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PRIVATE PENSIONS

Plan Provisions Differ Between Large and Small Employers



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The Honorable Lloyd Bentsen
Chairman, Joint Committee on Taxation
Congress of the United States
Chairman, Committee on Finance
United States Senate

The Honorable Dan Rostenkowski
Chairman, Committee on Ways and Means
House of Representatives

The Honorable Edward M. Kennedy
Chairman, Committee on Labor and Human
Resources
United States Senate

The Honorable Augustus F. Hawkins
Chairman, Committee on Education and Labor
House of Representatives

This briefing report was prepared in partial fulfillment of the requirement under the Retirement Equity Act of 1984 (P.L. 98-397, Sec. 304) that GAO study the effects of federal pension rules on women and report the results to your committees. Focusing on the most prevalent types of pension plans in industries with most of these types of plans, this briefing report describes some of the options employers sponsoring these plans chose in designing their pension plans to meet federal rules, and it discusses the impact of some of the changes mandated by the Tax Reform Act of 1986 (TRA). Our future work will evaluate the effects of these rules on women.

Employer-sponsored pension plans that qualify for preferential tax treatment must meet a variety of federal rules designed to improve the equity and security of pension benefits. Because these rules set limits rather than specific requirements, employers choose options within the limits when designing their tax-qualified plans. The Joint Committee on Taxation has estimated that tax preferences for qualified employer-sponsored pension plans will result in a \$46 billion loss in tax revenue in 1989.

In this briefing report we describe the differing pension plan options that small and large employers chose within the limits of the law in

1985, and identify plans and participants that will be affected by TRA. We focused on four provisions:

- How long workers must wait to participate in the plans.
- How long workers must wait to gain a legal right to receive earned benefits; that is, "vest."
- How plans coordinate or "integrate" benefits with social security.
- How long workers must wait to be eligible for full retirement benefits.

We collected nationally representative data on the features of plans in operation in 1984 and 1985 (before TRA) and their participants using two samples, including the most prevalent types of plans in industries with most of these types of plans (see app. I & II for the plan types and industries in the samples). The sample of plans sponsored by small employers (fewer than 100 employees) represented about 67 percent of our selected universe of small employers' plans for all plan types and industries. The sample of plans sponsored by large employers (100 or more employees) represented about 59 percent of our selected universe of large employers' plans for all plan types and industries. Our study population included about 78,000 small employers' plans with about 700,000 participants and about 10,500 large employers' plans with about 6.2 million participants.

Principal Findings

Pension plans sponsored by large and small employers differed in requirements used for participation, vesting, integration, and normal retirement eligibility, according to our analyses. Recent changes to federal pension rules in TRA would have eliminated or reduced many of these differences between small and large employers' plans.

Participation

Four out of five pension plans in our study population used some combination of age and service to determine when a worker was eligible to participate in the plan. Small employers were more likely than large to use a combination of age and service (85 vs. 51 percent). The most common combination, which affected about 40 percent of participants, was age 21 and 1 year of service.

Under federal pension rules, a plan may exclude from participation any worker who is not at least 21 years old or does not have 1 year of service (or both). Plans with immediate vesting upon entry into the plan may require up to 3 years of service for participation (see p. 20). Large employers' plans more often allowed earlier participation than small

employers' plans (65 vs. 40 percent), and so were more advantageous to participants, other things being equal. About 43 percent of all plans allowed participation earlier than these legal limits. Such plans included about 58 percent of the participants in our study population.

Few plans would be affected by the change in participation requirements under TRA, which lowers the maximum service requirement for plans with immediate vesting from 3 to 2 years (2 percent of large employers' plans and 13 percent of small). These plans included fewer than 3 percent of the participants in our study population.

Vesting

Small employers' plans in our study population tended to vest participants sooner than large employers' plans. This was because many small employers' plans were affected by special "top-heavy" rules that called for full vesting in less than 10 years.¹ Many small employers' plans that were not top-heavy, however, did not fully vest workers in their benefits until they had worked more than 10 years. In comparison, most large employers' plans fully vested participants with 10 years of service. About 68 percent of participants were in these plans.

Before the Tax Reform Act of 1986, participants in non-top-heavy plans had to be fully vested after 10 years of service under a cliff schedule and with 15 years of service under a graded schedule.² Participants in top-heavy plans must vest within 3 years under a cliff schedule and within 6 years under a graded schedule. About one-third of all plans in our survey (small and large employers' alike) fully vested participants sooner than these legal limits, and so were more advantageous to participants, other things being equal. About 37 percent of the participants included in our study population were in these plans, which were most often defined contribution plans sponsored by large employers.³

TRA vesting requirements shorten the length of service participants must have to be fully vested. All tax-qualified plans will have to use vesting

¹Top-heavy rules apply to plans where more than 60 percent of the benefits or contributions go to company owners, officers, and other key employees.

²Under a cliff schedule, participants move from nonvested to fully vested status after a specific length of service; under a graded schedule, participants are vested gradually.

³In a defined contribution plan, the employer provides a periodic contribution to an account for each participant but guarantees no particular pension benefit. In a defined benefit plan, the employer promises a specific retirement benefit that is generally based on a worker's years of service, earnings, or both (see p. 14).

schedules that span, at most, 2 to 7 years rather than 2 to 15 years. Participants in 9 out of 10 large employers' plans and about half the small employers' non-top-heavy plans would have vested more quickly under TRA. About 85 percent of the participants in our study population were in such plans. Top-heavy plans still must comply with accelerated top-heavy vesting schedules.

Integration With Social Security

About 42 percent of the pension plans in our study population used integrated benefit or contribution formulas. That is, these plans provided lower pension benefits as a percentage of preretirement earnings for lower-paid workers than for higher-paid workers. This was because most plans were defined contribution plans, and many defined contribution plans did not use integrated formulas.

Plans that did integrate included about 54 percent of the participants in our study population. Two out of three participants in integrated plans were in defined benefit plans, which used the offset method of integration. Using this method, a portion of the worker's social security benefit is deducted from an initial pension amount to determine the worker's final pension benefit.

TRA eliminated the "pure excess" method of integration, which provides participants with income below a certain level with no benefits. Elimination of this method would affect about 25 percent of the integrated pension plans in our study population, most sponsored by small employers. These plans included about 5 percent of participants in integrated plans.

Normal Retirement Eligibility

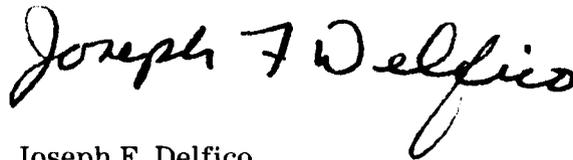
About two-thirds of the plans in our study population used age as the only criteria for retirement with full benefits (normal retirement). Large employers did this more often than did small employers (78 vs. 64 percent; see p. 37). Small employers required a combination of age and service almost twice as often as large employers (36 vs. 20 percent).

Under federal pension rules, participants must be allowed to retire with full benefits no later than age 65 with 10 years of service. About 83 percent of the plans in our study population, containing about 95 percent of participants, allowed normal retirement sooner than these limits and so were more advantageous to participants, other things being equal.

Future Work

Our examination of plan provisions gave indications of the potential impact of changes in pension law on participants. In future studies, we will use information from our database to report on the distribution of pension benefits in plans between men and women and other participant groups, and to estimate the potential effect of changes under TRA on the distribution of benefits.

We are sending copies of this briefing report to other interested congressional committees. Copies also will be made available to others who request them. The major contributors to this briefing report are listed in appendix III.



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Abbreviations

ERISA	Employee Retirement Income Security Act of 1974
GAO	General Accounting Office
IRS	Internal Revenue Service
REA	Retirement Equity Act of 1984
SIC	Standard Industrial Classification
TEFRA	Tax Equity and Fiscal Responsibility Act of 1982
TRA	Tax Reform Act of 1986

Section 1: Introduction

Recognizing that private pensions, along with social security and private savings, contribute to retirement income for millions of retirees and their families, the Congress uses tax preferences to encourage employers to sponsor pension plans. For qualified plans, employer contributions for workers' pension benefits are tax deductible to the employer but are not counted as taxable income to the employee.¹ Money in pension funds earns interest tax free, and individuals pay taxes on pension benefits only when they are received. To qualify for preferential tax treatment, an employer-sponsored pension plan must meet certain requirements in the tax code.

In order for an employer-sponsored plan to qualify for preferential tax treatment, the employer is required to design the pension plan within legal limits that are intended to distribute pension and tax benefits equitably among workers and ensure that adequate resources exist to pay promised benefits. Among other things, legal limits govern (1) when a worker must be allowed to participate in the plan, (2) how a worker's benefits will be determined, and (3) when a worker can retire with full benefits. Employers may also establish nonqualified plans that are not affected by these limits and whose participants do not receive favorable tax treatment.

In fiscal year 1989, the Joint Committee on Taxation estimates that the Treasury will lose an estimated \$46 billion in tax revenue for qualified employer-sponsored pension plans.^{2,3} As the largest tax expenditure for 1989, this sum is under scrutiny as the Congress examines deficit reduction strategies.

Despite the importance of private pensions to retirement income and tax revenues, nationally representative data about the features of these plans generally has been unavailable to policymakers. Without such information, it is difficult for the Congress and others to assess the need for, and potential impact of changes in pension plan requirements. Instead, the Congress has had to rely on anecdotal information or data on selected cases to evaluate potential changes in pension law.

¹Employer contributions are treated as ordinary and necessary business expenses for federal income tax purposes.

²This estimate was calculated using the revenue loss method. The Office of Management and Budget (OMB) also estimated a cost of \$61 billion for tax-qualified pension plans using the outlay equivalent method. This method estimates the amount of direct outlays required to provide the same after-tax benefit as the tax provision, and in cases like this one, the outlay equivalent estimate is greater than the estimated tax revenue lost.

³The Joint Committee tax expenditure estimate included both private and public sector plans.

Existing pension data are not representative of all sizes of plans or are limited in detail or scope; for example:

- The Bureau of Labor Statistics in the Department of Labor reports information for pension plan participants in firms with 50 or more employees.⁴
- Labor's Pension and Welfare Benefits Administration (formerly the Labor-Management Services Administration) publishes information on private pension plan participation and financing.⁵ The information is based on nationwide Internal Revenue Service (IRS) data representing the universe of tax-qualified plans, including those with fewer than 50 participants. The only plan characteristic included in the information—vesting—cannot be updated because the revised IRS forms that employers file for tax-qualified pension plans do not include this information.
- Management consulting firms publish information about their clients' plans, but these data are generally not representative of pension plans outside their client base.

In this briefing report, we present estimates of the prevalence of various features of pension plans sponsored by small (fewer than 100 employees) and large (100 or more employees) employers in selected industries nationwide. In particular, we examine provisions relating to (1) how long a worker must wait to participate in the plan, (2) how long the worker must wait to gain a legal right to receive earned benefits or "vest," (3) how the plan coordinates benefits with social security, and (4) how long the worker must wait to be eligible for full retirement benefits. The information is drawn from our data on nationwide samples representing about 88,500 pension plans with about 6.9 million participants in selected industries. (See app. I for more information.) The database was developed to respond to the mandate in the Retirement Equity Act of 1984 (REA) that we study the effects of federal pension rules on women.

Background

The Congress has imposed a variety of qualification requirements on retirement plans concerning participation, vesting, and retirement eligibility, among other things, through the Internal Revenue Acts and the Employee Retirement Income Security Act of 1974 (ERISA), as amended.

⁴See Department of Labor, Bureau of Labor Statistics, Employee Benefits in Medium and Large Firms, 1986 (Washington, D.C.: U.S. Government Printing Office, June 1987.)

⁵Department of Labor, Labor-Management Services Administration, Pension and Welfare Benefits Programs, Estimates of Participant and Financial Characteristics of Private Pension Plans, 1983.

Generally the requirements, through time periods or other constraints, limit the choices employers have in designing plans. Tax-qualified pension plans must have provisions that conform to these rules; however, a plan may use more liberal provisions than the law stipulates.

As table 1.1 shows, federal pension rules limit many aspects of pension plans, including:

- Participation—when a worker may join the plan and start earning retirement benefits.
- Vesting—how long a worker must remain with the employer to receive earned retirement benefits should the worker leave the plan before retirement.
- Coordination with social security (also called integration)—how benefit formulas account for social security, providing lower benefits as a percentage of compensation for lower-paid workers than for higher-paid workers. Revenue rules, known as integration rules, limit the size of allowable differences between lower-paid and higher-paid workers.
- Normal retirement—when a worker must be allowed to retire with full pension benefits.

Section 1: Introduction

Table 1.1: Legal Limits on Pension Plan Provisions Included in GAO's Analysis

Provision	Legal limits in			
	ERISA ^a	TEFRA ^b	REA ^c	TRA ^d
Participation	Age 25, 1 year of service. 3 years of service for plans with immediate full vesting.		Reduced age to 21.	Reduced to 2 years of service for plans with immediate full vesting.
Vesting	For all plans. 10-year cliff. ^e 5- to 15-year ^f graded.	For top-heavy plans. 3-year cliff. 2- to 6-year graded.		For non-top-heavy plans. 5-year cliff. 3- to 7-year graded.
Integration ^g				Eliminated methods resulting in \$0 benefit for lower-paid.
Normal Retirement	The later of age 65 or 10 years of service.			

Notes: In addition to the listed provisions, the legislation shown in some cases addressed other provisions or included additional components outside the scope of this report.

^aEmployee Retirement Income Security Act of 1974.

^bTax Equity and Fiscal Responsibility Act of 1982.

^cRetirement Equity Act of 1984.

^dTax Reform Act of 1986.

^eUnder a cliff schedule a participant moves from nonvested to fully vested status after a specified period of time.

^fWith a graded schedule a participant vests gradually over a period of time.

^gIntegration is addressed in the Internal Revenue Code of 1954.

Since 1974, the Congress has imposed more stringent qualification requirements that plans must meet to receive preferential tax treatment through numerous amendments to ERISA. These include provisions of the Tax Equity and Fiscal Responsibility Act of 1982, the Retirement Equity Act of 1984 and the Tax Reform Act of 1986 (see table 1.1). Under TEFRA, the Congress established top-heavy rules to curb perceived inequities in pension plans when an employer's key employees are the primary beneficiaries.⁶ A plan is top-heavy when more than 60 percent of the benefits or contributions go to company owners, officers, and other key employees. Top-heavy plans must comply with stricter requirements, including shorter vesting schedules and minimum benefits for non-key participants. REA, among other provisions, lowered the minimum participation age for all plans, top-heavy and non-top-heavy alike.

⁶A key employee is an officer, an employee owning more than a 5-percent interest in the firm, an employee owning more than a 1-percent interest in the firm and earning over \$150,000, or 1 of the 10 employees owning the largest interests in the firm.

TRA includes provisions that shorten the vesting period for non-top-heavy plans. In addition, for all plans that integrate benefits with social security, TRA further limits the extent of integration by reducing the differences allowed in pension benefits as a percentage of preretirement earnings between lower-paid and higher-paid workers.

Types of Pension Plans

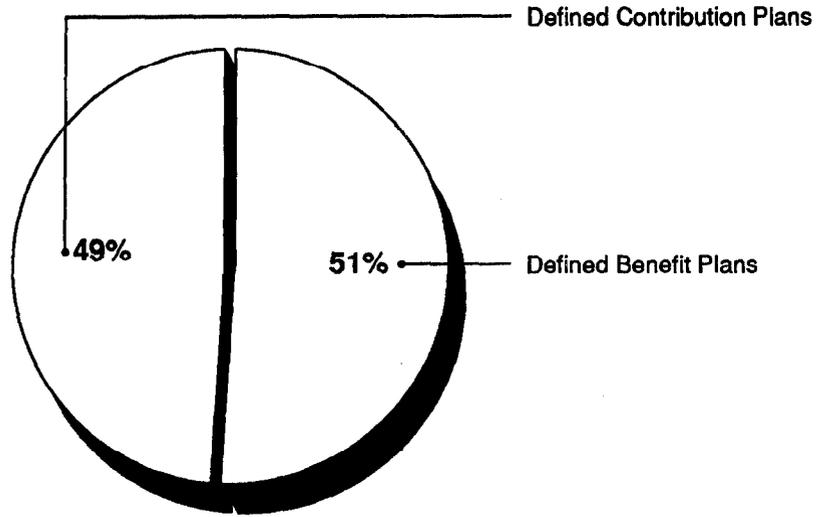
Employers may sponsor either defined benefit or defined contribution plans or both. Generally, the ERISA requirements apply similarly to both types of plans. In a defined benefit plan the retirement benefit is determined through a formula based on a worker's years of employment or participation in the plan (years of service), earnings, or both. The employer is responsible for funding the plan sufficient to pay the promised benefits. In a defined contribution plan, each participant has an individual account and the retirement benefit will depend on the amount of contributions and the investment experience of the account. Contributions are generally allocated in proportion to earnings.

According to the most recent data available, larger plans (those with 100 or more participants) were fairly evenly split between defined benefit plans and defined contribution plans in 1985, as shown in figure 1.1. In contrast, most smaller plans (those with fewer than 100 participants) were defined contribution plans. Similarly in our study population, plans sponsored by small employers were more likely to be defined contribution plans. (See app. II for information about the number of plans and participants in plans of various sizes represented in our data.)

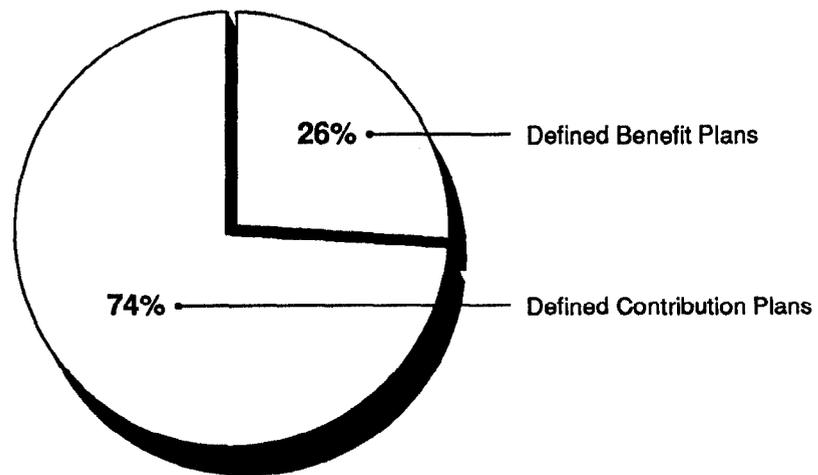
Both plan types have advantages and disadvantages for employees. From the worker's point of view, defined benefit plans provide predictable retirement benefits that typically are tied to earnings immediately before retirement. The risk of plan investment performance is borne by the employer, not the employee, and some portion of workers' vested benefits is generally guaranteed by the federal government through the Pension Benefit Guaranty Corporation. The main disadvantage of defined benefit plans is to short-term, mobile workers because benefits are usually frozen when the worker leaves and so are not subsequently adjusted for future real earnings growth and inflation.

In contrast, defined contribution plans are advantageous to short-term, mobile workers. Compared with a defined benefit plan, defined contribution plan assets build at a faster rate during the early years of participation, and workers' vested retirement benefits are generally less

Figure 1.1: Comparison of Pension Plan Types by Plan Size, 1985 (Percent of Plans)



Plans with 100 or more participants (N = 46,000)



Plans with fewer than 100 participants (N = 756,000)

Source: Department of Labor, Pension and Welfare Benefits Administration (IRS reports submitted by employers for plan year 1985).

affected by changing from one employer's plan to another. The main disadvantage is that workers bear the risk associated with investment performance of the assets in their individual accounts. Thus the size of their retirement benefits are not predictable.

Objectives, Scope, and Methodology

Section 304 of the Retirement Equity Act of 1984 requires us to study the effects of federal pension rules on women and report the results to the House Committees on Ways and Means and on Education and Labor, the Senate Committees on Finance and on Labor and Human Resources, and the Joint Committee on Taxation. Specifically, we were to

“conduct a detailed study (based on a reliable scientific sample of typical pension plans of various designs and sizes) of the effect on women of participation, vesting, funding, integration, survivorship features, and other relevant plan and Federal pension rules.”

As part of our work to meet the REA mandate, this briefing report focuses on the options employers sponsoring plans chose in designing their pension plans to meet federal pension rules. Our future work will examine the effects of these pension rules on women. The plans represented in our study population are of various types and sizes in operation in 1985 in industries with a high proportion of these plans. Specifically, we describe the differing pension plan options that employers chose within the limits of the law in 1985, and identify plans and participants that will be affected by pension rule changes in the Tax Reform Act of 1986. We focused on four provisions:

- How long workers must wait to participate in the plans.
- How long workers must wait to gain a legal right to receive earned benefits; that is, “vest.”
- How plans coordinate or “integrate” benefits with social security.
- How long workers must wait to be eligible for full retirement benefits.

Source and Scope of GAO Data

To collect data about pension plan provisions, we drew two statistical samples of private pension plans in operation in both 1984 and 1985. We chose these years because the ERISA annual reports filed with IRS for plan years beginning in 1984 were the most comprehensive and up-to-date

plan listings available at the time we drew our sample.⁷ We divided the plans by company size, those sponsored by employers with fewer than 100 employees (small employers) and 100 or more employees (large employers). Because our focus was on ongoing plans, we excluded from the samples those plans that terminated during the 1984 plan year. In addition, the 1984 listings did not include plans that began operating in 1985; consequently, our samples represent only plans in operation in 1985 that were also in operation in 1984.

Our samples contained the most prevalent types of defined benefit and defined contribution plans in industries with most of these types of plans. (For details about selected plan types, see app. I.) The sample of plans sponsored by small employers included plans in the five industry groups shown in table 1.2 and represented about 67 percent of our selected universe of small employers' plans for all plan types and industries. The sample of plans sponsored by large employers included plans in six industry groups and represented about 59 percent of our selected universe of large employers' plans for all plan types and industries.

Table 1.2: Industry Groups Included in GAO's Samples

Industry group	Plans sponsored by	
	Small employers	Large employers
Nondurable manufacturing		X
Durable manufacturing		X
Wholesale trade	X	X
Retail trade	X	X
Finance, insurance, real estate	X	X
Legal, medical, health services	X	X
Other services	X	

Note: These industry groups are based on the Standard Industrial Classification (SIC) code developed by the federal government in conjunction with U.S. business.

For defined benefit and defined contribution plans with more than one participant sponsored by small employers, we drew a simple random sample of 630 plans from the five industry groups stratified by plan type. About 65 percent (407) of the 630 sampled plans responded to our survey. Based on this response rate and the results of our nonresponse analysis, the estimates in this report apply to a study population of

⁷ERISA requires most employee benefit plans to file reports with IRS showing various financial, actuarial, and demographic data. Plans with 100 or more participants use the Form 5500, Annual Return/Report of Employee Benefit Plan. Plans with fewer than 100 participants use the Form 5500-C, Return/Report of Employee Benefit Plan at least every 3 years. These plans must file the Form 5500-R, Registration Statement of Employee Benefit Plan, for years they do not file the Form 5500-C.

about 78,000 defined benefit and defined contribution plans sponsored by small employers, and covering about 700,000 participants. (For details about our sample of plans sponsored by small employers and nonresponse analysis, see app. I.)

We used similar sampling criteria and methods for the defined benefit and defined contribution plans sponsored by large employers. Our sample of 211 plans with more than one participant was drawn from six selected industry groups. Because large employers were more likely to sponsor multiple plans, we used two-stage cluster sampling. We first randomly sampled employers with plans meeting our criteria, then randomly selected one plan from each selected employer. Based on our nonresponse analysis and the 63-percent response rate (133 of 211 plans), our estimates apply to a study population of about 10,500 defined benefit and defined contribution plans sponsored by large employers containing about 6.2 million participants. (Details about our sample of plans sponsored by large employers and nonresponse analysis appear in app. I.)

Plan data generally covered the most recently completed plan year for which information was available, usually ending in 1985 or 1986. Participant data generally applied to the beginning and end of the most recently completed plan year. Plan and participant data included information about the sampled plan and its participants and other plans sponsored by the employer in which these people participated. The focus of this report is on the sampled plan and its participants.

GAO Methodology

To assure the quality of the data, we edited survey responses for consistency and validity, checked documentation, such as summary plan descriptions and actuarial reports supplied by the employers, and called company personnel familiar with the plans to resolve apparent inconsistencies. We created a computerized database of these responses. For a random sample of cases, we verified that the computerized data did not differ from the data contained in the survey. We also used extensive computerized range and consistency checks to identify responses that seemed unreasonable or inconsistent. We resolved these problems by means of information in the plan documents, additional phone calls to the respondents, and our pension knowledge.

By identifying and grouping employers' responses about provisions for participation, vesting, integration with social security, and normal retirement eligibility, we were able to report the incidence of various

provisions for both plans and participants. We compared responses to the legal limits for these provisions in effect for the period covered by our data (which preceded TRA changes). Our objectives were to determine (1) which plans had provisions that used the legal limits, (2) which plans had provisions that were more advantageous to participants, and (3) how many participants were in these plans. Comparing responses to TRA requirements, we determined (1) which plans would have to change to accommodate TRA rules, (2) which would not, and (3) how many participants were in each of these kinds of plans.

We examined whether plans with particular provisions before TRA differed in employer size and type of plan. We also examined whether plans that would have to change as a result of TRA differed from other plans in employer size and type of plan. We only report differences that were significant at the 95-percent confidence level.

We did not obtain formal written comments on this report because we were not reviewing specific agency functions or programs. However, we discussed its contents with officials from IRS and the Department of Labor and incorporated their comments as appropriate.

Section 2: Plan Participation

Workers do not earn pension benefits until they meet their pension plans' participation requirements.¹ Employers may allow only workers who are above a certain age or have worked for the employer for a specified period of time, or both, to participate in a pension plan and start earning benefits.²

More plans in our study population used the combination of 21 years of age and 1 year of service than any other type of participation requirement, regardless of employer size or type of plan. Plans sponsored by large employers allowed participation earlier than required by law more often than plans sponsored by small employers, according to our analyses. Few plans sponsored by large or small employers will have to change their participation requirements under the Tax Reform Act of 1986. These requirements became effective in 1989.

Legal Requirements

Under ERISA, as amended by REA, the maximum age requirement for participation is 21 years, and the maximum service requirement is generally 1 year. For example, in a plan using the most common requirement of 21 and 1, an 18-year-old worker must wait until age 21 to be a plan member, but a 35-year-old new hire must wait 1 year. For the period covered by our data, ERISA allowed plans with full and immediate vesting in pension benefits to use up to a 3-year service requirement for participation. In this case, both the 18-year-old worker and the 35-year-old worker could be required to wait 3 years before participating in the plan. However, they would fully vest immediately upon participation, whereas, in the earlier case, they might have to wait longer to vest.

The Tax Reform Act of 1986 lowered the maximum years of service from 3 to 2 years beginning in 1989 for plans offering immediate vesting.³

¹Some plans, most of them subject to collective bargaining, have provided for retroactive recognition for benefit purposes of some or all service prior to date of membership in the plan.

²Participation may be limited to a specific group of employees as long as it does not result in discrimination in favor of officers, shareholders, or highly-paid workers.

³TRA also changed the rules about the minimum number of employees that must be included in a qualified plan. The impact of this change is outside the scope of this study.

What Were the Most Common Plan Participation Provisions?

About 80 percent (an estimated 72,000) of pension plans in our study population required that workers meet both age and service requirements to participate in the plan. An age and service combination was the most common participation requirement for both large and small employers' plans. However, large employers were less likely than small employers to use this type of requirement (see fig. 2.1). The most common combination, used by almost half the plans with an age and service requirement, was age 21 and 1 year of service, the legal limit. In all, about 2.7 million participants (40 percent) were in plans that used this requirement.

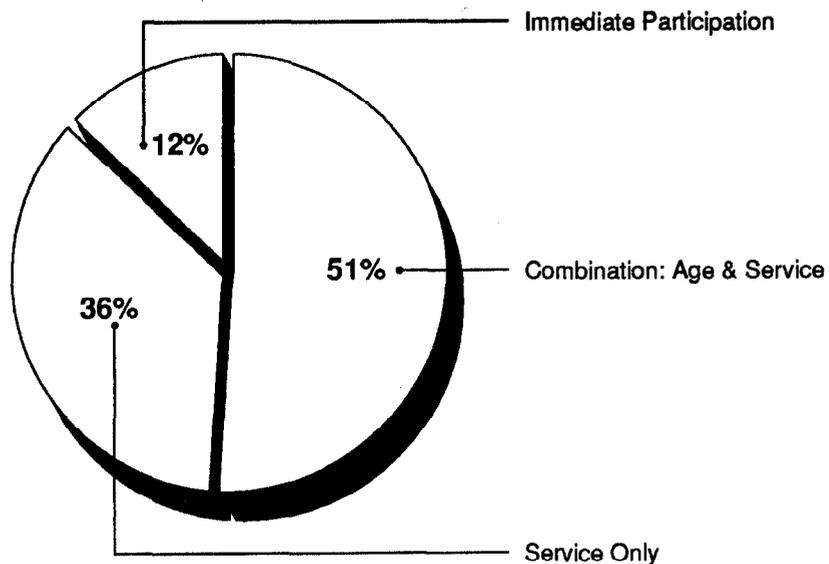
The second most common requirement was service only, which about 12 percent of plans (an estimated 11,000) used. Large employers were four times more likely than small employers to use service as the only requirement, as shown in figure 2.1. Almost three-quarters of the plans with only a service requirement used 1 year of service for participation. Few employers allowed immediate participation or used age as the only criterion.

How Often Did Plans Allow Earlier Participation Than the Legal Limits?

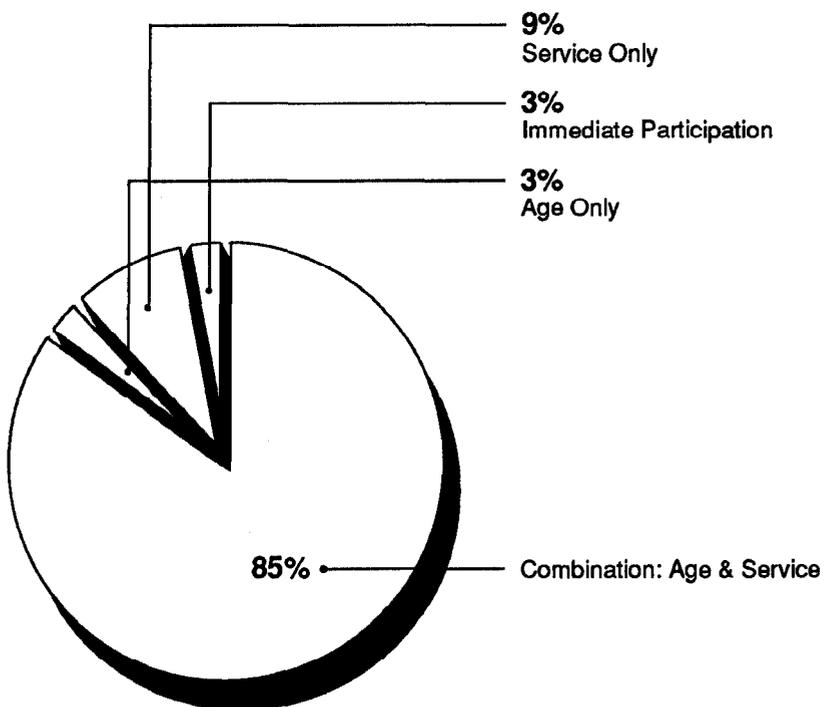
About 43 percent of all pension plans we studied allowed earlier participation than required by law and so were more advantageous to participants. These plans included more than half of the participants included in our analyses, an estimated 58 percent. About 65 percent of large employers' plans allowed earlier participation compared with about 40 percent of small employers' plans (see fig. 2.2).

In this analysis, defined contribution plans and defined benefit plans did not differ significantly among small employers. Among large employers, however, a higher proportion of defined contribution plans allowed earlier participation than defined benefit plans (about 80 vs. about 55 percent).

Figure 2.1: Comparison of Pension Plan Participation Provisions by Employer Size (Percent of Plans)



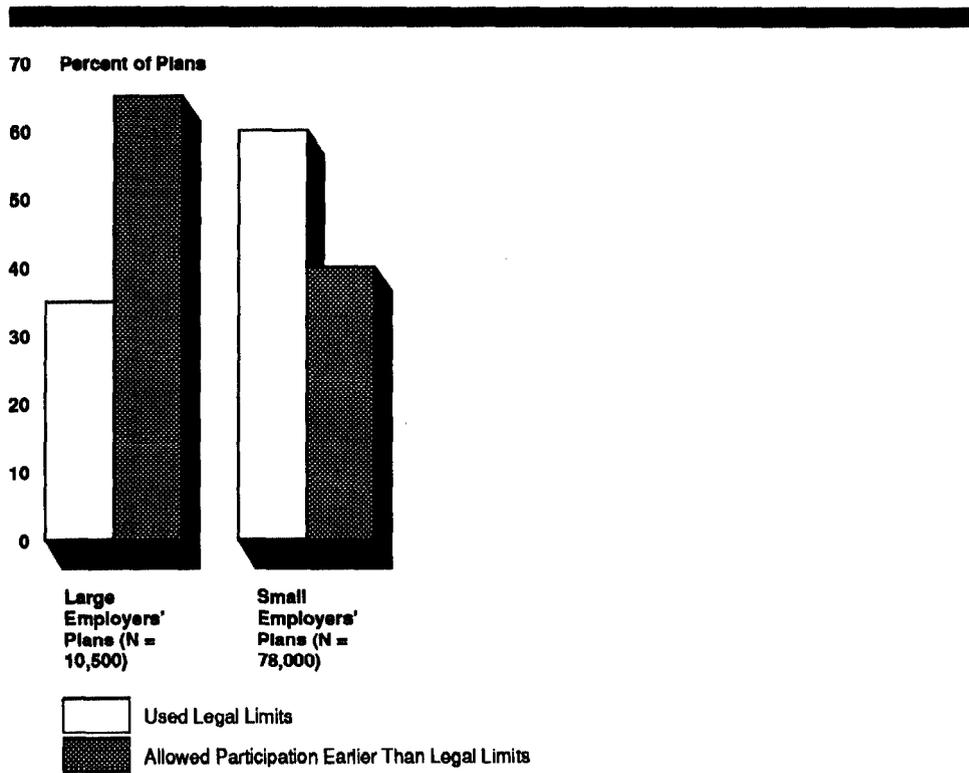
Large Employers' Plans (N= 10,500)



Small Employers' Plans (N = 78,000)

Note: About 1 percent of large employers' plans used age only.

Figure 2.2: Comparison of Pension Plan Participation Provisions With Legal Limits, by Employer Size



Notes: For this analysis, we classified plans with the following participation requirements as being earlier than the legal limits and, therefore, more advantageous to participants, other things being equal: (1) immediate participation, (2) only an age or service requirement, (3) a combination of age and service when age was less than 21 or service was less than 1, and (4) less than a 3-year service requirement with immediate vesting.

About 10 percent of small employers' plans allowed participation later than the legal limits. These plans were counted as using the legal limits because IRS granted extensions to plans to comply with the new limits during the period covered by our data.

How Many Plans Must Change to Meet Requirements of the Tax Reform Act of 1986?

About 2 percent of large plans (an estimated 200 plans) and 13 percent of small plans (an estimated 10,000 plans) will have to change to meet TRA requirements because they provide immediate vesting with a participation requirement of more than 2 years of service. These plans include fewer than 3 percent of participants, an estimated 182,000 people.

Section 3: Vesting

Although pension plan participants start to earn benefits when they enter the plan, they will not receive these benefits if they leave their job before the plan's normal retirement age unless they have worked for their employer long enough to vest in their pension benefits. That is, even after a worker meets the plan participation requirements, he or she may be required to work for a specified period of time to gain a legal right to receive earned benefits.

Because of top-heavy vesting requirements (see p. 13), most plans sponsored by small employers provided full vesting after 6 years of service compared with 10 years for most plans sponsored by large employers. However, small employers' plans that were subject to the same legal limits as large employers' plans because they were not top-heavy most often required more than 10 years for full vesting. Defined contribution plans sponsored by large employers were the most likely to provide full vesting sooner than required. Most large employers' plans and about half the small employers' plans that were not top-heavy will have to provide more rapid vesting to retain tax-qualified status under TRA.

Legal Requirements

In 1974, ERISA required employers that sponsored pension plans to give participants a right to their benefits before their retirement. As a result, employers could not fire workers just before retirement and avoid paying them pension benefits.

Cliff vesting and graded vesting are two common types of vesting. Under a cliff schedule, participants move from nonvested to fully vested status after a specified length of service, as shown in table 3.1. With a graded schedule, partial vesting begins after a specified length of service and increases by a fixed percentage each year until full vesting is achieved. Under a cliff schedule a worker gets all or nothing, but graded vesting gives the worker the right to a portion of the pension benefit earlier. However, under a graded schedule it may take longer for a worker to fully vest.

Table 3.1: Comparison of Cliff and Graded Vesting

Sample vesting schedule	Percent of vesting, by years of service														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
10-year cliff	0	0	0	0	0	0	0	0	0	100	100	100	100	100	100
5- to 15-year graded	0	0	0	0	25	30	35	40	45	50	60	70	80	90	100

The longest vesting schedules first allowed under ERISA included 10-year cliff and 5- to 15-year graded vesting. To assure a more equitable distribution of retirement benefits, the Congress has twice amended ERISA, shortening the maximum time employers may require for workers to vest in tax-qualified benefits. More rapid vesting, the Congress believed, would enhance the retirement income of women, minorities, and lower-income workers in general. These workers, tending to be more mobile, are more likely to terminate employment before vesting in their pension benefits.

As part of TEFRA, the Congress established vesting schedules for top-heavy plans, effective in 1984. Participants in these plans must vest at least as fast as (1) a 3-year cliff schedule, or (2) a 2- to 6-year graded schedule. As a general rule, the smaller the company, the more likely it is that a plan it sponsors will be top-heavy.

Effective in 1989, TRA reduces the maximum years workers must wait for full vesting from 10 to 5 for cliff vesting and from 15 to 7 for graded vesting, as shown in table 3.2.¹ Top-heavy plans still must comply with TEFRA's accelerated top-heavy schedules.²

Table 3.2: Comparison of Laws Affecting Maximum Years to Full Vesting

Type of vesting by legislative authority (effective dates)	Percent of vesting, by years of service											
	1	2	3	4	5	6	7	8	9	10	15	
Cliff:												
ERISA, 10-year (1976)	0	0	0	0	0	0	0	0	0	0	100	100
TEFRA, 3-year for top-heavy plans (1984)	0	0	100	100	100	100	100	100	100	100	100	100
TRA, 5-year for non-top-heavy plans (1989)	0	0	0	0	100	100	100	100	100	100	100	100
Graded:												
ERISA, 5- to 15-year (1976)	0	0	0	0	25	30	35	40	45	50	100 ^a	
TEFRA, 2- to 6-year for top-heavy plans (1984)	0	20	40	60	80	100	100	100	100	100	100	
TRA, 3- to 7-year for non-top-heavy plans (1989)	0	0	20	40	60	80	100	100	100	100	100	

^aThe 5- to 15-year graded vesting increased by 10 percentage points per year between year 10 and year 15.

¹Passage of TRA has led to a debate about whether to repeal the top-heavy rules, including the vesting requirements. Proponents of repeal contend that top-heavy rules are similar to TRA rules, while opponents argue that top-heavy rules provide faster vesting, which protects shorter-tenured workers. For further information, see *Pension Plans: Vesting Status of Participants in Selected Small Plans* (GAO/HRD-88-31, Oct. 30, 1987).

²Multiemployer plans satisfy the minimum vesting requirements of TRA if the benefits are fully vested after 10 years of service.

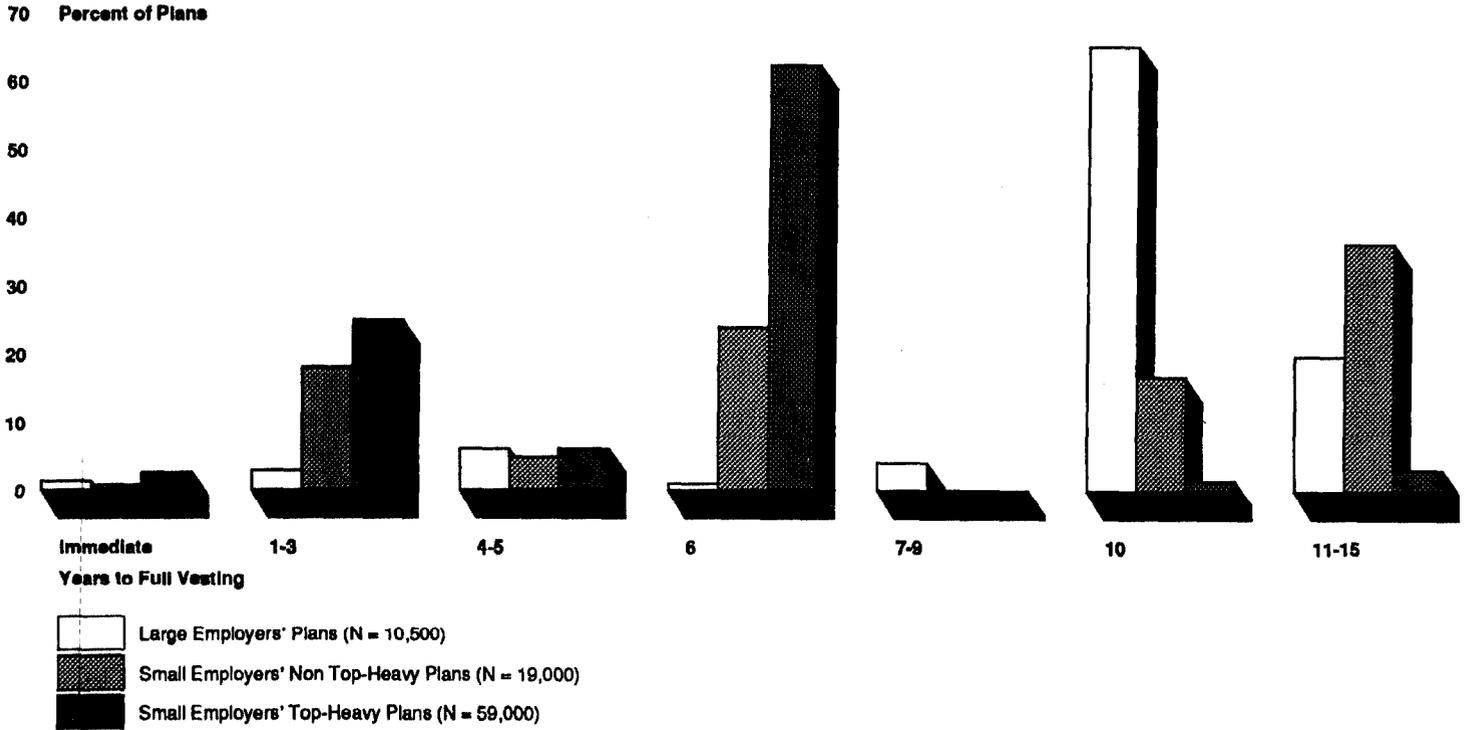
A plan using one of the ERISA vesting schedules may not be tax-qualified should IRS determine that the plan, in operation, discriminates against certain classes of workers. Under certain conditions, IRS may require plans to use more rapid vesting schedules than otherwise required by ERISA, as amended. On a case-by-case basis, IRS determines if benefits or forfeitures have tended, or if there is reason to believe they will tend to discriminate in favor of employees who are officers, shareholders, or highly compensated. For instance, discrimination in operation could be found in a small plan if (1) after 10 years of operation only owners or highly compensated employees had any vested benefits or (2) a pattern of staff firings just before the employee's account balance became vested was evident. We do not know how many of the plans in our sample have been reviewed by IRS.

What Were the Most Common Provisions for Full Vesting?

About 47 percent (an estimated 41,000) of plans we studied provided full vesting after 6 years of service, mainly because many small employers' plans had to use the shorter top-heavy vesting requirements. These plans contained about 4 percent of participants, an estimated 300,000 people. Most of the participants, however, about 68 percent, (4.7 million) were in plans that provided full vesting after 10 years of service, largely because most large employers' plans used 10-year cliff vesting.

Most pension plans sponsored by small employers allowed full vesting sooner than plans sponsored by large employers. About three-fourths (an estimated 59,000) of small employers' plans in our study population were top-heavy. Most of these top-heavy plans (about 62 percent) used the longest vesting schedule permitted under the top-heavy rules, 2- to 6-year graded vesting (see fig. 3.1). In contrast, no large employers in our analysis were top-heavy, and most large employers (about 64 percent) required 10 years of service for full vesting.

Figure 3.1: Comparison of Years Required to Fully Vest by Employer Size and Top-Heavy Status



Notes: The 1-3 year category includes plans with full and immediate vesting after 1-3 years of service. We did not determine why top-heavy plans reported using 10-year and 11-15 year vesting.

Small employers' plans that were not top-heavy (and so were subject to the same legal limits as large employers' plans) also had different requirements than large employers' plans (see fig. 3.1). Although most

large employers allowed full vesting after 10 years of service, small non-top-heavy plans tended to require either more than 10 years of service (about 35 percent) or 6 years of service (about 23 percent). Indeed, many of these plans used the 2- to 6-year graded schedule required by the top-heavy rules, although they were not required to do so.

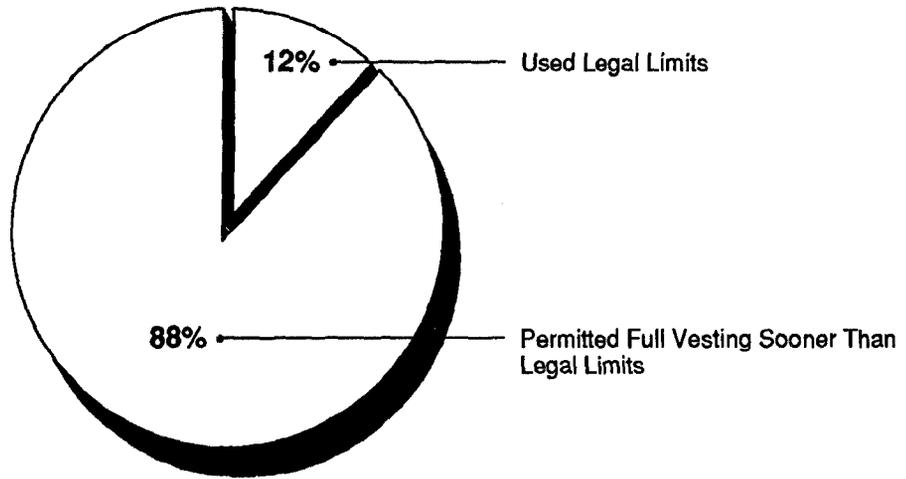
How Many Plans Allowed Full Vesting Sooner Than Legal Limits?

About one-third of all plans allowed full vesting in a shorter period than required by law, and so were more advantageous to participants in the short term than plans using the legal limits, according to our analysis. These plans contained about 37 percent of participants, an estimated 2.6 million people. Large employers' defined contribution plans provided full vesting earlier than defined contribution plans sponsored by small employers, as shown in figure 3.2. Large employers' defined contribution plans also provided full vesting in a shorter period than defined benefit plans sponsored by either large or small employers. For defined benefit plans, about 21 percent (an estimated 5,000 plans) allowed full vesting earlier than required by law, with little difference between small and large employers' plans.

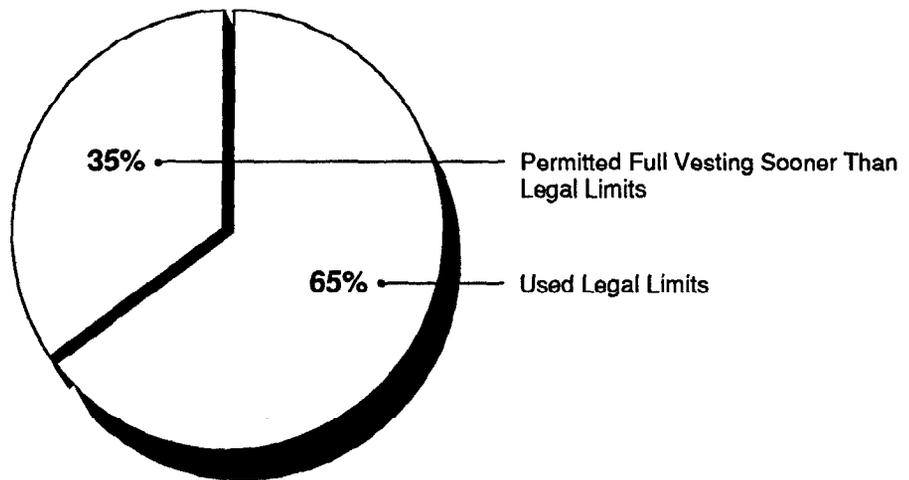
How Many Plans Must Change Vesting Provisions Under the Tax Reform Act of 1986?

Top-heavy plans, about 75 percent of the small employers' plans in the industries we studied, were unaffected by TRA's vesting changes. About 90 percent of plans sponsored by large employers will have to provide more rapid vesting to retain tax-qualified status under TRA, as shown in figure 3.3. About 25 percent of all small employers' plans were not top-heavy, and about half of these plans will have to change vesting schedules. About 85 percent of plan participants, an estimated 5.8 million workers, were in pension plans that would not meet the TRA vesting requirements.

Figure 3.2: Comparison of Defined Contribution Plans Permitting Full Vesting Sooner Than Legal Limits, by Employer Size (Percent of Plans)



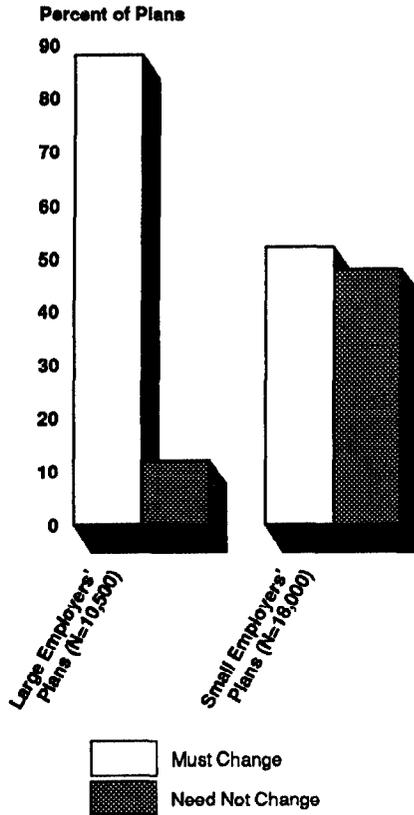
Large Employers' Plans (N = 4,000)



Small Employers' Plans (N = 61,000)

Note: For this analysis, we classified certain vesting schedules as allowing full vesting sooner than the legal limits and, therefore, being more advantageous to participants in the short term, other things being equal. These schedules were: (1) top-heavy plans that provided workers with full vested benefits earlier than 3 years under a cliff schedule and earlier than 6 years under a graded schedule, (2) plans that were not top-heavy that provided workers with full vested benefits earlier than 10 years under a cliff schedule and earlier than 15 years under a graded schedule, and (3) any plans with immediate vesting that required less than 3 years of service for participation in the plan.

Figure 3.3: Impact of the Tax Reform Act of 1986 on Vesting for Non-Top-Heavy Plans, by Employer Size



Beginning in 1989, TRA requires that workers be fully vested in their pension benefits after 5 years of service under a cliff schedule, or be partially vested after 3 years and fully vested after 7 years under a graded schedule. TRA's impact on the vesting provisions of non-top-heavy plans sponsored by large and small employers differs because many plans sponsored by small employers use accelerated top-heavy vesting schedules that already meet TRA requirements, even when the plans are not top-heavy.

Section 4: Methods of Coordinating Pension Benefits With Social Security

Employers contribute to their employees' retirement through the social security payroll tax and through employer-sponsored pension plans. The means by which pension benefits are adjusted to reflect the presence of social security benefits is known as integration.¹ Under the social security benefit formula, lower-paid workers receive a greater proportion of their preretirement earnings from social security than do higher-paid workers. Because of this, the Congress allows employers to use integrated private pension benefit formulas that favor higher-paid workers, but strictly limits the extent to which these workers can be favored.

Fewer than half the plans in our selected industries accounted for social security benefits in calculating pension benefits, with defined benefit plans being almost twice as likely as defined contribution plans to be integrated with social security. The Tax Reform Act of 1986 eliminated integration methods that resulted in some lower-paid workers receiving no benefits.² This change will affect about one-fourth of all integrated plans, most sponsored by small employers.

Legal Requirements

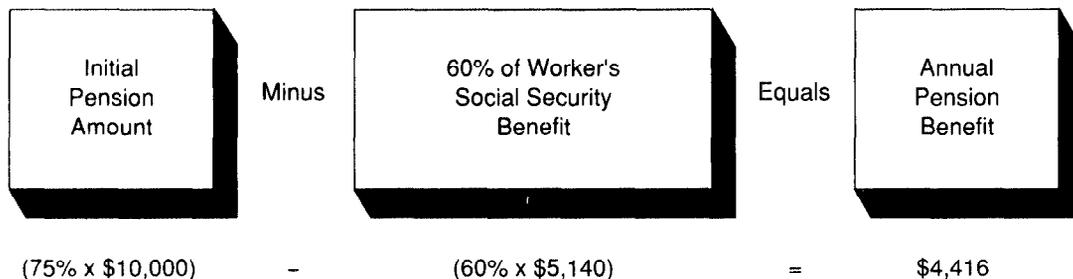
Employers sponsoring defined benefit plans may use one of two methods of integration—offset or excess. Employers sponsoring defined contribution plans may use the excess method. Under the offset method, a worker's initial pension amount is reduced by a stated percentage of his or her social security benefit to determine the pension benefit. Because of the social security system's tilt toward lower-paid workers, offsetting a worker's pension amount by a percentage of social security results in a larger reduction (in terms of preretirement earnings) for lower-paid workers. Only defined benefit plans may use this method. Figure 4.1 demonstrates this calculation for a worker in an offset plan with a final average salary of \$10,000 at retirement. The pension benefit formula in this example is based on 75 percent of final average pay with an offset of 60 percent of the social security benefit.³ These percentages may vary from plan to plan within the confines of the law.

¹For further information on integration see Pension Integration: How Large Defined Benefit Plans Coordinate Benefits with Social Security (GAO/HRD-86-118BR, July 21, 1986).

²TRA included other changes in integration; however, the extent of these changes, which require some plans to modify their benefit formulas while allowing them to maintain the same integration method, is outside the scope of this study.

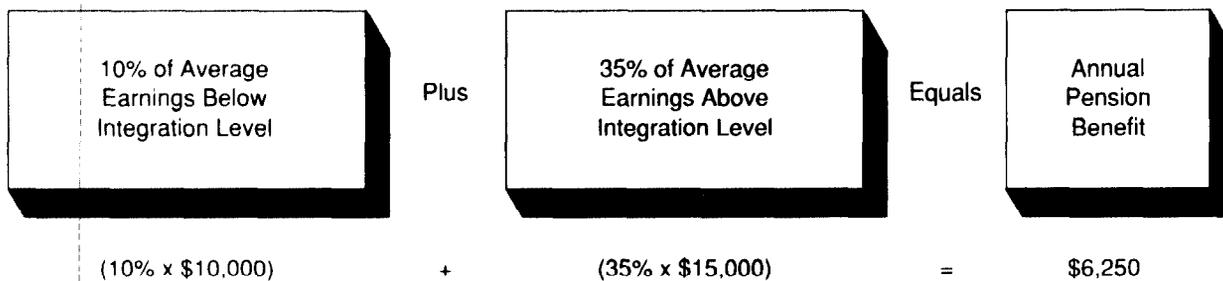
³Final average pay is the participant's average salary in the final years he or she is in the plan—often the last 3 or 5 years.

Figure 4.1: Pension Benefit Computation Using the Offset Integration Method



Under the excess method, pension benefits are calculated at different rates on earnings above and below a level specified in the plan known as the integration level. Unlike offset plans, excess plans do not directly use a worker's social security benefit to calculate pension benefits. Instead, these plans provide a higher pension benefit on earnings above the integration level than on earnings below that level. For example, a worker earning \$25,000 annually who participates in an excess defined benefit plan with an integration level of \$10,000 would receive the pension benefit shown in figure 4.2. The integration level and percentages used may vary from plan to plan within the confines of the law. Both defined benefit and defined contribution plans can use this method.

Figure 4.2: Pension Benefit Computation Using the Excess Integration Method

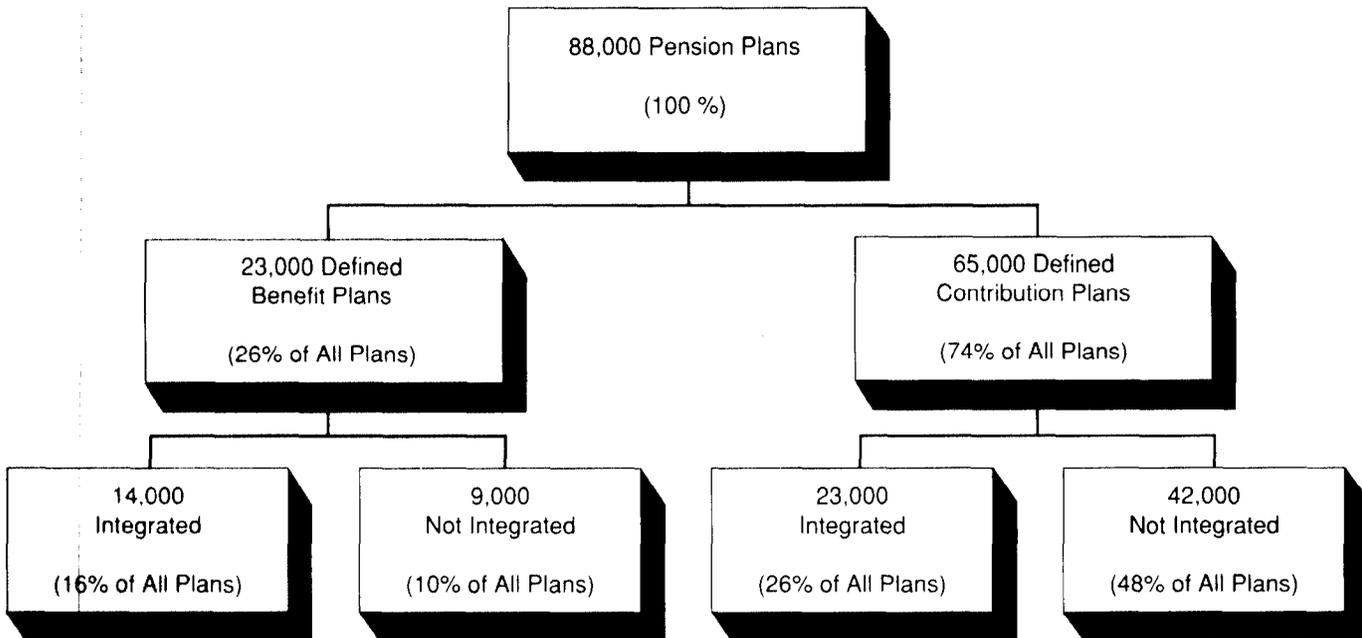


Under TRA, defined benefit excess plans that provide no benefit on earnings below the integration level will no longer be qualified to receive preferential tax treatment beginning in 1989. These plans commonly are referred to as pure excess plans. Any defined contribution plan with a contribution formula that could result in no contributions to participants with earnings below the integration level will be treated as a pure excess plan under this provision.

How Many Plans Integrated Pension Benefits and Social Security?

In the industries in our study population, about 37,000 pension plans (about 40 percent) integrated their benefits with social security with little difference between plans sponsored by small and large employers. These integrated plans contained about half the participants, an estimated 3.7 million people. About 60 percent of defined benefit plans were integrated (16 percent of all plans), compared with about 35 percent of defined contribution plans (26 percent of all plans), as shown in figure 4.3. Similar proportions of large and small employers' defined benefit plans were integrated (about 70 vs. 60 percent).

Figure 4.3: Use of Integration by Pension Plan Type



Most defined contribution plans sponsored by either large or small employers were not integrated, as shown in figure 4.4. However, defined contribution plans sponsored by small employers were almost three times as likely to integrate as defined contribution plans sponsored by large employers.

Many more integrated plans used the excess method of integration than the offset method (see fig. 4.5). In fact, about 80 percent of all integrated plans (an estimated 30,000 plans) used the excess method of integration. Integrated defined benefit plans, which may use either integration method, were split rather evenly between the two—about 7,000 plans used each method. However, for integrated defined contribution plans, which represented about 60 percent of the integrated plans, the excess method is the only integration method available.

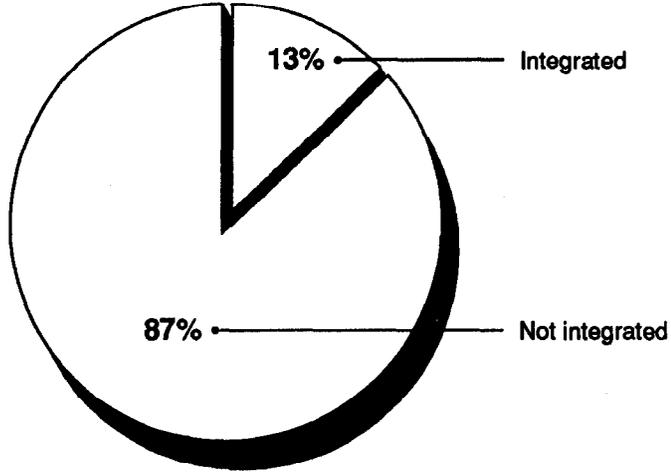
The offset method included almost one in five integrated plans (an estimated 7,000 plans), but many were the larger defined benefit plans, containing two out of the three participants in integrated plans. Of an estimated 3.7 million participants in integrated plans, an estimated 2.4 million were in defined benefit plans using the offset method of integration.

How Many Plans Must Change From the Pure Excess Integration Method Under the Tax Reform Act of 1986?

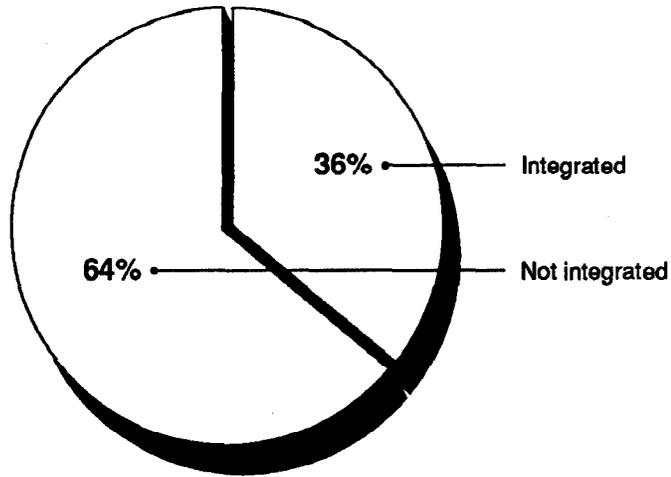
About 11 percent of all plans (almost 10,000 plans) used a pure excess formula that will no longer receive preferential tax treatment beginning in 1989. These defined benefit and defined contribution plans included about 200,000 participants in our study population. Affected plans, about one-fourth of all integrated plans, must revise their benefit formulas to retain tax-qualified status. Most affected plans were sponsored by small employers. In fact, small employers' plans were three times more likely to be affected than large employers' plans. Specifically,

- about 12 percent of small employers' plans (an estimated 9,500 plans) used a pure excess formula, and
- about 4 percent of large employers' plans (an estimated 400 plans) used a pure excess formula.

Figure 4.4: Use of Integration by Defined Contribution Plans, by Employer Size
(Percent of Plans)



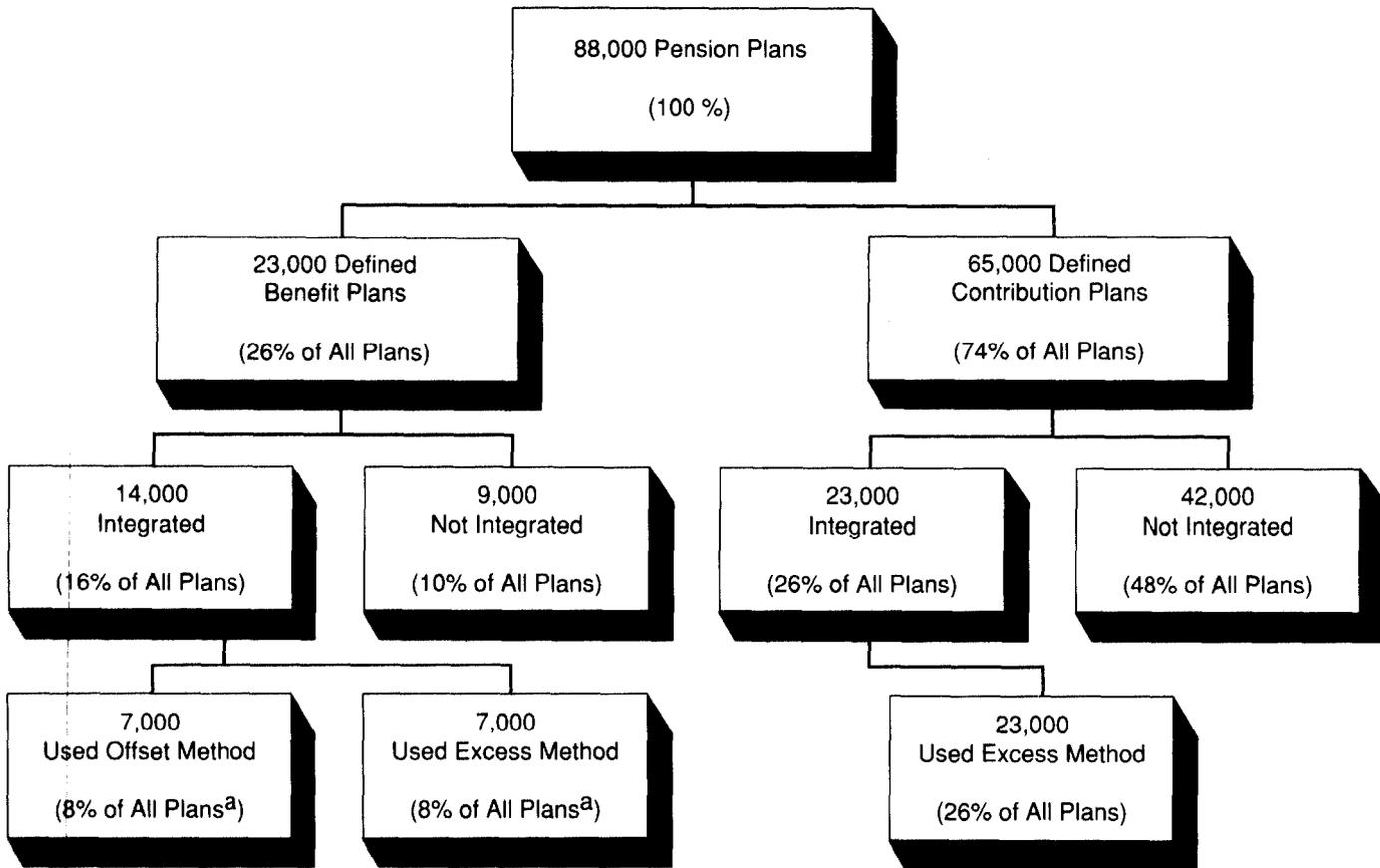
Large Employers' Plans (N = 4,000)



Small Employers' Plans (N = 61,000)

Section 4: Methods of Coordinating Pension Benefits With Social Security

Figure 4.5: Use of Integration Methods by Plan Type



Note: Fewer than 1 percent of defined benefit plans used a combination of excess and offset methods.

Section 5: Normal Retirement Eligibility

Pension plan provisions establish normal retirement requirements that a worker must meet before becoming eligible to receive full benefits.¹ These include a minimum age or a minimum age and service requirement.² Most plans permitted normal retirement at age 65, usually without an accompanying service requirement, but normal retirement eligibility before age 65 was not uncommon.

Legal Requirements

Under ERISA, any participant in a tax-qualified plan must be allowed to retire with full benefits at age 65, as long as the person participated in the plan for at least 10 years. Of course, pension plans may allow normal retirement earlier than this legal limit. Plans may also allow participants to elect early retirement with reduced benefits.

What Were the Most Common Normal Retirement Provisions?

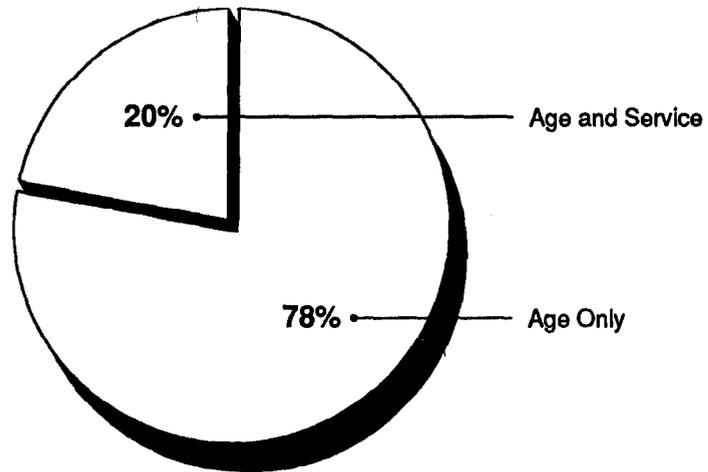
About two-thirds (some 58,000) of the plans in our selected industries specified a minimum age for normal retirement without any service requirement. Large employers more often specified only a minimum age requirement than did small employers (see fig. 5.1). About 86 percent of plans specifying only a minimum age (an estimated 50,000 plans) required participants to reach age 65 to retire with full benefits. Fourteen percent of these plans (an estimated 8,000) permitted normal retirement before age 65. About 74 percent of the participants included in our study (an estimated 5.1 million) were in plans with only an age-65 normal retirement requirement and no service requirement.

The second most common normal retirement provision was a combination of age and service (an estimated 30,000 plans). These plans included about 900,000 participants. Small employers required a combination of age and service almost twice as often as large employers. About half of all plans requiring both age and service used age 65 and 10 years of service. Fewer than 1 percent of all plans allowed normal retirement at any age after meeting a minimum service requirement.

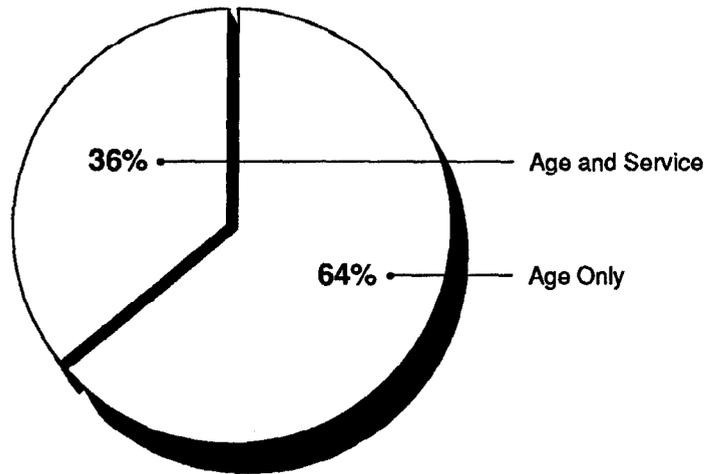
¹In a defined contribution plan a participant need only be fully vested to be eligible to receive full benefits when he or she leaves the plan. Nevertheless, these plans may still include normal retirement requirements.

²Years of service include all the years a worker has worked for the employer; years of participation include only those years that the worker has participated in the pension plan. In this section, the concept "years of service" encompasses both service and participation.

Figure 5.1: Comparison of Normal Retirement Pension Plan Provisions, by Employer Size (Percent of Plans)



Large Employers' Plans (N = 10,500)



Small Employers' Plans (N = 78,000)

Notes: About 2 percent of large employers' plans reported requiring service only.

Less than one-half of 1 percent of small employers' plans reported requiring only service.

Looking at all plans that used an age requirement (about 88,000 plans, including those that used both age and service requirements), one out of five plans used an age less than 65 as the normal retirement age. Among small employers' plans, defined benefit plans were more likely to permit normal retirement before age 65 than were defined contribution plans. Specifically, normal retirement before age 65 was permitted by

- about 53 percent of small employers' defined benefit plans (an estimated 9,000 plans) and
- about 20 percent of small employers' defined contribution plans (an estimated 12,000 plans).

In contrast, among large employers' plans, defined contribution plans offered normal retirement before age 65 slightly more often than defined benefit plans. Specifically,

- about 28 percent of large employers' defined contribution plans (an estimated 1,000 plans) offered normal retirement before age 65, and
- about 12 percent of large employers' defined benefit plans (about 800 plans) offered normal retirement before age 65.

How Often Did Plans Allow Normal Retirement Earlier Than Legal Limits?

About 83 percent of both large and small employers' plans allowed normal retirement earlier than age 65 and 10 years of service, the legal limit, and so were more advantageous to participants. These plans, which often required only that participants attain a particular age, most often 65, included about 95 percent of participants (about 6.5 million people).

GAO's Pension Plan Samples and What They Represent

From ERISA reports for employee benefit plans filed for the plan year beginning during 1984,¹ we drew two samples of private pension plans operating in both 1984 and 1985. One sample contained plans sponsored by employers with fewer than 100 employees (small employers), the other plans sponsored by employers with 100 or more employees (large employers). The reports maintained by IRS were the most up-to-date information available on pension plans operating in 1984 and 1985 at the time we drew our samples but did not include plans that began operating in 1985. Consequently, both samples include only plans that started before 1985.

Plans Sponsored by Small Employers

We estimated that 202,299 plans sponsored by small employers met our sampling criteria. The plans were as follows:

1. Ongoing plans of the four most prevalent types—fixed benefit and unit benefit defined benefit plans, and profit-sharing and money purchase defined contribution plans.²
2. Plans in one of the five industry groups with the most of these types of plans: wholesale trade; retail trade; finance, insurance, and real estate; legal, medical, and health services; and other services.
3. Plans sponsored by a single employer with fewer than 100 employees.
4. Plans with more than one participant.
5. Not Keogh plans for self-employed individuals.

The distribution of the universe and sample among the selected plan types and industry groups is shown in table I.1.

¹Form 5500 for plans with 100 or more participants and Form 5500-C for plans with fewer than 100 participants.

²A fixed benefit plan provides a retirement benefit that is not related to the years of service of the plan participant; e.g., a specified percentage of compensation, such as 50 percent of the participant's final pay. A unit benefit plan uses a formula that provides an explicit unit of benefit for each recognized year of service with the employer; for example, 1 percent of compensation per year of service. In contrast, rather than fixing benefits by a formula, profit-sharing and money purchase plans fix the amount of the employer's contribution to each participant's account. In a profit-sharing plan, the total employer contribution is a function of profits and the amount contributed to each participant is generally in proportion to the participant's share of total compensation paid to all participants. In a money purchase plan, the employer is committed to periodic contributions according to a specific formula, usually a percentage of salary.

**Appendix I
GAO's Pension Plan Samples and What
They Represent**

Table I.1: GAO's Universe and Sample of Plans Sponsored by Small Employers

	Original universe	Original sample	Eligible ^a sample	Adjusted universe	Response rate (percent)	Population estimate
Fixed benefit plans						
Wholesale trade	3,855	31	20	2,487	85	2,114
Retail trade	3,356	17	10	1,974	80	1,579
Finance, insurance, and real estate	4,416	25	10	1,766	60	1,060
Legal, medical, and health services	17,646	119	78	11,566	59	6,821
Other services	11,054	71	39	6,072	54	3,270
Unit benefit plans						
Wholesale trade	478	34	27	380	78	296
Retail trade	430	28	24	369	71	261
Finance, insurance, and real estate	984	53	39	724	72	520
Legal, medical, and health services	1,659	82	51	1,032	61	627
Other services	936	56	34	568	65	368
Profit-sharing plans						
Wholesale trade	10,942	33	23	7,626	61	4,642
Retail trade	11,254	20	15	8,441	80	6,753
Finance, insurance, and real estate	9,902	21	9	4,244	78	3,301
Legal, medical, and health services	44,633	94	61	28,964	70	20,417
Other services	25,605	81	37	11,696	41	4,742
Money purchase plans						
Wholesale trade	3,431	16	11	2,359	64	1,501
Retail trade	3,254	15	10	2,169	100	2,169
Finance, insurance, and real estate	4,881	24	12	2,441	67	1,627
Legal, medical, and health services	31,698	153	98	20,303	65	13,112
Other services	11,885	50	22	5,229	55	2,852
Total	202,299	1,023	630	120,410	65^b	78,031^c

^aOriginally sampled plans were ineligible if they were (1) Keogh plans for self-employed persons, (2) plans with only one participant, (3) sponsored by employers with 100 or more employees, or (4) terminated during the 1984 plan year.

^bThe response rate is weighted to represent industry and plan types in proportion to their representation in the universe.

^cPopulation estimate has total precision of $\pm 5,471$ plans (± 7 percent).

Our original stratified sample included a total of 1,023 plans selected from each of the four plan types. Within each plan type, we allocated the sample across selected industry groups generally in proportion to each group's representation in the universe. We determined the final

sample size of 630 and adjusted our universe estimates after we identified 393 cases in the original sample that did not meet our sampling criteria. The adjusted universe included an estimated 120,410 plans (+ 7,373).

Among these 630 sampled plans, 65 percent (407) responded across all the sampled plan types and industries. We compared respondents and nonrespondents on several characteristics—plan size, top-heavy status, integration with social security, vesting method, industry, and plan type—and found some significant differences. For example, defined contribution plans that did not respond tended to be smaller than those that did respond. Because of these differences, our estimates apply only to that proportion of the adjusted universe that responded to our survey. As indicated in the final column of table I.1, our respondents represent an estimated 78,031 plans (+ 5,471). These plans contained an estimated 700,000 participants (+ 100,000).

Plans Sponsored by Large Employers

We estimated that 19,553 plans sponsored by large employers met our sampling criteria. These plans were ongoing plans in one of the three most prevalent plan types—fixed benefit, unit benefit, or profit-sharing—in one of six industry groups containing most of these types of plans—nondurable manufacturing; durable manufacturing; wholesale trade; retail trade; finance, insurance, and real estate; and legal, medical, and health services. In addition, sampled plans were sponsored by a single employer or a controlled group (where all the business entities are under common control) with 100 or more employees and contained more than one participant. Table I.2 shows the distribution of the universe and sample among the selected plan and industry types.

**Appendix I
GAO's Pension Plan Samples and What
They Represent**

Table I.2: GAO's Universe and Sample of Plans Sponsored by Large Employers

	Original universe	Original sample	Eligible^a sample	Adjusted universe	Response rate (percent)	Population estimate
Fixed benefit plans						
Nondurable manufacturing	526	4	4	526	25	132
Durable manufacturing	587	10	8	470	50	235
Wholesale trade	187	3	1	62	0	0
Retail trade	151	2	1	76	0	0
Finance, insurance, and real estate	295	4	4	295	50	148
Legal, medical, and health services	235	4	3	176	33	59
Unit benefit plans						
Nondurable manufacturing	2,796	31	29	2,616	83	2,165
Durable manufacturing	4,251	50	39	3,316	46	1,530
Wholesale trade	429	5	4	343	50	172
Retail trade	426	5	3	256	100	256
Finance, insurance, and real estate	1,169	13	11	989	73	719
Legal, medical, and health services	1,278	15	14	1,193	79	937
Profit-sharing plans						
Nondurable manufacturing	1,735	28	25	1,549	76	1,177
Durable manufacturing	2,244	29	25	1,934	64	1,238
Wholesale trade	824	11	11	824	45	375
Retail trade	992	14	13	921	69	638
Finance, insurance, and real estate	1,056	14	12	905	67	603
Legal, medical, and health services	372	6	4	248	50	124
Total	19,553	248	211	16,699	63^b	10,507^c

^aOriginally sampled plans were ineligible if they were (1) sponsored by employers with less than 100 employees or (2) terminated during the 1984 plan year.

^bThe response rate is weighted to represent industry and plan types in proportion to their representation in the universe.

^cPopulation estimate has total precision of $\pm 1,019$ plans (± 9.7 percent).

The original sample included 248 plans allocated across the selected plan types and industry groups generally in proportion to each plan type's and group's representation in the universe. We determined the final sample size of 211 plans and adjusted the universe estimates after identifying 37 cases in the original sample that did not meet our sampling criteria. The adjusted universe included an estimated 16,699 plans (+ 818).

Among these 211 sampled plans, 63 percent responded across all the included plan types and industry groups. We compared respondents and nonrespondents on several characteristics—plan size, age of the plan,

Appendix I
GAO's Pension Plan Samples and What
They Represent

whether or not the plan was integrated with social security, industry, and plan type—and found one significant difference. As with the sample of plans sponsored by small employers, defined contribution plans that did not respond tended to be smaller than those that did. Consequently, the estimates in this report apply only to that proportion of the adjusted universe that responded to our survey. As indicated in the final column of table II.2, our respondents represent an estimated 10,507 plans (+ 1,019). These plans include an estimated 6.2 million participants (+ 1.9 million).

Information on Plans and Participants in GAO's Study Population

Table II.1: Percent Distribution of Large and Small Private Pension Plans and Participants by Plan Type

No. of participants	Plans			Participants		
	Total	Defined benefit	Defined contribution	Total	Defined benefit	Defined contribution
Under 100	100	22	78	100	23	77
100 and Over	100	60	40	100	64	36
Total	100	26	74	100	60	40

Note: For information on the study population, see app. I.

Table II.2: Number of Private Pension Plans by Number of Participants in Plan and Plan Type

No. of participants	Plans			Participants		
	Total	Defined benefit	Defined contribution	Total	Defined benefit	Defined contribution
2-9	62,400	14,100	48,300	263,700	52,200	211,500
10-24	8,100	1,600	6,500	114,000	25,500	88,500
25-49	6,900	1,300	5,600	243,800	50,300	193,500
50-99	1,200	400	800	83,800	31,500	52,300
100-249	4,400	2,700	1,700	692,800	409,000	283,800
250-499	2,600	1,600	1,000	883,000	540,500	342,500
500-999	1,700	1,000	700	1,148,300	708,000	440,300
1,000 & up	1,200	600	600	3,438,600	2,278,200	1,160,400
Total	88,500^a	23,300	65,200	6,868,000^b	4,095,200	2,772,800

^aPopulation estimate for plans has total precision of $\pm 5,600$.

^bPopulation estimate for participants has total precision of ± 1.9 million.

Table II.3: Percent Distribution of Defined Benefit and Defined Contribution Plans and Participants by Size of Plan

No. of participants	Plans			Participants		
	Total	Defined benefit	Defined contribution	Total	Defined benefit	Defined contribution
2-9	70	61	74	4	1	8
10-24	9	7	10	2	1	3
25-49	8	6	9	3	1	7
50-99	1	2	1	1	1	2
100-249	5	12	3	10	10	10
250-499	3	7	2	13	13	12
500-999	2	4	1	17	17	16
1,000 & up	1	3	1	50	56	42
Total^a	100	100	100	100	100	100

^aPercents may not add to 100 due to rounding.

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Pension Plans: Vesting Status of Participants in Selected Small Plans (GAO/HRD-88-31, Oct. 30, 1987).

Pension Integration: How Large Defined Benefits Plans Coordinate Benefits With Social Security (GAO/HRD-86-118BR, July 21, 1986).

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