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Eastern Spring Meeting Topics of Current Interest

'THE FUTURE OUTLOOK' AND THE ACTUARY

by John H. Miller

(Editor's note: The distinguishing feature of the last annual meeting of the Institute of Life Insurance was a symposium on The Future Outlook *sponsored by the Institute and directed by Mr. Miller. We are particularly glad to have his comments based on the symposium on the future outlook for actuaries.)*

While the contemplation of the future is nothing new, its formalized study seems to be something of a current phenomenon. For example, The Commission on the Year 2000, headed by Dr. Daniel Bell of the Academy of Arts and Sciences, is but one of many groups formed for this purpose. New words have been coined such as "futurist" and the French "futuribles", meaning possible futures. This term describes the principal technique which is to enumerate the possibilities and assign to each, by estimation or judgment, a probability of occurrence and a value or statement of the consequence, should the particular event occur. From this calculation of probabilities and consequences, one may derive either a composite prediction or a most likely prediction or evaluation.

This method of linking the probabilities with the cost or yield of an event is essentially the basic actuarial technique used in measuring the cost of insuring

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MORTALITY INVESTIGATION ON INDIVIDUAL LIVES

by William H. Schmidt

The Society's Committee on Mortality under Ordinary Insurances and Annuities, of which I am current Chairman, has been around for many decades. Since many Society members have not been exposed to the Committee and its operation, comment is in order on several aspects of its work: (1) how it functions, (2) what current special projects are under consideration, (3) the recently completed 1967 Occupation Study, and (4) a brief review of the most recent report on mortality between the 1965 and 1966 anniversaries. The 1967 *Reports Number* will also contain a summary of the "Canadian Assured Lives Tables, 1958-1964." (see *The Actuary*, October 1967.)

How the Committee Functions

The Committee operates as one of three committees on mortality and morbidity among lives individually insured. Their activities are coordinated by a General Chairman. Since the large annual bread-and-butter job is the continuing study of ordinary mortality, the members of the Committee are largely drawn from the companies which contribute to this Study.

For the last several years it has been customary for the Chairman of the Mortality Committee to appoint a Secretary from his own company. This "privilege" carries with it the dubious honor of running the Central Compiling Bureau for the annual study. The work of compiling other studies is passed around from company to company, and

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LEGISLATIVE DEVELOPMENTS

by Albert Pike

Several of the major areas of activity of the LIAA, ALC and HIAA have already been fully dealt with in panel discussions, notably holding companies, variable annuities, segregated accounts, mutual funds, and federal income taxation of life insurance companies. Two exceptions are the beginnings of federal regulation of life insurance company equity-based products by the SEC, and the $1 billion dollar urban investment program of the life companies. But these are more in the province of the lawyer and the investment man than of the actuary. I would like to add:

Holding Companies

It does not now appear that there will be New York legislation this year to give effect to the recommendations of the Report of the Special Committee on Insurance Holding Companies. An effort was made to legislate separately the proposals in the Report that life insurance company investment powers be expanded in New York. This, however, is not now in serious prospect for the current year.

Variable Annuities

First, there are reasonably good expectations that the New York law will be changed this year to authorize individual variable annuities, instead of just group variable annuities. So one more roadblock to individual variable annuities seems about to be removed, although mutual funds may create another roadblock of a practical nature.

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sometimes more than one company shares the load. For example, for the 1967 Occupation Study, the actuarial analysis, specification layout, and drafting of the text were done by one, and another served as the compiling bureau.

The compiling companies are reimbursed for all out-of-pocket expenses, except for professional actuarial time. Until I became Chairman, I always thought that companies contributing to the various studies also picked up the tab. I was pleasantly surprised to find that this is not true — that, in fact, over 300 companies and firms of consulting actuaries in the United States and Canada have agreed to be assessed annuallv on a formula basis in order that these various studies, both on individual lives and group, can be produced.

Projects Under Consideration

These will not be in the forthcoming *Reports Number* of *The Transactions.*

1. Study of Mortality and Lapse under
   (a) term conversions, and
   (b) conversions under the so-called "guaranteed insurability" riders.
2. Study of Mortality under Immediate Annuities. These have again become highly competitive. The study will be made by amount of annual income.
3. Preparing a pamphlet to aid companies in setting up statistical records for intercompany mortality studies.
4. In view of increased limits, the Committee has been asked to consider some analysis of non-medical mortality by size of policy.

1967 Occupation Study

The desirability of an Occupation Study has been discussed since about 1960. Some felt that occupational mortality had improved to such an extent that it was no longer of any concern. Others felt that because it was 40 years since the last definitive study in 1928, and because many companies were maintaining records on occupational risks, the Study should be made.

Most companies with information were in favor of making the Study, and 17 companies finally contributed. The objective was to keep the Study as simple as possible and to limit it to broad-range occupational groups where there appeared to be an extra hazard. It was limited to male lives for the ten-year period 1954-1964.

Overall the results were highly satisfactory. Standard occupations produced standard mortality. In other words, the liberalizations in ratings have been justified, although the accidental death rate, both from motor vehicle and other accidents, appears to have been higher than expected, being in the range of 140% for those causes of death alone.

Occupations which had substandard ratings produced mortality 50% higher than normal on the average, with an accident rate twice the normal and a motor vehicle death rate 1½ times normal. Pneumonia and cirrhosis of the liver were two to three times the normal rate of deaths from these causes.

This might be the last Occupation Study on individual lives by the Society. The Committee is currently studying occupational coding to find a simple code which would meet not only its own needs but also those of the Committee on Group Life and Health Insurance.

Two Questions

Two questions that might be asked:
(a) Is the level of mortality improving?
(b) Does the Mortality Committee see any adverse effects from the recent feeling that underwriting has become more competitive? The answer to the first is *yes,* at least on medically underwritten business.

Is there any evidence from the Mortality Study between 1965-1966 anniversaries that competition is showing up in increased mortality? There are some suggestions, notably from the last Large Amount Study, that there is an increased mortality, but the results are not at all conclusive.

The overall Select Medical Mortality Ratio was 95.1%, representing a gradual improvement in overall mortality each year since the 1955-60 Select Basic Table was prepared. Most of this improvement took place at ages of issue 25 and over. The corresponding non-medical mortality ratio, covering the first 15 policy years, was 107.8%, *excluding war deaths.* This ratio has *not* shown any significant improvement since 1962. In other words, the spread between medical and non-medical mortality in the aggregate has widened over the past six years.

Extreme care, however, must be taken in interpreting this difference. At least four factors must be considered: (1) the proportion of medical and non-medical business differs among companies; (2) the age distribution for each type of business is obviously different; (3) the underwriting standards of the contributing companies differ, and so do their markets; and (4) in the case of the large combination companies, medically examined business in the non-medical ages often represents borderline risks.

Accordingly, the spread between the medical and non-medical ratios, exclusive of Vietnam, for the large combination companies (who furnish a great deal of the exposure) often is significantly less than that of companies who operate strictly in the ordinary market, where the medical issues at young ages arise from large amount applications rather than from borderline risks.

The Ultimate Mortality Ratio, policy years 16 and over, is 94.9%, showing a slight improvement since the 1955-60 Basic Table was compiled. Overall, the mortality pattern seems to be constant, so that there is no present indication that the 1955-60 Basic Tables have outlived their usefulness.

Vietnam

Obviously, Vietnam war deaths were much more significant during the 1965-66 Study than during previous years, particularly at the non-medical ages of issue, 10-24 years. The effect on the aggregate non-medical ratio was to change it from 107.8%, excluding war deaths, to 116.1%, including war deaths. Here again, the spread differed widely among companies. For example, for one company the corresponding ratios, with and without war deaths, were 107.0% and 126.0%, respectively.

The heterogeneity of the Committee data raises some questions. Discussions are now going on concerning wider availability of the information contained in the Mortality Committee's annual investigation. The 18 contributing companies obviously have differing underwriting philosophies. Therefore, while

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the annual studies and Basic Tables compiled from these data from time to time serve well enough as an overall standard against which to check trends, the underlying data are heterogeneous rather than homogeneous.

The Mortality Committee is currently discussing the feasibility and desirability of a comparative mortality study among the contributing companies. This study would undoubtedly not be printed in the *Reports*, but, if approved, would be made available outside of the printed *Reports*, on a coded basis, company by company, for those contributing companies who would permit the use of their material in this fashion.

At the meeting of the Committee on Research last fall in Chicago, John Wooddy proposed an investigation into risk theory, using as raw material the mortality ratios of the annual study, on a company-by-company basis. The contributing companies have agreed to make their data available to Messrs. Wooddy and Lew for this research purpose.

Finally, one recent development is the work now being done under the aegis of the Association of Life Insurance Medical Directors. They have received company support for a pilot study by Dr. Bakst of Boston University. Dr. Bakst, working with an Advisory Committee which includes Messrs. Moorhead, Ormsby, and Lew, is reviewing the clinical studies reported in current medical journals to cast light on the mortality of various medical impairments. This would supplement papers such as the one by Bart Pauley, presented to this meeting.

The Committee will be glad to receive any constructive suggestions or requests that may make its efforts of more value to the Society. ☐

Legislative Developments

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Second, the various Insurance Commissioners are beginning to concern themselves with the regulation of variable annuities and segregated accounts, both as individual Commissioners and collectively through the NAIC. For example, there is the issue of the assumed interest rate used in the process of determining the first, or "going-in", annuity payment under a variable annuity. Should this rate be regulated? The matter is of great importance, as are some others of actuarial import.

We are fortunate that these regulatory issues of an actuarial nature are being carefully reviewed by an LIAA-ALC Actuarial Subcommittee headed by Harry Walker. This Subcommittee reports to a parent LIAA-ALC Actuarial Committee headed by C. L. Trowbridge. There are many actuarial regulatory questions which these committees will cover. While basic opinions by actuaries in matters of this sort have been and will be formed in meetings like this, nevertheless these trade association actuarial committees bear the brunt of promoting the actuarial point of view with the regulatory authorities and, for that matter, with much of the rest of the life insurance fraternity.

Federal Pension Regulation

Hearings are now in progress in Congress on legislative bills to amend the federal Welfare and Pension Plan Disclosure Act in various ways. The most important of these is to extend the purposes of the Act so as to include provision for imposing federal standards of fiduciary responsibility on trustees and administrators of employee welfare and pension plans. Certain exceptions are provided for in the proposals, including exceptions for most, if not all, insured employee welfare and pension plans, presumably on the grounds that they are already subject to state regulation.

These federal fiduciary responsibility proposals have engendered surprisingly little opposition so far. The matter of most interest to actuaries is that there is a perhaps better than even chance that the Johnson Administration will soon use the occasion of these Congressional hearings to officially propose federal standards for employee pension plan vesting and funding, and to propose some sort of pension guarantee system. Assistant Secretary of the Treasury Stanley Surrey sent up a trial balloon on such proposals a while back at a meeting of the American Pension Conference.

It is possible that these proposals may shortly be made more official. But then, again, they may not be. One thing certain is that the Administration has not forgotten about pension vesting, funding and guarantees. If the unveiling of official position does not take place in the next few weeks, do not assume that the whole matter of federal standards will just dry up and blow away. Pensions are too great an economic and social force in this country to escape further federal government attention for long.

Pension Integration

Some time ago the Internal Revenue Service proposed that the basic 37½% allowance for integrating qualified pension plans with Social Security be substantially reduced, even for pension plans integrating at the old $4,800 a year taxable wage base breaking point. What at first held up a decision was the likelihood in 1967 of Social Security benefit increases. Now that these are in effect, with a new $7,800 Social Security taxable wage base, the new pension integration regulations can be expected at any time. There is a very good chance that the 37½% allowance will come down, both for new pension plans and old pension plans, and that the real issue is not whether it will come down but how far it will come down and on what rationale.

Issues in New York

Three issues under consideration in New York deserve comment.

1. The policy loan interest rate. Pending is an Insurance Department sponsored bill to substitute a variable policy loan interest rate for the present statutory maximum interest rate of 5% (4.8%, of course, if payable in advance), the variable rate to be applicable only to new policies but to be mandatory. The variable interest rate would range from 4% to the maximum interest rate for usury purposes, which is now 6% in New York but which may be raised to 8%.

The actual rate used within this range would be equal to the average new money investment earning rate of the particular insurer on other than policy loans and equity investments, to be changed from time to time not only for new policy loans but also for old policy loans, when made against policies issued after the operative date of the change

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