

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

EMPLOYEE BENEFIT PLANS

Group Life

- A. What methods have been used to provide for exposure to higher than normal limits of insurance on individual lives? What has been the experience under various excess limits pooling arrangements?
- B. To what degree does Group Life experience by case or by classification of business parallel that of Group Accident and Health? Are small groups giving a mortality experience different from larger ones?

Philadelphia Regional Meeting

MR. RICHARD H. HOFFMAN: The Equitable Society has provided insurance in excess of the normal limits by a pooled insurance method and by a special reserve method. The maximum amount of insurance on any one life under either method may not exceed twice the normal underwriting limit.

Under the pooled insurance method the excess insurance coverage for a particular group is pooled with the similar excess insurance coverage of other groups. When a claim occurs, the amount equal to the normal underwriting limit is charged against the group's experience and the excess is charged against the pool. The pool is supported by a special charge which is deducted from the group's premium and which is determined by the ages of the employees with pooled insurance and the amounts of their insurance.

To be eligible for pooled insurance the group must have favorable underwriting characteristics which include a well-balanced age distribution, stable organization, favorable past experience, if any, a substantial employer contribution, a reduction of insurance at retirement of at least 50%, and a ratio of insurance to earnings which is nearly constant for all salary ranges. In addition, the employee must be actively at work on a full-time basis, physically able to perform all the duties of his occupation, working the full number of hours in the employers' normal work week which may not be less than thirty-two hours. Moreover, he may not be absent from work by reason of disability during the four-week period immediately preceding his date of enrollment. Where these conditions cannot be met, the employee must submit satisfactory evidence of insurability including a medical examination.

Over 800 groups have been insured under the pooled insurance method and the experience has been satisfactory.

The special reserve method is available only to large cases. The full

amount of all claims is charged against the group's experience. A special reserve is accumulated to protect the insurer against a substantial loss in a year in which a very large claim occurs. The maximum value of this reserve is determined on the policy anniversary, based on the ages of the employees with excess amounts of insurance and the amounts of their insurance. If the special reserve is less than the maximum value on a given anniversary date, a charge is made against the dividend otherwise payable in order to build up the reserve. Conversely, if the special reserve exceeds the maximum value, the excess is released and disbursed as part of the policyholder's dividend.

Claim charges arising from the excess insurance, including death and disability claims and conversion charges, are made directly against the special reserve. On termination of a contract the special reserve is returnable to the group after the applicable charges for the year have been made. This method is not as popular as pooled insurance and only thirty cases have adopted it.

MR. WILLIAM S. THOMAS: The Metropolitan has provided insurance in excess of the normal limits by reserve and pooling methods. The reserve method is generally used where the reserve can be readily established or where the policyholder requests some unusual features which may not be readily adapted to the pooling method.

Two pooling methods are used, one requiring individual evidence of insurability, the other requiring no evidence. In lieu of such evidence, a tighter "actively at work" provision has been imposed which requires the employee to be actively at work, physically able to perform all the duties of his occupation, regularly working the normal work week of at least thirty hours. Moreover, he may not be absent from work during the three weeks prior to the effective date by reason of sickness or injury. If these requirements are not met on the effective date, the amount of insurance is limited to \$10,000 until the date these requirements are first met. To date the experience has been favorable under this method.

In order to achieve satisfactory underwriting results the group must have favorable underwriting characteristics which include a substantial reduction of insurance at some specified age, such as age 65, a well-graduated schedule of insurance based upon earnings so there is not an unusual concentration of insurance on the higher paid employees. Also, if the group is small in size, the disability provision should be of a limited nature such as the "extended death" benefit.

MR. JOHN M. BRAGG: In the group experience of the Life Insurance Company of Georgia there is no discernible positive correlation between

Group Life experience and Group Accident and Health experience by size of group. If anything, the smaller groups seem to exhibit better A&H experience than do the larger groups.

The group mortality experience has been analyzed by group size from policy anniversaries in 1957 through 1961. If the mortality ratio is set at 100.0% for groups containing 100 lives or more, then the corresponding ratio is 100.7% for groups from 25 to 99 lives and 117.3% for groups from 10 to 24 lives. Although the volume of data is not large, the larger mortality ratios in the smaller groups is significant and reflects antiselection.

Life of Georgia also writes a wholesale product on 3 to 9 lives requiring evidence of insurability but liberally underwritten. The corresponding mortality ratio for this business is 91.3%.

MR. J. BARRETT WALKER: The Canada Life pooled all existing group life cases of less than 50 lives three years ago. The pool of existing business, which includes 950 to 1,000 groups, has indicated experience somewhat better than the remainder of our group life business. This may be due in part to the wearing off of the initial antiselection on the part of the insureds. Experience, although scarcely significant, for current "package-plan" groups has been hopeful.

MR. ALAN FORD: The Prudential has analyzed the mortality experience by size of group for each of the last three years, after excluding supplementary pooled amounts. The mortality experience of groups with less than 100 lives was 8.5% greater than the corresponding experience on larger groups.

Kansas City Regional Meeting

MR. ROBERT V. YOUNG: At the Massachusetts Mutual, the maximum amount of insurance that can be issued nonmedically to an individual insured is conditioned by the type of group life schedule applicable to the group of which he is a member and by the size of the group. For groups with level amount schedules, the amount of nonmedical insurance may not exceed \$20,000. For groups with graded schedules, one of two formulas is used to determine the maximum amount of nonmedical insurance for an individual. The first formula is applicable to groups with amounts of insurance based on earnings where the ratio of insurance to earnings is essentially the same for all eligible employees. The maximum amount of nonmedical insurance is determined by a percentage of the total volume of insurance plus three times the average amount of insurance on the 25 employees who are insured for the highest amounts, excluding any amounts of insurance in excess of \$35,000. The second formula is applica-

ble to groups with other types of graded schedules. This formula is similar to the first but is less liberal in the maximum amounts produced.

Insurance in excess of the nonmedical maximum amount may be written only for groups which qualify for the liberal nonmedical maximum formula—in other words, for groups with amounts of insurance based on earnings, with a consistent ratio of insurance to earnings for all employees. Amounts of insurance in excess of the nonmedical maximum require submission of the same evidence of insurability as in the case of insurance under individual policies. Substandard risks including Table B are acceptable. The maximum amount of such excess insurance which is written is the greater of \$40,000 or one and one-half times the nonmedical maximum amount up to \$100,000, subject, of course, to any statutory maximum.

The total insurance for an individual who has attained age 65 is limited to the greater of \$10,000 or 50% of the amount for which he would otherwise be eligible. No cutback is required on amounts of insurance of \$10,000 or less. On certain groups the required cutback may be accomplished by reductions of 10% per year.

For each group, any amounts of insurance on individual lives in excess of the nonmedical maximum amount are pooled with excess amounts of insurance on other groups on which individual evidence of insurability is required, and these excess amounts of insurance are referred to as medically pooled insurance. If a claim in excess of the nonmedical maximum should occur, the pooled amount is not charged against the experience of the group. Instead, a charge based on the volume and age distribution of the medical pooled insurance is made each year, whether or not a claim occurs. A charge is also made for any direct underwriting costs incurred.

Massachusetts Mutual utilizes additional pooling in the nonmedical portion of the insurance. For each group, a self-rated maximum is determined, based on the total volume of insurance on the group. Any amounts of insurance on individual lives in excess of the self-rated maximum amount but not in excess of the nonmedical maximum amount are pooled with excess nonmedical amounts on other groups. If a claim occurs in excess of the self-rated maximum, only the portion of the claim up to the self-rated maximum is charged against the group. A nonmedical pooling charge, computed in a similar manner to the medical pooling charge, is made each year.

Prior to 1960, the pooling charges for the nonmedical pool were based on 100% of the 1941 CSO net one year term rates. Experience indicated that this basis was producing excessive charges, and in 1960 the basis for pooling charges was changed to a smaller percentage of the CSO term

rates. The nonmedical pooled claims incurred in the eight calendar years ending with 1961 have amounted to 47% of the nonmedical pooling charges, where the 1960 and 1961 pooling charges have been corrected to reflect the old 100% CSO charge basis. This mortality level is substantially lower than the level on normal amounts of insurance. Since the current volume of nonmedical pooled insurance is \$35,000,000, this experience could be regarded as significant. However, the exposure is of rather short duration, and it can be assumed that the mortality level of the pooled insurance will ultimately be higher than that of the normal business because of the antiselection involved in attempts to obtain higher than normal amounts of insurance on key individuals.

The pooling charges for the medical insurance are of the same basis as the charges for the nonmedical pooled insurance. The experience on the medical pool, while excellent to date, is not of sufficient magnitude to have a creditable significance. Since this pool involves amounts of insurance on which individual evidence of insurability has been submitted, the experience of this pool should be somewhat better than the experience of the nonmedical pool.

Our Group Department keeps the basic coverage and the first forty thousand dollars of medically examined insurance and cedes amounts over that to the Ordinary Department.

MR. JAMES F. MACLEAN: Bankers Life of Nebraska has gone into a somewhat higher limit on group life the last nine months. Essentially, we will write up to \$50,000 for cases of 49 lives or less, and go up to \$100,000 for cases larger than 50 lives. Usual underwriting requirements are applied, such as the maximum not exceeding two and one-half times the average amount of insurance.

We were very much concerned over the possible encroachment of Group on the Ordinary market, so we have adopted an essentially conservative approach. We are using the old-fashioned method of charging the case for amounts equivalent to one year's premium and pooling the excess 100%. Some pooling is applied to the premium and claims below this level, based on exposure and credibility factors that are appropriate for the particular risk. To date, our experience has been exceptionally good; however, because of our limited exposure, our figures do not have the reliability that we would like.

We have not noticed any particular difference in loss ratios between the small and large cases after considering the effect of chance fluctuations. Also, from our limited experience, it would appear that Group Health does not have any particular correlation with Group Life experience.

MR. RONALD E. GALLOWAY: In common with many companies, the Great-West Life has for some five years now been providing group life insurance in amounts higher than normal group limits on a medically examined basis. The underwriting of each applicant for this excess group life is done by our Ordinary Department underwriters and they determine in accordance with their regular standards in which mortality class the applicant falls. The rate which is then charged for the excess portion of the applicant's coverage is the appropriate multiple of the group one year term rate at the applicant's attained age.

Claims under the excess arrangement are not charged against the group policyholder's experience but rather are charged against the excess pool to which all premiums for coverage issued on the excess basis are credited.

Most of the lives insured under the excess arrangement have, of course, been insured for less than five years and our experience to date must therefore be considered as being largely select. In any event the experience of the excess group life pool has been significantly more favorable than on that portion of the business which is issued without any evidence of insurability. Indeed, on the basis of over \$500,000 of premium allocated to the pool since we first started writing on the excess basis, our cumulative loss ratio is just over 44% and for the year 1961 the loss ratio under the excess coverage was only 25% as compared with a figure of 72% for our regular group life business.

MR. RAY D. ALBRIGHT: Like most other companies in the group business, we have been confronted with high individual amounts, particularly on smaller groups, during the last five years or so. The pooling devices we use are similar to those of the Massachusetts Mutual described by Mr. Young. For the larger groups a mortality fluctuation reserve may be accumulated. For smaller groups, where we provide individual maximums of \$20,000-\$25,000, complete case pooling is employed. All such policies are combined for experience rating purposes.

Our nonmedical pool has grown slowly and included a volume of about \$13 million at the end of 1961. Claims have been between 75% and 80% of those expected by the 1941 CSO Mortality Table, which is considerably higher than on the balance of our business. We also offer pooled amounts subject to satisfactory evidence of insurability. Amounts issued subject to evidence of insurability are reinsured in the Ordinary Department of our Company, with the Group Department retaining a small portion of the premium for general overhead expenses.

MR. DEAN E. WILLIAMS: Our technique for pooling is very similar to the type that has been described. However, we vary our credibility

factor in accordance with the ratio of maximum amount to average amount; the higher the ratio the lower the credibility.

Just recently we went from a percentage of actual premiums for so-called expected claims, to a percentage of tabular premiums based on New York minimum rates. However, because of the loading in the 1960 CSG Table, we modify it slightly to take into account variations by age.

It appears that where a company "cedes" excess amounts of group insurance to the Ordinary Department, all the company is doing is dampening the gain and loss from group operations. Furthermore, because of the difference in treatment by different companies, I am confused as to where it belongs in the annual statement.

MR. GEORGE J. VARGA: It is true that ceding excess amounts to Ordinary will dampen the gain and loss for group operations. However, this is not the real reason we do it. We find that one good side effect is this: when we go to a group policyholder, we tell him we use the 1941 CSO rates as the cost of reinsurance for the excess, and there is no argument—we sell it to him a lot easier. We use the same commission scale on the excess as on the rest of the group.

Looking at Group A&H, we have found out that on our large groups we will lose money one year in A&H and make it up on the Life portion and then later the Life portion will get bad and we will come out all right on A&H. The difficult part is to convince people that whenever the loss ratio goes down to thirty percent, this is not the expected loss ratio for next year.