

**TRANSACTIONS OF SOCIETY OF ACTUARIES  
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**PENSION TRUSTS**

- A. What are the advantages and disadvantages in the pension trust field of using the whole life plan for the basic policy and accumulating an auxiliary fund to supplement the pension provided by that policy?  
What arrangements have been found desirable in the provision for the auxiliary fund?
- B. What procedures are used in providing pensions for substandard or uninsurable risks?

MR. J. A. BEVAN opened the discussion of section A pointing out two aspects of the whole life policy auxiliary fund arrangement that could lead to lower employer costs for pension benefits. Where death benefits are limited to those provided by the whole life policies, the cost might be expected to run 6% to 9% less than for retirement income type of plan. Additional savings can be effected if labor turnover is appreciable and there is no vesting of the auxiliary deposit. (As a rule, most companies do not permit vesting of this deposit.) This nonvesting feature, though, has its disadvantages in that turnover rates which are too high might be used in determining the amount of the auxiliary deposit. In this connection, he mentioned that one company refuses to use a turnover factor for cases of less than 25 lives and, for other cases, the maximum rate is 5% up to age 40 reducing to zero at age 60.

The standard form whole life contract may be used in this combination with a clause added which allows conversion at a specified age. To protect themselves against selection, several companies require the policy to be surrendered at retirement age if not converted, with an appropriate modification of the nonforfeiture provisions to cut off coverage at retirement age if terminated previously.

The cost of conversion is usually the excess of the retirement income reserve over the whole life reserve, loaded, say 3%. The loading is necessary to take care of premium taxes that may be payable, to provide for a small amount of antiselection at retirement, and part of it might also be considered a premium for guaranteeing the original rates. As a rule, no commissions are paid on this cost of conversion or on the deposits to the auxiliary fund.

The auxiliary fund deposits are calculated to accumulate to the conversion cost at retirement, but these deposits may be suspended temporarily without affecting the basic coverage. This is both an advantage and disadvantage in that an employer may procrastinate and find very heavy future deposits required.

Mr. Bevan went on to state that the level death benefit is sometimes easier to explain to the insured and does result in lower costs. Further there is a clear-cut separation in the vested and nonvested provisions, assuming that some vesting is desirable on termination of employment. The employee is given a low cost whole life policy which he can generally afford to continue. This policy would include the right to convert but in many cases he might desire to continue his life coverage beyond the normal retirement age. This is usually permitted if requested 5 years prior to retirement or if evidence of insurability is submitted.

The auxiliary fund can be administered by an independent trustee or by the insurance company. In the latter case, the company furnishes the necessary actuarial service, the cost of which is met by deducting  $\frac{1}{4}\%$  from the interest allocated to the fund. The fund is a straight interest-bearing accumulation of the amounts deposited less amounts withdrawn and, since the employer is not required to make calculated deposits, there can be no guarantee that the fund will be actuarially solvent at all times.

Mr. Bevan closed with a statement that the auxiliary fund plan has a definite place in the agent's portfolio, but the employer should know what he is buying and the consequences of delinquency in contributing to the auxiliary fund.

MR. J. L. STEARNS then listed six advantages and six disadvantages that he saw in issuing a pension trust on a combination basis, some of which were covered by Mr. Bevan. The other points are summarized below:

#### *Advantages*

1. Only the whole life premium represents the fixed commitment, which is approximately only one half as large as under a retirement income plan.
2. If the auxiliary fund is administered by an independent trustee, the cooperation of the trustee is obtained in setting up the plan.
3. Since a whole life policy does not have a specific maturity date as does an endowment policy, the auxiliary fund combination plan might facilitate the handling of flexible retirement dates.

#### *Disadvantages*

1. Since there are two parts to the trust, more detail is involved in handling the collections.
2. Sales of such an arrangement necessitate a much more complex presentation by the agent with a consequent hazard that the buying public will not understand the arrangement.
3. The agent and prospect must understand that the apparent economy arises from benefits to the participant lower than under a retirement income plan, for if an attempt is made to vest any part of the auxiliary fund the financial advantage soon disappears.

4. The insurance company must prepare discount tables for an auxiliary fund on many different mortality and interest assumptions with and without the allowance for employee turnover.

Mr. Stearns then stated that of the pension trust cases sold by his company, The New England Mutual, 38% were on the combination basis in 1952 as compared with 5% on this basis in 1951.

Mr. Stearns also outlined several provisions that his company has found advisable in connection with auxiliary fund arrangements. These specify:

1. The amount of money that the company will accept into the fund, which is limited to that required to convert the policies on participants' lives to monthly incomes of not more than \$10 per \$1,000 of face amount.
2. The guaranteed rate of interest to be applied to the fund and a promise of participation, if available.
3. The exact basis on which the whole life policy will be converted to provide life income.
4. That if the agreement is completely terminated in less than 5 years, the guaranteed interest rate shall be reduced and a recalculation made on the funds which had been received.
5. That the trustee may withdraw funds subject to the usual waiting period applicable to any policy loan or surrender and subject to the provision that if the amount to be withdrawn exceeds \$100,000, the company may spread the withdrawal over a five year period.

The final speaker on section A was MR. R. W. WALKER who objected strongly to the whole life policy auxiliary fund arrangement. He opened by discussing briefly the two extremes of pension plan funding, namely, the use of an auxiliary fund for accumulating the full pension fund and the so-called "fully funded" plan. The overpowering disadvantage of the former method, as he saw it, was the lack of any real guarantee. The employer and employee (if contributory) knew what they were paying but did not know what they were getting. As for the "fully funded" plan, he recognized that it has been criticized from many points of view, *e.g.*, full funding is unnecessary, expensive, impossible, and so forth. Mr. Walker expressed the thought, though, that the "fully funded" plan was probably the traditional or perhaps the purely actuarial concept of funding.

Between these two extremes, one found the variety of insured and uninsured plans currently available and, in particular, the arrangement covered by section A. From the point of view of the insurance company, he could see only disadvantage in this plan. If the company maintains the auxiliary fund, it puts itself in the investment or banking business for an extended period and he could not see why a company would want to add to its investment problems. If on the other hand, the fund is maintained

by an independent trustee the insurance company has affixed its name or is associated with a venture over which it does not have sole control. The company might find that it would have to bear the stigma of unsatisfactory experience in the auxiliary operation.

Although the auxiliary fund is a means of reducing cost, he asked whether the company, employer and employee were not kidding themselves that pension benefits do not cost a lot of money. The industry and profession should never knowingly let itself become identified with failure to meet obligations real or implied. He went on to state that the method of funding does not determine the cost of the pension plan but the benefits do that.

He questioned the propriety of an extra-contractual agreement permitting the change or conversion of the whole life policy to an annuity policy if such agreements were not available to all policyholders, particularly in a mutual company. Recognizing that there is no unanimity of opinion as to the incorporation of a change privilege, he felt such provisions had no place in policy contracts. Changes are allowed and have always been allowed but conditions should be permitted to vary as practice requires in order that the company may protect itself from anti-selection at a future date.

Referring to the criticism of the retirement income policy because of the insurance element therein, he stated that there was an even greater insurance element under the combination plan.

Section B was covered by three speakers who discussed two different methods for providing pensions for substandard or uninsurable risks. The three speakers were MR. BEVAN, Connecticut General, MR. WALKER, Northwestern Mutual, and MR. H. F. PHILBRICK, Massachusetts Mutual. Mr. Walker mentioned the use of the retirement annuity contract which is the practice of his company, Mr. Philbrick the scheduled or graded death benefit policy, while Mr. Bevan covered both methods. Mr. Walker indicated that the retirement annuity contract has proven its usefulness in his company not only where the life is substandard or uninsurable but also when the regular insurance plans are not available for reasons such as age, period to retirement, etc. Mr. Bevan indicated one disadvantage to this plan in that it sometimes introduces complications when vesting equity must be maintained.

The scheduled death benefit policy provides for a reduced amount of insurance depending upon the substandard rating. Mr. Bevan defined the death benefit as the sum of the cash value and a proportionate part of the amount at risk, depending on the rating. Mr. Philbrick's definition of the benefit involves the reserve instead of the cash value and he specified that the percentages applied to the amount at risk in his company were

the reciprocals of the mortality classifications, *e.g.*, 50% for a risk rated 200%, etc., using an assumed rating of 1000% for uninsurable risks.

Mr. Bevan indicated that the standard cash values may be included in these policies unless higher values are required to comply with statutory requirements. The paid-up and extended values must be calculated on a substandard table, the death benefit under the extended option being the same increasing amount as would have been provided if there had been no lapse.

He also stated that the advantage of this plan is that it will fit into any pension agreement and does not require a different premium for substandard risks. One disadvantage is that it may be easily misunderstood. Further, Mr. Bevan continued, there is a problem as to how to handle substandard risks that would normally require flat extra premiums or temporary extra premiums. The flat extras can be converted to a percentage by comparison with the percentage extras but the temporary extras, if converted year by year by comparison with  $q_x$ , give rise to a problem in explaining the nonforfeiture tables in the policy unless the extended insurance option is eliminated, and this is undesirable after the temporary period.

Another problem encountered in the application of this method, mentioned by both Mr. Bevan and Mr. Philbrick, is the fact that at certain ages and ratings the sum of the premiums paid exceeds the amount of the death benefit and this is, of course, difficult to explain.

Mr. Philbrick indicated that of the policies which have been written in the Massachusetts Mutual since August 1950 on uninsurable risks on the 1000% mortality basis, one-half were issued to applicants in their fifties and practically all the rest at ages under fifty. Although several deaths might have been expected in this group on the basis of the appropriate multiple of a standard ultimate table, he pointed out that to date they had not experienced a single death on these policies. Mr. Philbrick then suggested an alternative approach in view of the difficulty in explaining the relationship between the death benefit and the total premiums under policies issued to uninsurable risks and in view of the experience which seems to indicate that the adoption of the 1000% classification was conservative. This approach would be to issue a retirement annuity form, the premium charged being equal to the standard life paid-up at 85 premium and the policy guaranteeing a death benefit equal to the return of premiums or cash value, if greater. Since this policy would develop a higher value at retirement, a smaller amount would be required at that time to increase the life income to the full amount of pension to be provided. This approach might also be satisfactory for the higher classifications such as 400% and 500% as well as for the uninsurables.