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

DISCUSSION OF SUBJECTS OF SPECIAL INTEREST D114

Retirement Plans-Miscellaneous

- A. What new types of options are being provided at retirement under pension plans? How long in advance of retirement is it customary to require election of an option?
- B. To what extent are profit-sharing plans being used to supplement pension plans, and vice versa? Is it feasible to adopt a pension plan to provide past service benefits, plus a profit-sharing plan for future service benefits?
- C. Is there a need for nonparticipating group annuity rates? Is it possible to make them attractive in comparison with participating or experience refund plans?

Philadelphia Regional Meeting

MR. KENNETH H. ROSS: Recent developments in options are related to what happens at death rather than retirement. An increasing number of plans provide optional benefits, usually to a spouse, on the death of a member in active service at a time when the member had some form of vested interest. Frequently the condition is that the member must be eligible for early retirement, and then the spouse receives the survivor pension based on the joint and survivor pension that the member would have received had he retired the day before his death. Options of this type have been prevalent in public employee retirement plans for several years.

Another type of option, also in a public employee plan, is to provide an automatic full cash refund option applicable on death in active service under certain vesting conditions. Since this option provides large cash payments to beneficiaries, a recent amendment permits a beneficiary entitled to \$5,000 or more under this option to elect some form of annuity settlement in whole or in part in lieu of the cash. This is a more liberal option than the joint and survivor option since the full reserves are applied for the beneficiary.

An increasing number of employers, encountering pressures from employees after years of experience with pension plans, have been liberalizing the rules relative to the election of options. Although ten or fifteen years ago most plans provided for a five-year advance election, this is no longer the general rule, especially among self-insured plans. Frequently plans now permit election at time of retirement, or possibly 90 days before retirement. There is no doubt that the administration of an advance election is troublesome, and employers are becoming more willing to pay the extra cost of permitting a last-minute election.

A recent analysis of plan provisions reveals several company plans apparently permit election of survivor options at time of retirement.

A 1960 survey of life insurance company pension plans for home office employees indicated very few companies require advance notice. While this may have been an error of omission in a summary comparison of nearly 200 such plans, only 2 specified a five-year advance notice and only 1 a two-year advance notice.

One large life insurance company makes the following loadings in its premium rates under group annuity contracts to allow for a reduction in the three-year advance notice period:

2 years	$\frac{1}{2}\%$
1	1%
0	

MR. HOWARD YOUNG: In various pension plans subject to collective bargaining negotiations since last summer, the following new options have been adopted.

A survivor option providing for a continuation of pensions which have already commenced, with the following features:

- To be available with all types of retirement—normal, early, disability, and deferred vested.
- (2) Opportunity to elect the option at the time of retirement, except for disability retirement in which case the option becomes available when the retiree attains age 65.
- (3) A "loaded" reduction formula producing benefits which are more than the actuarial equivalent of the benefits payable if the option is not elected.

In arriving at the details of the option the major considerations were (i) this is an extremely desirable type of benefit, (ii) the usual requirement for advance election substantially reduces the value of the option because it is unusual for the employees to give the question much thought several years in advance, (iii) the reduction to an actuarial equivalent is also a deterrent, and (iv) there is merit to providing larger total benefits to married employees who are willing to provide a pension for their spouse than to other employees.

It was decided to limit the form of the benefit to one in which 50% of the reduced pension payable to the retired employee would be continued to the spouse after the retiree's death. The formula adopted to determine the reduction gives the retired employee 90% of the amount he otherwise would have received if he and his spouse are the same age. For every year that the spouse is younger (older) the 90% is reduced (increased) by $\frac{1}{2}\%$. Thus if the spouse is five years younger the reduction factor is $87\frac{1}{2}\%$. Where the employee's pension would not be level even if this election were not made, the reduced benefit is determined somewhat differently.

Because it was recognized that the election of this option increases the cost of the plan, the class of survivors was limited to wives who had been

married to the employee at least a year before election, or husbands who met the same marriage test and also who had a lower taxable income than the female employee during the preceding year.

The cost of the option has been subject to much discussion. My estimate is 4% of the basic benefit cost, arrived at by assuming that the average age difference will be four to five years, thereby giving the individual employee approximately an 8% increase in benefits if he makes the election, and that 50% of the employees will utilize the option.

An option to level out the total income available from the plan and Social Security in the case of early retirees was also introduced. Here again the principle of election at the time of retirement was used. The reduction in pension occurs at age 62 (the earliest age Social Security becomes available) and is generally standardized at \$96, which is assumed to be a reasonable estimate of the Social Security benefit. The additional amount available before age 62 is usually taken to be \$96 reduced by the product of $\frac{5}{9}\%$ and the number of monthly payments to be made at the increased rate; thus an employee retiring at age 60 can have an extra \$83.20 prior to age 62 followed by a net reduction of \$12.80 after age 62. This option is generally considered to have no appreciable effect on the cost of the plan.

Finally, former employees entitled to deferred vested benefits commencing at age 65 were given the option of having their pension commence at any time between ages 60 and 65 at a reduced rate. The reduction is usually equal to $\frac{5}{9}\%$ multiplied by the number of months benefits are payable before age 65. The option to level out the total income available from the plan and Social Security is generally not available to these former employees.

MR. JAMES H. BRADDOCK: An option of widespread interest today is a limited widow's benefit. Some companies have put in quite liberal widow's benefit plans, on the continental style, but there is more and more interest in a limited widow's benefit which merely eliminates the discontinuity usually occurring if a man dies just before retirement.

Quite a few plans with which we work provide that in event an employee makes an irrevocable election of a joint and survivor option, and dies in active service at least a year later and after attaining age 60, he is considered as being retired early on the date of his death. His early retirement pension is first determined, a reduction for the joint and survivor option is made, and his wife gets whatever percentage—half, two-thirds, three-quarters—he has elected for her. This means that the widow's benefit is fairly small if a man dies at age 60 and gradually grades up to the full amount if he dies just a day before age 65.

This option can be arranged so that the company pays the whole cost or it can be arranged so that the employee pays for part or all of the cost. The employee's cost is met by an appropriate reduction in his own pension, if he lives until retirement, without penalizing his widow by a further deduction in her own benefit. For example, if an employee has elected that one-half of his pension is to be continued to his wife after his death and he has had a full five years of protection for the widow's benefit between age 60 and age 65, a reduction of 5% in his own "joint and survivor" pension is sufficient to meet the entire cost of the widow's benefit. If his wife should die before he retires, the joint and survivor option is canceled, but the employee's pension is still reduced fractionally for the period up to the time of his wife's death.

MR. CONRAD M. SIEGEL: With regard to section B, recent Internal Revenue Service statistics indicate that, in terms of the number of plans, new profit-sharing plan approvals have almost caught up with pension plans. Yet our actuarial literature is almost devoid of references in this field. Many actuarial consultants consider profit-sharing plans as non-actuarial in nature and the computational work in such cases is often delegated to the trustee, the client's accountant or even the attorney. Mr. Stuart Kingston, however, has shown the importance of actuarial thinking in several aspects of profit-sharing plans in his paper appearing in Volume VIII of the *Proceedings* of the Conference of Actuaries.

Those actuarial firms that do operate extensively in this field, including the firm with which I am associated, usually provide services which extend considerably beyond the computational phases. In order to achieve its greatest effect, a profit-sharing plan must be continually sold and resold to its participants.

As an investment medium, the life insurance companies do not appear to have been too successful in attracting profit-sharing plans. Their activities have been confined mainly to the issuance of life insurance under profit-sharing plans with associated guarantees as to annuity purchase rates at retirement. A trusteed profit-sharing plan has considerable appeal to even the small employer, since he does not have to stand behind mortality, interest, or other losses.

The American Motors settlement in 1961 has created a lot of interest in the subject of profit sharing. Generally those who have come out with so-called "impartial" comparisons of pension and profit-sharing plans have tended to overemphasize the merits of the position they support and magnify the disadvantages of the position they oppose. The profit-sharing approach offers several advantages, some of which are listed below:

- (1) increased contribution flexibility, especially if a voluntary formula is used;
- lack of determinable benefits, thereby allowing greater equity investment participation and freeing the employer from absorbing actuarial losses;
- (3) forfeitures can be reallocated and need not be used to reduce contributions;
- (4) incentive effect can be greater than in pension plans;
- (5) lump sum settlements are more feasible than in most types of pension plans.

Of course, each of the advantages listed above can be a disadvantage in the case of a particular employer. The principal disadvantages of profit-sharing plans include the 15% limitation on contributions, and the lack of effective past service recognition.

In a medium or large organization it is feasible to establish a pension plan to cover past service or all service on a modest basis. This increases the contribution limit to 25% for both plans. In one instance our firm was called into a case where a poorly designed pension plan had become hopelessly underfunded. We amended the pension plan to provide only for service to the date of amendment and a new profit-sharing plan was installed on that date. In most dual plan cases, however, we provide a minimum pension plan for all employees and a profit-sharing plan for the salaried group.

Small employers usually find the administrative and other costs associated with two plans disproportionately large. If a profit-sharing plan is desired, the past service problem can be handled either through direct payments after retirement or through funded deferred compensation agreements. This situation admittedly is not perfect. However, it corrects itself in time and does allow the employer to pick and choose employees for supplemental payments. Smaller employers seem to like to pick and choose.

Sometimes even the 25% limitation is not sufficient because of the presence of one or two older highly paid executives in a small organization. This situation can be handled by means of an integrated pension plan with no contribution limitation. After the executives concerned have retired, a profit-sharing plan can be installed, subject to the 25% over-all limitation.

MR. ROBERT L. MALLORY, JR.: Concerning section C, I believe that there is little question that most group annuity contracts can best be handled on the participating or experience-rated basis. There are a few sectors of the group annuity business, however, where in my opinion it is possible to offer a nonparticipating product which is competitive on price as well as having other advantages. One of these has already seen considerable activity, namely the single premium purchase to provide paid-up benefits for the employees of an employer going out of business

or a group of employees working in a plant that is being closed down. In this instance, the employer is interested in settling his obligation for pension benefits at the cheapest possible price. Future rate credits are of no concern to him. Insurance companies have been able to meet this need by reducing their normal premium rates to reflect the higher interest returns available on current investments and the pooling of the mortality risk with other similar contracts.

There are two other areas where nonparticipating contracts have not been used much but where such a product should be salable. The first is a contract which is essentially on an employee-pay-all basis such as a 501(c)3 plan or a plan covering members of an association. The latter may become a very active market if H.R. 10 is ever passed. The disadvantage of the participating approach for this type of coverage is the timing of the emergence of experience refunds to be returned to the individual participants. Under the normal experience rating plan the insurance company writes off at least some of the initial sales and installation costs of the contract as well as establishing partial contingency reserves before allowing an experience refund. In these circumstances, the individuals covered in the early years may receive smaller total benefits than those covered in later years. In addition, if such a contract were written on a participating basis, there would be the additional expense of allocating the refunds in some manner among the participants. From actual experience we have found that this cost can be relatively high.

The other area where it appears to me that a nonparticipating arrangement would be feasible is the small group annuity contract. One of the problems we have today with small cases is high expenses. If these contracts were written on a nonparticipating basis, I believe that simpler administrative procedures could be used with a resultant actual cost saving for the policyholder. In addition, somewhat more liberal assumptions for mortality and interest could be used in the premium rates so that the initial cost for pension benefits for the small policyholder would be sufficiently lower than on the participating basis to be attractive. In this connection it is interesting to note that many insurance companies have been successfully marketing nonparticipating pension trust products for many years.

In recent years the medium and large size policyholders have been able to reduce their initial outlay for pension benefits through a deposit administration contract. This vehicle makes it possible to use more liberal funding assumptions than the insurance company would guarantee on a participating basis and to advance discount for turnover. I don't think it is wise for the small policyholder to assume these risks since it is quite

probable that his experience will not follow the averages. However, a nonparticipating deferred annuity contract would allow him to obtain a lower initial cost with the insurance company taking over the risk.

Kansas City Regional Meeting

MR. SAMUEL ROSENBLOOM: A pension plan providing nonunion employees with a unit credit benefit permits election of the same form of annuity provided the union employees, who are covered by the Central States Conference of Teamsters Plan. This form reduces to a lower level after five years.

Another unusual optional form is a variation of the survivorship annuity, under which the annuitant's income increases to the normal form level if the contingent annuitant dies first. Thus, the income paid during the joint-life status is the normal form, reduced by the premium payable during the same period for the reversionary annuity.

Many self-administered pension plans, such as those for public employees, require no advance election, while a substantial number of private plans require from one to three years. Twelve insurers, quoting in 1961 on a conventional group annuity, showed a distribution of three companies requiring five years advance election, one requiring three or five years and four each requiring three years and two years.

As to section B, profit-sharing plans are being used to some extent to supplement pension plans, in some cases in lieu of increasing pension plan benefits. However, the nondiscrimination requirements of Section 401 of the Internal Revenue Code usually require limitations on past service credits under the pension plan, if these credits are proportional to both service and compensation.

As to section C, there should be a market for nonparticipating group annuities. They would be suitable in conjunction with profit-sharing plans. There is also a logical need for them when a trusteed plan terminates and assets are allocated to the covered employees.

MR. FREDERICK P. SLOAT: In connection with section A, a company in England offers an annuity which increases a given amount each year, such as two or three percent, providing a rising, rather than level, income. It seems to me that an option of this type would make a lot of sense to the employee willing to take a lesser dollar amount at first in order to get more in later years.

MR. DONALD B. WARREN: I believe the SEC is suggesting a guaranteed increasing benefit in discussions of the Prudential variable annuity. Any gains from excess interest earnings and capital gains would be applied immediately for the benefit of annuitants.

MR. ROBERT C. TOOKEY: Pension plans and profit-sharing plans are neither similar in nature nor even moderately related.

Profit-sharing plans have a flexible formula permitting the employer to allocate amounts, based on percentage of employee compensation, to a fund that provides income of an indefinite amount upon retirement. The purpose of such plans is to provide employees with incentive to work harder and produce more. Resultant income is withheld at a time when the employee's budget needs enforcing and deferred to a time when he is in a lower income tax bracket.

The adequacy of profit-sharing payments tends to be entirely incidental, and profit-sharing plans do not solve the problem of retirement. However, small, rapidly growing companies hiring young employees are often well advised to start with a profit-sharing plan. The plan can provide incentive for hard work, and there will be no immediate need for a pension plan if profits are sizable and older employees few.

An employer may wish to forestall unionization, develop automation and keep the work force small. A profit-sharing plan promotes this because the fewer the employees, the greater the profits per employee.

Although I don't have the details, I have heard of profit-sharing plans with a minimum guaranteed benefit, which would almost necessarily be of the type of combination under discussion.

MR. WILLIAM E. MOODY: In Huggins & Company we seldom recommend a profit-sharing plan except in conjunction with a pension plan. In one instance where all employees were office employees, we established a supplemental profit-sharing plan at the same time the insured individual policy pension plan was converted to a self-insured basis. The pension plan normal cost was deducted from the contribution determined by the profit-sharing plan contribution formula.

The firm expanded by acquiring other companies, which not only brought in higher age people, but also reduced profits available for distribution. The resultant year-by-year reduction in the number of dollars added to each member's profit-sharing account led to widespread dissatisfaction. A temporary remedy has been to reduce the pension plan normal cost by liberalizing the actuarial assumptions to reflect actual conditions more closely.

A recent amendment to these plans would permit an employee retiring under the pension plan to purchase additional income under the pension plan with his accumulation from the profit-sharing plan, current actuarial assumptions being used. IRS approval is pending. MR. CHARLES E. FARR: For most situations participating group annuities are highly satisfactory as a means to arrive at the lowest long-range cost to the policyholder. On the other hand a legitimate need exists for the nonparticipating approach in the case of a terminating trust fund. Here it is desired to purchase as much income for the employees as possible with the assets, and there is no satisfactory way of distributing dividends.

In this situation my company is willing to quote what are essentially nonparticipating group annuity rates, especially tailored to the characteristics of each case, but we do not expect to quote nonparticipating rates where a participating group annuity is appropriate.