Basic Features of a Pension Plan

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It is axiomatic in pension planning that the benefit pattern and other substantive provisions of a pension plan should be determined before consideration of the method of financing and the legal form of the plan. Certain basic provisions are common to all types of pension plans and can be discussed independently of the financial and legal characteristics of the plan. It is the purpose of this chapter to outline the essential features of any pension plan, indicating in a general manner the various arrangements and combinations that are available. The chapter is not intended as a manual or guide for pension technicians but rather as background for subsequent discussions of the more complex and controversial issues encountered in pension planning. Despite the many facets of a pension plan, the essential features can be summarized under the three general headings of coverage, benefit structure, and source of financing.

COVERAGE

From the standpoint of broad coverage, a pension plan may be of the multi-employer or single-employer type. The multi-employer type of plan is a product of collective bargaining and has emerged principally in industries characterized by skilled craftsmen, numerous small employers, and a high rate of business failure. It may be industry-wide in scope or it may cover only the members of the negotiating union located in a particular geographical area. Some examples of industry-wide plans are those of the United Mine Workers; the United Brotherhood of Carpenters and Joiners of America, AFL; the International Brotherhood of Electrical Workers, AFL; the International Typographical Union, AFL; and the Amalgamated Clothing Workers of America, CIO. Among the multi-employer plans that operate in a restricted geographical area are those covering (1) the Detroit tool and die workers, United Automobile Workers, CIO; (2) the brewery workers of the New York City area, the International Union of United Brewery . . . Workers, CIO; (3) the longshoremen in the New York City area, International Longshoremen's Association, AFL; and (4) the employees of a number of small employers in the Toledo, Ohio area, the bargaining unit being the United Automobile Workers, CIO. By the nature of things however, the great majority of pension plans cover only the employees of a single employer.[1]

If a pension plan is to qualify under Section 401(a) of the Internal Revenue Code of 1954, it must not discriminate in favor of officers stockholders, supervisory personnel, or highly paid employees. Discrimination may occur in three broad areas—coverage, benefits, or contributions—but as a safeguard against discrimination as to coverage, the Internal Revenue Code requires that a plan cover an arbitrary percentage of employees or, in lieu thereof, satisfy the Commissioner of Internal Revenue that it is, in fact, not discriminatory in favor of the specified categories of individuals. In order to qualify under the so-called Arbitrary Rule, a plan must cover 70 per cent or more of all employees, exclusive of short service, seasonal, and part time employees, or 70 per cent or more of all employees, similarly defined, must be eligible for coverage under the plan, of whom at least 80 per cent must actually participate.[2] Thus, so long as 70 per cent of the employees are eligible for coverage, a plan may qualify if only 56 per cent of the employees participate (70% x 80%) Moreover, in satisfaction of this requirement, an employer may treat as a unit any number of pension plans he may have in effect

A plan may fail to meet the foregoing requirement and still qualify by satisfying the Commissioner that no discrimination will occur Section 401(a)(3)(B), referred to as the Discretionary Rule, permits the Commissioner to approve any classification of employees which he finds not to be discriminatory in favor of officers, stock

1. As of June 30, 1953, 22,168 profit-sharing and pension plans had been approved by the Treasury Department, of which only 99 were industry-wide plans. Prentice-Hall *Pension and Profit-Sharing Report No. 56,* September 4 1953. For statistical purposes, an industry-wide plan is defined as a negotiated plan of all subscribing employers located in areas under the jurisdiction of more than one District Director of Internal Revenue.

2. Section 401(a)(3)(A), Internal Revenue Code of 1954.

holders, supervisory personnel, or highly compensated employees. In practice, most plans are approved under this discretionary provision. The Commissioner has approved plans covering as few as 10 per cent of the employees.

Very few pension plans cover all employees of a particular employer. The employee group may be stratified in various ways without jeopardizing Treasury approval of the resulting plan or plans. The most common bases for exclusion from participation in a particular plan are as follows:

Type of Employment.—The basis for exclusion under this category is normally the part-time or seasonal nature of the work performed by the excluded employees. Section 401(a)(3)(A) of the Code, it may be noted, permits exclusion of those persons who do not work more than twenty hours per week or whose customary employment is not for more than five months in any calendar year in computing the percentage of coverage under a plan. Under this category, however, a plan may cover the employees of only one department of a plant or the employees of only one or a few plants of several operated by the employer. Likewise, a negotiated plan may cover only one bargaining unit at the plant, excluding other bargaining units and unorganized groups.

Type of Pay.—A distinction is sometimes made between salaried and hourly employees. If such a distinction is made, it is usually to exclude hourly employees. The employer may feel that he cannot afford to provide retirement benefits to all his employees and prefers to provide adequate benefits to a limited group (the salaried employees) rather than inadequate benefits to the entire group. Occasionally, a plan is limited to salaried employees in the beginning, with the objective of extending it to hourly employees as soon as the financial circumstances of the employer permit. Finally, if the hourly employees are organized, the union representatives may request wage increases and other benefits in lieu of pensions.

On the other hand, plans are frequently established which exclude salaried workers, particularly at the outset.

Amount of Pay.—The rationale for a distinction on this basis is the treatment of earnings under the Federal OASI program. As was pointed out earlier, the benefit formula under this program is designed to favor the low income worker. For example, under the present law the primary OASI benefit replaces 35.4 per cent of the total wages of a covered employee earning $2,400 per year, while it replaces only 21.7 per cent of the total compensation of an individual earning $6,000 per year. A person earning $18,000 has only 7.2 per cent of his salary replaced through his primary OASI benefit.

In an effort to achieve an equilibrium between earnings and retirement income, many employers throughout the years have established plans covering only those employees with earnings above the limit of OASI coverage, currently $4,200, with a benefit formula designed to replace the same percentage of earnings above the limit as is replaced below the limit by the OASI program. Such plans are approved by the Treasury if they meet the integration requirements discussed below and are otherwise acceptable. In many cases, a company has one plan covering all employees and another plan, intended to equalize benefits, covering only employees earning more than the income limitation under OASI. As might be expected, revisions in the OASI wage base and benefit formula have precipitated amendments to many plans integrated with earlier formulas.

Length of Service.—Most plans require that an employee complete a minimum period of service before achieving membership in the plan. Early plans tended to require five years of service as a qualification period, but the trend in recent years has been to shorten the period. An analysis of 217 "conventional" plans established or amended during the period 1950-52 revealed that 49 had no service requirement and 87 others had a requirement of one year or less.[3] Only 31 plans required as much as five years of service. In about 40 per cent of the cases, the service requirement was combined with an age requirement, the most frequent combination being one year of service and age thirty.

The purpose of a service requirement is almost purely administrative. There is a high rate of turnover among recently hired

3. Bankers Trust Company, *A Study of Industrial Retirement Plans*, 1953 Edition, New York, p. 8. A "conventional" plan is defined in the study as one whose benefits vary with both years of service and rate of compensation. It is to be contrasted with the negotiated or "pattern" plan whose benefit is a flat amount, sometimes varying with years of service but seldom with rate of compensation. Plans negotiated in the steel and rubber industries are an exception to the above definition, since their benefits almost always vary with the rate of compensation.

employees, particularly those at the younger ages, and it is an unnecessary administrative expense to bring such persons into the pension plan, with the attendant records, only to have them withdraw a short time later. The matter of employer contributions is normally not involved, since such short-term employees would rarely have any vested interests and the contributions on their behalf would thus be recovered by the employer in any event. The requirement does reduce the number of years of credited service and, hence, the pension benefit of the employee who remains with the employer until retirement, or to the point of vesting.

A service requirement may occasionally be found in a different connection or at the other end of the scale. If the plan requires a minimum period of service for entitlement to benefits, as opposed to membership in the plan, an employee who cannot accumulate the requisite period of service before the normal retirement age may be excluded from membership in the plan. In that event, he may be denied retirement benefits altogether or he may receive benefits outside the plan. In the Bankers Trust Company study referred to above, it was found that 18 per cent of the conventional plans required a minimum period of credited service, ranging from ten to twenty years, before entitlement to benefits.[4]

Age.—An employee may be excluded from membership in a pension plan because he is either too young or too old. Many plans require that the employee must have attained the age of 25, 30, or 35 before he may become a member of the plan, while at the other extreme, persons who are employed after, or have not elected to become members of the plan before, age 50, 55, or 60 are excluded from membership.

A minimum age limitation has much the same purpose as a service requirement—to exclude high turnover employees—and, as was indicated previously, is frequently combined with a service requirement. When the plan is contributory, a minimum age requirement has the additional function of excluding those employees who because of their youth have scant interest in pensions and would object to making contributions for that purpose.

The maximum age limitation has a purely financial basis—the desire to hold down the cost of pensions. Dollar for dollar, the cost

4. *Ibid.*, p. 9.

of providing a pension increases with the age of the employee. For example, a widely used rate basis requires a single premium of $45.60 for a life income of $1.00 per month at age 65 purchased at age 30, with no refund, while the same benefit purchased at age 50 is $82.32.[5] At the same time, an employer normally feels little responsibility for the retirement needs of a person who was in his service only five or ten years before retirement. Companies which do not include a maximum age provision in their pension specifications may achieve the same objective through a hiring limitation. Such a device may be effective for this purpose, but its widespread adoption creates serious economic and social problems for the economy as a whole.

BENEFIT STRUCTURE

The benefit provisions of a pension plan constitute the very heart of the plan. They define the type of benefits that will be paid, the size of the benefits that will be paid, the circumstances under which they will become payable, and the manner in which they will be paid. Together, they represent the disbursement aspect of the plan. There is obviously a close logical relationship between the benefit pattern of a plan and the methods of financing such benefits. In this section, however, benefits will be discussed independently of financing techniques.

Retirement Benefits

Size of Benefits.—The underlying purpose of a pension plan is to enable the employer to remove his superannuated employees from the payroll in a manner that is morally and socially acceptable. Basic to this objective is the continuation of an income which, supplemented by OASI benefits, will be large enough to sustain the retired worker and his dependents on a decent standard of living. Otherwise, the employer will not feel justified in forcing the aged worker off the payroll, and the pension plan will fail of its purpose.

Ideally, perhaps, the goal of a pension plan, in conjunction with the Federal program, should be the continuation, in full, of the

5. Rates based on 1937 Standard Annuity Table, 2½ per cent interest, and loading of 8 per cent of gross premium.

worker's wages or salary at the time of his retirement. As a practical matter, however, it has not been found possible, or perhaps even desirable, to provide retirement benefits on such a scale, and the objective has been, rather, to provide benefits that bear a "reasonable" relationship to the wages which were earned by the employee during his working years. The concept of reasonableness is obviously subjective, but pension technicians have generally regarded as adequate a plan which will replace, inclusive of OASI benefits, one-third to one-half of the employee's average earnings during the five or ten years preceding retirement.

A. Benefit Formulas.—Pension plans may be classified with respect to benefit formulas into two categories: money purchase and definite benefit.

(1) Money Purchase Plan.—The money purchase plan is one in which the contribution of the employer—and employee, if the plan is contributory—is fixed in the formula and the benefit is treated as the variable factor. The annual contribution to the plan on behalf of a particular employee is normally expressed as a percentage of the employee's earnings, the percentage typically being uniform for all employees. The percentage is normally not less than 10 nor more than 15 per cent. Most money purchase plans are contributory, with the employer matching the employee's contribution or sometimes contributing a multiple of the employee's rate. A typical plan might provide for a 5 per cent contribution on the part of both the employer and employee, with an upper limit of perhaps $5,000, $7,500, or even $10,000 on the earnings to which the percentage will be applied.

The benefits which can be purchased in any given year for a particular employee depend upon the attained age of the employee and will decrease with increasing age. For an employee, age 30, earning $3,000 per year, a total contribution of 10 per cent or $300 would purchase a life income of $78.95 per year beginning at age 65, with no guaranteed payments.[6] The same contribution would purchase an annual benefit of only $76.73 at age 31 and at age 40, assuming no change in earnings, the $300 contribution or premium would

6. All rates in this paragraph are based on the 1937 Standard Annuity Table, 2½ per cent interest, and loading of 8 per cent of gross premium.

purchase an annual benefit of only $59.76. Normally, of course, increases in earnings can be expected to offset to some extent the effect of the age increase.

The money purchase plan is attractive to the firm or organization which is forced to budget its funds very carefully and must know in advance what its outlay for pensions will be. Under this plan, an organization can determine its pension commitment by multiplying its projected payroll, adjusted for maximum limitations, by the appropriate percentage. It is used extensively in public retirement plans and plans of non-profit institutions, such as universities, hospitals, and charitable organizations. The technique is used in connection with industrial plans of the definite benefit type which permit voluntary contributions by the employees to provide benefits supplemental to the basic plan.

As the basic formula, however, the money purchase plan has certain undesirable features particularly from the standpoint of the employees. Through the operation of compound interest, relatively greater weight is given to compensation of the early years of service, when wages are low, than to earnings of the later years, the resulting benefit being particularly deficient during an inflationary period. The scale of contributions, adequate for younger employees, tends to produce inadequate benefits for older entrants. Furthermore, the plan does not lend itself to simple calculation or expression of benefits. For these and perhaps other reasons, the money purchase plan has not been widely adopted by industrial firms, and many plans which were originally set up on that basis have subsequently been converted to the definite benefit basis.

(2) Definite Benefit Plan.—The definite benefit type of plan is one in which the benefits are determined in advance by a formula and the contributions are treated as the variable factor. There are many variations of the plan. In its study of 346 group annuity plans established during 1946-50, the Federal Security Agency found 166 different formulas of the definite benefit type.[7] The Bankers Trust Company in its most recent study,[8] found 24 variations among the benefit formulas of 97 pattern plans, which by definition should

7. Weltha Van Eenam and Martha E. Penman, *Analysis of 346 Group Annuities Underwritten in 1946-50,* Actuarial Study No. 32 (Washington: Federal Security Agency, Social Security Administration), October, 1952, p. 20.
8. *Op. cit.*, p. 14.

have common characteristics, and virtually 217 different formulas among the 217 conventional plans. It might be said that the only uniformity among the benefit formulas of the latter plans was their nonuniformity. Nevertheless, the various plans of the definite benefit type can be broadly classified into four categories:

(a) Benefits related to both earnings and services.—The type of formula in which the benefit payable at retirement age is based on both earnings and length of service is by far the most popular. This type of formula has the merit of providing a benefit that is related to the employee's previous standard of living but is limited, in a rough measure, to the employer's moral responsibility to the employee. It appears to be elemental justice that an employee with a long period of service should receive a larger benefit at retirement than the employee with a limited or short period of service. The view that an employee's relative earnings status should be extended into retirement has not been as widely embraced.

For the purpose of the benefit formula, both "earnings" and "service" must be carefully defined. The pension agreement must spell out clearly the items of compensation which will be treated as part of the earnings base. Such items as overtime pay, holiday pay, sick pay, bonuses, and commissions must be specifically excluded or included. More important from the standpoint of the benefit formula, however, is the question of the period whose earnings will be used. Specifically, the question is whether the benefits shall be based on the earnings of the employee during his entire period of credited service or whether they shall be based on a selected period, such as the final five or ten years of employment.

The great majority of plans that relate benefits to earnings base the benefits on earnings for the total period of employment or the "career average," as the concept is called. The benefit formula of such a plan provides that each employee is to be credited with an annual benefit at retirement equal to a specified percentage of average annual compensation multiplied by the number of years of credited service. The percentage used in the formulas ranges from ½ to 2½ per cent, with 1 per cent predominating. The percentage may vary with the level of earnings, as many as four earnings classifications sometimes being employed. It is quite common to apply one percentage to the earnings subject to OASI and another, perhaps higher, percentage to earnings in excess of the OASI base. There is normally a distinction between past and future service, with a lower percentage being applicable to the former.[9] As a matter of administration, wage or earnings brackets are frequently established, with the formula percentage or percentages being applied to the midpoint of the bracket.

An increasing number of plans use a formula based on average earnings for the last five or ten years preceding retirement.[10] Under normal circumstances, this type of formula will produce an earnings base higher than that of the career average, since most employees reach the peak of their earnings in the years immediately preceding retirement. This bias in favor of the employee is offset in many such formulas by crediting a lower percentage of earnings toward retirement benefits.

A more significant characteristic of this type of formula, however, is the fact that it is more responsive to changes in price level and other economic developments. In periods of inflationary pressures, wages have a tendency to rise with the price level, and an employee whose earnings base for retirement purposes embraces such a period obviously receives larger benefits. The final average type of formula thus appears to be a partial hedge against the effect of inflation, and employers are currently being urged by employees and labor unions to adopt such plans. Naturally, the plan would operate in the opposite direction in a period of depressed business activity, assuming no amendments to the benefit formula. From a long range point of view, however, this formula should produce higher benefits than those of the career average formula, since the secular trend of prices and wages in the United States has been upward.

The benefit formula normally gives credit only for "continuous service," which is usually defined as the period extending from the last date of hiring to date of retirement. The pension agreement, therefore, must stipulate the types of personnel actions that will be interpreted as breaks in continuous service.

9. See pp. 39-40 for a discussion of past and future service.

10. As a matter of fact, the early important plans in this country, such as those of the petroleum industry, the Bell System, Bethlehem Steel, and International Harvester, were of the "final average" type. The depression of the 1930's caused a shift to the career average type, a trend which continued into World War II. The inflation since 1945 has reversed the trend back to the original type of program.

Another concept involved in the service aspect of the benefit formula is the distinction between future and past service. Future service means all service of a continuous nature performed after the date of establishment of the pension plan, while past service is all continuous service performed for the company in question prior to that date.[11] Virtually all plans give credit for future service, although there may be a limitation on the number of years that will be recognized for benefit purposes. Future service alone, however, will not provide adequate benefits to employees who have been with the company for years but have only a few more years before retirement. For this reason, the great majority of pension plans afford some recognition to past service. A relatively small percentage of plans, however, grant full credit for past service.[12] Various forms of limitations are used, the most common being the exclusion of (a) all service performed before a specified age, such as thirty; (b) the first few years of service, such as five; and (c) all service over a maximum number of years, such as 10, 15, or 25, or before a specified date. Exclusions (a) and (b) are frequently combined to exclude, for example, all service performed before age 30 and during the first five years of employment. The first two types of exclusion, or the combination, have the general purpose of placing the past service of old employees on the same basis as the future service of new employees. The primary purpose of the type (c) exclusion is to limit the cost of past service benefits, an accrued liability which is invariably borne by the employer.

The recognized portion of past service is generally given credit for a specified percentage of earnings for each year of service, although some plans grant a stated dollar amount for each year of credited service. For administrative reasons, past service benefits are usually based on the employee's compensation as of the effective date of the plan or for a short period preceding establishment of the

11. Service with a company which was absorbed by or merged with the firm installing the pension plan may or may not be recognized. If the previous firm had had a plan in effect, it is likely that the acquiring firm will assume the pension obligations of the other firm or at least integrate its employees into the new plan.

12. The Federal Security Agency found only 31 plans out of 346 group annuities, or 9 per cent, which granted full credit for past service. Twelve per cent of the plans granted no recognition of past service. Van Eenam and Penman, *op. cit.*, p. 25.

plan. If the plan is of the final average type, the same compensation base is likely to be used for both past and future service, and the same percentage is normally credited toward retirement. In connection with the career average type of formula, however, a lower percentage, typically 3/4 per cent, is applied to past service earnings than to future service earnings on the grounds that the rate of compensation for most employees will be higher as of the date of the plan than the average up to that point.

(b) Benefits related to earnings but not to service.—Some plans utilize a benefit formula which provides a benefit at retirement equal to a specified percentage of compensation, without regard to years of service. The compensation base is normally the earnings or salary at retirement, but the average for a period before retirement or even the career average may be used. A wide range of percentages is found. The distinctive feature of the plan is that the percentage is flat and does not vary with years of service. Service is not ignored, however, since entitlement to benefits is based on a minimum period of service, such as twenty years. Past service may be credited against this requirement. The philosophy of this plan is that an employee who remains with the employer for twenty years, or whatever period is specified, is entitled to the same consideration as one who has served a longer period. However, the longer service employee will tend to have a higher earnings base than one who barely qualifies.

(c) Benefits related to service but not to earnings.—This type of formula has been rather popular in negotiated plans. The pattern appears to be $21 per year at age 65 for each year of credited service up to a maximum of thirty years. This would provide a benefit of $630 per year. Many of these plans, however, have a minimum benefit of $100 per month, including Social Security benefits, payable on normal retirement after 25 years of service. Some of the plans provide benefits ranging up to $30 per year of credited service, exclusive of Social Security benefits. In these plans, past service is credited with the same benefits as future service.

(d) Benefits related to neither earnings nor service.—This type of formula emerged from the contract negotiations in the steel and automobile industries in 1949 and has been incorporated in many negotiated plans since that time. It provides a flat benefit, including the primary Social Security benefit, to the employee who retires with 25 or 30 years of credited service. The basic formula of this type provides $100 per month after 25 years of service but a few plans pay $125. No benefit is paid unless the employee has accumulated a minimum period of credited service, typically 10 or 15 years, the latter being more common. Creditable service is carefully defined, and partial credit, measured by the number of hours worked, is granted for years during which the worker was employed only part-time. An employee who has accumulated the minimum period of service but falls short of the basic requirements receives a benefit adjusted to his years of service. To this extent, then, the benefit is affected by service.[13] But below the minimum and above the basic requirement, no recognition is given to service.

A variation of this formula treats the flat benefit as a minimum and provides larger benefits, based on compensation, on earnings in excess of a specified amount, such as $3,500 or $4,000.

B. Minimum Benefit Provisions.—There has been a trend in recent years to incorporate minimum benefit limitations in pension plans. The flat benefit of the negotiated pattern plans is, of course, the equivalent of a minimum pension. The provisions used almost defy classification, but they may be broadly classified as to whether the dollar minimum includes or excludes the primary OASI benefit. The tendency is to include OASI benefits in the minimum. The provision found most frequently promises a minimum benefit of $1,200 per year, including OASI, after 25 years of service, with reduced benefits available for shorter periods of service. A plan is occasionally found which guarantees an annual benefit of $1,500, including OASI. The minimum benefits in plans which exclude OASI range from $200 per year to $800 per year. It might be pointed out, with reference to the discussion of past service, that plans which do not provide past service benefits usually guarantee a minimum benefit at retirement.

C. Maximum Benefit Provisions.—The flat benefit of the pattern plan operates as both an upper and lower limit to benefits. Many

13. The employee who has accumulated the minimum period of service but falls short of the basic requirements, frequently receives a zero benefit because of the OASI deduction.

conventional plans, as well, impose an upper limit to the benefits which they will pay. This maximum may take the form of a dollar limit or as a limitation on the compensation which will be recognized for benefit purposes. The dollar limitations are usually very generous, some ranging as high as $40,000. The most common limitation, perhaps, is $10,000 per year, although a few plans impose a limit as low as $3,000 per year.

The limitations expressed in terms of compensation tend to be less generous when converted into benefits. The median salary figure in the Federal Security Administration study of 346 group annuity plans was $10,000, the maximum being $30,000.[14] This tendency has been confirmed by other surveys.

The trend, significantly, is to liberalize maximum limitations or to remove them altogether.

D. Integration with Federal OASI Program.—With few exceptions, private pension plans are superimposed on the Federal program of old-age benefits. Motivated by the desire to avoid pyramiding of benefits or to provide equitable treatment to all wage or salary classifications, most employers seek to integrate the coverage and benefits of their plan with the Federal program. This integration must be accomplished in consonance with Treasury directives on the subject, which are designed to prevent discrimination in favor of the more highly paid employees.[15]

Three general approaches may be used in integrating a private pension plan with the Federal OASI program:

(1) Deduction of OASI Benefits.—The simplest method of integrating is to deduct at retirement the benefits that are payable under the Federal program from those that would otherwise be payable under the private plan. This is referred to in Treasury regulations as the "offset plan." This is the approach used in many negotiated pattern plans and in a sizable percentage of conventional plans. It is not feasible for plans underwritten by individual insurance or annuity contracts or deferred group annuities, but it is adaptable to uninsured plans and group annuity contracts which

14. Van Eenam and Penman, *op. cit.*, p. 31.

15. The guiding principles on integration are set forth in Sec. 401(a)(5), IRC; Sec. 29.165-3, Regulations 111; Mimeograph 5539, July 8, 1943; Mimeograph 6641, May 3, 1951; and Revenue Ruling 13, January 5, 1953. The basic directive on integration is Mimeograph 6641.

do not allocate funds to individual employees until retirement. Nor is it feasible for contributory plans, particularly money purchase plans. Many plans, however, which do not subtract the primary OASI benefit from the basic benefit of the plan include it as a part of any minimum benefit that might be guaranteed.

In recognition of the supplementary and survivors benefits payable under the Federal OASI program, Treasury regulations permit the deduction of 130 per cent of the primary OASI benefit from the retirement benefit of a noncontributory plan that provides no death benefits before or after retirement.[16] Smaller deductions are allowed for plans which do provide death benefits before or after retirement. As a practical matter, the maximum deduction is seldom applied and most plans using the offset method deduct at most 100 per cent of the primary OASI benefit.

The offset approach has been criticized by many pension experts.[17] In the first place, it is argued, to deduct anything from benefits is poor psychology. It would be better to offer lower benefits under the private plan and treat OASI benefits as *additions* to the plan.[18] In effect, of course, the offset method is applied in that manner under some plans, particularly those which provide a flat benefit. Secondly, the employee may object to the deduction of the full OASI benefit on the grounds that he has purchased half of the benefit with his own contributions. This argument is recognized in some plans by a provision that only half of the primary OASI benefit shall be deducted. Finally, under this arrangement, any increase in OASI benefits would not benefit the employee; it would only decrease the cost of the private plan. An argument from the employer's point of view is that if Congress should ever lower the level of OASI benefits, not entirely inconceivable, the benefits under the private plan would be automatically increased and probably at

16. Paragraph 6, Revenue Ruling 13, January 5, 1953. If the employee's primary insurance benefit is computed under the formula in the Social Security Act amendments of 1950 rather than under the amendments effected by Public Law 590, 82nd Congress, 2nd Session, July 18, 1952, the permissible percentage is 140 per cent.

17. For example, see J. W. Myers, "Governmental and Voluntary Programs for Security," *Harvard Business Review*, Volume XXVIII, No. 2, March, 1950, p. 36.

18. Or, as suggested in some quarters, OASI should be viewed as the base to which the benefits from the private plan are *added* to produce an adequate over-all pension.

a time when the employer could least afford the increase in cost.

(2) Exclusion of Portion of Earnings.[19]—A second method of integration is to exclude from a pension plan that portion of earnings on which duplication might otherwise occur. Since the 1950 amendments to the Social Security Act, this has meant the exclusion of the first $3,600 of earnings; prior to that time only the first $3,000 had to be excluded. This approach, which is referred to as an "excess plan," is feasible only when the employer does not wish to supplement the retirement benefits of OASI for those employees earning less than $3,600. Furthermore, the plan must not provide for employees earning over $3,600 benefits proportionately greater than those available under OASI for employees earning less than $3,600. For the purpose of this comparison, the total benefits available under each program must be considered.

The Treasury has promulgated various rules to indicate whether a private plan is integrated with the Social Security program. Underlying all such rules is an evaluation of the benefits available under the OASI program.

For the purposes of integration it is assumed that all covered employees who retire in the future will be entitled to the maximum primary benefit payable under the OASI program. Under the Social Security Act, as amended in 1950, the maximum primary benefit was $80, 50 per cent of the first $100 of average monthly wage plus 15 per cent of the next $200 of average monthly wage. The 1952 amendments to the Act raised the maximum to $85 by crediting 55 per cent of the first $100 of average monthly wage, but the basic directive on integration, Mimeograph 6641, is still based on the 1950 amendments. Therefore, the primary old-age benefit under OASI is assumed to be $80, or 26⅔ per cent of the employee's average monthly wage. It is further assumed that the total benefits available under the OASI program, including the wife's old-age benefits and all survivorship benefits, are, on the average, equal to 150 per cent of the employee's primary insurance benefit. Thus, the total OASI benefits may be considered as equivalent to a straight life annuity beginning at age 65 of $120 a month, or 40 per cent of the assumed average monthly wage.

19. This section is based on the Social Security Act as it existed prior to the 1954 amendments, since the Treasury has not as yet issued integration rules based on the new formula.

This figure, however, takes no account of the fact that the OASI program is contributory and the employee has purchased a portion of his benefits. If it is assumed that the benefits under the Federal program will be completely financed through employer and employee contributions, in the long run the employees, in the aggregate, should bear approximately one-half of the cost of the program. Employees retiring within the next several years, however, will have contributed much less than one-half of the cost of their OASI benefits. In fact, for integration purposes, the Treasury assumes that at present employee contributions under OASI will pay for benefits equivalent to a straight life annuity of only 2½ per cent of average monthly wage, or one-sixteenth of the total OASI benefits payable, on the average, to an employee whose average monthly wage is $300. Accordingly, a $3,600 excess plan is considered to be integrated, subject to the conditions noted below, if the normal annual retirement benefit of no employee can exceed 37½ per cent of his average annual compensation in excess of $3,600.

This percentage, however, is based on the following conditions:[20]

(a) There are no benefits payable in case of death before retirement;

(b) The normal form of retirement benefit is a straight life annuity and optional forms of annuity, if available, provide benefits which are the actuarial equivalent of those payable under the normal form;

(c) No employee can become eligible for normal retirement benefits before completion of 15 years of service with the employer;

(d) Normal retirement age is not lower than age 65 for men and age 60 for women and any early retirement or severance benefits are actuarially adjusted to reflect the lower age and shorter period of service;

(e) The employees do not contribute.

A $3,600 excess plan which conforms to the conditions set forth above, except that it provides benefits in the event of death before retirement not exceeding the higher of the reserve or the total prior contributions on a typical individual level annual premium funding method, is integrated if the normal annual retirement benefit for

20. Paragraph 5, Mimeograph 6641, May 3, 1951.

any employee cannot exceed 33⅓ per cent of his average annual compensation in excess of $3,600.

If the normal form of annuity is one other than a straight life or pure annuity, the maximum retirement benefit, as a percentage of average compensation in excess of $3,600, cannot exceed the rate obtained by multiplying 37½ or 33⅓ per cent, as the case may be, by the appropriate percentage shown below.

Annuity for 10 years certain and life thereafter	90%
Annuity for 15 years certain and life thereafter	80%
Annuity for 20 years certain and life thereafter	70%
Life Annuity with instalment refund	80%
Life Annuity with cash refund	75%

For example, a $3,600 excess plan which conforms to all the required conditions, except that the normal form of retirement benefit is a life annuity with payments guaranteed for ten years and benefits equal to the reserve are payable in case of the employee's death before retirement, is integrated if the normal annual retirement benefit for any employee is 30 per cent (33⅓% multiplied by 90%) of his average annual compensation in excess of $3,600.

If a plan provides normal retirement benefits for service of less than fifteen years, the benefits cannot exceed 1/15 of those that would otherwise be permissible, multiplied by the number of years of actual service. In other words, a $3,600 excess plan that satisfies all the required conditions except (c) is integrated if it provides a normal annual retirement benefit of 37½ per cent of average annual compensation in excess of $3,600 less 2½ per cent of such average annual compensation for each year that the employee's total service at normal retirement falls short of fifteen years.

With respect to the condition stated in (d) above, the permissible percentage of average annual compensation that can be provided in the retirement benefit must be reduced by 10 per cent for each year that the normal retirement age is lower than age 65. Early retirement benefits must not exceed the actuarial equivalent of the contributions or reserve standing to the credit of the employee at the time of his withdrawal or early retirement.

Finally, if the plan is contributory, with the exception of the money purchase type, an employee's annual retirement benefit may be increased by 10 per cent of his aggregate contributions exclusive of those devoted to the current cost of insurance or death benefits in excess of the reserve or cash value. Such an increase is permitted regardless of the form of retirement benefit or provision for death benefits. Furthermore, no reduction in the level of permitted benefits is required by a provision that the employee's contributions, with interest, shall be returned in the event of his death before or after retirement. Separate rules have been promulgated for money purchase plans.

The increase in the maximum primary insurance benefit that was authorized by the 1952 amendments to the Social Security Act should have raised to a slight extent the percentage of average annual compensation that could be replaced through the benefit formula of excess plans. The Treasury authorities decided, however, that an increase in the basic integration limits was not warranted in view of the fact that the present 2½ per cent adjustment for employee contributions to the OASI programs appears to be inadequate. Nevertheless, changes were made in the limits for excess plans which cover earnings between $1,200 and $3,600 and in the rules pertaining to offset plans. In the latter case, the permissible percentage of offset was lowered in recognition of the heavier weighting assigned to employee contributions.

(3) Adjustment of the Benefit Formula.—This is the approach that is used when the employer wishes to supplement OASI benefits for all his employees yet at the same time desires to remove the bias in favor of lower paid employees that exists in the OASI benefit formula. This is referred to in official literature as a "Stepped-up Benefits Plan" and is defined as "A plan in which no employee and no portion of compensation is excluded by reason of a minimum compensation requirement and in which all the provisions apply uniformly to all covered employees regardless of the rate of compensation, except that a higher rate of benefit or of employer contributions (and possibly of employee contributions) is applicable to compensation above a specified level . . . than to compensation below such level . . ."[21] An example of such a plan is one which provides retirement benefits equal to ½ per cent of the first $3,600 of

21. Paragraph 16, Mimeograph 6641, May 3, 1951.

annual compensation and 1½ per cent of the excess for each year of credited past service and ½ per cent and 2 per cent, respectively, for each year of future service.

For integration purposes this type of plan is treated as two separate plans—one providing the lower rate of benefit or employer contribution on all compensation, and the second providing the balance of the higher rates on the compensation in excess of the specified level. The first or underlying plan does not involve integration requirements, since it provides uniform rates and types of benefits on all compensation, while the second plan may be treated as an excess plan which would be subject to all the rules outlined in the preceding section. The example cited would satisfy the integration requirements.

Time of Payment.—A second broad aspect of retirement benefits relates to the conditions under which the benefits become payable. Under the great majority of plans, an employee who is a member of the plan is entitled to receive full retirement benefits upon the attainment of a specified age, referred to as the normal retirement age. This is a contractual right and can be exercised without the consent of the employer. In some plans, however, the age requirement is supplemented by a minimum service requirement. Perhaps one-third of the plans that have been established since 1943 either require a minimum period of service or entry into the plan before a specified age, which has the same effect. Under negotiated pattern plans, the service requirement is normally 25 or 30 years, with no benefits for service of less than 10 or 15 years, while among conventional plans 15 years is the most common requirement. A service requirement is rarely used in insured plans of the group annuity type.

A. Normal Retirement Age.—The normal retirement age is the earliest age at which eligible employees are permitted to retire with full benefits. It may or may not be the automatic retirement age. If the employees do not have the option of continuing their employment beyond the age designated as the normal retirement age, then the normal retirement age is, in effect, the automatic retirement age. If, however, the employees are permitted to defer their retirement to a later date, with or without the employer's consent, it is customary to specify an age at which retirement will automatically become effective. This is known as the automatic retirement age. In some plans, particularly the pattern plans, an employee may remain in service beyond the automatic retirement age with the consent of the employer.

From the standpoint of an individual employer, the normal retirement age should be the age beyond which the services of his employees would be uneconomical. This point, of course, is not easy to determine. In theory, multiple retirement ages should be adopted in many cases, since a retirement that would be suitable for one class of employees might be completely inappropriate for another group. In the airlines industry, for example, flight personnel should undoubtedly have a lower retirement age than non-flight employees. Jobs which require physical strength and endurance may call for a lower retirement age than those which emphasize mental ability. Within particular job classifications, moreover, there are differences in individual employees which, ideally, should be recognized. Nevertheless, the practice, subject to certain exceptions, is to have a normal retirement age that is applicable to all employees, with provisions in a majority of plans for adjustments to particular situations through optional retirement arrangements, which are discussed below.

Age 65 is almost universally designated as the normal retirement age for male employees. This is undoubtedly a reflection of the Social Security program. A small percentage of plans specify an age lower than 65 for female employees, age 60 being the most common variant. An exception to the normal retirement age is generally made for employees who are beyond a specified age at the time the pension plan is established. The lower limit for such exception is usually 55 or 60, and such employees are permitted to work five or ten years beyond the normal retirement age or age 70, whichever occurs first. The purpose of such staggered retirement is primarily to spread the cost of the benefits, composed principally of past service credits, over a longer period than would otherwise be available. This is particularly important in insured plans, since the insurance company usually insists that the benefits payable to a retired employee must have been purchased in full before actual retirement. Another reason for staggered retirement at the inception of the plan is to permit high-age low-service employees to accumulate larger pensions.

B. Early Retirement.—It is customary to provide that an employee may retire earlier than the normal retirement age. The plans are about equally divided as to whether employer consent is required. About half of the plans permit early retirement on the sole basis of age, usually 55, while the other half require a period of service, typically ten years, in addition to the attainment of a specified age. Only rarely does a plan permit early retirement on the basis of service alone, in which case 25 or 30 years are usually required. Plans which require employer consent tend to rely on the age requirement alone, while those which permit early retirement at the option of the employee are inclined to impose both an age and service requirement.

Some plans permit early retirement only in the event of total and permanent disability. In such plans, age and service requirements are also imposed. Some of the plans provide a special disability benefit, while others pay only the actuarial equivalent of the regular accrued benefit.

The benefit which is paid to an employee who takes advantage of the early retirement privilege is the actuarial equivalent of the benefit that would have been paid at the normal retirement age. The actuarial equivalent, however, is smaller than the normal benefit. All benefits are calculated in the first instance on the assumption that no benefit payments will be made until the normal retirement age and that all contributions will earn interest until that date. If an employee retires early, the contributions on his behalf will have accumulated to a smaller sum, through loss of interest, than was originally assumed, and each dollar of accumulations will purchase a smaller benefit, since the payments begin earlier than was anticipated and, therefore, extend over a longer period of time. If the benefit formula is based on years of service, the anticipated benefit will be further reduced by the loss of the additional contributions, plus interest, that would have been credited to the account of the employee. Finally, if the plan is insured, the calculation of actuarial equivalency recognizes the fact that a high percentage of early retirements stem from poor health, and in providing benefits in such cases, the insurance company is disbursing benefits to some employees who would not have survived to normal retirement age. The result is a further reduction in the early retirement benefit.

The percentage of normal retirement income which is available for early retirement at ages 55-64 is shown in Table 1. The percentages are applied to the annuity credits earned to the date of early retirement and not to the benefits that would have been payable at age 65 had the employee continued working to that age. A distinction is made between male and female employees because of the difference in their life expectancy. Females have a longer life expectancy at 65 than males, which means that the early retirement of a female employee has a smaller effect, percentage-wise, on benefits than the early retirement of a male employee. Since retirement

TABLE 1

PROPORTION OF NORMAL RETIREMENT INCOME AVAILABLE IN EVENT OF EARLY RETIREMENT AT VARIOUS AGES*

Age at Early Retirement	*Normal Retirement Age 65*	
	Male Employees	*Female Employees*
64	90.6%	92.1%
63	82.5	85.0
62	75.3	78.7
61	68.9	73.0
60	63.3	67.9
59	58.3	63.2
58	53.8	59.0
57	49.8	55.2
56	46.2	51.7
55	42.9	48.6

* These percentages apply to the benefits earned to the date of early retirement and not to the benefits that would have been payable had the employee continued working to age 65.

ten years prior to the normal retirement age produces a benefit of less than half the normal benefit, most plans do not permit retirement earlier than ten years prior to the normal retirement age.

When a separate disability benefit has not been provided, employers occasionally supplement the early retirement benefit for an employee who retires because of poor health. The supplement may take the form of an informal benefit provided on a year-to-year basis until OASI benefits begin or a temporary life annuity of an amount equal to the benefit that will be available at normal retirement age. The temporary annuity is really a benefit paid in lieu of rather than in addition to the early retirement benefit. Apart from the foregoing, many plans permit an employee who retires early to level out his income including OASI benefits, by converting a portion of his normal retirement benefit into a temporary annuity payable to age 65.[22]

C. Deferred Retirement.—Under relatively few plans is retirement at the normal retirement age compulsory in the sense that no provision is available under which an employee could continue in employment. A sizable percentage of plans, perhaps a fourth, contain an automatic retirement age, as well as a normal retirement age, and under those plans an employee is permitted to remain in service up to the automatic retirement age, usually without the employer's consent. Continuation beyond the automatic retirement age, if permitted at all, is only with employer consent. Those plans which do not specify both a normal and automatic retirement age usually make express provision for continuation of an employee's service beyond the normal retirement age with the employer's consent.[23] It should be understood, of course, that the employee is entitled to retire at the normal retirement age and can be retained in service only with his consent. As a matter of practice, it is usually at the employee's request that he does so.

Practice is divided as to whether the employee who defers his retirement will, nevertheless, begin to receive his retirement benefits at the normal retirement age. The companies which provide for immediate payment of retirement benefits feel that the employee has earned the benefits and should receive them in addition to his regular wages or salary. Occasionally, a plan will provide for deduction of all or a portion of the retirement benefits from the employee's earnings.

Those companies which postpone the payment of benefits until actual retirement argue that the employee is not forced to continue in service but does so only because his full salary is more attractive than his retirement benefits. The majority of the plans which postpone the retirement benefits pay the employee, upon actual retirement, only the amount of income which would have been paid at the

22. This is known as the Social Security adjustment option, which is discussed briefly on pp. 55-56.

23. Retirement later than the normal retirement age is expressly provided for in 274, or 79 per cent, of the 346 group annuity plans analyzed by the Federal Security Agency. Van Eenam and Penman, *op. cit.*, p. 17. No mention of deferred retirements is made in the other 21 per cent of the plans, so it is likely that continuation of employment would be authorized under some of those plans by administrative decision.

normal retirement age. The payments which would have been made from the normal retirement age to the date of actual retirement inure to the credit of the employer. Some plans, however, pay a larger benefit at actual retirement than would have been paid at the normal retirement date. In technical terms, the actuarial equivalent of the normal benefit is paid at actual retirement. Such plans recognize the right of the employee to retire and receive his full benefits at his normal retirement age, yet they postpone the benefits until a time when they will be more vital to him. The actuarial equivalent of a given benefit increases substantially with each year of postponement beyond the normal retirement age.

Only in exceptional cases does an employee earn additional retirement credits by continuing to work beyond the normal retirement age.

Manner of Payment.—Implicit in any pension plan is the payment of a retirement benefit that continues throughout the remaining lifetime of the superannuated employee. The plan may provide various collateral benefits, but underlying the whole scheme must be the promise of a life income to the employee upon his retirement. If this promise is underwritten by a life insurance company, the life income will be provided in the form of an annuity of some type. If the plan is self-administered and handled through a trust company, the benefits may be provided through an annuity purchased from an insurance company, probably at the time of the employee's retirement, or they may be paid by the trust company directly.

Several forms of annuities are available for the disbursement of pension benefits. Classified broadly, annuities may be of the single life or joint life variety, and within that classification they may be either of the pure or refund type. As indicated by its title, a single life annuity is one which is based on only one life. The pure form of single life annuity, usually referred to as a "straight life annuity," provides periodic, usually monthly, income payments that continue as long as the annuitant lives and terminates upon his death. The annuity is considered fully liquidated upon the death of the annuitant, and no guarantee is given that any particular number of monthly payments will be made. Because of the absence of any refund feature, this type of single life annuity provides the largest monthly income per dollar of premium or outlay.

The refund type of single life annuity includes any annuity which guarantees to return in one manner or another a portion or all of the purchase price of the annuity. The annuity may promise that a certain number of monthly payments will be made whether the annuitant lives or dies, with payments to continue, of course, if the annuitant lives beyond the guaranteed period. In insurance circles, this type of annuity is referred to as a "life annuity certain and continuous," and the annuitant may elect 60, 120, 180 or 240 guaranteed instalments.[24] The cost of the annuity increases with the number of guaranteed instalments, since life contingencies are not involved during the guaranteed period. One type of refund annuity promises that, if the annuitant dies before receiving monthly payments equal to the purchase price of the annuity, the payments shall be continued to a contingent beneficiary or beneficiaries until the full cost has been recovered. This type of annuity is known as an "instalment refund annuity." If the contract promises, upon the death of the annuitant, to pay to the annuitant's estate or a contingent beneficiary in a lump sum the difference, if any, between the purchase price of the annuity and the sum of the monthly payments, it is designated a "cash refund annuity." The only difference between the "cash refund annuity" and the "instalment refund annuity" is that under the former the unliquidated purchase price is refunded in a lump sum at the time of the annuitant's death, whereas in the latter case the monthly instalments are continued until the purchase price has been recovered. These two types of annuities are the most costly of the single life variety, with the "cash refund annuity" being somewhat more costly than the "instalment refund annuity" because of the loss of interest.

A joint life annuity is based on two or more lives. It provides an income of a specified amount as long as the annuitants designated in the contract live, the income ceasing, however, upon the death of the first annuitant. Theoretically, this annuity could contain a refund feature, but it is not customary to incorporate such a feature. The joint life annuity has only a limited applicability and has been all but supplanted by the "joint and last survivor annuity" which provides a periodic payment of a specified amount as long as either of two or more persons shall live. For most combinations of ages, this is

24. Such a range of options is rarely provided under a pension plan.

the most expensive of all annuity forms. This type of contract is ideally suited to provide old-age income to a husband and wife. The contract is available in a form in which the income is reduced upon the death of the first annuitant to either one-half or two-thirds of the original amount, on the theory that the survivor does not require as large an income as do the two annuitants.

The benefits under a pension plan, and their cost, are calculated on the assumption that a particular form of income settlement will be used. The normal form of settlement specified in most noncontributory plans is the straight life annuity, although it is not unusual to guarantee a certain number of instalments. Contributory plans usually adopt a "modified" cash refund annuity. This form promises that should the employee die before receiving retirement benefits equal to the accumulated value of his contributions, with or without interest, the difference between his benefits and his contributions will be refunded in a lump sum to his estate or a designated beneficiary. Some contributory plans prescribe a life annuity with payments guaranteed for five or ten years, either form of which will, in the typical case, assure the return of the employee's accumulated contributions.

Despite the fact that a specific type of annuity is prescribed in the pension plan, the employee is usually given the option, at retirement, of electing a different type of settlement. In the case of group annuities, at least, such election must be accompanied by evidence of good health, unless made a prescribed time, usually five years, prior to retirement. Some plans provide a wide choice of options, while others are fairly restrictive. One form that is almost always available is the joint and survivorship annuity, in the thought that the employee may wish to extend the protection of his annuity to his wife. Since a regular joint and survivorship annuity sharply reduces the size of the retirement benefit, most plans also permit the type of joint and survivorship annuity that provides a smaller benefit to the survivor. Since under this option the surviving employee would receive only 40 per cent or less of the original benefit that was intended for him, many plans, including all group annuities, modify the option by stipulating that the income is reduced only when the employee dies first. If the wife or other dependent should die first, the employee continues to receive the full benefit.

An option that is available only in the case of early retirement is the so-called "Social Security Adjustment Option." The purpose of the option is to provide a level benefit throughout the period of retirement, notwithstanding the fact that OASI retirement benefits are not available until age 65. This objective is accomplished by converting such portion of the normal retirement benefit into a temporary annuity as is needed to provide an income to age 65 equal to the benefits, composed of the reduced normal benefit and the primary OASI benefit, that will be payable after age 65. The amount of the normal retirement benefit that must be converted can be easily determined from available tables.

A provision designed for the protection of the employee's dependents is found in some plans whose normal annuity form provides for 60 or 120 guaranteed instalments. This provision stipulates that if an employee should die between the ages of 55 and 65, or the period during which early retirement is permitted, but before he has actually retired, the beneficiary will receive benefits for five or ten years, as the case may be, in the same amount that would have been paid to the employee had he retired on the date of his death. This provision is a manifestation of the increasing interest in widows' benefits under pension plans. Another provision occasionally encountered presumes the election of a joint and survivorship annuity where the employee continues to work beyond the normal retirement age and dies before retirement.

The benefits under self-administered plans are distributed in essentially the same manner as those of insured plans, since, if an annuity is not actually purchased from an insurance company, the benefits prescribed under the plan provisions will be calculated in accordance with the same actuarial principles.

The monthly benefits which are payable at various retirement ages under some of the commonly used annuity forms are shown in Table 2. In each case, the benefits are those which would be paid for each $1,000 of accumulations available at the age indicated.

Termination Benefits

While a pension plan is set up for the primary purpose of providing retirement benefits, it must be recognized that a relatively small percentage of the persons who enter the service of a particular employer remain with that employer until retirement. It is necessary,

TABLE 2

MONTHLY BENEFITS PER $1,000 OF ACCUMULATIONS PROVIDED AT VARIOUS RETIREMENT AGES UNDER COMMONLY USED ANNUITY FORMS—MALE EMPLOYEES*

Age at Retirement	*Life Annuity*			*Full Cash Refund Annuity*	*Joint and Survivorship Annuity*†
	No Period Certain	*5-Year Certain*	*10-Year Certain*		
55	$4.91	$4.86	$4.71	$4.02	$3.53
60	5.66	5.56	5.28	4.38	3.90
65	6.63	6.44	5.94	4.79	4.37
66	6.87	6.65	6.08	4.88	4.48
67	7.11	6.86	6.22	4.97	4.59
68	7.37	7.08	6.36	5.06	4.72
69	7.65	7.32	6.50	5.16	4.85
70	7.95	7.56	6.65	5.26	5.00

* Rate basis: 1937 Standard Annuity Table, 2½ per cent interest, and loading of 8 per cent of gross premium.

† Contingent or joint annuitant assumed to be five years younger than the employee in each case. Full income to continue to survivor.

therefore, for the pension agreement to outline the rights of those employees who qualify for membership in the plan but sever their connection with the company, for one reason or another, before reaching retirement. These rights can be discussed under the three principal headings of withdrawal from employment, death, and disability. A fourth section deals with the rights of employees in the event that the pension plan itself is terminated.

Withdrawal From Employment.—It is a basic rule of pension planning that an employee must be permitted under all circumstances to recover the contributions, with or without interest, which he has made toward his own retirement. The trend today is to credit the employee's contributions with a moderate rate of interest, although many of the older plans return the accumulated contributions without interest. Under insured plans, the employee usually has the option of taking cash or a paid-up annuity that will be payable at the normal retirement age. If he elects to leave his contributions with the insurance company, he retains the right, nevertheless, to withdraw their cash value at any time before the annuity payments begin. If the plan is of the individual contract or group permanent type,[25] the employee is not only permitted to retain the benefits which his contributions have purchased up to the time of his withdrawal, but he may supplement the benefits by continuing premium payments on the contract.

In self-administered plans, the employee usually can take his contributions only in the form of cash, since annuities are normally not purchased for the employee until he reaches the retirement age and perhaps not then.

The rights of the withdrawing employee in the contributions of the employer depend upon the vesting provisions, if any, in the pension agreement. The term "vesting" refers to the right or interest which an employee acquires in the contributions made on his behalf by the employer. Vesting never refers to the right of the employee to the return of his own contributions, since that right is unquestioned. It refers only to the right of the employee to retain the benefits which have accrued from the employer's contributions.

The vesting provisions of pension plans can be classified according to at least four different bases: the *time*, the *amount*, the *form*, and the *type* of vesting. From the standpoint of *time*, the employer's contributions may vest immediately or the vesting may be deferred until certain age and service requirements have been met. As to *amount*, the employer's contributions may vest in full or only in part. Most plans vest in full upon satisfaction of the basic requirements, but some plans utilize an arrangement known as graded vesting in accordance with which only a portion of the contributions vest upon satisfaction of specified minimum requirements. The percentage of vesting increases on a sliding scale as additional requirements are met until 100 per cent vesting is eventually attained. An example of this arrangement is a plan which provides for 40 per cent vesting after ten years of service, with full vesting after 25 years of service or, alternatively, 15 years of service and the attainment of age 55. With reference to *form*, the employee may be permitted to take the employer's contributions in a variety of ways, including a lump sum, or he may be restricted to a deferred paid-up annuity without a cash value.

Finally, a distinction may be made as to whether the vesting is *absolute* or *conditional*. In theory at least, absolute vesting would

25. See pp. 69-75 and 75-84, respectively, for a description of these two types of contracts.

place full title to the employer's contributions in the employee whenever the basic requirements are met, and his rights could be exercised under any circumstances that might terminate his employment. Specifically, the employee, or his estate, would be entitled to receive the employer's contributions in one form or the other whether the termination resulted from withdrawal (severance), death or disability. Conditional vesting, on the other hand, permits the employee to exercise his rights only under certain circumstances, usually only in the case of withdrawal. In fact, this type of conditional vesting provision is so widely used that in common usage "vesting" refers to entitlement to employer contributions only in the event of withdrawal. Yet the term has a broader application, and careful usage requires that the circumstances under which the vesting is to occur be clearly indicated.

Another example of conditional vesting is a provision found in many plans, including the vast majority of group annuity plans, that upon withdrawal, the employer's contributions vest in the employee only if the latter elects to take his own contributions in the form of deferred annuities, rather than in a lump sum. In such plans the employer's contributions vest only in the form of deferred pension credits.

The great majority of pension plans provide for some type of vesting in the event of withdrawal.[26] A significant exception is the negotiated pattern plans in which no vesting is provided other than that which is available under the early retirement provisions of the plans.[27] Vesting rights are virtually always conditioned on service or a combination of service and age, with full, immediate vesting being extremely rare. Seldom will age alone confer vesting privileges.[28] The most common requirements from a service stand-

26. Over 75 per cent of the conventional plans analyzed by the Bankers Trust Company in its 1950-52 survey contained some form of withdrawal vesting. *Op. cit.*, p. 12. Ninety-four per cent of the 346 group annuity plans studied by the Federal Security Agency provided for withdrawal vesting under some conditions. Van Eenam and Penman, *op. cit.*, p. 42.

27. Employer contributions vest absolutely and in full upon retirement, so an early retirement provision may be regarded as a method of accelerating the vesting process.

28. Only nine plans out of the 346 group annuities analyzed by the Federal Security Agency provided for vesting on the basis of age alone, although 46 per cent of the plans which provided for vesting contained an age requirement in combination with a service requirment.

point are 5, 10, 15 or 20 years, with the latter being the most widely used. If an age requirement is imposed, age 45, 50, 55 or 60 is usually used. A summary of the vesting provisions found in the two most recent surveys of conventional plans by the Bankers Trust Company is presented in Table 3. For graded vesting provisions, minimum service and age requirements are shown.

TABLE 3

WITHDRAWAL VESTING PROVISIONS IN RECENTLY ESTABLISHED OR AMENDED PENSION PLANS

Type of Vesting Provision	*1948-50 Plans**	*1950-52 Plans†*
	%	%
No vesting	19	24
Vesting upon Completion of Period of Service:		
10 years or less	14	13
15 years	7	6
20 years or more	10	10
Total	31	29
Vesting upon Attainment of Age:		
50	1	1
55	2	1
60	2	2
Total	5	4
Vesting upon Completion of 10 to 20 Years of Service and Attainment of Age:		
45 or less	7	9
50	9	10
55	17	12
60	5	7
Total	38	38
Immediate Vesting Without Age or Service Requirement	3	2
Vesting only on Layoff	3	2
Information Incomplete	1	1
Total	100	100

* Includes 100 new plans and 117 amended plans.

† Includes 97 new plans and 138 amended plans.

Source: Bankers Trust Company, *A Study of Industrial Retirement Plans* 1953 Edition (New York), p. 12.

Death Before Retirement.—In a contributory plan there will almost invariably be a death benefit equal to the accumulated value, with or without interest, of the contributions of the deceased employee. This benefit is paid in a lump sum to the deceased's estate or designated beneficiary. In some states this disposition of the employee's contributions is required by law. Any other death benefits that might be available would depend upon the type of plan selected, the various possibilities being outlined in the discussion of noncontributory plans.

There may or may not be death benefits under noncontributory plans. The right of an employee to his employer's contributions does not normally vest in his estate in the event of his death before retirement, so there is no assurance that a death benefit will be paid. Death benefits may, of course, be provided in other forms. A self-administered plan may provide a specific death benefit, unrelated to the contributions made by the employer toward the employee's retirement, sometimes expressed as a flat amount and sometimes equal to one year's salary of the deceased. Among insured plans, the individual retirement income policy and group permanent policies automatically include a death benefit with the retirement benefit. The amount of the death benefit in the retirement income policy is normally $1,000 for each $10 unit of monthly income at retirement, or the cash value, whichever is larger, while the group permanent plan, when it does not utilize the retirement income policy, affords $1,000 of insurance for each $10 unit of monthly income.

Plans using the group annuity contract normally provide no death benefits as a part of the pension plan, other than return of the employee's contributions, if any. Under the bulk of group annuity plans, the contributions of the employer are applied to the purchase of pure or nonrefund deferred annuities in accordance with which mortality is discounted in advance and no refund is available upon death of an employee.[29] Nevertheless, many companies which have a pension plan of the group annuity type provide death benefits through a separate group life insurance program.

Benefits paid by reason of death after retirement depend upon the

29. This procedure, it might be added, maximizes the retirement benefit per dollar of employer contribution.

type of annuity under which retirement benefits are paid. As was indicated earlier, the normal form of settlement under noncontributory plans does not provide any death benefit, while contributory plans, in keeping with the fiduciary treatment accorded employee funds in every aspect of pension administration, return the unliquidated portion of the employee's contribution through the operation of the modified cash refund option. Under either type of program, annuity forms are usually available under which death benefits of varying magnitude can be obtained—all at the expense of the retirement benefit, or at extra cost.

Disability Benefits.—Virtually all pension plans contain provisions which protect the interests of employees who are temporarily unable to work because of illness or injury. The real problem, however, is created by the employee who is permanently unable to work because of injury or disease.

The majority of pension plans make no provisions for permanent and total disability other than the relief afforded by the early retirement privilege. As was indicated earlier, this provision permits an employee who has met certain age and service requirements to retire with a reduced benefit earlier than the normal retirement age. Experience has shown that most early retirements are based on physical disabilities and, moreover, a large percentage of employees who become permanently and totally disabled can satisfy the eligibility conditions for early retirement. To afford greater relief, some plans permit a disabled employee to retire at a younger age and with fewer years of service than would otherwise be possible. Such an employee would receive only the actuarial equivalent of his accrued pension credits, which in most cases would constitute a very modest benefit. In recognition of this, a few plans vest the employer's contributions upon the occurrence of permanent and total disability and permit the employee to withdraw them in a lump sum. Other employers, while making no attempt to increase the amount of disability income, purchase an additional annuity at retirement of such amount as to bring the total retirement income up to that which the employee would have received at the normal retirement age, based, however, on the credits earned up to the date of the disability retirement. Since, with few exceptions, the disability benefits under these plans are the actuarial equivalent of the pension credits accrued at the inception of disability, they constitute only an alternative rather than supplemental benefit.

Many large plans, particularly those resulting from collective bargaining, provide a separate and distinct benefit for permanent and total disability. The benefit is definitely stated in advance and may be a percentage of the normal retirement benefit, a percentage of current compensation, or a flat amount. Several recently negotiated plans provide a disability benefit of $50 per month up to age 65, at which time the disabled employee becomes entitled to a normal retirement benefit based on his credits as of the date of disablement. In self-administered plans, the benefits are usually paid from the same fund used to finance retirement benefits, although an occasional employer charges them to current payroll. Disability benefits under insured plans may be provided as an integral part of the plan or, if the insurance company is unwilling to underwrite the disability hazard, through a self-administered disability fund apart from the retirement plan itself.

Termination of the Plan.—The conditions under which a pension plan can be terminated without retroactive tax penalty have been carefully circumscribed by the Treasury in order to prevent discrimination in favor of stockholders, officers, and highly paid employees of the company. Without adequate safeguards, a company with a small core of permanent officers and employees, for example, might establish a pension plan with illiberal vesting provisions which, after being credited with tax-deductible contributions for all employees for a number of years, could be terminated, with distribution of the total accumulations among the favored few participants who could meet the stringent vesting requirement. This scheme is particularly attractive during years of high profits and large tax liabilities.

In order to forestall such practices, the Treasury has ruled that a plan can be terminated only for reasons of "business necessity."[30] If a plan is abandoned for any cause other than business necessity within a few years after it has taken effect, such action will be construed by the Treasury as evidence that the plan, from its inception, was not a bona fide program for the exclusive benefit of employees in general. Some of the motivating forces for termination

30. Section 29.165-1 of Regulations 111.

which have been recognized by the Treasury as reasons of business necessity include bankruptcy, insolvency, change of ownership, change in management, and financial inability to continue contributions toward the pension program. If the Treasury finds that a plan, from its inception, was not a bona fide permanent program for the exclusive benefit of employees in general, employer contributions toward the plan will be disallowed as Federal income tax deductions for all open taxable years.

Upon termination, all funds credited to the pension plan vest in the employees, active and retired.[31] This is in accordance with the so-called Non-Diversion Rule[32] which forbids the employer to divert any portion of the principal or income of the pension plan to purposes other than for the exclusive benefit of his employees or their beneficiaries. The only exception to this rule is that which permits the employer to recover any balance remaining after all liabilities of the plan have been satisfied, provided that the surplus arose out of an "erroneous actuarial computation."[33] Plans under which units of benefits are purchased for employees on a current basis usually vest title to such paid-up benefits, including those purchased with employer money, in the employees. This is the practice in connection with deferred group annuity plans, for example. A different procedure may be prescribed by plans which pool the contributions and make no allocations to individual employees on a current basis. Even in those plans, any funds contributed by the employees will be returned to them upon termination, either in a lump sum or in the form of deferred pension credits; employer contributions, however, may be distributed in any manner which does not violate the provisions of Mimeograph 5717, which imposes restrictions on the amounts which may be paid to the 25

31. An exception to this rule exists whenever a plan is terminated in order to reactivate it with another funding agency, i.e., with another trust or insurance company. In such cases, the basic provisions of the plan continue to apply, and all accrued credits are transferred to the new funding agency.

32. Section 401(a)(2), IRC; Section 29.165-2 of Regulations 111.

33. A balance due to an "erroneous actuarial computation" is the surplus arising because actual requirements did not equal the projected requirements based on reasonable assumptions as to mortality, interest, turnover, salary scales, and other pertinent factors. It is to be contrasted to a surplus which arises out of a downward adjustment in the benefit formula, which does not inure to the benefit of the employer.

highest paid employees. If there are sufficient funds to purchase annuities for all accrued credits, the money would, of course, be applied in that manner. If funds are not sufficient to meet all accrued liabilities, a system of successive preferential classes of employees or classes of benefits may be followed. For example, the highest priority may be assigned to benefits for retired employees, the benefits for employees who have met the requirements for retirement but have not actually retired, then benefits to employees who have met the vesting requirements, and so on until the funds have been fully exhausted. On the other hand, the funds might first be used to liquidate future service credits, with any excess being applied on a pro rata basis to past service benefits. Any excess remaining after the satisfaction of all liabilities, if not due to an actuarial error, would be applied to provide additional benefits on some equitable basis.

SOURCE OF FINANCING

From the standpoint of financing, a pension plan may be contributory or noncontributory. Under a contributory plan the employee provides the funds for a portion of his benefits, with the employer assuming the cost of the remaining portion. Under a noncontributory plan the employer bears the total cost of the program, the employee making no contribution.

The Case for and Against Employee Contribution

Traditionally, the cost of providing retirement benefits has been borne jointly by the employer and employees and even today contributory plans predominate in number. Joint financing has the obvious and, in some cases, controlling advantage of making possible larger benefits to the employees. In many cases, the employer's financial position is such that he cannot assume the entire cost of pensions, and unless the employee group is willing to contribute toward the program, no plan will be installed. In other cases, employees contribute in order to enlarge the benefits. Finally, some plans are made contributory on the assumption that the members have a fuller appreciation of the plan if they bear a part of its cost.

The case for noncontributory plans rests largely on the deferred wage concept, which was discussed earlier. If retirement benefits can be regarded as the equivalent of wages, then, logically, the employer should assume the total cost of the program. If that view is rejected, the argument for unilateral financing loses much of its strength.

Entirely apart from the philosophical or moral aspects of the question, there are strong practical considerations in favor of employer financing. Arguments frequently cited in favor of noncontributory plans are relative freedom from employee interference, administrative convenience, and flexibility in funding. A more compelling argument revolves around the fact that the contributions which an employer makes toward a qualified pension plan are deductible as an ordinary business expense for income tax purposes and, in the short run at least, a substantial portion of the cost is shifted to the Federal government. On the other hand, the contributions which an employee makes toward his own retirement are not deductible and, as a consequence, are made from residual or net income. Dollar for dollar, therefore, employee contributions are more burdensome than employer contributions.

Current Practice in Financing

As might be expected, the tendency in negotiated plans has been to place the entire burden of financing on the employer. None of the 97 pattern plans analyzed by the Bankers Trust Company in its 1950-52 survey requires nor accepts contributions from employees.[34] Under a few programs, however, employees covered by a pattern plan are permitted to elect voluntarily to make contributions to and participate in a conventional contributory plan which the company has established.

The majority of conventional plans require employee participation in financing, although a trend in the opposite direction seems to be developing among newly established and amended plans. In its surveys, the Federal Security Agency found, for example, that 94 per cent of the group annuity plans established during the period of 1938-42 were on the contributory basis, whereas during the 1942-46 period the percentage dropped to 58.[35] With the termina-

34. Bankers Trust Company, *op. cit.*, p. 13.
35. Van Eenam and Penman, *op. cit.*, p. 5.

tion of World War II, contributory plans gained in popularity, the peak being reached in 1948 when 85 per cent of the group annuity plans were on the contributory basis. The trend was reversed again, however, and by 1950, only 59 per cent of the newly established plans were of the contributory type.

The general pattern revealed in the Bankers Trust Company studies of conventional plans is similar to that disclosed in the Federal Security Agency studies, but within the category of contributory plans a trend away from employee contributions on the first $3,000 or $3,600 of annual compensation is manifested. Only 35 per cent of the conventional plans established during 1950-52 required no employee contributions, but another 25 per cent excluded contributions on annual earnings of less than $3,000.[36] The bulk of the plans in the latter category excluded contributions on annual earnings of less than $3,600. Only 37 per cent of the plans require employee contributions on all earnings.

Amount of Employee's Contribution

In a contributory plan, the amount of an employee's contribution should bear a reasonable relationship to his ability to pay. This is important from a practical as well as an ethical standpoint, since if the contribution rate is set too high, a sufficient number of employees may not elect coverage under the plan. Under group contributory plans, at least 75 per cent of the eligible employees must elect coverage before the plan will be installed and under any plan the objectives of the program can be defeated by inadequate participation.

In the definite benefit type of plan, an employee's contribution rate is usually set at a multiple of his retirement benefit. The most common practice has been to establish employee contributions at two to three times the rate at which future service benefits accrue. If future service benefits accrue at the rate of 1 per cent of each year's compensation, for example, the employee contribution rate would usually be set at 2 to 3 per cent of each year's compensation. The amount of retirement benefits which such contributions will purchase varies with the attained age of the employee, and other factors, but the employer contributes such additional sums as are

36. Bankers Trust Company, *op. cit.*, p. 13.

needed to provide the future service benefits guaranteed under the plan. In addition, the employer almost invariably bears the entire cost of past service benefits.

In connection with money purchase plans, the employee's rate of contribution bears a fixed ratio to the contribution rate of the employer, although both are normally expressed as a percentage of the employee's compensation. As a minimum, employers are expected to match the employee's rate, with each, for example, contributing 5 per cent of the employee's compensation. In some plans, however, the employer contributes at a rate of two or three times that of the employee. The appeal of this approach is that the employer knows in advance what his rate of contribution will be, as contrasted with the definite benefit type under which his contributions are supplemental in nature and, hence, indeterminate.

Under both definite benefit and money purchase plans, the employee's rate of contribution on earnings subject to OASI coverage may be lower than that on earnings in excess of that limit. The rate of contribution on the first $3,600 of earnings tends to fall within a range of 1 to 4 per cent, while the rate on earnings in excess of $3,600 falls within a range of 2½ to 7 per cent.