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DISCUSSION OF PRECEDING PAPER

RONALD G. MAITLAND:

The treatment of ill-health terminations under group annuities has always been a source of friction between the employer and the insurer. The author is to be congratulated on his scholarly treatment of the subject and on his indication of a possible solution to the problem.

His suggestion of evaluating each ill-health termination is open to some objection on the grounds that it leaves the employer entirely at the mercy of the insurer as to what constitutes ill-health and as to the degree of ill-health that exists. The employer might feel that the insurer could compensate itself for inadequate rates by stiffening the medical selection on terminations.

This is not so serious an objection where there is an alternative course open. For example, the suggested procedure might be satisfactory where an employee has received a reduced paid-up deferred annuity, on termination of the plan or otherwise, and he later elects to receive a lump sum in lieu of the deferred benefits. Under these circumstances the employee would have the option of continuing the benefit as a deferred annuity if he thought the cash settlement was inadequate.

The author's approach to the problem appears to be based on the fact that the mortality tables normally used prior to retirement include more deaths than can be expected among active contributors. If the preretirement mortality table did *not* include these deaths, and the mortality following normal retirement date were based on group annuity experience excluding early retirements, it would only be necessary to refuse payment of withdrawal values where death occurred immediately following termination of employment.

It would appear, therefore, that a less stringent procedure would be suitable where the insurer has sufficient margin in the mortality in use prior to retirement, by reason of age setback or otherwise, so that it approximates the mortality of contributing employees *only*. Under these circumstances the practice of full payment of withdrawal values, on terminating employees who survive a short period of years, could be justified theoretically. This procedure at least guarantees that there is eventual payment if the insurer's evaluation of the employee's health is in error.

It is likely that no *one* method will completely satisfy employers at all times and that alternative methods will have to be used on occasion, as the author implies in his paper.

ROLAND E. NELSON:

Mr. Siegel has presented a precise method of calculating the reduction in employer surrender values to be effected under certain circumstances. He apparently intends to underwrite every terminating life, except for those with small amounts of accumulated employer contributions, and to apply the suggested reductions to all substandard lives.

Theoretically, we could divide the group of terminating employees into those terminating because of ill-health and those terminating for other causes regardless of their state of health. The former group would comprise those cases in which the employee is unable to perform the duties of any occupation or is advised to find less strenuous employment. The method suggested when applied to this group is a considerable improvement over the current practices described in the paper.

Turning to the latter group, there is no reason to suspect that they, as a group, will experience any heavier or lighter mortality than that anticipated in the premium rates. Accordingly, full employer withdrawal values should be allowed on all lives in this group, even though an individual life might be substandard.

In practice we would experience difficulty in differentiating precisely between these two groups. Many cases could be resolved through a statement from the employer showing the reason for termination, the type of new employment, and the date of commencing new employment. Full employer withdrawal values should be allowed when termination is clearly the result of considerations other than health. A general layoff or the immediate commencement of similar employment elsewhere would thus be sufficient qualifications. Doubtful cases and those clearly the result of health considerations should be adjusted in accordance with Mr. Siegel's suggestion.

The higher aggregate surrender values that would result under this refinement would still leave financial benefits for the company greater than those needed to compensate for the reserves that would have been released by death had all annuities remained in force. The excess represents the reductions applied in the doubtful cases on which further investigation would have indicated that termination was not prompted by ill-health.

CLIFFORD J. WOODLEY:

I want to congratulate Mr. Siegel on the submission of a very fine paper.

It is interesting to note that some of the Canadian companies are offering deferred group annuity contracts to relatively small employee groups. The paper does not state whether these plans are funded on the "step rate basis" or whether some level type of premium is used.

For groups of this size I can appreciate that the use of an actuarial method of determining appropriate ill-health reserve releases, as advocated by the author, would alleviate many of the problems encountered in the various, somewhat empirical methods currently in use. However, I am wondering whether the very existence of these problems is not an indication that the basic contract itself is not too appropriate.

In the first place, if we are speaking of only one life under a group annuity contract, then I have serious doubts as to whether the interest of the client is served adequately by the use of a premium rate discounted for mortality.

I believe if the position were fully explained to the purchaser, he might find that his best interest was served by the use of a policy which either contained no mortality discount prior to retirement or else had basic death benefits in the preretirement period.

In the United States, my recommendation to a client seeking retirement benefits for only one employee would be, in the absence of special circumstances, to obtain a contract which did not involve mortality prior to retirement. If this were impractical for him under available contracts, I would recommend that he accumulate the funds in an appropriate trust, with a view to purchasing a single premium annuity for the employee at retirement.

I would point out to this client that at the time termination does occur under a mortality discounted contract, a substantial lump sum may be involved on this one life and, hence, it is natural to assume that all parties would be concerned with their own interest first in disposing of such a sum. The question of this concern on the part of the insurer is pointed up in the paper by the suggestion that one possible criterion would be that the entire credit should be available if the employee is alive five years after the termination date, with the burden of proof resting on the employer. It is difficult to see how, for example, the contingency of a man killed in an automobile accident two or three years after his termination in the plan should have any bearing on the refund the purchaser is entitled to at the time of termination.

For groups involving more than one life, the question of bias in termination administration is negligible if the dividend formula under the plan operates to alleviate any inequities. However, if, because of the small size of the group or for any other reason, the dividend formula does not compensate for undue stringency in termination releases, then I think the issuer of the contract must be very careful that the vehicle he is offering does give a full equitable treatment to the purchaser.

The theories and arguments concerning the effect of antiselection are, I think, almost endless on both sides. I have always felt there is too much tendency to admit that antiselection exists and then try to offset its effect, and too little effort to really explore just exactly what antiselection we are talking about. Basically, I think antiselection should arise only when the person who has control over the choice of the contingency is benefited by that choice.

In a typical employee plan funded under a deferred group annuity with mortality discount, the employee's benefit, either by way of death benefit or severance, is in general approximately the same. It therefore seems to me we may be applying the term "antiselection" to a case where one person makes the choice and another person benefits. It is possible to conceive of an employer who would, under certain circumstances, discharge an employee in order to get a recovery that he knew he would lose should he not discharge the individual. We could then be talking about the case of the person who is to benefit by the decision actually making the decision and thereby fulfilling what I think is the basic criterion of antiselection. Personally, I have never met such an employer and I hope I never shall. But providing he does exist, then I think any pension plan he would put in should be very carefully underwritten by an insurer so as to establish full equity to the employees as well as to him. I think the interests of all concerned would be better served under a plan that did not contain any area of selection on the part of that employer.

Our statistics show us that a substantial antiselection element exists in the conversion of group health policies. However, I do not condone the blanket application of this result in deducing that general employee turnover in a retirement plan may likewise be fraught with the same element. I have never seen statistics on the general health level on terminating employees, but I think from a human nature aspect there would be a tendency for lives with fairly high levels of good health to be the ones who would seek to better themselves by a change in position. On the other hand, a strong deterrent for a man contemplating such a step might well be the knowledge or even the suspicion that his health is not up to par. Since this paper and presumably the general practice of insurers in regard to ill-health terminations give no consideration to a possibility of bonusing these terminations which occur in above average health, then I think that what we are talking about here is a one-sided approach.

If the empirical method used by the insurer, or the actuarial approach advocated by the author, does nothing more than to allow for a certain percentage of terminations that are actually anticipated as deaths in service in the underlying mortality table, then no inequity should arise. However, if the method results in a charge against all ill-health terminations with no offsetting credit for "better than average" health terminations, then the operation could conceivably result in a source of profit to the insurer not originally contemplated by the parties.

In summary, I believe this problem is not too important in those cases where whatever stringency is adopted on ill-health terminations is adequately compensated for in the dividend formula. In cases where this is not so, I would recommend that the insurers operate the annual funding of these plans so that the effect of all releases is spread over an appropriate period without regard to possible ill-health at the time of termination.

Possibly some insurers may feel this would lead to calculations under small plans that the premium structure would not justify. If in fact such additional administrative costs are impractical, then I think the best interests of the employer and his employees would be served in many of these small groups by the elimination of the mortality discount prior to retirement.

(AUTHOR'S REVIEW OF DISCUSSION)

CONRAD M. SIEGEL:

I should like to thank Messrs. Maitland, Nelson and Woodley for their kind remarks in connection with my paper. It is indeed gratifying to have one's paper discussed by actuaries in such widely differing pursuits.

The paper was written primarily with reference to the small group annuity field in Canada. There are a small number of insurance companies which obtain the vast majority of the group annuity business in Canada. With one or two important exceptions, the type of contract offered is essentially nonparticipating. By nonparticipating I mean that the contract does not envisage dividends that are based on past experience in respect of annuities that have been purchased since the inception of the contract. The contracts may be written with a basic nonparticipating rate, or with a somewhat higher scale of premium rates and a current rate discount or dividend that primarily anticipates future excess interest earnings on the annuities purchased in the current year. The rate discount and dividend formulas sometimes are based on long-term theoretical Dominion Government bond yields, and variations in the discount or dividend rate are made as frequently as once a month.

The competition with regard to current net cost is extremely keen and "true" interest assumptions, based on realistic appraisals of mortality and expense, currently approach or even exceed 5%. In fact, the principal barrier to even lower net premium rates appears to be the 3½% maximum valuation interest rate permitted by law. Hence, it will appear fairly obvious that under this basic nonparticipating approach there will be little margin in the premium rates for overly liberal administration of the "ill-health" termination clause. Since employees are permitted tax-deferment on employee contributions under a registered pension plan in Canada, the vast majority of small group annuity contracts are on a contributory basis. Hence at termination the employee usually completes a form electing a termination benefit (cash or paid-up annuity) and it has been found practicable to have the employee complete a questionnaire regarding health on the same form. The solution suggested in the paper was devised with these conditions in mind and, of course, modification might be necessary under other conditions.

Mr. Maitland objects to the solution suggested in the paper on the grounds that it leaves the employer entirely at the mercy of the insurer as to what constitutes "ill-health," and as to the degree of "ill-health" that exists, and he points out further that the insurer could compensate itself for inadequate rates by stiffening the medical selection on terminations. Of course, this objection applies to any "ill-health" termination administrative system (including the classical "all-or-nothing" method) that bases the employer return in any way on the health of the terminating employee. While this objection is theoretically valid, as a practical matter it is unlikely that an insurer would follow such practices because of the effect on the sale of new business, the conservation of existing business and possible insurance department criticism.

Mr. Maitland suggests that if the mortality table used in calculating premium rates did not have any provision for release of reserves on "ill-health" termination, then it would be possible to provide the full credit, except where the employee died immediately after termination of employment. There are, in my opinion, several difficulties in this approach. If the mortality table to be used for the calculation of premium rates were derived from experience in connection with which the "ill-health" termination clause was administered in the conventional fashion, but included only deaths among active lives, then it would appear that such mortality rates would overstate the expected experience under the administrative system proposed by Mr. Maitland. This would be true since under the conventional system there is little financial advantage to be gained on the part of the employer by terminating the employment of an employee in "ill-health," whereas under the system proposed by Mr. Maitland there is very definite advantage in doing so. In my opinion, this aspect is under the control of the employer to such a great extent that, for the protection of the insurer, the mortality rates used in premium calculations would have to be so low as to make such premium rates uncompetitive when compared with the premium rates of companies retaining the usual "ill-health" termination clause. A certain amount of inequity as between employers with considerable turnover and employers with little turnover would result under Mr. Maitland's proposed method, since in the case of the former the average level of health of terminating employees would be expected to be better than in the case of the latter. Since under Mr. Maitland's suggested procedure payment would not be made in the case of employees dying immediately after termination, some sort of contractual "ill-health" clause would still be necessary and the usual sales problems would not be entirely eliminated.

In answer to Mr. Woodley's question, both level premium and unit purchase funding methods are available for small group annuity contracts, although it is doubtful that extremely small cases are sold on the unit purchase basis.

Mr. Woodley obtained certain impressions from the paper concerning the minimum size of "discounted for mortality" contracts that I did not intend to convey. It is very doubtful that many group annuity contracts involving one or two or a half-dozen employees are written on a "discounted for mortality" basis. Usually the companies also discourage this form of death benefit where a substantial portion of the total employer cost is applied on behalf of one or two highly compensated employees. Contracts falling in these classifications are usually written with a return on death before retirement equal to both the employee and the employer contributions, with or without interest.

For the reasons stated in the paper, it is often of considerable advantage to consider discounting for mortality where there are 25 or 30 employees involved and where the amounts applied on behalf of a particular employee do not form a very substantial part of the total employer contribution.

Mr. Woodley's fine discussion on selection is an important addition to the paper. It is rather difficult to determine, *a priori*, whether a specific employer is the type of employer "who would, under certain circumstances, discharge an employee in order to get a recovery that he knew he would lose should he not discharge the individual." Quoting again from Mr. Woodley's discussion ". . . a substantial lump sum may be involved on this one life and, hence, it is natural to assume that all parties would be concerned with their own interest first in disposing of such a sum." I have heard of cases administered under the 50% rule mentioned in the paper wherein the employer credit notice arrived after the death of the "terminated" employee.

It is not clear as to whether Mr. Woodley's suggestion that releases be spread over a number of years offers a practical solution to the basic problem. If the state of health at termination is ignored, then this method would be subject to the same criticism as outlined above in connection with Mr. Maitland's discussion. I do not feel that "discounted for mortality" contracts, with the advantages listed in the paper, should be withheld from smaller employers simply because of termination problems. These problems are being solved, and can be solved to the satisfaction of all concerned in most instances.

Mr. Nelson has suggested a variation of the method suggested in the paper. I think that in practice, Mr. Nelson's modification and the method suggested in the paper would produce much the same results.