CHAPTER II

EMPLOYER PLANS AND IRAS

Tax advantages for retirement saving are available through IRAs and a variety of qualified employer plans. This chapter describes how the main types of plans work, and compares the incentives and risks inherent in them. The chapter begins with a short history of pensions and pension legislation.

EVOLUTION OF THE PENSION SYSTEM

Formal pension plans in the United States began well before the enactment of special tax provisions for them. 1/ They emerged in the last quarter of the 19th century as a response to fundamental social changes-- increasingly fragmented family structures in an urbanized and industrial society, longer life spans, and the rise of large corporations that needed socially acceptable ways to terminate older workers. By 1929, about 15 percent of private employees were covered by employer plans, concentrated in large corporations and in sectors where government oversight tended to be the strongest.

The Revenue Acts of 1921, 1926, and 1928 initiated the tax advantages for employer plans. The 1921 act allowed employers to deduct current-service contributions to profit-sharing and stock-bonus plans, while allowing employees to delay recognition of any income from those plans until it was paid. Investment earnings of these plans were also exempted from current taxation. The 1926 act extended these advantages to pensions, and the 1928 act allowed contributions for past, as well as current, service to be deducted by sponsoring employers.

1. Further details on the evolution of pensions and pension legislation will be found in Appendix A.

The Depression and War Years

Enactment of these provisions had little impact on the development of employer provisions in those years. Low tax rates held down the value of the provisions. Moreover, they were barely in place when the Great Depression reversed the evolution. Many employers terminated their pensions, and frequently did not pay benefits already promised to workers.

In 1935 the federal government established the Railroad Retirement system to enable the depleted pension funds for railway workers to meet their obligations. In the same year, the first Social Security legislation was enacted, initially covering only portions of the labor force. Symptomatic of the general decline of employer-sponsored plans was the nearly total absence of any mention of them in the Report of the Committee on Economic Security in 1935. That report proposed a system of federally sponsored voluntary annuities that would be available to those not covered in the compulsory annuity system for industrial workers (in today's terms, Social Security), but also could supplement the compulsory annuities of those who were covered.

By the late 1930s, however, pensions had revived enough to generate concern that they not be used primarily as tax avoidance schemes for the wealthy. The Revenue Act of 1938 made pension and profit-sharing trusts irrevocable, and in the Revenue Act of 1942, the Congress began the process of placing conditions on tax qualification of employer-sponsored plans. The 1942 act introduced the concepts of nondiscriminatory coverage and nondiscrimination in benefits and contributions, provisions which form the core of today's regulation of pensions. During World War II, pensions became a desirable form of compensation because of the very high wartime tax rates and the exemption from wage controls of contributions to pensions. After the war, pensions continued to spread because tax rates remained high, Social Security benefits had been eroded by wartime inflation, and labor unions won legislative and judicial victories making pensions subject to collective bargaining.

Recent Developments

In more recent years, changes have been made in the tax code and Social Security to distribute retirement income according to increasingly refined standards of adequacy and fairness. Specially restricted "Keogh" plans were enacted in 1962 for the self-employed and other noncorporate employers.

The Employee Retirement Income Security Act of 1974 (ERISA) considerably tightened qualification rules for employer plans. ERISA gave the federal government authority to prescribe a uniform meaning for plan rules, and legislated minimum standards for participation, vesting, benefit accrual, and funding.

Between 1974 and 1986, the Congress pursued two different lines of policy. On the one hand, it opened access to the tax advantages of qualified plans in ways that emphasize individual decisionmaking. With ERISA it created IRAs, but only for people not covered by a qualified pension plan. The 1981 Economic Recovery Tax Act extended IRAs to all taxpayers regardless of their coverage under a qualified plan. (It also allowed voluntary employee contributions to qualified employer plans subject to IRA limits.) The 1978 Revenue Act sanctioned salary reduction arrangements in profit-sharing plans--"401(k)s"--and in the state and local government sector (Section 457). Similarly flexible arrangements had already been possible in the nonprofit sector under Section 403(b) of the Code. Then, in the Federal Employees Retirement System Act of 1986, the Congress extended salary reduction saving opportunities to all federal civilian employees. Although subject to special nondiscrimination rules, so-called salary reduction agreements are like IRAs in their emphasis on individual decisionmaking.

On the other hand, pension practices were further constrained by changes that emphasize the collective or forced savings aspects of pensions. Examples are the expanded coverage requirements in the Retirement Equity Act of 1984 and the top-heavy plan rules in the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA). TEFRA also eliminated the differences between qualified plans maintained by corporate and noncorporate employers.

The Tax Reform Act of 1986 reversed the trend toward individual access to qualified saving, while continuing the trend toward stricter conditions on sharing pension benefits among a firm's employees. Individual access is limited by phasing out at higher incomes the deduction for IRA contributions among people who are covered by a pension themselves or have a covered spouse. Individual access to qualified saving is further limited by reducing the maximum salary reduction in 401(k) plans to $7,000 instead of $30,000 as under prior law.

The trend toward stricter sharing of benefits among a firm's employees is extended in the act primarily through stricter requirements for inclusion of employees, faster vesting of benefits, and smaller offsets of plan benefits because of Social Security. Separately, the reduction of tax rates in the act has the effect of reducing the gain from the tax advantages, as discussed above in Chapter I. Further details of the Tax Reform Act of 1986 appear in Appendix B. An assessment of the act's potential effects appears in Chapter V.

HOW EMPLOYER PLANS WORK

Most employer plans are relatively small. Of the 729,000 private employer qualified plans that existed in 1982 (excluding Keogh plans), 94 percent had fewer than 100 participants. However, the 6 percent of plans with 100 or more participants had 88 percent of all participants (see Table 4).

Employer plans can be classified as either defined benefit or defined contribution plans. A defined benefit plan guarantees a specific benefit in retirement, leaving the employer to accumulate sufficient funds to pay the pension. Defined contribution plans specify how much will be contributed annually and leave the payment amount to the fate of the investment experience. Defined contribution plans that are designed specifically to be retirement pensions are usually called money-purchase pensions. Thrift, profit-sharing, stock-bonus, and salary reduction plans are also types of defined contribution plans; some of these plans are not just for retirement savings, however.

TABLE 4. DISTRIBUTION OF PLANS AND PARTICIPANTS BY SIZE OF PLAN, 1982 (In percent)

Participants Per Plan	Number of Plans	Number of Participants
Total	100	100
0 - 99	94	12
100 or more	6	88

SOURCE: Richard Ippolito and Walter Kolodrubetz, eds., *The Handbook of Pension Statistics 1985* (Chicago: Commerce Clearing House, Inc.), 1986, pp. 63-64.

TABLE 5. DISTRIBUTION OF PLANS BY SIZE AND TYPE, 1982 (In percent)

Participants Per Plan	Total	Defined Benefit	Defined Contribution
Total	100	30	70
0 - 99	100	28	72
100 or more	100	60	40

SOURCE: Richard Ippolito and Walter Kolodrubetz, eds., *The Handbook of Pension Statistics 1985* (Chicago: Commerce Clearing House, Inc.), 1986, pp. 63-64.

Most qualified plans are of the defined contribution type, but large plans are more often of the defined benefit type. Thus, while 70 percent of all private plans in 1982 were defined contribution plans, nearly the reverse was true for large plans: 60 percent of private plans with over 100 participants were defined benefit plans (Table 5). In sum, most private plans are small defined contribution plans, but most of the participants in private plans are in large defined benefit plans.

The concentration of employees in large defined benefit plans is more pronounced in the public sector. The 9 percent of federal, state, and local plans with more than 500 participating employees covered 98 percent of all public employees participating in pension plans in 1979. 2/ Almost all of these large plans are defined benefit plans. 3/

The number of participants in private defined contribution plans has been growing more rapidly than the number in private defined benefit plans. Between 1975 and 1982, the number of participants in defined contribution plans more than doubled, to 23 million, while the number in defined benefit

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2. Laurence J. Kotlikoff and Daniel E. Smith, *Pensions in the American Economy* (University of Chicago Press, 1983), pp. 28, 352.

3. *Ibid.*, pp. 361-362.

plans increased only a tenth, to 30 million. 4/ Because the number of private defined benefit plans grew almost as fast as the number of defined contribution plans over the seven years, the greater increase in coverage of defined contribution plans represents the faster spread of these plans among large employers. The more rapid growth of defined contribution participants comes both from the addition of supplementary plans by employers already having defined benefit plans, and from employers choosing defined contribution instead of defined benefit plans for the basic pension.

Defined Benefit Plans

Important features of defined benefit plans are: how their benefits are determined; the extent to which they are integrated with Social Security; and their provisions for vesting, age of retirement, and funding.

Benefits. A relatively simple defined benefit plan provides a fixed benefit per year of service. Such a plan in 1982 might have provided $200 per year for every year an employee worked. A worker retiring after 30 years would collect $6,000 per year. Sometimes the dollar amount credited rises in a few discrete steps depending on earnings. Thus, $180 could be credited per year of earnings below $20,000 and $210 per year of earnings above $20,000. Plans in which benefits depend mainly on length of service represented one-third of all defined benefit plans in the annual Bureau of Labor Statistics survey of medium-to-large private plans. 5/ These plans are most common among unionized production employees--for example, in the auto industry.

The other two-thirds of private, medium-to-large defined benefit plans, and almost all public employee plans, base pensions on earnings as well as on length of service. These plans pay a fraction of the employee's average annual salary, the fraction increasing with length of service. In private plans, the salary is most commonly averaged over the last five years of service, or over the highest five out of the last ten years. In public sector plans, the last three years are usually averaged. The fraction paid is 1 percent to 2 percent times the number of years of service, commonly 1.5 percent. This type of pension formula would be written:

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4. Richard Ippolito and Walter Kolodrubetz, eds., *The Handbook of Pension Statistics 1985* (Chicago: Commerce Clearing House, Inc., 1986), p. 80.

5. General Accounting Office, "Features of Non-Federal Retirement Programs" (1984), p. 3. Medium-to-large plans are those with over 100 or 250 participants, depending on the industry of employment.

$$\text{Pension} = 0.015 \text{ x (years of service) x (average salary last 5 years)}$$

Under this formula, a person retiring after 30 years of employment would receive 45 percent of average salary in the final years. This fraction is referred to as the replacement rate. If salary in the final years averaged $20,000, the pension would be $9,000 per year. 6/

If a person leaves employment under the plan before the plan's retirement age, the benefit is based on years of service and salary to date. The benefit will commence on reaching the plan's normal retirement age. Such people are said to possess vested deferred annuities in contrast to the immediate annuities owed to those who continue in service until they retire from the plan and receive payments immediately.

Integration. In the private sector, most salary-based pensions are reduced to reflect Social Security benefits. This process is called integration. A common reduction at normal retirement is one-half of the primary Social Security benefit, although the fraction is lower for short-term employees. Such an offset added to the above formula would give a pension of:

$$0.015 \text{ x (years of service) x (average salary last 5 years)} \\ - \tfrac{1}{2} \text{ x (Social Security)}$$

If the person in the above example had a $6,000 primary Social Security benefit, the pension in the integrated plan would fall from $9,000 to $6,000. Other integration methods are possible. 7/

6. Some plans stop raising the replacement rate after a relatively short service length, such as 15 years. Everyone retiring with more years of service receives the same replacement rate. These plans are referred to as flat benefit plans, in contrast to the unit credit plans described above.

Other pension plans include an alternative benefit formula to insure a minimum benefit for low-wage or short-term employees. Such a formula might provide $120 per year of service. If a 30-year employee's final average earnings were under $8,000, the employee would do better under the alternative formula, which would provide a benefit of $3,600 ($120 x 30).

7. It is called an offset plan because a fraction of Social Security directly offsets the pension. Pensions are also integrated by lowering the fraction of the salary replaced below a specified income limit, called the integration level. For example, the fraction of salary replaced per year of service in the above formula might be reduced from $1\frac{1}{2}$ percent to 1 percent for income below the integration level. This is step-rate integration.

Integration allows private plans to offset some of the tilt in the Social Security benefit formula, which replaces a higher share of earnings for lower-wage workers. When the employer's plan is integrated, the tilt in Social Security causes an offsetting tilt in the employer plan so that higher-wage workers receive higher replacement rates from the integrated plan. In most integrated plans, the lowest-wage workers receive some pension beyond Social Security, and the tilt of the Social Security benefit formula is only partially offset for higher-wage workers. 8/ The extent of integration is restricted by one of the conditions for qualification under the Internal Revenue Code (discussed in Appendix B). The Tax Reform Act of 1986 tightened the rules on permissible integration.

Without integration, some long-service, low-wage workers could receive combined Social Security and employer plan pensions that would come close to or exceed their earnings before retirement. This would be a disincentive to continue working. Under integration, however, most of the pension payments of private plans go to higher-wage workers. Of course, these are the workers to whom the tax advantage matters, but they are also those best able to provide for themselves without tax advantages.

Public employers generally do not integrate their pensions with Social Security. The reason may be that historically the federal government and many states and localities chose not to participate in Social Security. Even though participation at the state and local level is now common, most pensions are not integrated with Social Security. Of 43 states where employees participate in Social Security, 37 percent do not integrate their

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8. Replacement rates for two hypothetical employees are reported here to illustrate the effects of integration. The two employees retire in January 1985 at age 65, with 30 years of service credited under the above offset formula. One has worked full time at the minimum wage, averaging $6,864 over the last five years; the other has consistently earned the Social Security maximum wage, averaging $32,300 in the last five years. For the minimum-wage worker, Social Security's basic benefit of $4,437 replaces 65 percent of average earnings over the last five years. The pension formula before offset would replace 45 percent of earnings but after the offset replaces only 13 percent of earnings. The combined replacement rate without integration would be 110 percent; with the offset it drops to 77 percent. For the worker earning the Social Security maximum, the Social Security replacement rate is only 27 percent. This worker's pension after the offset replaces 32 percent compared to 13 percent for the minimum-wage worker. The worker at the earnings limit, however, has a combined replacement rate of only 58 percent compared with 77 percent for the minimum-wage worker. Thus private plan integration, by replacing a higher proportion of benefits for higher-wage workers, offsets some of the progressivity in Social Security benefits.

pensions. 9/ Federal employees hired before 1984 are not covered by Social Security. Later hirees are covered but their newly enacted pension system is not explicitly integrated with Social Security.

Vesting. The term "vesting" refers to the guarantee of defined pension benefits when a person leaves employment before retirement. Employers usually impose a minimum service requirement before accrued benefits will be guaranteed. Currently, most medium and large private plans have 10-year cliff vesting--that is, a person leaving before 10 years of service loses all benefits accrued to date, and a person leaving after 10 years loses none. Almost 90 percent of the participants in private, medium-to-large, defined benefit plans face 10-year cliff vesting. 10/ Most of the remainder face graded vesting--for example, 50 percent vesting at 5 years and 5 percent more vesting in each of the next 10 years. Vesting times are limited for qualified plans, and 10-year cliff vesting is one of the limits.

Private employers will have to shorten their vesting periods starting in 1989. The Tax Reform Act of 1986 reduces the longest vesting periods for qualified plans to either five-year cliff vesting or graded vesting beginning after the third year and finishing after the seventh year.

Vesting for public employees tends to be more rapid and is rarely graded. All federal workers and almost half of state employees face five-year cliff vesting in their basic pensions. Most other state employees and local government employees vest in 6 to 10 years. 11/

Retirement Age. Defined benefit plans need to specify either an age at which the promised benefits are payable or a minimum service requirement, or both. In private plans, normal retirement ages of 62 or 65 years of age are most common, and earlier retirement with 30 years of service is not uncommon. 12/ In public employer plans, the normal retirement age is more likely to be 60 rather than 62 or 65, and an option to retire after 30 years is also more common than in private plans. 13/

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9. General Accounting Office, "Features," p. 6.

10. *Ibid.*, p. 5.

11. Kotlikoff and Smith, pp. 359-360.

12. General Accounting Office, "Features," pp. 10-11.

13. Kotlikoff and Smith, p. 365.

Nearly all pension plans permit early retirement with reduced benefits. Age 55 is the most common age. 14/ Most large employers reduce early retirement benefits by less than the actuarial cost of paying benefits over the longer expected retirement, thereby subsidizing early retirement. 15/ A small number of employers supplement early retirement benefits until age 62 or 65 when Social Security benefits become available. Supplementation is usually done by delaying the Social Security offset in integrated benefit formulas. Late retirement is often penalized by providing no increase in benefits, or too small an increase to reflect the additional service and shortened retirement. 16/

Funding. Most private defined benefit plans are funded solely by employer contributions, while most public plans require some employee contributions. Ninety-three percent of employees in medium-to-large pension plans (omitting thrift and related plans) make no direct contributions. On the other hand, the federal government and 47 states require contributions. 17/ Among public employees, contributions may be more common because many originally were not contributing to Social Security. Their pensions were replacing Social Security, in part, and so employee contributions were substitutes for the payroll tax. Contributions by public employees generally cover well below half of plan costs. Employers make up the difference. It is likely that employer contributions are offset to some extent by lower pay to participating employees, as is discussed in Chapter IV.

The total annual contribution to a defined benefit plan normally is based on the cost of paying the currently accruing benefits that current workers are projected to receive as either immediate or deferred annuities. In this way, the benefits are funded as they accrue to the workers. The size of a year's contribution depends both on the projected benefits and on the projected investment return of that year's contributions. The projections are reexamined periodically, and the contributions adjusted when experience diverges from the original assumptions. For example, in recent years high

14. General Accounting Office, "Features," pp. 11-12.

15. Edward P. Lazear, "Pensions as Severance Pay," in *Financial Aspects of the U.S. Pension System* (University of Chicago Press, 1983), p. 58.

16. Starting in 1989, a qualified plan cannot restrict accruals of older workers unless they have reached the plan's maximum benefit (The Omnibus Budget Reconciliation Act of 1986). The maximum benefit is normally specified in years of service, so the act will mostly help those who join a firm later in their work lives.

17. General Accounting Office, "Features," pp. 7-9.

interest rates and rising stock prices have reduced the calculated costs of future benefits. Employers have responded by reducing contributions and, in some cases, terminating plans to reclaim excess funds. Federal law requires qualified plans to be funded according to one of six actuarial funding methods. The entry-age normal cost method, which assesses costs as a constant percent of payroll, is most commonly used in large plans. The federal government can allow firms in financial difficulty to postpone their annual contributions.

Benefit Insurance. The governmentally established Pension Benefit Guaranty Corporation (PBGC) insures retirement benefits against plan termination. Qualified defined benefit plans are covered, with the exception of governmental plans and a few others. Separate rules apply to single-employer and multiemployer plans (described below). Defined contribution plans are not insured. If a single employer terminates a plan, leaving insufficient funds to pay accrued benefits, the PBGC will pay the basic benefits up to an indexed limit. The limit in 1986 was $1,790 per month, or $21,477 per year. Firms are assessed premiums intended to cover the cost of the insurance.

Defined Contribution Plans

Defined contribution plans include money purchase plans, profit-sharing plans, and stock-bonus plans. Some of these are also thrift or salary reduction plans.

Vesting in a defined contribution plan has to do with the contributed funds and investment earnings, rather than with promised benefits as in a defined benefit plan. It is typically faster and more likely to be graded than in defined benefit plans. Most employees are fully vested in defined contribution plans after five years of service, and if they leave they normally have the choice of a lump-sum payout at that time or of letting their funds remain invested until they retire.

Money Purchase Plans. In the simplest defined contribution plan, the employer contributes a fixed percent of each employee's salary to the pension trust fund. These are called money purchase plans. The fund is invested and accumulates earnings during the employee's working years. At retirement, the employee's share of the fund can be paid to the employee or used to purchase an annuity. Money purchase, as well as other defined contribution plans, can be integrated with Social Security benefits by contributing a higher percentage of salary for earnings above a specified earnings limit. Target benefit plans are money purchase plans in which the contribution is explicitly derived from an actuarial calculation of the cost of a target pension replacement rate. That rate is not guaranteed, however.

Profit-Sharing and Stock-Bonus Plans. These are defined contribution plans that incorporate variable employer contributions and are not necessarily limited to saving for retirement.

Profit-sharing plans tie the size of the employer's contribution to the profitability of the firm. Profit-sharing plans can either make payments to employees as current compensation or they can accumulate contributions in a trust fund. Only the latter--deferred profit-sharing plans--are qualified plans. Deferred profit-sharing plans can be attractive to firms with uncertain profits because contributions can be reduced in years when profits are low. In particular, small firms are likely to use profit-sharing plans as their retirement plans. Regulations require that contributions to deferred profit-sharing plans be held for a minimum of two years, although employers can impose longer holding periods. Plans permitting withdrawals after a few years are clearly not just for retirement saving.

Stock-bonus plans differ from profit-sharing plans in that the employer's contribution is not necessarily related to profits, and the benefits are distributable in company stock. Stock-bonus plans have much the same motivational objectives for employees as do profit-sharing plans.

Thrift and Salary Reduction Plans. The distinguishing feature of these plans is that they let the employee decide how much pay to contribute to the qualified plan. Employee contributions to thrift plans are not deductible, but those made to salary reduction plans are. In salary reduction plans, employees technically elect to defer a portion of their compensation, which is then excluded from current taxable income. As a result, these employee deposits are called "elective deferrals." Tax advantages for salary reduction plans are considerably larger than for thrift plans, as shown in Chapter I.

Thrift plans have long been available; salary reduction plans are more recent. A few employers offered them before the 1970s; in 1974, ERISA halted new salary reduction plans pending further study. Subsequent legislation has specified their use in several settings. The Revenue Act of 1978 added to the Internal Revenue Code section 401(k) to allow such plans in for-profit businesses and section 457 to allow similar (but unfunded) plans for state and local governments. Internal Revenue Code section 403(b) had previously allowed salary reduction plans for educational institutions and nonprofit organizations. Most recently, the Federal Employees' Retirement System Act of 1986 extended salary reduction to all civilian employees of the federal government, and the Tax Reform Act of 1986 extended salary reduction to Simplified Employer Plans (SEPs, discussed below).

Employers have long used thrift plans to allow supplementary saving beyond that provided in their basic defined benefit or money purchase plans. Most salary reduction plans are used in the same way, although a few employers sponsor them as their sole plan. Private employers have tended to operate thrift and 401(k) plans in much the same way. Employee contributions are normally limited to 5 percent to 10 percent of pay. Employers frequently make matching contributions of between 25 percent and 100 percent of the employee contribution, with 50 percent being most common. Employer contributions become the employee's after a vesting period; employee contributions, made from employee wages, vest immediately. One objective of employer matching contributions is to raise contributions from the lower-paid employees sufficiently that the proportion of contributions from the higher paid does not exceed federal limits for qualified plans.

Most thrift and salary reduction plans are forms of profit-sharing plans because the rate at which the employer matches contributions can vary from year to year according to the employer's profitability.

Other Defined Contribution Plans. Employee Stock Ownership Plans (ESOPs) and Simplified Employer Pensions (SEPs) are used by some employers as substitutes for employer plans, discussed previously. ESOPs are benefit plans holding employer stock that can be structured as stock-bonus or money purchase plans. Employee stock ownership is supported as a work incentive and as a means to greater employee participation in the firm. ESOPs also can be attractive capital-raising vehicles for firms.

SEPs combine features of IRAs and pensions. As with IRAs, contributions are made into a personal account for an employee and are fully owned by the employee. As with pensions, the employer establishes the plan and determines the contribution. Also, contributions are subject to the limits for defined contribution plans. Contributions must be proportional to wages for all employees, with the exception of integration with Social Security. SEPs were enacted to encourage small employers to set up plans by reducing the normal administrative requirements.

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