

**TRANSACTIONS OF SOCIETY OF ACTUARIES  
1962 VOL. 14 PT 2**

**EMPLOYEE BENEFIT PLANS**

*Group Life Insurance*

- A. Has the adoption of the Commissioners 1960 Standard Group Mortality Table as a premium basis by the states having minimum group premium laws led to a revision of rates by companies not operating in those states?
- B. What problems have arisen from the adoption of the Commissioners 1960 Standard Group Mortality Table as the basis for calculation of life reserves for statement purposes?
- C. What has been the mortality experience in small group cases, particularly where large amounts of life insurance have been made available? What is the best method for measuring the antiselection, if it does exist, on the individuals insured for larger amounts?
- D. What policy provisions are advisable with respect to disability coverage, suicide, contestability, and conversions when insuring larger individual amounts under group insurance?
- E. Is group life insurance with paid-up values becoming more popular? What effect has the recent change in group term rates had on such business?

*Jacksonville Regional Meeting*

MR. TED L. DUNN: A revised group life table has been adopted by the Provident Life & Accident for use in states without a minimum group premium law. The rates in this table are a little lower than in the Commissioners Table. The same expense loading of 20 cents per month per \$1,000 on the first \$40,000 of insurance is used. The volume reduction is the larger of the percentage discount determined from the Commissioners' Method volume reduction formula and the percentage discount determined from our usual volume reduction tables, which include the premium volume on most accident and health coverages.

MR. CARL R. ASHMAN: Before promulgation some months ago of the new minimums, special group life rate schedules gave my company, the Lincoln National of Indiana, a considerable competitive advantage over those companies "locked in" to minimum premiums. We have introduced a new rate schedule based on the 1960 CSG Table with what we regarded as adequate loadings. A test of the schedule against new cases indicated a reduction of from 5% to 7% from our previous schedule. Complicating factors, such as discounts by premium volume, average certificate size, variations in policy fees, etc., make comparison with schedules of other companies almost impossible except on an actual case basis.

MR. GENE P. ARCHER: The group life rates of my company, American Hospital and Life, are based on clerical mortality from the latest study available (based on experience which has a very high percentage of female employees) published by the Committee on Group Mortality. They were loaded to produce about a 67% loss ratio before volume discount.

MR. GORDON R. TRAPNELL: I would like to ask if any of the companies which have set new life rates below the New York minimum have used the experience of clerical employees only on which to set their rates. I, for one, will certainly say that my company, the Life Insurance Company of Virginia, did not.

MR. ASHMAN: Concerning section B, at the Lincoln National of Indiana we are seriously considering the use of the 1960 CSG Table for reserves. Some of the problems and questions which would have to be resolved are as follows:

1. Should the new table be adopted for new business only or should it and could it, in addition, be applied to existing business?
2. If applied only to new business after a certain date, the calculation of unearned premium reserves would have to be separated accordingly. Further separation of new business would be required unless there is statutory authority, or approval secured, for the use of the new table in all states where licensed.
3. If extended to existing business, a separation of this business would still be necessary. For example, Texas specifies the mortality table and the maximum interest rate to be used and requires that this be stated in the policy.
4. If the new table is or can be used for all or a substantial part of existing business, then there would be a correspondingly substantial reduction in reserves with a resultant overstatement of operational gains in the year of its adoption.
5. Since any change will ultimately result in lower unearned premium reserves, its effect on federal income taxes should be thoroughly reviewed.

MR. WILLIAM V. HAUKE: At the Continental Assurance Co., our valuation follows the reserve basis stated in each group life insurance policy. We make the assumption that premium payment dates are distributed equally throughout the month. Our reserves are calculated seriatim on any statement date by multiplying the amount of insurance in force by the average net premium for the balance of the period until the next premium due date.

Cases issued subsequent to promulgation of the new minimums are valued on the basis of the 1960 CSG Table. If we valued all of our group term on this basis the reduction in reserves would be approximately 25% of present reserves or 3.5% of annual premiums.

The advisability of an over-all change to the 1960 CSG Table depends on the income tax status of a company. If it is in Phase 2 a substantial tax would be paid on this release of reserves.

The practical problems and mechanics of calculating group life reserves would make an over-all change advantageous to our company. At the present time we are computing manual rates in all cases on the basis of the new table and converting from this table for policies containing valuation bases different from the 1960 CSG Table.

MR. ROBERT M. JOHNSTONE, JR.: At the Equitable, the introduction of the new group mortality table has presented virtually no reserve problems. Aside from the various active life disability reserves, we set up unearned premium reserves which are an estimate of the pro-rata part of the premiums paid in one calendar year applicable to that fraction of the policy year for which they were paid falling after December 31.

Daily factors ranging from  $1/62$  to  $61/62$ , to reflect two basic types of grace period clauses, are applied to distributions of monthly premium in force by due day and contract premium basis. The aggregate amount of such reserves is increased for the remainder of advance premium on cases that are administered on a true annual or quarterly premium basis.

A large case review of renewal actions is relied on to uncover those instances of net premiums exceeding rerated gross premiums. For such cases, the ratio of net to gross is determined for multiplication times the case's monthly premium in force before preparation of due day distributions.

The introduction of a new group table for new cases and rewrites of old contracts will add a fourth contract premium basis to the distribution of premiums. Otherwise, our system remains unchanged.

We have a small problem in valuing contracts currently issued in Texas inasmuch as that state has yet to approve the new table for valuation purposes. For the coming year-end, we expect to adjust premiums for those policies to net CSO rates where such net rates are higher than the basis charged.

MR. ROBERT A. NIX: With regard to section C, the Life of Georgia loss ratio on 10-24 life cases based on the 1961 Standard Group Life premiums has been 55% for the period between the anniversaries in 1957 and 1961. Experience to date, covering the period between the anniversaries in 1961 and 1962, is 90%. On a case in this size range, we think that \$10,000 is a large amount, even though our underwriting rules allow us to offer such an amount without evidence in most instances.

To prevent antiselection, we recommend (1) requiring at least three

lives in the top class or writing on a franchise-type plan with evidence, if it is impossible to establish a three-man class, and (2) avoiding the \$10,000-\$2,000 sort of schedule.

**MR. RONALD E. GALLOWAY:** At the Great-West Life, investigation of cases under which the number of lives insured was less than 25 showed an over-all loss ratio well under 50%. However, a considerable number were older cases under which the top amount of insurance was \$5,000 and on which the probability of antiselection having been exercised was not too great. I think that the experience on newer cases involving high no-evidence amounts will be significantly poorer.

Investigation of death claims paid in 1960 where the amount of insurance was \$10,000 or more revealed that we had been selected against in quite a few instances. Typically, the number of insureds was between 10 and 15, the insured in respect of whose death the claim was paid was an executive of the firm, usually the president, the interval between the effective date of coverage and the date of death was under two years, and the cause of death was almost invariably heart trouble.

An M.I.B. check of impairments of all lives insured for \$10,000 or more under small groups issued in the previous six months period was inconclusive. However, there was considerable evidence that we are still being selected against.

As a result of our investigations, we have reduced the no-evidence maximums on small cases and slightly increased them on large cases.

To measure the degree of antiselection exercised by persons insured for larger amounts, I suggest a mortality study by amounts of insurance. In its simplest form it could include two classifications, lives insured for less than \$10,000 and lives insured for more than \$10,000. The study might be by size of group as well, for a company with a very large volume of business, but in general should be confined to smaller groups. Another aspect which might be studied is the intensity of antiselection as the extent of employer contributions to the total cost of coverage decreases.

**MR. NIX:** Concerning section D, a recent study of Life of Georgia group life death claims incurred on all cases that were renewed between October 1957 and April 1962, where the cause of death was suicide, indicated the following: Number of deaths, 12; number occurring within the first two years of individual coverage, 10; within the first year, 6; within the first six months, 3. One of the first year claims was for a large individual amount. In general, these statistics indicate that a one or two year suicide exclusion might be advisable in a group life contract, whether or not large individual amounts are involved. Two points that can be made to support

these conclusions are: (1) it is certainly possible for selection to be exercised in this respect, especially in a contributory case and (2) when a person who is in a suicidal state of mind finds himself newly covered with insurance that is payable on death for any reason at any time, this might encourage him to commit suicide.

On conversions, if a part of the insurance applied for is available only as "excess," subject to individual rating, then the policyholder and insured are informed of any substandard classification by letter. Later, if the conversion privilege is exercised, our policy language completes the picture by saying that the premium for the individual policy will be the premium applicable to the class of risk to which the insured belongs.

MR. GALLOWAY: Although at the Great-West Life we recognize the desirability of provisions which protect the company when writing large individual amounts, we feel that such provisions must apply to all of our business. In particular, it is advisable to ensure that if the amount of insurance is subject to reduction as age increases, the disability provision should be written so that an insured whose coverage is being carried on under the waiver benefit does not retain more insurance than he would if he were not disabled.

MR. RICHARD G. SCHREITMUELLER: With regard to section E, at the Aetna Life we have 2,100 group paid-up policies with \$2.8 billion of total insurance. Our paid-up business in force has increased steadily for the following reasons:

1. It appeals to our policyholders as a method of prefunding life insurance after retirement because it provides fully vested coverage without tax problems.
2. It was designed specifically as a group product and can be administered conveniently by even the small employer.
3. It is popular with employees. The employee who hesitates to contribute 60¢ for term insurance will often be willing to invest \$1.30 in paid-up with a money-back guarantee.

Two years ago we changed the rates for all paid-up purchases to 1958 CSO net rates. We are using the 1961 New York term premium rates for paid-up business except for the very small policies where we have found it necessary to establish a special scale of higher policy charges.

*Chicago Regional Meeting*

MR. COLEMAN BLOOMFIELD: The new CSG Table has certainly led to some changes, but recent significant changes in rate level have resulted from increased competition, not the new table. The standard premium rate bases for non-New York companies vary from a level fairly close to the statutory minimum rates down to rate reductions of 25% of

the "minimum" rates. I know of rates about 25% lower for cases involving \$150,000 of insurance volume, about 20% lower for cases involving \$1 million.

The low rates referred to will provide for mortality costs according to the 1960 Basic Group Mortality Table plus an expense margin approximately equal to the expense loadings inherent in the minimum rates. There appear to be no other margins.

**MR. ALAN M. BAYLY:** My company, The London Life, does business in Canada only, and is unrestricted by the usual statutory minimum premium provisions. The new CSG Table has not led directly to any changes in our group life rates. Nevertheless, we have had two rate adjustments in the past year, so there is a chronological correlation.

Unlike the CSG Table, our rates are based on our own mortality and expense considerations. Further, they are tailored to fit the structure of each group with respect to (1) coverage by sex, and the number of accounts, in addition to the usual variables of age and size, and (2) such items as administrative expenses—per certificate, per account and per policy—claims expenses, general expenses, commission and acquisition costs, taxes, contingency contribution, and dividend margin.

Until recently, our mortality charges, which for the past six years have been based on a table derived from our 1950-54 group life experience on standard groups, have reflected quite realistically our group life mortality experience. Our basic mortality rates include provision for the extended death benefit and are significantly lower than the corresponding basic rates for the new CSG Table. Starting in the twenties, our rates are much less than 60% of the latter rates. This percentage increases fairly uniformly by age to about 75% at age 55 and remains true up to at least age 75.

About a year ago we adjusted our mortality charges to recognize reduced mortality for female lives. Early in 1962 we re-examined our rates and found our 1961 group life experience confirmed a small downward trend in group life mortality. Subsequently we reduced our mortality charges to reflect this favorable trend.

**MR. GERALD B. ANGER:** Great-West Life operates in several of the states having minimum premium laws as well as elsewhere in the United States and Canada. The revised minimum premium tables have not affected our company. They have, however, reduced the margin of premium inequity between those groups that are subject to the minimum premium laws and those that are subject to our standard premium basis.

**MR. RICHARD S. MILLER:** When we changed our rates at American United two years ago we based them on the 1960 mortality table data.

The major difference between our current rate structure and the CSG occurs in the older ages. We have two different rate bases for over 60, one for active lives and one for retired. This results in a significant difference in rate when we have a group loaded with older active lives.

**MR. BLOOMFIELD:** Concerning section B, I would like to enumerate three important problems generated by a premium basis which approaches the level of a nonparticipating rate:

1. The Basic Group Mortality Table encompasses a broad range of industries. In many the expected level of mortality will exceed the basic table. If a premium rate basis provides no mortality margin, a conservative approach to the underwriting of certain normally standard industries is best.
2. It is traditional to provide for a degree of credibility to the experience of each group policy, except for the smallest cases. With a nonconservative rate basis, the degree of credibility must be reduced. The reduction or elimination of dividends or retroactive rate credits may create a serious problem in conserving cases with favorable experience.
3. At The Minnesota Mutual we rely heavily on the 1960 Basic Group Mortality Table, by far the best measure of group mortality available. However, in the last 3 to 5 years we have experienced and have sometimes submitted to increasing pressures to liberalize the amounts of guaranteed issue provided under group contracts. Policyholders and brokers are becoming more sophisticated in buying group life insurance. An increased amount of antiselection may lead to poorer mortality results than those reflected in the 1960 Basic Group Mortality Table.

In The Minnesota Mutual our premium rate basis is less conservative than the New York minimum rate basis. The difference is about 7%, which leaves a reasonable margin to minimize the three problems I have cited.

**MR. ANGER:** At Great-West Life, our group single premium and our group paid-up insurances are written and valued on the CSO basis. We do not plan to change either our premium basis or our valuation basis to the 1960 CSG Table.

**MR. WILLIAM V. HAUKE:** I think the intent of section B is that group life insurance companies usually hold an earned premium in reserve, often on a net basis. At Continental Assurance we hold it mainly on a CSO net basis. We have discovered that if we change this valuation basis from CSO to CSG, the net premium is reduced 25%; hence earned premium reserves are reduced 25%.

An obvious problem that arises is that if you release a substantial sum of money in group life reserves as unearned premiums you have tax consequences if you are in Phase 2 of the income tax.

**MR. SIMONE MATTEODO, JR.:** With regard to section C, Equitable Life Assurance Society recently revised its baby group operation. In doing so we reviewed the claim papers on about 130 death claims, because our group life experience was significantly worse than average.

One claimant, who controlled two small groups we insured, died from a condition which antedated the effective date of both contracts. Two executives from another group died from heart conditions within a year after being insured. One claimant was insured at a bakery, yet his claim papers listed his occupation as a motel clerk, although he was supposedly on disability when he died. One claimant was the wife of the president of the group and was insured as an executive. Newspaper accounts indicated that she was bedridden when the contract was effective, in the hospital one week later, and died from a general carcinoma condition six weeks after the contract was effective. One claimant died, one month after the contract was effective, from arteriosclerosis from which he suffered for 2 1/2 years, and the group terminated four months after he died. There were a few other claims of this questionable category.

Although we have not devised any concrete methods to measure anti-selection, the results of our death claim analysis indicate that we should take certain measures to protect ourselves from antiselection.

We have instituted an inspection program to verify that the intended insureds are full-time employees, and that close relatives are not being insured as regular employees.

We feel that pooling gives us some measure of protection against anti-selection. For baby group insurance, we pool all insurance. For regular group insurance, we have found that pooling only excess amounts is satisfactory.

**MR. MILLER:** At American United we recently completed a mortality study by amounts in the cases. Cases under \$150,000 total insurance show a significantly higher mortality rate than larger cases. We attribute that mostly to antiselection.

In that size group, mortality by lives is higher than by amounts. However, the mortality on the group by amounts is about 14% greater than it is on the larger groups. This is barely covered by the CSG margins.

**MR. MATTEODO:** Concerning section D, at Equitable Life Assurance we get a statement of health for employees who apply for more than a modest amount of insurance, and for older people who apply for more than a limited amount of life insurance.

**MR. JERRY L. BROCKETT:** With regard to section E, Northwestern National has been preparing an increasing number of proposals for group



life insurance with paid-up values. However, our sales have not kept pace with our proposals.

Our agents use this type of insurance as a door-opener. A popular topic of conversation these days is health insurance coverage for the aged, which brings to mind the need of life insurance coverage for the aged. The group life insurance with paid-up values method is ideal for such coverage.

A few months ago one of our public relations men wrote a nine-line item for the magazine *Office Procedures*, describing group life with paid-up values. The inquiries from this short article have been amazing. Employers are interested in insurance which employees can take with them upon retirement.

To the extent that recent change in group term rates has reduced the employer's cost of term insurance on the younger lives, the new rates have had a favorable effect. However, the change in the paid-up insurance rates to the 1958 CSO mortality table with continuous functions and interest rates at around 3% has also attracted considerable attention.

MR. ANGER: In November of 1961 we decreased our rates to the 1958 CSO 3%. To assist in cases where older employees would not accrue enough insurance at retirement on the regular paid-up basis, we have proposed applying the paid-up equity at age 65 towards purchase of a decreasing retirement benefit. This has the advantage of providing larger amounts of coverage in the early years of retirement than would otherwise be possible with a level paid-up benefit. In spite of these modifications, sales of paid-up continue to be unsatisfactory.