The Actuary

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Actuarial Literature

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I was unable to justify to my satisfaction the reasons for the existence of the Committee on Papers. I think that the signature of any member of the Society should be a sufficient requirement for inclusion of an article in the *Transactions*."

"I believe the statistics on the percentage of papers which are accepted indicate that not all actuaries will present papers of high quality. I believe we must maintain at least one publication which is a scholarly one."

"A paper should not be published unless it is well-written, accurate (although not necessarily uncontroversial), and represents a meaningful contribution to the literature."

"The Committee on Papers is charged with evaluating the papers submitted. It can do nothing about papers which are needed but which have not been written."

On the Concurrent Sessions:

"At times one can find a subject which has been treated properly but is not current. Sometimes current information can be found, typically in the form of minutes from a Concurrent Session, but the information due to its nature is not thorough enough to be of much value."

On the Examination Study Notes:

"The author of a study note is relatively unknown among the Society membership."

"The Study Notes prepared for students provide an overview of actuarial practice from the standpoint of individuals with five or ten years experience who, having carefully studied the limitations of their mathematical tools, have almost concluded that those tools are worthless and that pure judgment should apply."

"The Society is going at it in the wrong direction in that students are being given material (the Study Notes) that the practicing actuary should be getting but is not, while the practicing actuary is being given a book (the *Transactions*) filled with papers that the student should be required to read but is not."

On the Encouragement of Authorship:

"There seems to be general agreement that we want and need more and better papers."

"We need a committee that could actively solicit papers."

"Writing research papers must be recognized as having value to the company."

"We feel very provincial about the research and actuarial work that we have done thus far. We feel it would be inappropriate to share this information with others."

"Unwillingness to share the results of research is a phenomenon known as the 'Cotton Curtain'."

Hopefully, the author's friends in the profession will not object to this amalgamation of their views! Collectively, they have outlined the problem in an admirable fashion. There are no magic solutions. However, steps *can* be taken to improve the preparation of actuarial literature. Here are some ideas being considered by the committee:

(1) A Director of Publications, who will be a new constitutional officer of the Society, will be elected. The Director of Publications will have both authority and responsibility to see that needed material finds its way into the two publication forms (the *Transactions* and printed books) which contain literature of permanent value to the profession. The Director of Publications will be chairman of a Publications Board supervising all publications of the Society. He will also work closely with the many committees of the Society (e.g., E.&E. and Continuing Education) which are in a position to encourage authorship.

(2) A new publication, tentatively called *The Record*, will contain minutes of meetings, concurrent session discussions, lectures, teaching session outlines, etc., and will be published in streamlined form as soon as possible after each meeting.

(3) A Study Note Service, designed for the practicing actuary, will be made available at a nominal charge. The material therein will be organized by subject matter in easily-accessible form, and will be updated automatically as changes occur.

(4) The *Transactions*, which will contain many additional papers of a needed and practical nature, will be divorced from specific meetings of the Society, and will become simply a publication issued at periodic intervals.

(5) A new annual prize will be instituted for the best paper appearing in the *Transactions*.

The Committee invites views from any reader of *The Actuary*. □

TONTINE

Robert W. Cooper, *An Historical Analysis of The Tontine Principle*, S.S. Huebner Foundation for Insurance Education, University of Pennsylvania, 1972, pp. 69, $2.50.

by C. Norman Peacor

This is a monograph that one will find difficult to put down. Not necessarily because it is so interesting, which it is, but because it is so readable and brief. It has a natural appeal to every actuary whose gambling instincts were aroused by the study of cards and dice in order to get through the examinations. It, perhaps, even has an appeal to the instinct for gain that lurks latent in all of us.

Ever since Lorenzo Tonti proposed the scheme in the mid-1700's for the purpose of replenishing depleted French exchequers, the idea has captured people's imaginations. Mr. Cooper traces the early history of the Tontine schemes through their rise and fall as instruments of national policy, particularly for France and England. It was not, however, until the mid-19th century in the United States that the approach effectively and almost universally burst upon the American insurance scene.

There is an ample description of the policy provisions, the actuarial and legal aspects of the plan, and an analysis of the marketing principles (and lack thereof) that characterize Tontine and semi-Tontine policies. The brief description of the sales "Thirty Years War" between the Mutual Life of New York and the Equitable makes one wish for more information. Perhaps the histories of these two companies for this period of time could be read for further background. It must have been an interesting period in American insurance development.

Finally came the Armageddon of the Armstrong Investigation. Rapid and substantial surplus buildups, the lack of annual accounting, and the excessive sal-

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Survivor Benefits

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an[illegible]. The additional amount, payable for as long as there is at least one child remaining as an eligible beneficiary, is to be sufficient to pay the cost of benefits to the children after the spouse is no longer eligible. The spouse's benefit eligibility ceases at death or at remarriage prior to age 60.

The Class 3 premium, payable only as long as at least one child remains an eligible beneficiary, is to be sufficient to pay the cost of the benefits to the children after the death of the retiree.

The Class 4 insurable interest premium is somewhat higher. It is 10% of the retiree's full retired pay plus an additional 5% for each full five years the beneficiary is younger than the retiree, subject to a maximum cost of 40% of retired pay.

Beneficiaries in Classes I through 3 will receive the maximum of 55% of retired pay unless the member elects to have premiums and benefits based on a lesser amount down to $300 per month. Class 4 beneficiaries receive 55% of retired pay net of the SBP premium. Both premiums and benefits are adjusted for changes in the Consumer Price Index.

Consumer Price Index

The CPI adjustment occurs whenever the CPI increases by 3% since the last adjustment date and does not dip below that level for three consecutive months. The amount of the adjustment is equal to the percentage increase in the CPI between the month of the last adjustment and the current adjustment month plus 1%. The extra 1% is meant to recognize the lag time in the adjustment process.

Social Security Integration

Perhaps the most interesting feature of the plan is the provision relating to Social Security integration. Two types of Social Security benefits are fully offset against SBP benefits, while other social security benefits are ignored for offset purposes. If a widow has exactly one dependent child, the SBP payment is reduced by an amount equal to the Social Security mother's benefit to which the widow would be entitled based solely upon the uniformed service of the retiree and [illegible]lated assuming he lived to age 65. When the widow or widower reaches age 62 or there is no longer a dependent child, whichever occurs later, the amount of the SBP payment will be reduced by the amount of the Social Security survivor's benefit calculated under the abovementioned assumptions. When there are two or more children, the mother's Social Security benefits are ignored because integration would produce a lower SBP benefit than is available to similar beneficiary classes under the civil service survivorship plan.

During the Congressional hearings on this legislation, the Department of Defense recommended that one-half of the amount of Social Security attributable to military service be offset against the SBP payment. Congress rejected this recommendation primarily in order to achieve comparability between the civil service and the military survivor's benefit plans. The civil service retiree's contributions, which are made during active service and retirement, provide 60%—62.5% of the cost of the civil service survivorship plan.

With the full offset for Social Security in the two cases described above, the military member who currently enters military service will contribute, on the average, about 62.7% of the total cost of the survivor benefits (including Social Security). The member's contribution includes the SBP premium and one-half of the value of the Social Security benefit, on the assumption that his Social Security contribution pays for one-half of the Social Security benefit. With the one-half offset, the member would contribute about 55%. The deficiency of 37.3% of the total cost of military survivor benefits will be financed from general revenues and will be included in the defense budget.

Guaranteed Annual Income

One additional purpose of the SBP bill is to provide a guaranteed minimum annual income of $2,100 per year to current widows of retired military personnel. Many widows are not covered by either Social Security or by the SBP's predecessor, the Retired Serviceman's Family Protection Plan (RSFPP). Only about 15% of military retirees participated in the voluntary RSFPP. Consequently, a large number of widows have no survivorship rights in their husband's retirement income. The guaranteed annual income is to help provide for those who have no other significant sources of income. The Survivorship Benefit Plan was passed to avoid this problem in the future. □

Death

Robert P. White

Tontine

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aries and commissions were abuses that could be laid directly at the door of the deferred dividend system. High lapse rates and disappointed policyholders (who saw the actual dividends paid fall short of the estimated dividends) generated angry letters and, in some cases, law suits. But, not until the Armstrong Committee made its report and the New York Legislature acted on it, was anything done to curtail the abuses of the system. Once action was taken, however, it was immediately effective in causing the Tontine-type policy virtually to vanish from the life insurance scene.

The interesting point of Mr. Cooper's monograph is that the story does not stop with a demise of Tontine insurance schemes in 1906. His final chapter briefly touches on six forms of modern Tontine schemes. Earlier, he had defined the Tontine principle as a scheme ". . . whereby those members of a specified group who survive and/or persist receive a future benefit of an unknown amount at the expense of those members who die and/or withdraw from the group." The manner in which Congress and the news media are criticizing pension plans would suggest that at least one form of modern Tontine is not only with us still but is, perhaps, causing the same old types of problems insofar as the participants are concerned. In an area such as this, it is perhaps too bad that the deliberate brevity of the monograph precludes a full or clear analysis of the problem and its ramifications.

Nevertheless, not since Thomas Costain wrote "*The Tontine*" has there been anything as readable, in my opinion, on the subject. On the other hand, this is no historical novel so that the background of information is much more complete, albeit impersonal. The large number of footnotes is an invitation for further reading and, perhaps, that is in itself a sufficient recommendation for this monograph.

This is the first of a series of monographs to be published by the S. S. Huebner Foundation and it is a good augury for subsequent volumes. The monograph is distributed by Richard D. Irwin, Inc., Homewood, Illinois. □