**TRANSACTIONS OF SOCIETY OF ACTUARIES
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MISCELLANEOUS

A. How practical is it for a company to make its own studies, and how significant are the results of such studies in connection with
   (i) Persistency,
   (ii) Mortality,
   (iii) Morbidity,
   (iv) Agency compensation?
   What use may be made of model office analyses?
B. How effective are budgets in reducing expenses? Can budget data be used to derive expense assumptions for actuarial purposes?
C. Have any companies made any working arrangements with mutual funds?
D. Are the talents of the actuary spread too thinly? Can some annual statement exhibits, even though actuarial in nature, be turned over to other departments? How much use can be made of the services of consultants in connection with
   (i) Research,
   (ii) Current developments,
   (iii) Federal income tax matters?

MR. RICHARD M. FRIDLEY: I feel that competition leads most small companies to base premiums on intercompany rates of mortality, morbidity and persistency. A small company must then make studies of its own experience to allow management control to keep company experience reasonably close to intercompany experience.

At the Pan-American each three months we analyze the quality of life insurance business submitted by agent, agency, country, and for the company as a whole. Our analysis of quality extends to persistency, average policy size, average premium per thousand, average premium per sale, not-taken rates, distribution by plan of insurance, mode of premium, and so forth. Persistency rates are calculated by policy and by amount of insurance over periods of one and two years, tabulating the percentage that complete one or two years of premium payments.

We have found these persistency reports allow us to determine agents and agencies responsible for poor persistency and to follow it by appropriate management action. The analysis of business submitted and issued is also useful in making agency compensation studies.

MR. JOHN C. ANGLE: At Woodmen Accident and Life Company we routinely carry out the following studies:

1. A study made each quarter of first year lapse rates on individual health insurance contracts with lapse rates developed by kind of policy, occupational class, mode of premium payment, agency and agent.

2. A study made each quarter of life insurance lapse rates by agency and by agent.
3. An annual study of first and second year life insurance lapse rates by policy form, kind and mode of premium payment.
4. An annual study of ordinary mortality experience on a 15-year select basis with exposures developed from valuation records. Standard and substandard experience is studied separately, as is the distribution of death claims by principal cause of death.
5. Each five years we complete a study of morbidity under all outstanding individual health insurance contracts. These studies cover all contracts with significant exposure and an analysis of experience is made of classes defined by age, occupational class, sex and type of benefits provided. At other than five-year intervals we occasionally make morbidity studies of certain group or individual contracts.
6. Annual studies of contract termination rates of full-time agents' "success ratios" and the financing cost per surviving successful agent by year of contract.

While studies in a single year may have limited significance, the results become meaningful when corroborated by similar results for several consecutive years. I feel it far better to use one's own persistency, mortality and morbidity experience in calculating gross premiums and dividends than intercompany experience of limited applicability. For health insurance benefits, intercompany morbidity experience will usually not be available and the actuary is left with a choice between setting premiums by analogy or basing them upon the experience of his company.

MR. EMANUEL E. HALPERN: I think studies of the mortality experience of a company are well worth the effort. The literature describing the construction of the 1958 CSO Table contains a discussion of the wide variation in mortality experience between companies and points to the desirability of a study of the company's own experience to compare with intercompany experience. The extent of wide variation in mortality experience indicates that even wider variation can be expected in persistency, morbidity, and agency compensation rates.

At Southwestern Life we prepare a special mortality card maintaining enough information for separate mortality studies by sex, medical or nonmedical underwriting, age group and duration; studies may also be made by plan, amount of insurance, calendar year, substandard groupings, or by impairment. Too fine a breakdown reduces the volume of data and the reliability of the results. This can be compared with Heisenberg's uncertainty principle which says that as your information seeks to become more exact, less is known about it. It is important to graduate crude rates to get them in usable form. Appropriate methods would include a Whittaker-Henderson Type B graduation, the fitting of a Gompertz curve, or the relating of data to an existing mortality table.

MR. MAURICE B. ROBERTS: At Government Personnel Mutual Life we have made persistency studies indicating that lapse rates of business issued to military persons vary by rank and age. The effect of these variations in persistency on margins in premiums was tested by asset share calculations. The results of these asset share calculations led us to vary commission rates on business issued to military persons by rank and age of the applicant. This action has produced a remarkable and very desirable upgrading of our business issued.

MR. RAYMOND H. STRONG: My firm does consulting work for a number of smaller companies but has never thought it expedient to make studies of combined mortality or persistency data from all of our clients. The differences in methods, procedures and operations of smaller companies make such data difficult to combine.

MR. GENE P. ARCHER: Several years ago, upon joining the American Hospital and Life Insurance Company, I constructed a model office to be used in revising our managers' compensation plan. The model office, unhappily, did not turn out to be a good simulation of the company, but it has been useful in comparing the relative cost of new agency compensation plans.

In 1958, after three years of losing money, we established a budget for 1959 under the direction of the controller. We asked each department head to estimate his expenses and to stick to the approved budget limits in the following year. The result has been a twenty percent reduction in expenses in two years, with a decline in the number of home office employees from 177 to 142½. The budget has allowed management to find ways of substantially reducing expenses.

In regard to section D, we have attempted to conserve actuarial time and talents by transferring to the controller's department responsibility for preparation of the greater part of annual and quarterly statements, preparation of income tax returns and the filing of premium tax returns.

MR. ANGLE: I believe that budgeting and careful planning is a sign of a well-managed business. A budget is defined by Herman C. Heiser, C.P.A., as "a complete over-all plan for the matching of anticipated revenue with anticipated expenditures." While one goal of budgeting is to control expenses, I do not feel that our goal is necessarily to minimize expenses.

To illustrate this point, let me separate agent financing and subsidy costs into three parts:

1. Replacement Cost—The cost of replacing agents and managers who will terminate or die during the year.
2. Upgrading Cost—The cost of hiring replacements who are of a higher caliber than the men they are to replace.
3. Expansion Cost—The cost of establishing new agencies and of increasing the number of full-time agents.

Replacement costs are unavoidable if an insurer's agency force is to be kept at full strength. How much can be spent for upgrading and expansion is a question for management that will depend on how much can be spent without reducing earnings or impairing the insurer's ability to pay a competitive scale of dividends to policyholders. Management's best tool for determining allocations to upgrading and expansion will be to prepare alternative budgets for the following year and following five years.

MR. GEORGE A. MACLEAN: The Standard Life of Indiana was one of the first companies to make arrangements for the sale of life insurance paired with mutual fund shares. Our president, Mr. Wade, felt this was the most practical way to meet the demand for variable annuities. While it is proper to have variations in the return on investments prior to retirement, we feel that after retirement there should be a fixed income and, therefore, allow the value of mutual fund shares to be used at retirement to purchase an annuity from Standard Life at rates guaranteed at the time the shares were first purchased. With these points in mind, the Standard Life several years ago purchased controlling interest in the management corporation of the Advisers Fund.

Our partnership with Advisers Fund has attracted mutual fund salesmen who wish to sell life insurance and new life agents who wish to sell mutual fund shares. Some delays have been encountered in obtaining licenses for salesmen to sell both life insurance and mutual fund shares in a few of the 30 states we are in, but only in Florida is the law interpreted to prohibit dual licensing. In some of our states of operation we have not yet secured a license for Advisers Fund.

We offer ordinary life, life paid-up at 65, Guaranteed Life Income, and Retirement Annuity at 65 on a monthly premium plan which also provides for a regular monthly investment in mutual fund shares. We have never sold term insurance with mutual fund shares, and do not intend to do so.

Anticipated advantages of the arrangement include better persistency on life insurance written as part of a monthly savings plan, flexibility because a policyholder may omit his monthly deposits for mutual fund shares when financially pressed, and an increase in the average size of new life insurance policies sold. Disadvantages may arise if mutual fund salesmen overemphasize the savings feature so that a policyholder feels it more important to maintain his monthly investment in mutual fund shares than in life insurance. It is also possible that policyholders may obligate themselves to larger monthly premiums and mutual fund deposits than they can comfortably carry.

We have introduced a monthly income disability benefit with income during disability payable to age 65. In event of disability, monthly payments are used to purchase mutual fund shares. Originally the benefit provided that the monthly benefit would be paid to the Irving Trust, which acts as fiduciary agent. However, several states objected to this and so in these states we issue a waiver of premium and monthly income benefit. If this benefit is attached to a Retirement Annuity, a fee is charged to cover the cost of evidence of insurability.

Standard Life believes that rather than trying to fight mutual funds the insurance industry should seek a basis of cooperation, as we believe there is a place for each in a properly balanced personal financial program.

MR. CHARLES M. BEARDSLEY: During the past fourteen months my company, Security Life and Trust Company, has purchased the stock of a fire and casualty company which is now a wholly-owned subsidiary, entered the individual health insurance field, and organized an open-end, balanced mutual fund. Each of these moves has been planned as a step towards a fully multiple-line operation. I felt that a description of the organization of the mutual fund might be of interest.

We feel that the availability of mutual fund shares will enable our agents to earn more income and will ultimately lead to the sale of additional life insurance. Having decided to sell mutual fund shares through our agency force, our first problem was whether to join forces with an established mutual fund or to organize our own from scratch. We approached a small but successful fund in North Carolina about the possibility of acquiring controlling interest in the management corporation. After negotiation, however, we concluded that the price asked was too large in comparison to the amount of control we would be able to obtain. Furthermore, we had certain ideas for appealing to our own life insurance policyholders which did not appropriately mesh with marketing methods used by the established mutual fund.

We concluded that the best approach was to establish our own fund and to incorporate our own management company to operate it. We were able to use the services of one of the executives of the established mutual fund on a fee basis to work with two company lawyers to draw up the required instruments and to obtain approval from the Securities and Exchange Commission. Incidentally, the services of this experienced executive were invaluable.

The management company, known as Security Diversified Shares Management, Inc., is wholly owned by Security Life and Trust Company. This management company acts as underwriter, manager, investment advisor, stock transfer and dividend disbursing agent for the fund. The mutual fund itself is known as Security Diversified Shares, Inc. The management company was organized with $11,000 of capital and $9,000 of surplus. To put the mutual fund into operation, Security Life and Trust Company bought $100,000 worth of shares in it.

One unique feature of our plan is that any mutual fund shareholder can arrange to have dividends payable by the fund reinvested in additional shares without a loading. Since we calculate share prices to four decimal places, any amount can be invested. For regular purchases the minimum size deposit is $10. We encourage regular monthly deposits and have worked out arrangements so that a person can pay for his life insurance, health insurance and mutual fund investments all in one check.

Security Diversified Shares was put into operation on June 15, 1960 and the asset value per share at that time was $10. In November a semiannual dividend of 15 cents per share was paid. At the present time the net asset value is $11.55 a share and the fund has grown to over $1,700,000. Actually, we do not feel that we have at all begun to capitalize on the possibilities in this field. Now that our agency force has become used to this idea and is receiving regular reports of the changes in net asset value per share, we believe that a concerted sales effort in this area will produce dramatic results. It has been difficult to measure whether this venture has produced additional life insurance, but we know that the morale of our field men has increased, that they are earning more money, and the chances that they will remain with us are very good.

MR. EUGENE WISDOM: I have a client that issues a policy providing guaranteed annual endowments which may be left on deposit at interest. The rate of interest to be paid is guaranteed, but there is also a participation arrangement that may allow payment of a higher rate of interest. The description of the participation arrangement involves the word "fund."

A local office of the SEC wrote the company that this policy could be considered a security and quoted from the Supreme Court decision on variable annuities. The letter concluded that this policy was a security because it offered an incentive or consideration other than life insurance. I replied to this letter explaining that the provision in question was a participating settlement option. I also pointed out that if such a clause made the policy a security then the SEC would take over the regulation of endowment policies with an income at maturity and dividend-paying participating policies.

MR. ALFRED N. GUERTIN: I recall an incident that occurred at the last meeting of the National Association of Insurance Commissioners. At the meeting a representative of the Securities and Exchange Commission met with members of the Life Insurance Committee. He said that some life insurance companies were issuing contracts that contained provisions for a separate fund to be accumulated out of a specified part of the premiums or out of dividends. The fund is invested in common stocks and accumulated until maturity or time of claim when it would be paid out as provided by contract. These funds have the characteristics of a segregated fund and in many cases would involve such things as units. His reason for appearing was that the SEC is interested in these contracts because they regard them as having some attributes of a security. He asked if there was not some basis for cooperation of the SEC and the insurance commissioners in the regulation of these policies. He may also have meant that cooperation of the industry with the SEC and commissioners would be helpful.