## TRANSACTIONS OF SOCIETY OF ACTUARIES 1951 VOL. 3 NO. 5

## **GROUP RETIREMENT PLANS**

- A. What problems may arise in the future as a result of offering group annuity plans which permit the employer initially to choose his method of funding?
- B. What considerations are involved in determining the minimum size for a group annuity contract of the deposit administration type?
- C. Should insurance company proposals include cost estimates involving labor turnover rates, at the risk that the overstatement of turnover may result in a subsequent deficiency in the employer's fund?

MR. S. L. EISNER, commenting on section B, believed that from an actuarial point of view a minimum size deposit administration contract was not needed if there were an adequate rate structure and a possible pooling of mortality on retired lives.

He recognized certain practical objections: small employers tend to experience a higher termination rate and would be less likely to understand fully the concept of the deposit administration type of contract than that of the traditional deferred annuity type. The latter was also likely to be true of their employees. The insurance company may thus have potentially more serious future public relations problems under small deposit administration contracts.

A company's decision as to these small contracts would be influenced by the source of its business, as between its own agents and brokers who specialized in pensions, and this in turn might be influenced by the company's commission scale.

Another important question is the adequacy of the company's staff to provide the substantial amount of service required by deposit administration contracts. He emphasized the necessity of a rate basis which would permit the smaller contracts to stand on their own feet and not produce a deficit during the initial guarantee period. To do this and be competitive on the large cases, the rate structure would have to be adjusted so that more margin would be available on the smaller cases. This is the procedure currently followed by the Prudential.

He then pointed out the close relationship between sections A and C. The use of discounts for anticipated labor turnover in many cases is a practical necessity both to secure income tax deductions and to meet collective bargaining requirements.

If the employer chooses both the initial assumptions underlying the cost calculations and the actuarial cost method to be used, two problems would arise: the trouble and expenses arising from relatively frequent changes which may be desired in these choices; and the possibility that the initial assumptions may prove overoptimistic. The employer and possibly the employees would blame the insurance company in the latter event, particularly if the insurer has been acting as the actuarial consultant.

Pointing to the dual role of the insurance company in such cases, Mr. Eisner indicated that his company generally would accept the recommendations of a competent independent actuary but would in occasional cases decline the business when the insurance company felt that the assumptions proposed were unlikely to be realized.

He concluded by saying that if the costs in a deposit administration arrangement were to anticipate the mortality prior to retirement, it would be equally appropriate to anticipate, on a reasonably conservative basis, not only labor turnover rates but also rates of increase in salary, rates of retirement, of disability, and of excess interest to be credited. The fulfilment of social need by the insurance company services on such plans more than offsets the risk of future adverse public relations.

MR. M. H. ALVORD, in dealing with section C, said that the ideal method of funding a pension plan is by purchasing annuities each year as the pension benefits accrue. Employers, however, do not feel that this is a realistic approach. They do not wish to buy annuities for each employee in 1951 if only a small proportion of their then employees will actually continue to retirement. While this reflects a real need which it is the function of insurance companies to meet, the insurer, as well as the employer, may be blamed if the fund ultimately proves to be inadequate.

He felt that reasonable safeguards would minimize that risk. Such safeguards would include dealing with employers who appear both able and willing to continue their pension plans into the future. It must, however, be made clear to them that deposit administration funding itself involves some risk of inadequacy of the funds. Employees must also be made aware of the nature of deposit administration funding and be fully informed concerning the type of plan and funding basis used. The use of conservative turnover factors based on the employer's past experience and that of others in the industry was recommended. He stressed the necessity of careful drafting of the contract and descriptive booklet so that neither the insurance company nor the employer would have any legal liability to make up a possible future deficit.

With these safeguards, Mr. Alvord thought the insurance company could fully protect itself and still fulfill its duty to meet the need for such contracts. MR. W. M. RAE stated that ever since first writing deposit administration plans the Bankers Life had been including a discount for turnover. They select one of a series of turnover tables, using rates not more than half the estimated experience of the particular group in order to be conservative. The employer is made fully aware that the rate of turnover is not being insured. In many cases it is a necessity to use a turnover discount in competing with self-insured proposals.

Mr. Rae pointed out that the choice of a method of funding is important. He recommended a funding method which provides automatic adjustment for any deficit resulting from overstating turnover rather than one which requires special action by the employer (toward elimination of an indicated deficit). One method favored by his company is the frozen initial liability method, as described in Treasury Bulletin on 23(p) (June, 1945).

MR. C. A. ORLOFF questioned whether the inclusion of section C on the agenda arose from a trend of pension underwriting away from insurance company and toward bank trusteeship, resulting from unfavorable comparison of cost estimates in insurance company proposals that exclude turnover with self-administered trusteed proposals that generally give consideration to turnover. If that were the case he felt there was required an analysis of the ultimate responsibility of an insurance company for the accuracy of its cost estimates.

Whereas the consultant for a trusteed plan assumes no responsibility for the validity of the assumptions underlying his cost forecasts, but makes it clear to the employer that actual costs will differ from his estimate to the extent that actual experience differs from the assumptions used, the insurance company's proposals may imply that guarantees are provided by the insurance companies. Because insurance company rates frequently are increased after the first five years under a plan and because employer costs rise as a result of increased employee compensation, he thought that insurance company rate guarantees actually have no significance except in event the contract is canceled and the accumulated fund is insufficient to meet the committed obligations. He expressed the opinion that the insurance companies should substitute for their "guarantee" representation the assertion that group annuities operate essentially on a cost plus expense basis. With such a premise, he said, the insurance company's proposals would constitute "educated guesses" in the same way as trustee proposals. Insurance company estimates thus could be based on more realistic assumptions involving not only labor turnover rates but salary scales and actual retirement rates. Proposals of this type, he said, would not necessarily entail serious long-range consequences to the success of a pension plan since periodic revisions of the assumed rates could be made, based on actual experience.

He suggested a compromise solution under which an insurance company proposal would consist of several cost estimates of varying degrees of conservatism. This would give the employer an indication of the possible range in costs and a better conception of the role played by the insurance company. On such a "cost-plus" principle it might be unnecessary to specify a minimum interest guarantee during the accumulation period. He thought it would be possible for the insurance company to make earlier and more substantial dividend distribution under group annuity contracts, imposing a surrender charge, to the extent of any deficiency, if the plan were canceled, in lieu of retaining a surplus to strengthen reserves or provide for possible losses. Coverage could thus be broadened to provide disability benefits and to eliminate the requirement of advance election of contingent annuity options. He felt that the adverse experience of insurance companies with disability benefits need not be duplicated under pension plans if the disability benefit is modest in relation to compensation, and if court action is avoided through determination of disability by the employer's doctor, or jointly by the employer's and employee's doctors. Plans based on that principle, Mr. Orloff indicated, might enable the insurance company to eliminate duplicate record-keeping and reduce correspondence, thereby lowering administrative expenses. He felt that many employers who have adopted selfadministered trustee plans would welcome the opportunity of transferring responsibility to insurance companies on such a basis.

Segregation of assets and the failure to guarantee life incomes to retired employees are the basic weaknesses of financing plans through trust companies. Insurance companies, which avoid these weaknesses, have a responsibility to market their facilities effectively.

MR. DATON GILBERT, commenting on section C, discussed a combination pension trust plan based on the sale of special individual contracts with conversion privileges and the accumulation of a conversion deposit fund to pay the costs of such conversions. Such funds could be handled either by banks acting as trustees or by the insurance company issuing the individual contracts. In the latter case deposits are usually treated as advance premiums, no loading being currently charged and no commissions currently paid. Administrative expenses are met by a margin between the interest rate earned and that credited to the account. Typically, a level premium method is used to fund the reserve, with discount for interest, mortality and withdrawal. He felt that a high degree of refinement in the mortality assumption was unnecessary, since only the period prior to retirement was involved and annual valuations normally were made. The CSO Table was used by some companies as a standard. Interest assumptions frequently range from 2% to  $2\frac{1}{2}\%$  per annum.

Company practices differ in handling withdrawal assumptions. The Connecticut Mutual prefers not to discount for withdrawals because (1) eligibility requirements are generally drawn so as to minimize the effect of turnover, (2) this plan is ordinarily used for smaller cases in which the likelihood of chance fluctuations in withdrawal experience would make a withdrawal discount dangerous, and (3) the important savings in expenses resulting from a standardized valuation process would be lost if withdrawals were discounted.

MR. H. J. STARK, in referring to the difficulties of making a sound prediction as to the rate of turnover to be experienced, spoke of the numerous external and internal factors which may cause wide fluctuations in labor turnover rates experienced by a particular business. The employer's competitive position, local pattern of wage differentials, seniority or other rule adjustments resulting from collective bargaining, selective service policies or emergency manpower allocation would all affect labor turnover. Two general causes of difficulties in predicting turnover are (1) adoption or liberalization of a benefit plan may itself tend to reduce the rate of turnover previously experienced and used as a basis for the prediction, and (2) most employers seem to have now a higher proportion of older short-service employees than would be likely at a later date, in which case the turnover rate would be expected to decrease as time went on.

Prediction is more difficult if salary scales and rates of retirement, as well as turnover rates, must be taken into account. Estimated costs based on turnover rates, unless handled with extreme conservatism, might frequently have to be adjusted upward.

He felt that the insurance company actuary places himself in a difficult position when he undertakes to include labor turnover rates in estimating costs of a retirement program. The reasons are:

1. Each employer's turnover experience should be individually studied along with the probable effects of changes in the factors determining it. He thought that the routine choice of one or more standardized tables of turnover rates would not produce satisfactory results. If the appropriate detailed studies were to be made, substantial expansion of actuarial staffs would be needed. Under present circumstances such increased staffs could not be readily secured, and he doubted whether the cost of many such detailed actuarial studies could be assessed against the smaller number of employers who would accept the proposal of a particular company.

2. Discounts for labor turnover could become a competitive factor as between different insurance company proposals, with the company making the greatest discount most likely to secure the contract. Such a trend would be undesirable.

3. An insurance company actuary would be in a more difficult position than an independent consultant if it became necessary to recommend to the employer that a deficiency be made up.

In summary, Mr. Stark felt it undesirable for insurance company actuaries to include labor turnover rates in making estimates of retirement costs. If such estimates are necessary they should be made by a competent actuary with no other interest in the transaction.

MR. R. M. PETERSON, in discussing section A, indicated that the problems which may arise from limited funding would no doubt have their origin in misunderstanding by employers and employees as to what the payments made would accomplish in provision for pensions. It is necessary to make certain both that the employer understands the effect of the funding method and that employees are correctly informed as to what is being done. This would be particularly true when plans result from collective bargaining and when the agreement provides for pensions only for those who retire during its term. Disappointment and some dissatisfaction may result if the plan is terminated, but there is little reason for misunderstanding.

With respect to section B he felt that the principal considerations in determining the minimum size for a deposit administration contract were expense and cost variations arising from chance fluctuations. He is undertaking studies to determine the cost of providing actuarial service in valuing a fund and making computations for the employer's tax return and expects to find they are fairly substantial. Even if the employer initially utilizes the services of a consulting actuary the insurance company must be prepared, if necessary, to do the actuarial work for valuation and tax purposes. He feels the employer should be furnished with costs figured on orthodox funding principles even where contribution is made only for those actually retiring.

He believes that the minimum size for which deposit administration would be appropriate would be several hundred employees, the deferred annuity approach being preferable where the number of employees is less. Where immediate annuities are purchased from the fund, fluctuations in cost are minimized and their major source is the mortality on deferred lives, the effect of which is relatively small.

With respect to section C, Mr. Peterson said that there is as much justification for using labor turnover rates under a deposit administration plan as there is in a trusteed self-administered plan. It is undesirable to use labor turnover rates where normal costs are calculated by the single-premium cost method, since there will be a tendency for costs figured on that basis to increase unless a stabilized age distribution has been reached. Where withdrawal rates are used, the "entry age normal cost" basis should be adopted; on this basis the costs may be as great as or greater than costs on the single-premium basis without such discount.

Since he uses conservative withdrawal rates he does not feel there is any great risk of a subsequent deficiency due to overstatement of turnover. On the contrary, the margin from conservative withdrawal assumptions has in some cases offset deficiencies arising from low mortality on active lives. It is the practice of his company to make cost quotations on two sets of assumptions, one conservative and one more optimistic. In his experience, most employers who study the matter thoroughly will prefer to use the conservative assumptions. It is necessary to provide for termination of the plan, making it plain that where turnover has been discounted, there will not necessarily be sufficient funds to cover accrued credits for all employees active when the plan is terminated.