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DIGEST OF REPORTS ON TOPICS OF CURRENT INTEREST

FUTURE OUTLOOK STUDY

Philadelphia Regional Meeting

MR. JOHN H. MILLER: While the contemplation of the future is nothing new, its formalized study seems to be something of a recent phenomenon. New words have been coined, such as "futurist" and the French "futuribles," meaning possible futures. The latter term describes the principal technique used, which is to enumerate possibilities and assign to each by estimation or judgment a probability of occurrence and a value or statement of consequences should the particular event occur. This method of linking the probability with the cost or the yield from the event is essentially the basic actuarial technique used in measuring the cost of insuring against a future event.

In discussing the future with particular reference to the interests and responsibilities of the actuary, I shall raise some fundamental questions rather than attempt any predictions.

One of these fundamentals concerns the adequacy of the voluntary life and health protection now enjoyed by the American people. How much total protection is enough, and to what extent should it be provided by voluntary organizations? The issue of adequacy or its opposite number, overinsurance, has over the years received the attention of distinguished scholars, and yet, today, do we have an authoritative formula for adequacy? Here is an interesting and important area of study for the actuary. The related question—how the responsibility for adequate protection should be shared by the private and public sectors—is also of fundamental concern to us.

The private system of insurance produces an extremely important by-product, capital accumulation for the construction and financing of homes and plant and equipment. On the other hand, public systems of protection result in income distribution among people at different economic levels, a function not compatible with the private programs. A study of the different characteristics of the public and private systems and of the needs of the country, both social and economic, can lead to a rational rather than a political answer to the question of how far social security benefits should be permitted to expand.

After the question of how much private insurance is adequate has been answered, we must ask what form it should take. Do we need equity-related life insurance along with variable annuities? Can we introduce methods of accumulating funds for retirement and other purposes through equity investment without losing the proved virtues of guaranteed benefit level premium life insurance? The best program embodying the unique functions of life insurance with capital accumulation through equity investment has probably not yet been conceived. The ideal solution will, in all probability, require changes in legislation as well as in some of our administrative and marketing practices. One of the things that I think is regrettable in all the discussion of mutual funds and variable annuities is an implication that inflation will always be with us and that we must find means therefore of coping with it. I think it would be a lot more constructive if we talked about equity investment in terms of ownership in the national economy as a supplement or complement to ownership of debt obligations rather than as a means of protecting ourselves against inflation.

One can hardly speak of the future without some reference to the computer. We will miss the full potential of planning for the future if we restrict our thinking to the capabilities of existing equipment. We should include in our plans some of the facilities and methods which are theoretically possible though not yet commercially available.

Other questions which I can only mention include the following:

1. Can we develop programs under which the insurance benefits will continually adapt to the changing needs of the family while the financing of the program follows the varying cash flow of the family budget?
2. Can we extend the use of the guarantee of insurability so that the young person who makes a total commitment to a program of adequate insurance can be assured that protection will be available if new or additional needs arise in the future?
3. Can we bring more research to bear on such perennial questions as how persistency can be improved?
4. Why do agents fail?
5. How can the agents contribute to the knowledge and motivation in the areas of physical fitness and accident prevention?
6. How can life insurance contribute increasingly to the health of the economy and the quality of life?

Los Angeles Regional Meeting

MR. WENDELL A. MILLIMAN read Mr. Miller's statement given at the Philadelphia meeting and added a description of a "client-account concept," under which a continuing service would be provided, modified from time to time to the client's needs and ability to pay, with the client rather than the policy being the focus of the administrative procedures. This concept, while not dependent on a "life-cycle policy," would be facilitated by the development of new and more flexible insurance contracts.

MORTALITY INVESTIGATION ON INDIVIDUAL LIVES

Philadelphia Regional Meeting

MR. WILLIAM H. SCHMIDT: I would like to speak on several aspects of the work of the Society's Committee on Mortality under Ordinary Insurances and Annuities: (1) how we function; (2) what current special projects are under investigation; (3) our recently completed *1967 Occupation Study;* and (4) the most recent Report on Mortality under Standard Ordinary Issues between 1965 and 1966 anniversaries.

First, let us look at how we function. We operate under a general chairman as one of three committees covering mortality and morbidity among lives individually insured. 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. We try to have Canadian representation and at least one or two members from other companies, in order to avoid becoming too insular. For the last several years it has been customary for the chairman of the Committee to appoint a secretary from his own company. This "privilege" carries with it the dubious honor of being the central compiling bureau for this annual study. The work of compiling other studies is passed from company to company, and sometimes more than one company shares the load on a particular study.

With regard to our second topic, we have four things currently under Committee consideration. One is a study of mortality and lapses under term conversions, as well as under conversions from guaranteed insurability riders. The second is a study of mortality under immediate annuities. This normally comes every five years. We have anticipated it one year because of the increasing competition with respect to immediate annuities. This year we are also going to study, for the first time, mortality by amount of annual income. Third, we are preparing a pamphlet which will, we hope, aid companies in setting up statistical records for their own studies and make a possible future contribution to intercompany mortality studies. Four, we are also considering, in view of the increased nonmedical limits, the possibility of making an ancillary study of nonmedical mortality by amount of insurance.

The *1967 Occupation Study*, the third aspect of the Committee's work that I wish to present to you, was published early this year; work on it has been active since about 1960. At that time the Committee had a great deal of discussion about it. A decision was finally reached to make the study, and seventeen companies contributed. Our 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. Accordingly, it was limited to male lives for the ten-year exposure period 1954–64. Over all, the results were highly satisfactory. Standard occupations produced standard mortality. 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 that expected from these causes of death alone, roughly 140 per cent. Occupations which had substandard ratings produced mortality 50 per cent higher than normal on the average, with an accident rate twice the normal and a motor-vehicle death rate $1\frac{1}{2}$ times the normal rate. Pneumonia and cirrhosis of the liver were 2–3 times the normal rate of deaths from these natural causes. This may be the last occupation study on individual lives that the Society of Actuaries will produce. However, we are currently engaged in a study of occupational coding, in co-operation with other industry organizations, to see whether a simple code can be devised which would meet the needs not only of our Committee but also of the marketing group insurance and health insurance segments of the industry.

As for topic 4, on current mortality, two questions might be asked: (1) Is the level of mortality improving? and (2) Did the Committee see any adverse effects from the recent feeling that underwriting has become more and more competitive?

The answer to the first question is yes, at least with respect to the medically examined business. The over-all select medical mortality ratio for 1965–66 was 95.1 per cent, which represents a gradual improvement in over-all mortality each year since 1962, when the 1955–60 Select Basic Tables were first used. The corresponding nonmedical mortality ratio, covering the first fifteen policy years, was 107.8 per cent, excluding war deaths. This ratio has not shown any significant improvement since 1962. In other words, the spread between medical and nonmedical mortality in the aggregate has widened over the past six years. However, in interpreting this spread and the significance of the widening, extreme care must be taken. There are at least four factors which must be considered: (1) the relative proportion of medical and nonmedical 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 as well as their markets; and (4) in the case of large combination companies, medically examined business in the typically nonmedical ages often represents borderline risks. Accordingly, the spread between the medical and nonmedical ratios, exclusive of Vietnam, for those large combination companies which furnish a good deal of our exposure, is often significantly less than that of companies which operate strictly in the ordinary market, where a higher percentage of the medical lives at the young ages is caused by large-amount applications rather than by borderline risks. As far as ultimate mortality, sixteen years and over is concerned, the 1965–66 mortality ratio is 94.9 per cent, which shows a slight improvement since the 1955–60 Basic Table was compiled. Over all, the mortality pattern seems to be constant enough so that there is no present indication that the 1955–60 Basic Tables have outlived their usefulness.

In regard to the second question—Is there any evidence at all that competition is showing up in increased mortality?—the last large-amount mortality study, which indicated a slightly worsening mortality in the large-amount area, coupled with improving mortality in the medically examined lives, would tend to indicate that the amounts under $50,000 might be improving even more than the results would show. The Committee, however, did not feel that the results were conclusive enough to be able to draw that type of conclusion at this time.

Vietnam deaths obviously are much more significant in the current 1965–66 study than they have been during previous years, particularly in the nonmedical ages at issue, 10–24. The effect on the aggregate select nonmedical ratio was to change it from 107.8 per cent, exclusive of war deaths, to 116.1 per cent, including war deaths. Here again, the spread differed widely among companies.

This heterogeneity of our data leads to the next point. Discussions are now going on concerning wider availability of the information that is contained in the Committee's annual investigation. The eighteen companies contributing obviously have differing underwriting philosophies. While the annual studies and the Basic Tables compiled therefrom serve well enough as an over-all standard against which to check trends, the underlying data are much more heterogeneous than homogeneous.

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 for this research purpose. In addition, the Mortality Committee is currently discussing the feasibility and desirability of compiling a comparative mortality study, showing mortality results on a coded basis, company by company.

One recent development in the general area of mortality statistics which may be of interest is the work now being done under the aegis of the Association of Life Insurance Medical Directors. Dr. Bakst, of Boston

University, is working with an advisory committee which includes three actuaries. He is reviewing the clinical studies reported in current medical journals, hoping to cast light on the mortality of various impairments.

Los Angeles Regional Meeting

MR. ERNEST J. MOORHEAD repeated the presentation given at the Philadelphia meeting by Mr. Schmidt.

LEGISLATIVE MATTERS OF INTEREST TO ACTUARIES

Philadelphia Regional Meeting

MR. ALBERT PIKE, JR.: Before taking up those areas of LIAA activity which have not been covered in any of the panel discussions, I would like to add the following postscripts to yesterday's topics.

First, 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. When this became clear, an effort was made to legislate separately the proposals in the report that life insurance company investment powers be expanded in New York. This is not now in serious prospect this year, so any companies expecting to have the 5 per cent limit on stock investments raised this year are going to be disappointed.

Next, there are reasonably good expectations that the New York law will be changed this year to authorize individual variable annuities in that state in addition to the group variable annuities now allowed.

Finally, the various insurance commissioners are beginning to concern themselves with the regulation of variable annuities and segregated accounts, both individually and collectively, through the National Association of Insurance Commissioners. For example, should the assumed interest rate used in the process of determining the going-in price of the annuity under individual variable annuities be regulated by the insurance commissioners? The reports on such regulatory issues of an actuarial nature are now being reviewed by an LIAA/ALC actuarial subcommittee.

Among the concerns not previously discussed, two rather important ones—the beginnings of federal regulation of life insurance companies as to variable annuities, segregated accounts, and mutual funds by the Securities and Exchange Commission and the billion-dollar, urban investment program of the life companies—are more problems of the lawyer and the investment man than of the actuary, so I will not take up your time with them. This leaves a number of matters on which I would like to report in some detail.

On the federal scene, pension regulation and pension integration are of considerable concern. 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 which would be to extend the purposes of that Act to include provision for imposing federal regulatory standards of fiduciary responsibility on trustees and administrators of employee welfare and pension plans. Certain exceptions are provided in these bills, including the exception of 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 in Washington so far, except from a few professional federal government-haters.

The matter of most interest to actuaries is that there is perhaps a better-than-even chance that the Johnson administration will 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. The administration has not forgotten about pension vesting, pension funding, and pension guarantees, so, if the unveiling of the official administration position does not take place in Congress in the next few weeks, don't 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 attention for very long.

Pension integration with social security is already subject to regulation, but the rules are about to change. Some time ago the Internal Revenue Service proposed that the basic $37\frac{1}{2}$ per cent allowance for integrating qualified pension plans with social security be substantially reduced, even for plans integrating at the old $4,800 a year social security wage base. What at first held up a decision on this issue was the pendency in 1967 of proposed social security benefit increases and a change in the wage base. Now that these are in effect, with the new $7,800 social security wage base, the new pension integration regulation can be expected at any time. There is a very good chance that the $37\frac{1}{2}$ per cent allowance will come down, both for new and for old pension plans. The real issue is not whether it will come down, but how far it will come down and on what rationale.

As to state matters, first, and probably the most important to most of you, is the New York proposal concerning policy loan interest rates. There is an insurance department-sponsored bill to substitute a variable policy loan interest rate for the present statutory maximum of 5 per cent—4.8 per cent, of course, if payable in advance—this variable rate to be applied only to new policies. The variable interest rate would range from 4 per cent to the maximum rate that is used in the state for usury purposes, which is now 6 per cent but which may be raised to 8 per cent. The actual rate used within this range would be defined as that equal to the average new-money investment earning rate of the particular insurance company—in other words, everybody would have a different rate—on other than policy loans or equity investments, to be changed from time to time not only for new policies but also for outstanding policies, but, of course, only with respect to policies issued after the applicable date of the changes in the law.

Second, in New York there is the matter of binding premium receipts for life and health insurance policies. The insurance department is reviewing what you can say in those binding receipts. The details are rather complicated, but I think that they are generally found to be acceptable by most insurance companies and they are better than what was first proposed.

Third, there is in New York the issue of compulsory health insurance. Governor Rockefeller has proposed a system of compulsory hospitalization insurance, euphemistically called "universal hospitalization insurance." The cost would be shared by employers and employees after the manner of the New York Disability Benefits Law, but with the state coming in with a subsidy, or what they call "subvention," on high-cost employee groups. While the bill appears to have little chance of enactment this year, it should be studied, if only because a great deal of competent technical work went into its formulation.

Finally, in New York there is the matter of the amendments to the limits in Section 213. A bill has been introduced which seems likely to be passed and signed. It was developed in conferences with the insurance department and is acceptable to the department. It would make modest liberalization in the provisions permitting training allowances and would increase slightly the limit on the renewal commission scale, offsetting this by a reduction of the limit on service or collection fees after the fifteenth policy year. The net effect of the last two changes is to increase the total commuted value of the limit on all renewal compensation by only a negligible amount, but there will be increased flexibility in how renewal compensation may be paid within this limit.

With regard to states other than New York, the principal state regulatory issues with reference to life insurance companies are those concerned with credit life and credit accident and health insurance. Credit insurance premium rates are regulated in many states, and the regulation of premium rates for any form of life or health insurance is of concern to all life actuaries. This state regulation of premium rates is unfortunately not working too well, for reasons which would seem obvious to an actuary. The basic trouble is that some insurance commissioners have not brought themselves to the point of conceding that, if a particular credit insurance premium rate is to produce a 50 per cent loss ratio (which is the NAIC bench-mark standard), then the insurance company must eventually pay out at least 50 cents in claims on the premium dollar. Many states have given lip service to the 50 per cent loss ratio principle, but they have then turned right around and given their blessing to premium rates which by no stretch of the imagination could possibly produce that high a loss ratio.

Because of this slight breakdown in state supervision, the federal government has gotten into the act through recent congressional hearings under Senator Hart, of Michigan, in a subcommittee concerned with antitrust and monopoly. Senator Hart is expected to introduce in Congress shortly a very stiff federal regulatory proposal designed to take most, if not all, of the money out of credit insurance as far as the vendor or creditor is concerned. While we do not believe that even Senator Hart expects this proposal to make any progress, nevertheless this is a warning of what may be expected to come at the federal level in the future if the states do not measure up a little better to the job of state regulation of insurance.

Los Angeles Regional Meeting

MR. DALE R. GUSTAFSON reported on some of the same items covered by Mr. Pike at the Philadelphia meeting. He also reported the following:

We have a vast complex of industry committees, subcommittees, and task forces at work on various aspects of variable annuities and mutual funds. We are attempting to assimilate and work with the various security acts—1933, 1934, and 1940—at the federal level, the state securities laws, and now variable annuity regulations. We are interested in the mutual fund bill, in that it appears that at least the severe restriction or elimination of the front-end-load part of that package will probably be enacted into law and will probably have an implication on variable annuities.

We have a subcommittee of actuaries dealing with the state regulations that restrict or determine the maximum going-in annuity payment that may be illustrated. We are also concerned with valuation requirements for the variable annuity, from the standpoint of making sure that the variable annuity laws in the states are implementable. This joint subcommittee will be meeting shortly with its parent committee.

With reference to the subject of the federal income tax some of us have felt for a long time that one of the most serious and most difficult areas of dealing with the federal income tax law was going to be in the area of reserves required by law and what a life insurance reserve is. Now we are beginning to see an increasing interest on the part of revenue agents in these areas, and the problem is not going to be easy to cope with because there are some different philosophical origins on valuation practices and the import and purposes of a tax law. Within the next year or two we are going to be spending a good deal of actuarial energy and time dealing with reserve questions.

As an example of things happening quickly that involve us, the SEC proposed a promulgation about six weeks ago of Rule 10b-12. It has been in effect for a long time, but the promulgation extends it to the life insurance and banking businesses. In effect it says that if a stock company declares a stock dividend that is less than 25 per cent of the capital of the company it must have and transfer from surplus to the capital account the fair market value of that stock dividend. With market values running three, five, or even more, multiples of book values and market values being 100 times par value, this will make prohibitive the use of stock dividends in amounts less than 25 per cent by life insurance companies. It will also very nearly eliminate their use for amounts between 25 and 100 per cent, because the same rule applies except that the SEC may grant an exception if there are sufficient extenuating circumstances to demonstrate that this declaration is not a part of a recurring pattern. The rule made no sense in the first place, when applied to other corporations, but the fact is that it has been applied and has been accepted by all Stock Exchange–listed corporations. We have a committee working on this. The staff is now preparing a document to file with the SEC within the next week.

While the problem of adjusted earnings is not legislative or regulatory, I personally think that it is of great importance and of special interest to actuaries. Two outside groups are trying to do something—the AICPA and the financial analysts. These two independent groups are attempting to solve the same problem—as they put it, to provide more meaningful information for stockholders or for others—and have come to almost totally different results. They agree on the capitalization and amortization of acquisition expenses. One thing that the accountants have fairly well concluded is that they should not attempt to make any reserve adjustment but should make all other kinds of adjustments, capital gains, and so on. The analysts, on the other hand, have reached the conclusion that none of the other adjustments are of any importance except reserve adjustments. As far as the accountants are concerned, they talk about adjusted earnings, but, of course, the foundation of their interest rests on generally accepted accounting principles, and, insofar as they develop something that will go into the auditor's certification, they will do it uniformly for all companies. It will not be a matter that would be applied only to a stock company that uses a C.P.A. It would be equally applied to a mutual company if it uses a C.P.A.

One of the most exciting phases of the life insurance industry is the billion-dollar, urban-area investment program. This is an area of extreme social need, and the life insurance industry, contrary to its long reputation of being very conservative and old-fashioned, is really in a position of leadership in this province.