## TRANSACTIONS OF SOCIETY OF ACTUARIES 1951 VOL. 3 NO. 7

## DIGEST OF INFORMAL DISCUSSION

## GENERAL

- A. For the purpose of controlling intermittent war hazard antiselection, what advantages would result from the inclusion in all policies of a temporary war clause which would exclude all deaths resulting from war during the first two policy years?
- B. Would the fact that mortality of females is less than the mortality of males justify lower premium rates for females, or does the smaller size of policy offset the mortality difference?
- C. In view of the large volume of accident and health business written by life insurance companies and the recent entrance into the business of a number of large life insurance companies, what should the policy of the Society of Actuaries be with respect to inclusion of accident and health problems as a subject for papers and discussions?
- D. What are the advantages and disadvantages of the proposed new form of annual statement (U.S.)? Will likely changes in the form of Canadian annual statement be of similar character?

MR. E. M. MACRAE stated that the large volume of business written immediately prior to the introduction of war and aviation clauses on policies issued by the Occidental to military personnel on active duty and to members of the Reserve and National Guard had resulted in a state of congestion of the underwriting and issuance departments for several weeks. Accordingly, approval has been secured in most of the states of a two year war risk exclusion clause, with no reference to Home Areas, which will be attached to all policies in the event an attack occurs or war is declared. The availability of such a clause would permit issuance of new business to continue in an orderly fashion.

MR. A. C. WEBSTER thought there might be intermittent war hazard antiselection for a long time. The underwriting problem in a period of little wars is not an easy one, but it is not solved by ignoring the hazard or by setting up artificial limitations on the amount of insurance issued. A war clause is the only control available and the form of the war clause might depend to a considerable extent upon the pattern of our rearming. The exposure to war hazard now seems to be confined to the younger ages. So long as the Selective Service Act does not extend beyond age 26, a clause applicable to issue ages 18 to 26 and terminable five years after issue might be used to meet the intermittent war hazard. MR. C. B. SPURGEON listed some of the advantages of a war clause. He did not see any point in limiting the clause to two years and suggested that a clause excluding war claims anywhere should be a permanent part of every life policy. If a full war develops it is likely to have catastrophic effects on civilians just as much as on combatants and a war clause in all policies would seem justified.

MR. J. E. HOSKINS, speaking on section B, observed that from an application of the Travelers experience on female lives to its premium formula he has reached the conclusion that the smaller size of policy offsets the lower mortality. In their most recent experience female mortality has averaged about 70% of male mortality and the average policy on female lives based on Ordinary insurance in 1950, exclusive of term and group conversions, was slightly less than half that on male lives. Mr. Hoskins also showed that the effect of lapse might work in the direction of higher premiums for women if they are subject to the same lapse rates as men, but that this may be offset if they have a lower lapse rate. Reference was made to a discussion by Mr. Larus who had found that the lapse ratio on Phoenix Mutual policies written on women had been much more favorable than on men. He concluded that the net effect combining the lower lapse rate on female lives with mortality and size differentials would seem unlikely to indicate lower premiums for women.

MR. J. S. HILL indicated that for a recent six-year period mortality on females in the Minnesota Mutual has run about 60% of that for males and on the same business the average size policy on females was about 50% of that for males. He noted that the paper just presented by Dublin and Spiegelman showed for the last few years a ratio of white female mortality to white male mortality remarkably close to the experience of his company. Considering that excess expenses occur largely in the first year, that gains in mortality apply only to the net amount at risk and taking lapses into account, it would appear that women should be charged a higher rate than men except for low premium plans issued at the advanced ages.

He concluded that for most companies the relatively few cases where women should be entitled to preferred treatment are offset by the cases in which the reverse situation obtains. The whole matter appears to be one in which practical considerations, such as the expense of separate rates and the difficulties encountered in public relations, outweigh the theoretical consideration of equity.

MR. J. E. MORRISON agreed with the other speakers that while the mortality margins between male and female risks may be substantial they are very largely offset by higher expenses arising from lower average size policies. He referred to a special female policy reflecting lower mortality where the anticipated average size is greater than the company average, which was introduced by the Great-West Life about a year ago. The minimum policy is \$10,000 in the United States and \$5,000 in Canada. A higher average size policy is the principal adjustment in calculation of the gross premium with anticipated lower mortality reflected in the dividend scale. Eligible risks must be standard and first class in every respect. In the first year about 10% of the Great-West adult female business was written on this plan with an average size policy of \$16,000.

MR. W. VAN B. HART, in discussing section C, pointed out that personal accident and health insurance has received little space in the proceedings of the Casualty Actuarial Society. Our own Society has given even less attention to this subject. As a result the intelligent collection of statistics and the free interchange of actuarial thought on actuarial problems have undoubtedly suffered to some extent. The life insurance business in its turn has suffered from lack of exposure to accident and health ideas. The Society has already admitted group accident and sickness to the pages of its Transactions and the extension of the principle to individual accident and health seems entirely logical. The Bureau of Accident and Health Underwriters has been responsible for practically the only intercompany efforts to gather sound accident and health statistics on individual policies. Any increased stress laid by our Society on accident and health should be done in the spirit of cooperation with the Bureau of Accident and Health Underwriters, the Conference of Accident and Health Underwriters, and the Casualty Actuarial Society.

MR. H. R. LAWSON expressed the opinion that membership interest should be the controlling factor in deciding what subjects should be discussed by the Society of Actuaries. Today considerably more of our members find themselves with companies prepared to write accident and health than was the case a year ago. The entry of so many leading life insurance companies into the individual accident and health field will have a very stimulating and healthy influence on this branch of the insurance business. At the same time he saw a grave danger in the present rush to get into the business, in that competition plus a human tendency to forget the lessons of the past might lead to practices that would bring about a repetition of the total disability debacle of twenty years ago.

He referred to certain inherent difficulties in the way of presenting the same sort of papers on accident and health insurance as on life insurance. For example, a paper on morbidity experience under individual accident and health policies would be of very little value. Morbidity rates vary with economic conditions, the definition of what constitutes disability, the precise nature and extent of benefits, whether policies are noncancelable or cancelable, the class of risks insured, the underwriting practices, the way in which claims are handled and many other factors. He believed, however, that members of the Society would from time to time add greatly to our knowledge of the subject.

MR. H. G. JOHNSTON did not think that we should necessarily discuss accident and health insurance because life insurance companies write it. The criterion is whether or not it is an actuarial subject.

MR. C. H. TOOKEY reviewed some of the reasons why individual accident and health problems should be included as suitable subjects for papers and informal discussions in the Society. The Society can broaden the service to a large proportion of its members, particularly those in medium sized or small companies who may not have the time and facilities for individual research that is available in the large companies. It would seem that the Society could well encourage the submission of papers of a fairly elementary nature so that all actuaries might have at least a general knowledge of the subject. An increased interest by the actuary would be good for the accident and health business.

He also referred to the number of variable factors involved in accident and health research which do not exist in the life field and wondered whether in the past the actuaries felt that because of these variations the business was too complicated to obtain much benefit from actuarial research. If so, is this belief based on careful consideration of the subject or is it due to fear of tackling a difficult job? He concluded that interest on the part of the Society would encourage the individual actuaries to do a better job in their own companies in accident and health matters.

MR. D. J. LYONS indicated the need in the accident and health field for the kind of thorough analysis to which life actuaries are accustomed. The solving of the many problems presented by the accident and health business should be undertaken by life actuaries and preferably through the Society of Actuaries.

MR. E. J. MOORHEAD was of the opinion that there would be increasing divergence in the treatment of accident and health business by the life companies and the casualty companies—notably in compensation and coverages. For this reason it would be particularly desirable to discuss this topic in the Society of Actuaries.

MR. R. G. STAGG questioned the desirability of actuaries covering the individual accident and health field. He felt that it might be better to encourage within the ranks of the Casualty Society a group of people definitely interested in this topic and to follow it through in that way. If this subject were included in papers and discussions of the Society, it would, no doubt, result in an increase in the scope of our examinations which are probably already broad enough.

MR. H. R. BASSFORD pointed out that while individual accident and health insurance is a natural for life insurance agents it would present many new problems to life insurance companies, and it would appear to be a logical step to include it as part of the regular subjects at our meetings. The remarks made by Mr. Lawson illustrate some of the problems. Mr. Bassford felt also that it would be very desirable to include the subject in the Society examinations.

MR. K. B. PIPER stated that while it was possible some years ago for a Fellow of the Society to become an Associate of the Casualty Actuarial Society by passing one fellowship part this arrangement was no longer possible.

MR. ARTHUR PEDOE referred to the historical aspect of sickness insurance. It goes back to the very early days of actuarial science. He thought that it was time the serious minded actuary became interested in the accident and health business in order that it might be put on a sound basis.

MR. N. M. HUGHES said with reference to section D that the criterion for judging the new form of statement must be the degree to which sound criticisms leveled at the old form had been met. These criticisms, as would be seen from reference to the 1937 volume of *The Record* or as could be inferred from the pamphlet accompanying the December 1947 edition of a Proposed New Annual Statement, were chiefly directed at the features making for misunderstanding and confusion on the part of the public. While because of the nature of the life insurance business there were phases which would always be obscure to the outside observer, the statements should not only aid in the task of supervision but also be in a form intelligible to the public.

The new form, he indicated, went far in removing the type of criticism referred to. The first pages followed the accepted order and arrangement for financial statements. Apart from the inclusion in the Summary of Operations of certain items not involving profit and loss and the possibility of being misled by the Analysis of Increase of Reserves, a reader familiar with financial statements would meet no difficulties until Exhibit 12 which apparently restated items previously disposed of. Exhibit 13 might give the impression of classifying assets into good and inferior ones. Some difficulty might arise, too, from the fact that the schedules do not support the asset items appearing in the balance sheet, but only those labeled "Ledger Assets" on page 14. While it might be argued that most readers would study only the first four pages, a completely satisfactory blank would contain no unnecessary pitfalls for the unwary.

He said the Joint Committee representing the companies had unanimously endorsed the new blank despite some disappointment at the veiled retention of the old statement of income and disbursements and the old breakdown of assets. Relegation of these to a later place in the statement would, it was felt, facilitate their removal should it become apparent that they served no useful purpose. It was also felt that the schedules could be amended on a gradual basis at a later date. He recalled the history of efforts to revise the Gain and Loss Exhibit and intimated that lapse of time alone would probably not dispose of unnecessary appendages. It is much easier to get ten features onto a blank than to get one feature off it. He concluded that while the new blank was considerably better than the old it was not perfect and good public relations demand constant efforts on the part of both the companies and the insurance departments to improve it.

MR. D. C. DUFFIELD questioned what he said might be a minor aspect of the statement, the idea implied by the division of capital gains and losses between "realized" in the summary of operations and "unrealized" in the surplus account. If the division were made, profits and losses on sale would probably be treated as realized and changes in admitted and book values as unrealized. This procedure would be misleading since sale would give rise to both a realized profit (excess of sale price over book value) and an unrealized loss (appreciation to previous year end), so that by making the subdivision neither item is confined to the operations of the calendar year. A company was primarily concerned with total investment operations during the current year and not with a division of this result between that due to appreciation of securities held at the previous year end and that due to switches to new securities. He felt that gains and losses in a given year had no meaning except in total, as it was questionable whether any gain was permanently realized.

He believed, therefore, that all capital gains and losses should be entered in a single item, preferably in the surplus account, to avoid the necessity of arbitrary distribution by lines of business on page 5. He pointed out that distribution by lines of only realized gains might lead to anomalous results. While separate accounts were needed for profits on sale and change in book and admitted values, the separate items should not be credited with a significance they did not possess. He said that the views expressed were his own and not necessarily those of his company.

MR. KERMIT LANG stated that while not all of the detailed company suggestions had been adopted the prime objective of a change to

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revenue form had been achieved. Relegation of detail to supporting exhibits was an improvement. The substitution of thirteen pages for six in the old statement involved additional work, but the amount was comparatively inconsequential. Exhibits 12, 13, 14 might be considered unnecessary by some, but especially in the transition period this was not a unanimous opinion and experience will show the necessity of them. Inclusion at the present time removed the objection to lack of continuity due to a change of statement form.

The Exhibit of General Expenses and the Instructions for Completing Annual Statement Blanks (of which three out of eight pages were devoted to the expense exhibit) were important innovations. There would be uncertainty at the outset as to the meaning of some of the instructions, but this might not be a disadvantage. The aim was to more uniformity, but not to complete standardization since in a limited number of cases opinions and underlying conditions could well be different. In certain cases as in the classification of Federal Income Tax the arrangement deliberately permitted freedom of choice.

The method of determining the interest rate in the new statement was an improvement over the old, but it had been noted that the formula was still in error in that the funds on which the rate was figured should be adjusted for unearned investment income. If there was any real disadvantage to the new form, he felt that this was in connection with the new expense exhibit and even there it was rather a question of timing than of the form. Accounts must be revised in the light of the new requirements and for 1951 considerable analysis or some rough approximation would be necessary.

MR. A. A. TOUSAW said that a committee from the Canadian life companies had been working for some time on the change from a cash to a revenue statement basis. It was hoped to have a revised statement ready for submission to the authorities within the next few months. The Canadian Insurance Department was favorably disposed to a revenue statement and would cooperate in its development, while the Provincial Superintendents advocated such a statement and had requested the Committee to coordinate the revision of the Dominion and Provincial Statements. The majority of the committee favored an "Operations Statement" reconciling change in surplus, while a minority preferred a "Fund to Fund" Statement such as the annual statement required by the Board of Trade of Great Britain.

The committee was unanimously agreed on the principles of showing only major items in Assets, Liabilities and Operations Statements and relegating details to supplementary schedules and exhibits, and also on the elimination of terms such as Ledger, Non-Ledger and Not Admitted Assets. The Canadian Insurance Department apparently favored some breakdown of premium income, etc., within the main statement. Some difficulty might arise from the separation of participating and nonparticipating funds as required by the Insurance Act. It might also be felt desirable to include in the Canadian statement a division of operations by class of business as in the new United States convention form and in the present Provincial statements.

Because of the number of companies operating in both Canada and the United States a definite objective of the committee was to bring about greater uniformity with the United States form.