

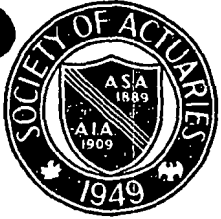


SOCIETY OF ACTUARIES

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CAPITAL ADEQUACY IN PROPERTY INSURANCE

A Simulation Analysis of Capital Structure in a Property Insurance Firm, by David J. Nye, S.S. Huebner Foundation Monograph Series, University of Pennsylvania, \$5.00.

by David J. Grady

Editor's Note: We are indebted to The Actuarial Review for permission to publish this review of the latest volume in the Huebner Foundation Monograph Series. Mr. Grady is a Fellow of the Casualty Actuarial Society.

Dr. Nye's monograph is a carefully constructed academic who-done-it in six acts. The victim is an apparently innocuous monoline insurance company with dreams of multiperiod survival. In order that we should not mistake the character of the victim for any company familiar to us in real life, the author reveals that the single line is automobile physical damage coverage. We are introduced with meticulous care to those who sustain close relationships with the potential deceased: the cheerful and optimistic common stock portfolio, the ever-faithful but possibly overvalued presence of long-term bonds, the uncertain support of the debt/equity ratio, and the brute strength of blind growth. As we become more deeply involved with these interrelationships, the suicidal tendencies of the victim are revealed to us. Suspense is heightened when we begin to suspect that the true culprit has been unmasked in a footnote on page 89. However, with the introduction of further complexities in the latter half of the work, the reader comes away with a feeling of relief that it has been, after all, only a simulation.

A careful perusal of the monograph should provide the reader with a much greater depth of understanding of the

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20TH INTERNATIONAL CONGRESS OF ACTUARIES

The deadline for final registration for the 20th International Congress of Actuaries in Tokyo this October has been extended to June 30. One hundred actuaries from the United States have already registered for the Congress and there are a number of registrations still available. United States actuaries can obtain information from Fredrick E. Rathgeber, Prudential Plaza, Newark, N.J. 07101. Canadian actuaries should contact Colin E. Jack, Tomenson-Alexander, 680 University St. W., Montreal, Quebec. □

ENCYCLOPEDIA SOCIAL SECURITY

Robert J. Myers, *Social Security*, pp. 691. Richard D. Irwin, Inc., Homewood, Illinois 60430. \$17.50.

by Geoffrey N. Calvert

For all of us who have to work with employee benefit plans that relate in some way to the Social Security system, this book by Bob Myers is a godsend. While it has been described by one of my actuarial friends as "a Niagara of detail", it does give all of us a marvelous reference source from which to draw in getting a fix on literally hundreds of the finer points relating to eligibility, the method of calculating benefits, in fact the whole background and evolution of these benefits and methods. Bob has a rare facility for communicating this detail in an accurate and readable form.

The Social Security system is not a static system. It is constantly evolving. And it has its quirks and anomalies. It is the product of forty years of political hassles.

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CARRUTHERS' REPORT ON INSURANCE IN THE PROVINCE OF ONTARIO

by L. Blake Fewster

In January 1973, the late G. E. Grundy, then Superintendent of Insurance for Ontario, appointed Douglas H. Carruthers, Q.C., as special legal counsel to review the relationship between insurers and the public and in particular, the role of insurance intermediaries.

Mr. Carruthers' final report was submitted to the Superintendent in July 1975 and was made public earlier this year. His review appears to have been extensive, providing an independent perspective of the insurance industry. The report may have gone beyond its original intent, but Mr. Carruthers feels that the insurance industry in Ontario has important problems to resolve with respect to licensing practices, policy wording, and cost disclosure. His report, will now be exposed for appraisal by knowledgeable persons and groups inside and outside the insurance industry.

Prior to the final report, there were some interim reports to the Superintendent: in December 1973, a report on the life insurance business and in February 1975, a similar report on the non-life business. These reports have now also been made public, although it is doubtful if they were intended to be more than working documents. A rather mysterious leak to the press several months ago concerning the 1973 report brought some unfavourable reaction from the life insurance industry.

In his final report, his main criticisms of the present legislation are:

(1) It is not clear to the insured in whose interest insurance intermediaries act.

(2) Inadequate information on cost and benefits is available to consumers.

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Actuarial Note

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This recursion formula has been used in evaluating pension benefits and life insurance policies where they have modal—non-annual—characteristics. It lends itself to use in computer programs, particularly with (annually) varying interest since only v , F and G change.

It is sufficiently general to include temporary life annuities with obvious modification. The results will of course differ from traditional values by a percent or so due to the difference in approximating assumptions.

This "linear" assumption would seem to be a reasonable, practical one even at the clouture of a table. Double life annuities are easily found by first generating a joint life mortality table using actual ages. □

Letters

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profession because, among other things, I was attracted by its tradition of practical on-the-job training for those entering the field. I was also attracted by your nationally administered, uniformly graded actuarial exams which I felt would be recognized anywhere I went. To me this is vastly preferable to a series of almost meaningless grades received from beleaguered professors whose cost of living raises frequently depend in part on how well they fare on "faculty evaluations" by their students. Most of my former colleagues agreed that these evaluations correlate with the professor's liberality in grading.

While it is conceivable that a single comprehensive examination could serve to equalize between the associateship exams and the academic route, my feeling is that it would have to be 19 hours long before I'd really have confidence in it.

I beg of you: Please maintain the rigorous standards that led many of us to enter the actuarial profession!

E. Torrance

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Actuarial Notation

Sir:

Mr. Di Paolo's article in the March *Actuary* on actuarial notation is excellent but, as to the Halo Notation, I am reminded of the old gray mare: She ain't what she used to be and never was.

I admit that the Halo Notation "... is very concise and unambiguous and ... easily read and quickly understood."

I suppose you can write an expression for the net annual premium for a k -year deferred, n -year, t -pay, endowment. This makes me feel like the school-boy Churchill when he was obliged to decline *mensa*. The vocative, *mensa*, means "O Table", and is used when speaking to a table. "But I never do", Churchill is said to have replied.

The Halo Notation is all right as far as it goes but it doesn't go very far. How do you say "gross premium" in Halo Notation? "Policy fee"? "Conversion rate"? "25% of either the adjusted premium for the first policy year or the adjusted premium for a whole life policy of the same uniform or equivalent uniform amount with uniform premiums for the whole of life issued at the same age for the same amount of insurance, whichever is less"?

How do you handle unit expenses? Interest rates varying by duration? The premium for the renewability provision in term insurance? Stochastic analysis of risk?! GAAP reserves?!!!

The list is endless.

Mr. Di Paolo asks whether we should extend "... the scope of ... actuarial notation ... to cover fields such as pensions, disability, demography, social insurance, and non-life insurance?" I would like to propose that the Halo Notation be extended to cover modern ordinary life insurance — if it can be.

Kenneth T. Clark

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Sports Section

Sir:

I would like to make two points relative to the tennis tournament in Miami.

Chicago Corner

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showing the exact description of each session, the number of persons estimated to be at the session, the arrangement of chairs and tables required, and other information needed by the hotel to make its arrangements.

Throughout the meeting, the Society staff is in constant touch with the hotel convention personnel in order to handle any problems which may arise. For example, an unexpectedly large number of persons may turn up at a luncheon, requiring additional tables and chairs to be set on a moment's notice, or someone may have failed to set up a particular room the way it was supposed to be set.

Not all meetings go as well as others. Some hotels are better than others in planning conventions, and sometimes problems develop which no one could have foreseen. For example, in Cincinnati last year, a great many more persons registered for the meeting than had been anticipated.

Although we work hard to give the members of the Society the best possible meetings, we recognize that there is always room for improvement, both in the content of the programs and in the hotel arrangements. Readers are encouraged to send their suggestions to the Executive Director.

P.W.P.

First, recognition of Gerry Levy's outstanding job of organizing and running the tournament. I enjoyed it a great deal, despite getting beaten so badly that I needed four days in Puerto Rico to recover. Without Gerry's effort (and his company's sponsorship), the event would not have been possible.

Second, a south-of-the-border viewpoint of R. A. Nix's request for "equal time" for golfers (March 1976). In the U.S. (if Boston in the 60's and Chicago in the 70's are typical), golfers have been rather well taken care of at the Club level. (I have never seen an announcement for an annual "Tennis Outing"). With bridge tournaments at both Club and Society levels, it has been the tennis player who has felt out in the cold. Until Miami! Thanks, Gerry, for the breakthrough.

C. M. Underwood