# TRANSACTIONS OF SOCIETY OF ACTUARIES 1958 VOL. 10 NO. 27

## DIGEST OF INFORMAL DISCUSSION

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- A. 1. Provided the resulting reserve is suitably described, is there any actuarial objection to the proposal that any deficiency reserve for a category of business valued on a standard higher than the minimum need not exceed the amount sufficient to bring the total aggregate reserve up to that on the minimum standard, including any deficiency reserve attaching thereto?
  - 2. What are the current prospects for adoption of a new mortality table for the valuation of Ordinary Insurance?
- B. What is the background of the program currently in progress for mutualization of some prominent Canadian companies? What is expected to be the position in the mutualized companies of policies originally sold on the nonparticipating plan?

MR. J. T. PHILLIPS, a member of the Committee to Co-operate with the NAIC in the Construction of an Up-to-date Mortality Table, believed that he could best answer the second question by bringing the members up to date on developments and letting them arrive at their own opinions as to what were the current prospects for adoption of a new valuation mortality table.

He started with the final report of the Society Committee. This report, dated January 24, 1958, was accepted at a meeting of the Executive Committee of the Society of Actuaries on April 9, 1958, and the Society's Committee, in accordance with its request, was discharged.

Mr. Phillips did not attempt to review this report but merely pointed out that this report stated that an advisory committee of industry representatives would be in a better position to discuss the facets of industry and supervisory policy, as well as the need for a new table. The report also stated that such a review would involve problems in addition to the technical problems to which the Society's Committee had been limited by reason of the terms of its appointment.

The Honorable Cyril C. Sheehan, Commissioner of Insurance of the State of Minnesota and Chairman of the NAIC Sub-Committee on Deficiency Reserves and Mortality Tables Review, followed the recommendation of the Special Committee of the Society and appointed an Industry Advisory Committee that included among its members representatives of nearly every type of life insurance company and of all areas of the country. Robert H. Rydman, General Counsel of the North American Life and Casualty Company of Minneapolis, Minnesota, is the Chairman of the Industry Advisory Committee. Only five of the other ten members of this Committee are actuaries and Mr. Phillips is the only member of the Special Committee of the Society who is also a member of the Industry Advisory Committee.

The first meeting of the Industry Advisory Committee on April 9 and 10, 1958, considered the NAIC Sub-Committee's request for consideration and suggestions with respect to the following matters:

- 1. The problem of extended term insurance as it relates to Table  $X_{17}$ .
- 2. The loadings in the younger ages in Table  $X_{17}$ .
- 3. The NAIC Sub-Committee has taken the position that companies should use only one basic table with respect to all plans currently being offered by the company. Does your Committee agree?
- 4. In implementing this or any table into legislation what additional matters should be considered, *i.e.*, should each policy be "self-supporting" and if so, how should this be inserted in the framework of the law? Consider also any other matters of a similar nature.
- 5. Give us your opinion and discuss the factors you consider important with respect to timing of legislation of this nature.

Various subcommittees were appointed to consider these specific questions and a second meeting was held on May 8 and 9, 1958. Substantial agreement was reached at this meeting. The Industry Advisory Committee completed its report and submitted it to Commissioner Sheehan on June 2, 1958.

Mr. Phillips then quoted from this report as follows:

## THE NEED FOR A NEW MORTALITY TABLE

It seems to us that the question of "need" should be disposed of prior to considering a new mortality table. It will be recalled that before the adoption of the 1941 CSO Table this point was seriously studied. As early as 1937 the Commissioners considered the "need" question. The Table was actually adopted by the NAIC in 1942, and implementing legislation was largely completed by 1948 after the war. While to consider the question of need is consistent with the previous practice, we think it more important in that if "need" had been fully established, some of the opposition which has plagued the progress of X-17, would have been eliminated.

Briefly and specifically, we believe there is a "need" for a new mortality table in much the same sense there was a need that the 1941 CSO Table replace the American Experience Table. So as not to burden the body of this report unduly, our thinking and our documentation of this point is supplied in Exhibit I, attached hereto.\* While some of the companies feel there is a need to provide relief from present deficiency reserve requirements, we do not rest our case on that point. Presumably a new table would furnish such companies with some relief,

\* I.e., to the Committee Report.-ED.

but in the larger sense an important need would exist regardless of the deficiency reserve problem.

The insuring public may come to feel that the cost of their insurance is adversely affected by the continued use of an old valuation standard, because, as Exhibit I shows, the 1941 CSO Table is obsolete when measured against today's experience just as the American Experience Table was twenty years ago. This misapprehension should be avoided and a modern table should be adopted. But since the need is of this nature, we do not think the situation is so acute that we should resort to hasty and not thoroughly considered solutions. Elsewhere in this report we shall recommend certain substantive undertakings with respect to adopting a new table. In our judgment there is a need, but we caution that if a table is developed as a result of this finding, it should be arrived at deliberately and an effort to enlist the widest possible support should be made.

## RECOMMENDATIONS WITH RESPECT TO ADOPTING A NEW MORTALITY TABLE

## A. Extended Term Insurance

It is our recommendation that the problem presented by extended term insurance should be dealt with as a part of any new table considered. Objections have been raised to Table X-17 because of increased periods of extended term insurance and, to some extent, the increased amount of reduced paid-up insurance it would provide in contrast to that of the C.S.O. Table. At the same time it has been argued that the basis of determining the amount of such nonforfeiture benefits should provide for the expense of maintaining such options after lapse....

Therefore, we think, as a practical matter, any new table should be constructed to consider this very important point. Accordingly, one actuarial member of the Industry Advisory Committee has constructed, for illustrative purposes, a special non-forfeiture mortality table, which is set forth in Exhibit II....

We wish it to be clearly understood that we are not recommending the adoption of this specific table. We are recommending that this problem area be considered and some similar approach be recommended by a technical committee of actuaries. As we have previously indicated, we are not a technical committee of actuaries. It would be inappropriate of us to make specific recommendations. Either the Society might again be approached or a sub-committee of our committee could be established which would have the necessary qualifications. Possibly another idea might occur to your sub-committee as to how this could best be handled. The point is, if your sub-committee makes a decision with respect to this matter, it seems to us you could use additional advice in the technical aspects of the problem.

#### B. Loadings or Margins

This question was also dealt with from a practical viewpoint. A large measure of the concern with Table X-17 springs from the belief in some quarters that the margins, at least at some ages, are not adequate for universal usage throughout the country. Our point is as long as this beliet exists, there is a substantial prac-

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tical impediment to the adoption of X-17. We therefore urge that these margins be re-examined in that light, and again we would recommend that a properly constituted technical committee, such as is suggested above, be specifically informed of this important practical problem, and asked to report to you with that in mind. A possible approach was submitted by one actuarial member of this committee and is incorporated herein as Exhibit III. In submitting this document to us it was pointed out that this was a suggested approach and that it should be thoroughly tested prior to its being reviewed on its merits. Accordingly, we have *not* so reviewed it and as a committee, we do not wish to imply its acceptance. It is included as an illustration of an approach which would avoid some of the criticism leveled at X-17.

#### C. Permissive Question

In the list of questions submitted to this Industry Advisory Committee by the NAIC, the Subcommittee took the position that companies should use only one table with respect to all plans currently being offered in the United States by the company. This Committee shares that view.

We believe that permissive application of a new mortality table to one plan or "category of plans" is artificial in nature. If there is sufficient justification to support the promulgation of a new mortality table for use in the valuation of policy liability, it is logical that the same mortality standard is appropriate to all like United States exposures of the company, unless the risk falls within a separate mortality classification, i.e., sub-standard.

We did not specifically consider the permissive question in the sense of "should all companies be required to issue policies based on a new table." Some believe company adoption should be permissive in this sense. The majority of us think otherwise. We do contemplate that before all companies would be required to change to any new table, the law would allow them a reasonable period of time to develop policies in accordance with such a table, much as was done at the time of adopting the 1941 C.S.O. Table.

## D. The "Self-Supporting" Concept

Basically, we favor and strongly urge that the law should require policies to be self-supporting. Here again, if some of the companies opposing X-17 could be convinced that they would be protected from "loss leader" competition, the likelihood of a new table coming into being would be greatly enhanced. Not only is this important practically, but from the public's point of view, there is much logic to such a requirement.

Assuming deficiency reserves will be handled in the future on a basis somewhat similar to the way it is currently handled in many states, we have prepared a suggestion with respect to the "self-supporting" concept.

Our suggestion and our approach is incorporated in the following proposed uniform statute. We do not advocate this specific statute, but we believe that the Commissioners should explore this possibility further with the idea of including a section of this type in the package of a new mortality table law.

If the gross premium charged by any life insurance company on any policy or contract is less than 110% of the net premium for the policy or contract according to the mortality table rate of interest and method used in calculating the reserve thereon, the Insurance Commissioner shall require such Company to satisfactorily justify that such policy or contract is self-supporting according to reasonable assumptions with regard to interest, mortality and expense.

It should be emphasized that this Committee is opposed to any form of rate regulation in this field, and this proposal is *not* intended to imply rate regulation. It is intended only that under specific circumstances a Company is required to satisfy authorities that a particular policy or group of policies have adequate rates from the "self-supporting" point of view.

#### E. Timing

Throughout this report we have attempted to indicate our thinking on timing. On the one hand, there is a need. On the other hand, part of the difficulty in considering X-17 arose because of what may have appeared to some as a "rush job." In essence, we believe there should be immediate but deliberate consideration of a Table, which considers the matters suggested herein. We would further suggest that after such a Table has been devised the Commissioners should "lay it on the table" after it has been made a part of the NAIC record and take no final action for a year from that time. Our reasoning, briefly, is that this is of tremendous importance to the public, as well as to the industry, and a full opportunity should be given to everyone concerned to study any Table which is proposed. We repeat, and further underscore, our suggestion that maximum unanimity of opinion is essential if confusion and dissension are to be avoided. It would be most unfortunate and certainly not in the public interest, if the new table could not be used practically everywhere at the same time. Upon adoption of a new table at the NAIC level, we recommend a pattern for legislative adoption similar to that which was used when the 1941 C.S.O. Table was considered.

## SUMMARY & CONCLUSION

Our committee has among its members representatives of nearly every type of life insurance company and all areas of the country are included. We differed and still do differ with respect to several technical points. Nevertheless, we were all genuinely anxious to act as a unit, and to be able to affirmatively take a position on this extremely important matter. We are pleased to report that we are 100% agreed as to what our advice to your subcommittee should be:

- I. There is in fact a need for a new table.
- II. For practical reasons, the study of a new table by a technical committee should consider the situations and areas indicated in this report.
- III. Work by a properly constituted technical committee should be undertaken without delay, so that sufficient time for individual study by Commissioners, their technicians, and the companies can be provided prior to adoption of such a table by the NAIC.
- IV. The suggestions made should be considered in the aggregate. If you do so, we believe a wider acceptance of the idea of a new table will be achieved. This in turn will assure the public of a modern, safe, and fair mortality table at the earliest reasonable date.

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Mr. Phillips pointed out that, in view of the time limitation, he had quoted only selected excerpts from the report of the Industry Advisory Committee. In general, these excerpts were selected so as to reflect the point of view of the majority of the Committee. He indicated that the report includes several references where individual members of the Committee indicated alternate views with respect to some items and that the report, including the Exhibits, would probably appear in the *Proceedings* of the National Association of Insurance Commissioners.

MR. C. A. ORMSBY in discussing the first question said that there are at least two schools of thought on this question of deficiency reserve requirements. One firmly believes that such requirements are indispensable to sound supervision of the insurance business by the states. The other is definitely in favor of their complete elimination perhaps accompanied by other means of defining acceptable valuation standards and of keeping gross premiums from being too low.

From a practical standpoint to base deficiency reserves on the minimum legal standard rather than the company standard would afford longneeded financial relief to more than a few companies. Other reasons in favor of this modification are lessening the impact of discrimination between participating and nonparticipating business and between older and younger stock companies; lessening the distortion of annual earnings, surplus position and gross premiums by issue age; removing a possible barrier to justifiable rate reductions among smaller stock companies; removing some of the objections found in practice to the indirect rate regulations of the deficiency reserve requirements; and allowing a company to use more conservative reserve standards without encountering deficiency reserve requirements.

Mr. Ormsby pointed out that the relief provided would vary with plan of insurance and issue age. The effectiveness could also be enhanced or impaired by shifts in the relation between the minimum legal valuation standards and the standards prevailing in the industry. A model-office study using CSO  $2\frac{1}{2}\%$  mean reserves (excluding deficiency reserves) and CSO 3% mean reserves (plus their deficiency reserves) indicated that the suggested lower standard could result in a substantial reduction in surplus drain, provided "category" was defined as including all plans and ages at issue.

If insurance laws were to be changed to incorporate this alternative for deficiency reserves, it would obviously be more important than ever to have a uniform minimum standard throughout the forty-eight states.

Although admittedly there are, from both an actuarial and practical point of view, a number of distinct advantages to this means of relaxing the requirements for deficiency reserves, its shortcomings should not be disregarded. The deficiencies of the present concept of deficiency reserves would in principle not be corrected by substitution of the minimum legal standard for the company standards in the statutory requirements for aggregate reserves. There are good practical reasons for not opposing the liberalizing modification in question. If temporal considerations were not so impelling, it would probably be preferable to resolve the deficiency reserve problems from a longer range point of view.

MR. W. H. BITTEL felt that the proposal was clearly in conflict with the deficiency reserve provision of the Standard Valuation Law. Assuming that the valuation interest and mortality bases are appropriate for the policy and the particular company involved, the deficiency reserve law guarantees that future premium income and the deficiency reserves, together, will be sufficient to maintain the reserves for the policy and related nonforfeiture values. The proposed deficiency reserve would no longer be related to the bases of reserves and nonforfeiture values actually adopted for a policy and would therefore be artificial and lacking any clearly defined objective. Mr. Bittel stated his opposition to any change in the present New Jersey laws to give statutory recognition to the proposal.

MR. RALPH KEFFER felt that if a company represents in Exhibit 8 of the annual statement that standards other than the minimum are being used or if nonforfeiture values are computed with interest rates lower than those specified for minimum standards, the minimum standard reserves are no longer acceptable. If a policy provides nonforfeiture values in excess of tabular reserves on the minimum standard, then Item G-3 of Exhibit 8 would call for additional reserves to be held. Moreover, it would seem that the company should not only set up the difference between surrender values and tabular reserves as an additional reserve in that year but also make provision in prior years of such amount as might be required to pay these excess surrender values. The requirement of this additional reserve is based upon the principle that the reserves should be adequate to provide the largest demands that may be made voluntarily by the policyholder as well as to provide for benefits automatically available.

If any scale of reserves set up by the company for any particular policy is to be considered adequate it would appear that it should meet the test that the reserve held at the beginning of any policy year before payment of premium plus the premium (or the net premium permitted by the valuation system if less than the gross premium) plus interest for the policy year should be at least equal to the amount payable in event of death (or other contingency) occurring during the year, multiplied by the probability of such contingency occurring during the year, plus the value of the

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largest optional benefit available to the policyholder if living at the end of the year, multiplied by the probability of living to the end of the year. The probabilities and rate of interest, of course, are to be computed according to the valuation standard. The value to be used at the end of the year would be the reserve to be held for the next year if the insurance is to be continued in force or the value of the nonforfeiture benefit available upon surrender if greater.

The reserves with which the aggregate reserves are to be compared should meet this test.

MR. H. M. SARASON felt that at the present time we have mortality, interest and extended insurance all wrapped up together and until they are separated we will have difficulties. As long as the net premium valuation is being used as a conservative approach to the gross premium valuation, it does not matter too much what mortality table is used. When it is being used for deficiency reserves and as a means of influencing the rate of premiums, it becomes a sharper tool.

MR. E. F. ESTES commented favorably on Mr. Keffer's remarks. He went on to point out the primary function of a valuation mortality table, viz., a legal yardstick for determining company solvency; but he cautioned against a tendency of the general public to regard such a table as a true and precise measure of expected mortality. Mr. Estes also raised the question of whether insurance departments were adequately staffed to determine the adequacy of gross premiums which were less than, say, 110% of the net premium. He felt that the deficiency reserve statutes, as they now stand, are inconsistent with the rest of the valuation laws if these laws are considered as a legal yardstick of the minimum standard. Mr. Estes then gave a description of a possible deficiency reserve as follows:

A deficiency reserve as hereinafter described shall be maintained if the gross premium charged on any policy contract is less than the corresponding deficiency net premium, such deficiency net premium being ascertained by applying, to the Commissioners 1941 Standard Ordinary Mortality Table with interest at  $3\frac{1}{2}\%$ ,\* the mathematical formulas used by the company to determine its corresponding valuation net premium (such valuation net premium being the net premium used in calculating terminal reserves).

(A) On any policy anniversary, if the reserve maintained by the company on such policy (exclusive of any deficiency reserve) is based on the Commissioners 1941 Standard Ordinary Mortality Table with interest at  $3\frac{1}{2}\%$ ,\* the aforesaid deficiency reserve is the excess, it any, of (1) the then present value of all such future deficiency net premiums over (2) the then present value of all such cor-

\* For any specified state, this interest rate to be the maximum interest rate applicable in determining minimum legal reserves. responding future gross premiums; all present values being based on the Commissioners 1941 Standard Ordinary Mortality Table with interest at  $3\frac{1}{2}\%$ .\*

(B) On any policy anniversary, if the reserve maintained by the company on such policy (exclusive of any deficiency reserve) is in excess of the corresponding reserve computed by the same formula but using the Commissioners 1941 Standard Ordinary Mortality Table with interest at  $3\frac{1}{2}\%$ ,\* the aforesaid deficiency reserve shall be as described in the next preceding paragraph (A) but reduced by such excess.

MR. H. F. ROOD commended the report of the Industry Advisory Committee. He felt that the need for a new table had been demonstrated and that the suggestion of 130% of the table plus one death per thousand for extended insurance and paid-up insurance was a fairly good one. Mr. Rood then turned to the suggested table with its loading of one death per thousand graded into twenty percent at the older ages. He felt that the younger ages could have rates increased without destroying the usefulness of the table but he was afraid that if the older ages were increased substantially there might be some net premiums produced which would be rather excessive. He pointed out that tables close to Table X<sub>17</sub> were in use now for such purposes as reinsurance premiums, one year term dividend additions and term riders.

Mr. Rood was concerned about the "adequacy of premiums" suggestion. He pointed out that the suggestion would provide that about 130%of Table X<sub>18</sub> net premiums would be the level generally acceptable by state insurance departments. He felt it likely that there would be some insurance commissioners who would not be prepared to go below the stated minimum. With 48 states and the District of Columbia, a company might find itself with a number of different premium rates. A new company would have a great deal of difficulty in satisfying the commissioners as to the appropriateness of their rates. There is the possibility of a Federal investigation of the insurance business this year. If the investigators found a situation existing whereby companies that wanted to reduce rates were not permitted to do so and whereby there was a different level of rates in different states, a good case for Federal supervision could be made.

MR. G. H. DAVIS felt that the "self-supporting premiums" suggestion was a constructive one, but he had doubts as to the illustration of how this might be implemented. He did not think that 110% of the valuation net premium was likely to be a satisfactory criterion for all plans and ages. Even if a more satisfactory criterion could be devised, it could not remain the same over any period of time. He thought that the use of this 110%requirement would, in a short time, mean that the gross premiums of substantially all companies would have to be justified. MR. A. C. OLSHEN stated that the application of the new mortality table to "any category of policies" rather than to all plans issued by a company would be discriminatory and would serve to further aggravate the deficiency reserve problem. The industry proposal for the development of a new mortality table arose from the desire to eliminate deficiency reserves on certain plans that were being issued by some companies. The counter argument has been made that these plans were in many instances "target" plans issued as competitive "leaders."

Permissive application to one plan or "category of plans" is artificial in nature. If there is sufficient justification to support the promulgation of a new mortality table for use in valuation it is logical that the same mortality standard be applied to all like exposures of a company.

It is generally recognized that companies utilize up-to-date mortality experience in developing their premium structure. A considerable effort was devoted ten years ago to explain this to the public. In spite of this the chairman of the NAIC subcommittee took the position that the matter "involves the price which the insuring public must pay for nonparticipating life insurance." An insight into this position can be obtained by considering the deficiency reserve aspect. Some contended that the requirement of deficiency reserves served as an inhibition to certain companies from lowering gross premiums. Some felt that the relief from the deficiency reserves was needed by smaller companies, but others felt that the deficiency reserve requirements serve as a barrier to the larger companies' cutting premiums on "target" policies for competitive purposes. Others feel that to eliminate deficiency reserve requirements would expose the industry to possible insolvencies due to inadequacies of gross premiums because of competitive pressures.

A concerted attempt should be made to:

- 1. Seek a permanent solution to the "burdensome" aspects of the deficiency reserve statute as it currently reads.
- 2. Eliminate any barrier which precludes lowering of premiums to levels which might otherwise be adequate.
- 3. Preclude the solution from being an instrument for hazardous unwarranted "price cutting."
- 4. Retain the prophylactic safety provisions built into the concept of the deficiency reserve statute.

The concept that each policy be "self-supporting" has the attribute of providing each of these desired solutions. Mr. Olshen then referred to the reports by the NAIC committees on a New Mortality Table (1939) and on Non-forfeiture Benefits (1942) and the proceedings of the Public Meeting (New York, 1940) and of the Hearing (Chicago, 1940). The position of the NAIC committee in 1940 was more or less summarized by the Connecticut Department representative as follows: "Some ten or fifteen years ago, we had some heavy competition in lower rates among nonparticipating companies, and it seemed to me that the deficiency reserve law was a very constructive thing and prevented that competition from becoming ruinous." From these sources, Mr. Olshen quoted Mr. Ray D. Murphy, Chairman of the Committee of Association of Life Insurance Presidents, and Mr. T. A. Phillips, Chairman of the American Life Convention, to the effect that if adequacy of gross premiums is what the NAIC Committee has in mind, this might be accomplished by some such provision as that of subsection II of Section 213 of the New York Law which reads:

No such company shall issue any life insurance or annuity contract which shall not appear to be self-supporting on reasonable assumptions as to interest, mortality and expense.

He pointed out that Mr. Phillips and Mr. Murphy did not feel that this was "rate regulation" nor that it called for "rate approval" by the commissioner.

Mr. Olshen suggested that the CSO Table could be retained as a floor and companies be absolved of deficiency reserves for only that portion of the deviation below the CSO net which they could support. The specific proposal was as follows:

- A. In lieu of Table X<sub>17</sub> there be prepared an "unloaded" progressive mortality table ("unloaded" so that no company could presume that the net had ample margins which precluded proper loadings for expense, contingencies, etc.; progressive so that projected improvement in mortality could be provided for).
- B. If a company desired to use a gross premium lower than the current statutory minimum, it would have to file evidence with the Insurance Department justifying such deviation. It would have to set up a deficiency reserve only to the extent of any deviation which it could not justify.
- C. If the company chose to adopt this table for any plan, it would be mandatory for all plans.

Under this proposal it would not be necessary to seek statutory change periodically, but instead, with the improvement in mortality, the progressive table would fit the situation with the Mortality Committee of the Society of Actuaries periodically updating its data.

Such a proposal would meet the four requirements outlined above and is not true "rate regulation." Some people might contend that insurance departments are not adequately staffed to evaluate the "self-supporting" filings. If this is true, how can we expect the hundreds of small companies without complete actuarial staffs to be secure in their judgment of utilizing adequate rates?

MR. T. B. MORRISON, in discussing section B, said that in Canada both stock and mutual companies issue life insurance on both participating and nonparticipating plans. By law separate funds must be maintained. Prior to 1951, the interest of the shareholders was limited to 10%of the divisible profits of the participating fund. In 1951 the Act was amended reducing the share of the divisible profits with increase in size of the participating fund grading to  $2\frac{1}{2}$ % where the fund exceeds \$1,000,000,-000. As Canadian stock companies grow, the capital stock becomes relatively less important as a protection and it is virtually impossible to increase capitalization. There has been a good deal of speculative interest in the shares of Canadian stock companies and in many instances the price of shares has risen to unjustified levels. There has been fear that this will result in a disproportionate share of profits going to the shareholders. The interest of participating policyholders has long been recognized by the right to attend and vote at all general meetings of the company and to be represented on the Company's Board of Directors.

Prior to 1930 all Canadian life insuranse companies were controlled in Canada, but then one company was acquired by an English company. Recently control of at least six companies has been purchased by interests outside Canada.

As a result of these developments there has been a growing interest on the part of some companies to mutualize. This became possible by an amendment to the Insurance Act in December last year. A stock company may now purchase its own shares and be converted into a mutual company with the consent of a majority of the shareholders and a majority of the participating policyholders provided it is in a financial position to do so. At least four Canadian companies are currently engaged in a program of mutualization.

MR. ARTHUR PEDOE pointed out that the seven companies referred to by Mr. Morrison represented a tremendous proportion of the 32 federally licensed Canadian life insurance companies. The fact that a relatively small capital stock, held in some cases by the families of those who organized the companies, controlled companies which had attained considerable size and had doubled and redoubled in the last ten years or so was bound to attract financial interests whose object was more to exploit the company than to develop it in the interests of the Canadian public.

Mr. Pedoe then mentioned four main factors to be considered in the developments of the last ten years.

First there was an effort to gain control of the Sun Life, Canada's

largest company. As a result of that, the Canadian law was changed to restrict the share of profits paid to the shareholders out of the participating fund as the company grew in size, thus reducing the attraction of a "take over" at a high price for the shares.

The next development was an offer made by interests outside Canada to purchase 45% of the paid-up capital of the Manufacturers which was in the estate of a former president of the company.

The third was the purchase of the Dominion Life company by the Lincoln National.

The fourth was the increasing number of smaller Canadian life insurance companies passing under the control of interests outside of Canada by share purchase.

All this led to the amendment to the Canadian law which, for the first time in Canadian life insurance history, enables a life insurance company to mutualize. In the past, only the North American had ever mutualized; this was a special case, as the charter of the company on organization had provided for the redemption of the shares of the original guarantors.

In addition to the points made by Mr. Morrison, Mr. Pedoe pointed out that the government is waiving taxation on the amounts paid out to purchase the shares, so that the shareholders will receive one hundred rather than approximately fifty percent of the amount paid out by the company.

Since in Canada mutual companies have always sold both participating and nonparticipating business, there will be no change in the status of the nonparticipating policies on mutualization. Profits on nonparticipating policies will go into the general surplus and could be available for distribution to participating policyholders.

MR. H. R. LAWSON pointed out that the desire to keep control of Canadian companies in Canada may have had something to do with recent mutualizations. He does not fully subscribe to this sentiment since in some companies close to half the assets are not in Canada, and, further, the Canadian law requires the majority of the Board of Directors to be Canadians.

The limitation of capitalization of Canadian companies puts some indefinite limit on distributable profits and on ultimate value of the shares as an investment. This limitation recognizes that capital is not necessary in the case of an established life insurance company and has attempted to bring about, along with a provision limiting the proportion of the profits on participating policies that can be transferred to stockholders, a happy compromise between the stock and mutual principles. Now that there is going to be a larger number of strong mutual companies which the public

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can choose as their insurance carriers if they so desire, Mr. Lawson hoped that stock companies will be allowed to pursue the stock course in a fuller sense.

MR. J. R. GRAY pointed out that when the price paid for the stock reflected both current and future earnings on the nonparticipating business, mutualization removed the guarantees provided for this business by the nonparticipating surplus and the capital. In the event of difficulties in the nonparticipating fund, the participating policyholders may be left to meet unforeseen deficits.

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## ACTUARIAL MEETINGS

- A. Does the simultaneous session plan used on Thursday afternoon at this meeting (and at the 1956 fall meeting) result in a more attractive program?
- B. What is the best division when simultaneous sessions are held? Should certain topics (e.g., Individual Accident and Sickness Insurance and Employee Benefit Plans) be maintained on a semipermanent basis?
- C. Would panel sessions or outside speakers on certain topics be preferred to the informal discussion plan?

MR. R. H. HOSKINS favored the simultaneous session plan for two reasons: first, the resulting program is more attractive to actuaries with special interests, and second, the smaller audience encourages more spontaneous discussion.

The best division of topics is a mutually exclusive one, from the point of view of as many members as possible. Certain topics should be maintained on a semipermanent basis, but it may be desirable to change the boundaries, thereby expanding or reducing the scope of a topic. In order to satisfy both of these requirements, Mr. Hoskins suggested that the program include two different discussion periods, each with two or even three simultaneous sessions. For example, because of the overlapping interest in the programs for younger members and consulting actuaries at the 1956 fall meeting, the former program might well have been paired with that on, say, accident and health, and the latter with that for government actuaries.

MR. H. B. STALEY was also in favor of the simultaneous sessions because this gave him more chance to hear and participate in discussions on his main interest, Ordinary life insurance. He would like to see Ordinary insurance as a semipermanent topic. Panels or outside speakers are not too effective. In preference to panels he suggested that the chairman of the meeting ask for questions from the floor after each speaker so that a discussion would be encouraged.

## TRANSACTIONS OF SOCIETY OF ACTUARIES 1958 VOL. 10 NO. 27

## SPECIAL POLICIES

#### A. Family Plans.

- 1. Are there any signs which suggest that the popularity of these plans is waning?
- 2. Has the persistency of policies written on these plans been significantly different from that of individual policies?
- 3. What principles are followed in setting up reinstatement requirements for these plans?
- 4. Have any valuation problems been encountered other than those covered in the paper and discussion on this subject presented at the 1958 Eastern Spring meeting?
- B. Bank Loan and Split Dollar Plans.
  - 1. Is there a sustained demand for policies with unusually high early cash values? Are many companies not now issuing these plans planning to do so?
  - 2. Is there a heavy lapse rate on business written on these plans? If so, what underwriting precautions can be suggested to improve persistency?

MR. W. H. KELTON, in discussing section A, stated that The Travelers has been issuing the Family contract since June 1957, and that sales of this contract have continued to account for 10% of their total new business since that time. For policy exhibit and valuation purposes his company divided the Family contract into four parts: Ordinary Life on the husband, Term to 65 on the wife (using the husband's age), Term to 21 (or the husband's age 65, if earlier) on the children, and waiver of premium on the death of the husband for the wife's and children's coverages. Reserves for children are developed on the assumption of  $2\frac{1}{2}$  children per unit. The term insurance on the wife and children is included in the Term column of the policy exhibit. Upon death of the husband, coverage on the wife and children is changed to paid-up Term to 65 and 21, respectively.

MR. S. L. EISNER stated that the Prudential has experienced only a slight decline in the popularity of family plans from their peak periods. In the first quarter of 1958, family plans constituted 45% by number and 62% by amount of the total regular Ordinary and monthly debit Ordinary new business.

Although no study of persistency on this plan has been made, Mr. Eisner felt that the lapse rate is no worse than that on other plans. Reinstatements within two months of lapse are handled on a short form reinstatement application; simple health questions are asked of all members covered on the due date of the premium in default. New additions to the family since lapse are underwritten separately. Lapses of two months or more are handled much the same as new applications. Mr. Eisner cautioned that the reinstatement application include a provision that reinstatement does not impose any liability for any person then deceased; otherwise the company might be forced to pay for deaths which have occurred subsequent to lapse and prior to the application for reinstatement.

MR. R. T. SCHWARTZ stated that in the New York Life the Family Insurance policy continues as a "best seller" with volume leveling off at approximately 22% of the total Ordinary paid figures.

Based on relatively scanty data the New York Life has found that lapses on the Family policy are definitely higher than for other plans. Mr. Schwartz suggested that this may be due to the higher proportion of premiums payable monthly, the young average age (30) of the insureds, a tendency to overburden the family budget with insurance premiums at these young family ages, and the recent months of adverse economic conditions and high unemployment.

He stated that their reinstatement practices conform with their basic pattern for underwriting the Family policy initially. The regular reinstatement form contains a question concerning the current health status of all persons covered on the date of default or subsequently added to the coverage. Evidence of insurability may be required on the husband depending on the length of time elapsed since nonpayment of premium. The only requirement contemplated for the wife and children is a statement of good health. If, however, a child were found uninsurable, such a life would be eliminated from the risk, and if the wife were uninsurable by Company standards, reinstatement of the contract would be refused.

MR. E. W. BATES indicated that his company, the Western and Southern, entered the Family contract field in order to prevent lapses of their older established policies. They decided to issue their family coverage in the form of a Term to age 60 rider insuring the wife and children. This rider could be added to existing policies or to new issues. At the same time they introduced a standard package of a fixed plan (L 65) and a Family Rider to be used for their smaller size new issues. Mr. Bates indicated that in the last five months they have experienced a leveling off and that the percentage of issues by number of cases has remained relatively constant both for the additions to older policies and for new issues. He concluded that popularity is not waning.

He stated that a comparison of lapse rates on the family coverage against individual policies was rather difficult in that the family coverage combined all sexes and ages. He felt, however, that the persistency of the family coverage followed the husband's policy, and he stated that of 331 lapses of the family coverage only 7 cases consisted of the removal of the rider only. He stated that the "not taken" rate on new issues with the rider was 40% higher by number than the comparable rate for other policies. The aggregate lapse rate on regular Ordinary policies with the Family Rider was 80% greater by number and 17% greater by amount than the rate for all other Ordinary policies. He felt that this poorer experience may be caused by the use of this new product in certain instances where it should not have been used, resulting in misunderstanding of the policyholder and subsequent lapse. He felt that the distribution by mode was also an important factor in persistency. The best persistency was experienced among the additions of the rider to older policies, where the lapse rate was one-sixth of that on newly issued policies with riders. The basic policies were seasoned sufficiently to absorb the small additional premium. He stated that, on lapse, calculations of extended insurance are made separately for the basic policy and for the rider. The rider provides for extended insurance on the wife only. Upon surrender the cash value of the rider is added to the cash value of the basic policy and the total amount paid to the husband. The principles followed in reinstatement of the family contract are similar to those for individual policies. A nonmedical statement of health of each member of the family to be covered in the reinstated policy is required. Mr. Bates stated that it is the practice of his company to allow one class deterioration without extra charge or rejection on reinstatements. The flexibility of the rider approach allows his company to (1) reinstate the basic policy and rider fully, (2) reject the reinstatement if the husband is unacceptable, (3) reinstate the basic policy only if the wife is unacceptable, or (4) reinstate the basic policy and the rider but exclude any of the unacceptable children by endorsement.

In regard to valuation his company creates a special valuation and statistical card for each rider. Mean reserve factors have been calculated which combine the Term to age 60 factor for the wife with the Term to age 21 factor for the children based on an assumed age distribution of three children. When a rider becomes paid-up by death of the husband or wife a single card is created and valued as paid-up term insurance, using an average age for the three children in each case. This average age for the children is based on the age of the insured wife. Upon death of either husband or wife the policy is endorsed to provide paid-up coverage. If both husband and wife are dead, individual certificates of insurance are issued to each child and individual valuation cards are maintained for each.

MR. C. W. McMAHON, in discussing section B, stated that in the Union Central there is still a sustained demand for policies with high early cash values. New sales in the first four months of 1958 are almost 80% of sales for the same period in 1957.

He stated that his company introduced their Extraordinary Life policy in December 1956, and in the following calendar year wrote 88 million or 45% of their total new business on this plan. As the year progressed the company became disturbed over the high proportion of new business written on this plan and also over the fact that 79% of these new contracts were issued with policy loans, virtually all for the maximum amount available. The company felt that if a serious business recession occurred, or if the government changed its position on the interest deduction for income tax purposes, heavy lapses would result. They also felt that in many cases these contracts with full policy loans were being used in lieu of term insurance, since the net cost was almost as favorable and the commissions were higher than on term plans. As a result the company took steps, such as raising the minimum issue and reducing the over-all limit on one life, in order to de-emphasize this type of business. The results of these changes were not startling and since the end of the year the company has taken further steps to control the sale of this plan and to minimize lapses. For policies with their first annual premium falling due in the four months prior to the end of March 1958, lapses were 22% by number and 18% by amount, about twice normal.

Mr. McMahon felt that it is important to restrict this type of insurance to the special markets for which it was originally designed: split dollar plans, business insurance cases where high cash values are desired for balance sheet purposes, and personal insurance to buyers in the high income brackets. He cautioned that the most serious offenders to these rules were the agents themselves, citing that 40% of the cancellations in this four month period were on policies purchased by agents on their own lives. He stated that in the personal insurance application of this policy a minimum income rule and a maximum ratio of total gross premium, whether it is to be paid in cash or by loan, to the insured's income seem to be essential. With proper underwriting guides, and with training of the sales force in the proper use of these specialized plans, Mr. McMahon felt that the desired persistency could be obtained, and that these policies could provide a real service in meeting the insurance needs in those markets for which it was designed.

MR. J. S. HILL stated that from some of the cost illustrations he has seen in regard to these high cash value policies, some companies are willing to pay out considerably more in direct costs such as commissions, taxes, and mortality costs, than they receive in premiums and interest earnings. He felt that as long as such favorable conditions to the buyer existed there will undoubtedly be a sustained demand for such a product. This demand has been further heightened by the practice in bank loan cases of paying full life commission on what really amounts to decreasing or level term insurance. He questioned whether the sale of any product based on such illustrations of cost can redound ultimately to the good of the public or the insurance industry at large.

MR. A. T. BUNYAN stated that the experience in the Phoenix Mutual indicated a continuing high demand for this type of policy. The policy, because of its loan nature and its low net cost, is very susceptible to a high lapse rate. He cautioned companies selling this type of policy to use whatever means available to keep the lapse rate down. He stated that in his company a salary charge-back to the manager on lapse of any policy within its first four policy years assures a financial interest of the manager in conservation of this business.

MR. JOHN PHELPS noted that some of the smaller young companies are writing substantial volumes of this type of business and that their lapse rates are considerably higher than those reported by Mr. McMahon.

MR. W. V. B. HART felt that the mutual companies have promoted this type of business to a greater extent than the stock companies.

MR. A. L. BUCKMAN stated that the Beneficial Standard Life's plan of this type consists of a one year preliminary term policy which automatically converts to a full level Ordinary Life policy with full level cash values beginning the second year. In the first year they pay a regular term commission and in the second year they pay a commission somewhat larger than an Ordinary renewal commission, but considerably lower than a first year commission on Ordinary Life. He stated that as a result their asset share calculations show a slight contribution to surplus each and every year. There was some agency dissatisfaction with this approach, which to a large extent has been eliminated through reminders that the plan of insurance is basically decreasing term which normally has even lower rates of commission. The experience to date on persistency of this business has been excellent.

# TRANSACTIONS OF SOCIETY OF ACTUARIES 1958 VOL. 10 NO. 27

## AGENTS' COMPENSATION

What are the trends in compensation arrangements for general agents or agency managers?

MR. E. J. MOORHEAD drew attention to a recent report of the Agency Management Association (Research Report 1958-1) which explores the practical workings of managerial compensation formulas and provides a stimulus for companies to examine how their formulas respond to differences in agency situation and performance. For example, the report shows the actual working effect of making "gain of insurance in force" a factor in compensation. At first sight this seems a desirable factor, happily combining the objectives of production and persistency, but examination shows that its practical working effect is quite different and can prove unsatisfactory.

In the past it has been widely believed that a compensation formula is bound to be satisfactory if it is designed "to pay the manager for doing what we want him to do." More recently there has developed a healthy respect for the hazards of incentive compensation and a recognition that such incentives do not, if left to themselves, produce the hoped-for result. Nowadays it is believed that incentive compensation plans should be kept simple and should err, if at all, in the direction of mildness.