mystifying, especially in view of the intended purpose of the book. While legal and moral guidelines governing the activities of insurance agents are only briefly sketched, the provisions of the Social Security Act are described in considerable detail.

For all its shortcomings, it can be said that *The Foundations of Life and Health Insurance* is concisely written and easy to understand. Charts and diagrams are sometimes employed for clarifying a discussion and each chapter ends with a helpful summary of main ideas. The calculation of a net single premium and equivalent level annual premium for a three-year term policy is illustrated, and an example is given of the mechanics of a major medical contract with deductible and coinsurance provisions.

Authors Hold and Todd fully recognize the limitations of their text and warn in the Preface that most subject areas are barely grazed. If this fact is realized by the aspiring new agent, *The Foundations of Life and Health Insurance* could serve as a reasonable first introduction to the insurance industry. Should his education end with the acquisition of a license, however, the Texas agent will find himself inadequately prepared for his new career. □

Actuarial Meetings

- April 13, Baltimore Actuaries Club
- April 17, Chicago Actuarial Club
- April 19, Portland (Ore.) Actuarial Club; Actuaries' Club of Des Moines
- May 15, Chicago Actuarial Club
- May 17, Atlanta Actuarial Club
- May 17, Baltimore Actuaries Club
- May 17, Seattle Actuarial Club
- May 17, Portland (Ore.) Actuarial Club
- May 18, Nebraska Actuaries Club
- May 23, Twin Cities Actuaries Club