Factors Affecting Employer-provided Retirement Benefits

A variety of factors affect the benefits that covered workers receive from employer-provided retirement plans. For defined benefit plan participants, these factors include the benefit formula, retirement age, length of service, and pre-retirement earnings. For defined contribution plan participants, they include contribution amounts and investment earnings.

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Employer-provided retirement benefits can enhance economic security in retirement. In 1994, 91 percent of aged units[1] with at least one member over 65 years of age received Social Security benefits, and 30 percent received income from private pensions. Among all recipients, however, private pensions, on average, accounted for one-fourth of total income. In the same year, median total income only from Social Security was $10,817 for aged units 65 or older, compared to $21,375 for those with income from both Social Security and a private pension.

Employer-provided retirement benefits may become more important to the economic security of future retirees. Many proposals for assuring the long-term viability of the current Social Security system depend on a healthy private pension system as well as on workers saving more for retirement.[2]

This article examines recent changes in retirement plan coverage and the factors affecting the payments workers receive from defined benefit and defined contribution retirement plans.[3]

Retirement plan coverage

Overall retirement plan coverage has remained relatively stable in recent years. There has been a shift, however, in the types of plans providing coverage to workers.

In the mid-1980s, private sector employers increasingly added 401(k) tax deferred provisions to their defined contribution plans or established new plans with 401(k) provisions. This has resulted in a shift in coverage from defined benefit pension plans and non-401(k) defined contribution plans to 401(k) plans.[4]

Bureau of Labor Statistics data from the Employee Benefits Survey show that in 1994-95, 66 percent of all full-time employees participated in one or more retirement plans, the same proportion as in 1990-91.[5] In 1994-95, 96 percent of State and local government workers had retirement plan coverage compared to 80 percent of workers in medium and large private

TABLE 1. **Percent of full-time employees participating in retirement plans by establishment type, 1990-91 and 1994-95**

Retirement plan	All	Medium and large private establishments	Small private establishments	State and local governments
1990-91				
All retirement[1]	66	78	42	96
Defined benefit	48	59	20	90
Defined contribution[2]	34	48	31	9
Savings and thrift	16	29	10	1
Deferred profit sharing	13	16	15	-
Employee stock ownership	1	3	1	-
Money purchase pension	7	7	6	8
1994-95				
All retirement[1]	66	80	42	96
Defined benefit	42	52	15	91
Defined contribution[2]	39	55	34	9
Savings and thrift	24	41	17	2
Deferred profit sharing	11	13	13	-
Employee stock ownership	3	5	1	-
Money purchase pension	6	7	5	7

[1] Includes defined benefit pension plans and defined contribution retirement plans. The total is less than the sum of the individual items because some employees participated in both types of plans.

[2] The total is less than the sum of the individual items because some employees participated in more than one type of plan.

establishments (those with 100 or more workers) and 42 percent of workers in small private establishments (those with fewer than 100 workers).[6] These proportions are virtually identical to those found in 1990-91.[7] (See table 1.)

Defined benefit pension plans. In 1994-95, 42 percent of all full-time employees participated in a defined benefit pension plan, down from 48 percent in 1990-91. The shift away from defined benefit pension plans occurred because of a decline in these types of plans in the private sector. In 1994-95, 52 percent of full-time employees in medium and large private establishments and 15 percent of full-time employees in small private establishments participated in a defined benefit pension plan, down from 59 and 20 percent, respectively, in 1990-91. Coverage among public employees was about the same during both periods.

Defined contribution plans. In 1994-95, 39 percent of full-time employees participated in one or more defined contribution plans with employer contributions, up from 34 percent in 1990-91. Increased participation in these plans also occurred exclusively in the private sector. In 1994-95, 55 percent of employees in medium and large private establishments and 34 percent in small private establishments participated in such plans compared to 48 and 31 percent, respectively, in 1990-91. Coverage among public employees was the same (9 percent) during both periods.

Savings and thrift plans are the most prevalent form of defined contribution plan, with 24 percent of all full-time employees participating in 1994-95. In these plans, participants contribute a predetermined portion of earnings, all or part of which the employer matches.[8] Participation among employees in medium and large private establishments was 41 percent, and participation among small private establishment employees was 17 percent. These proportions were much higher than the participation rates of 29 and 10 percent, respectively, in 1990-91. Among State and local government workers, participation was negligible in both periods.

Deferred profit-sharing and employee stock ownership plans (ESOPs) are only found in the private sector. In 1994-95, 13 percent of full-time employees in both medium and large and small private establishments participated in deferred profit-sharing plans compared to 16 and 15 percent, respectively, in 1990-91. Deferred profit-sharing plans differ from savings and thrift plans in that they are usually financed by employer contributions only.[9]

Employee stock ownership plans are usually financed entirely by the employer and must be designed to invest funds primarily in company stock. They may also be the means by which employees purchase their company.[10] In 1994-95, 5 percent of employees in medium and large private establishments participated in an ESOP compared to 3 percent in 1990-91; about 1 percent of employees in small private establishments participated during both periods.

In 1994-95, 6 percent of all full-time employees participated in a money purchase pension plan. This type of plan is generally funded only by employer contributions, (most often a percentage of an employee's earnings). However, when employee contributions are made, they are usually made on a pretax basis. Participation ranged from 5 percent of small private establishment employees to 7 percent of employees in both medium and large private establishments and State and local governments, not much different from the proportions found in 1990-91.[11]

401(k) type plans. All defined contribution plans, except ESOPs, may have 401(k) type features (cash or deferred arrangements). Although 401(k) plans are commonly found in the private sector, cash or deferred arrangements also include section 457 and 403(b) plans for State and local government employees.[12]

Cash or deferred arrangements allow participants to choose to either receive currently taxable income or to defer taxation by placing pretax income in a retirement account. If an employee chooses to participate in a 401(k) plan (that is, voluntarily elects a salary reduction arrangement), income taxes on the employee's contributions and earnings are deferred until the employee begins plan withdrawals. In 1994-95, 35 percent of all employees were in plans with 401(k) type arrangements. Participation was highest (53 percent) among employees in medium and large private establishments. Participation among small business and State and local government employees was 23 and 19 percent, respectively.[13]

In 1994-95, most employees (78 percent) with 401(k) type arrangements were in plans with employer contributions. Of State and local government employees, 11 percent were in such plans compared to 83 percent of those in medium and large private establishments and 88 percent of those in small private establishments.

Although there were variations in the type of 401(k) arrangements, the most prevalent were savings and thrift plans with salary reduction arrangements.[14]

Factors affecting payments from defined benefit pension plans

A variety of factors affect the benefit that a covered worker receives upon retirement. For participants in defined benefit pension plans, these factors include the benefit formula used to determine payments, retirement age, length of service, and pre-retirement earnings. Benefits may also be affected if the participant is in a plan providing for post-retirement increases.[15]

Benefit formulas. Terminal earnings-based formulas are the most prevalent method used to determine retirement benefit payments. In 1994-95, virtually all full-time public employees (99 percent) and the majority of employees in medium and large private establishments (58 percent) participating in a defined benefit pension plan were subject to terminal earnings-based formulas.[16]

These plans compute benefits as a percent of terminal earnings multiplied by years of service. For the majority of public sector participants (61 percent), terminal earnings are the average over a 3-year period. For most private sector participants (78 percent), terminal earnings are the average over a 5-year period.[17]

Seventy-eight percent of public sector participants and 37 percent of private sector participants in plans with a terminal earnings formula have a pension benefit formula based on a flat percent or factor.[18] The average factor is 1.85 percent in public plans and 1.45 percent in private plans. If terminal earnings of $50,000 are assumed, a public employee with 30 years' service would receive an annual retirement benefit of $27,750 ($50,000 x .0185 x 30); an employee in the private sector with 30 years' service would receive a benefit of $21,750 ($50,000 x .0145 x 30), or 78 percent of that received by the public sector employee.

As the following tabulation indicates, in 1994-95, 23 percent of private sector participants were subject to a dollar amount formula.

Private sector benefit formulas	*Percent*
Total defined benefit plan participants	100
Formula type	
Terminal earnings	58
Dollar amount	23
Career earnings	11
Cash account	3
Percent of contribution	2
Other (unspecified)	2

NOTE: Due to rounding, total does not equal 100.

The majority of these participants (94 percent) were in plans providing a flat dollar amount, averaging $28.47 per month, for each year of service; the rest (6 percent) were in plans where the dollar amount varied by length of service.[19]

Using the average flat dollar amount, for example, an employee with 30 years service would receive an annual benefit of $10,249.20 ($28.47 x 30 x 12). This type of formula provides the same benefit to all workers at equal levels of service regardless of earnings histories. This results in a decrease in the replacement rate (the proportion of a retiree's earnings during his or her final year of work that is "replaced" by the pension benefits received) as earnings increase.

Eleven percent of private sector participants were in plans with benefit formulas based on career earnings. Three percent were in plans subject to a cash account pension formula, which specifies an employer contribution and a rate of interest on that contribution. Benefits are computed as a percent of each employee's account balance. Two percent of private sector participants were in plans subject to a percent of contribution formula, which specifies an employer, and, occasionally, an employee contribution. Benefits equal a percent of total contributions. For example, if the formula specifies 1 percent of total contributions per month and career contributions were $40,000, an employee would receive a monthly benefit of $400 ($4,800 per year).[20]

Normal retirement. The age at which an employee retires affects the amount of benefits received. Although 65 is often thought of as the "usual" retirement age, many workers participate in plans that permit retirement before age 65 with a normal (unreduced) pension. In 1994-95, nearly two-thirds of full-time public sector participants could retire at age 55 or earlier, after meeting years of service requirements, and still receive a normal pension; this compares with one-tenth of participants in the private sector. (See table 2.)

Among public sector participants, 43 percent could retire at any age after satisfying a service requirement, usually 30 years (much higher than the 6 percent for participants in the private sector). Another 21 percent could retire at age 55, most commonly after satisfying a 30-year service requirement (compared to 4 percent in the

Table 2. **Age and service requirements for normal retirement, full-time employees by selected establishment type, 1994-95**

(In percent)

Requirement	Medium and large private establishments	State and local governments
Total with normal retirement provision	100	100
Younger than age 55	-	1
No service requirement	-	([1])
Service requirement		
5 years	-	([1])
20 years	-	([1])
25 years	-	([1])
30 years	-	([1])
Age 55	4	21
No service requirement	([1])	1
Service requirement		
5 years	([1])	2
10 years	-	([1])
20 years	([1])	([1])
21-24 years	([1])	([1])
25 years	([1])	5
30 years	3	11
More than 30 years	([1])	1
Age 56-59	([1])	([1])
Service requirement		
20 years	([1])	-
25 years	-	([1])
30 years	([1])	-
Age 60	8	5
No service requirement	1	2
Service requirement		
5 years	1	2
6-9 years	-	([1])
10 years	3	1
15 years	([1])	-
20 years	([1])	-
25 years	1	([1])
30 years	2	([1])
More than 30 years	([1])	-
Age 61	([1])	-
Service requirement		
15 years	([1])	-
Age 62	26	6
No service requirement	3	([1])
Service requirement		
5 years	4	([1])
10 years	9	5
15 years	3	([1])
20 years	4	-
21-24 years	([1])	-
25 years	1	([1])
26-29 years	([1])	-
30 years	2	([1])
More than 30 years	([1])	-
Age 63-64	([1])	3
No service requirement	([1])	-
Service requirement		
5 years	-	3
Age 65	48	8
No service requirement	36	2
Service requirement		
1-4 years	([1])	([1])
5 years	9	3
6-9 years	([1])	([1])
10 years	2	3
20 years	([1])	-
25 years	([1])	-
Service requirement only	6	43
Less than 30 years	-	7
30 years	5	29
More than 30 years	([1])	8
Sum of age plus service	9	12
Less than 80	1	([1])
80	1	4
81-89	6	1
90	1	4
More than 90	([1])	2

[1] Less than 0.5 percent.

NOTE: Because of rounding, sums of individual items may not equal totals. Dash indicates no employees in this category.

private sector). In contrast, 48 percent of full-time private sector participants had a minimum age of 65 for normal retirement (with varying years of service requirements) compared to 8 percent of public sector participants.

Early retirement. Most workers participating in defined benefit pension plans can retire before the normal retirement age and receive a reduced pension. In 1994-95, 96 percent of those in medium and large private establishments and 87 percent of those in State and local governments participated in plans with early retirement provisions.[21]

Among private sector participants with early retirement provisions, the greatest proportion (32 percent) were in plans allowing early retirement at age 55 with 10 years of service. (See table 3.) A substantial proportion, however, were in plans allowing early retirement at age 55 with 5 years of service (22 percent) and age 55 with 15 years of service (10 percent).

The most common early retirement age and service requirements for public sector participants were age 55 and 5 years of service (11 percent), age 55 and 25 years of service (10 percent), and age 55 and 10 years of service (9 percent).

Twenty percent of public sector participants were in plans allowing early

TABLE 3. **Age and service requirements for early retirement, full-time employees by selected establishment type, 1994-95**

(in percent)

Requirement	Medium and large private establishments	State and local governments
Total with early retirement provision	100	100
Younger than age 55	10	20
No service requirement	([1])	-
Service requirement		
5 years	3	8
6-9 years	([1])	([1])
10 years	2	1
15 years	1	1
20 years	([1])	5
25 years	3	1
30 years	-	3
Age 55	70	46
No service requirement	4	-
Service requirement		
Less than 5 years	([1])	3
5 years	22	11
6-9 years	([1])	1
10 years	32	9
11-14 years	([1])	-
15 years	10	5
20 years	1	3
25 years	1	10
30 years	-	2
Age 56-59	1	-
No service requirement	-	-
Service requirement		
10 years	([1])	-
30 years	1	-
Age 60	7	3
No service requirement	([1])	-
Service requirement		
5 years	2	([1])
10 years	1	1
15 years	2	-
20 years	([1])	2
30 years	1	-
Age 62	1	([1])
No service requirement	-	-
Service requirement		
10 years	([1])	([1])
15 years	1	-
Service requirement only	8	26
Less than 30 years	1	16
30 years	7	9
More than 30 years	-	([1])
Sum of age plus service	4	3
Less than 80	4	3
80	([1])	([1])
81-89	([1])	-

[1] Less than 0.5 percent.
NOTE: Because of rounding, sums of individual items may not equal totals.

Dash indicates no employees in this category.

retirement before age 55 with varying years of service requirements, compared to 10 percent of private sector participants. Twenty-six percent of public sector participants were in plans with a service requirement only and could potentially retire before age 55. Eight percent of private sector participants were in such plans.

A worker who takes early retirement will receive benefits over a longer time period than if benefits had begun at the normal retirement age. That is why, all factors being equal, such a worker usually receives a smaller pension than one who retires at the normal retirement age. Early retirement benefits are generally based on the normal retirement benefit, to which a reduction factor is applied. In many plans, reduction factors are smaller than those determined actuarially (i.e., based on life expectancy), indicating that the employer is subsidizing the early retirement benefit.[22]

Post-retirement pension increases. Inflation can seriously erode the purchasing power of a retiree's pension benefit. To prevent such erosion, some plans specify automatic cost-of-living increases, usually based on changes in the Consumer Price Index (CPI). In 1994-95, 54 percent of public sector participants were in plans that provided these automatic increases compared to 3 percent of their private sector counterparts.[23]

Some employers provide a discretionary or ad hoc increase to adjust retiree benefits for inflation. In 1994-95, 13 percent of public sector participants were in plans that had granted an ad hoc increase during the previous 5 years compared to 4 percent of private sector participants.[24]

The incidence of post-retirement pension increases was much higher in previous years when inflation was also much higher. For instance, in 1989-90, 7 percent of participants in medium and large private establishments and 50 percent of public sector participants were in plans that provided for an automatic cost-of-living adjustment. In addition, 22 percent of participants in medium and large private establishments and 16 percent of public sector participants were in plans that had granted an ad hoc increase during the previous 5 years.[25]

Although beneficial, these post-retirement increases may not fully protect against purchasing power loss. Automatic increases, for example, are often restricted to a portion of the CPI change or by ceilings, generally 3 percent or less, that are applied to them. Employee Benefits Survey data show that in the 1980s, ad hoc pension increases were, on average, about one-third to one-half of the inflation rate.[26]

Factors affecting payments from defined contribution plans

In defined contribution plans, an account is established for each participating employee. Generally, the employer, and often the employee as well, make fixed (defined) contributions to the account. Benefits are not predetermined, but depend on contributed amounts and any investment earnings. These factors make it much more difficult than with defined benefit pension plans to determine the benefits that will be received.

Contributions. Defined contribution plans differ widely in the amount of specified employer and employee contributions that can or must be made. Savings and thrift plans, the most prevalent form of defined contribution plan, usually require a basic employee contribution that is subject to the employer's matching contribution. Most plans also permit voluntary employee contributions in excess of the maximum amount matched by the employer. For example in 1995, the most common matching provision was for an employer to match half of an employee's contribution, up to the first 6 percent of earnings.[27] If an employee contributes 9 percent of earnings, the employer adds 3 percent (half of the first 6 percent of earnings), for a total contribution of 12 percent. If, however, an employee contributes 4 percent of earnings (less than the maximum basic contribution), the employer adds 2 percent, for a total contribution of 6 percent.

All other factors being equal, employees who make larger contributions should receive larger benefits than employees whose contributions are lower. [28]

Investment earnings. Most savings and thrift plans have more than one investment option. Participants can usually direct their own contributions and their employer's as well. All other factors being equal, the higher the rate of return from the participant's investment choice or choices, the greater the sum available at retirement. At an annual interest rate of 6 percent, an employee with final year earnings of $35,000 and 20 years of participation in a savings and thrift plan would receive a lump sum of $79,870; accrued interest accounts for 42 percent of the amount received.[29]

Conclusion

Although Social Security is still the main source of support for many current retirees, existing research has found that current workers who expect it to be their most important retirement income source are not confident about their lifestyle in retirement.[30] Employee Benefits Survey data show that the majority of current workers participate in one or more employer-provided retirement plans. Benefits from these plans could greatly enhance economic security in retirement for many of these workers.

For participants in both defined contribution and defined benefit plans, financial planning is needed if workers are to use these benefits to their advantage. The trend toward increased participation in defined contribution plans means that more and more employees bear the responsibility for determining where to invest the funds in an employer-provided retirement plan. The greater the return from a defined contribution plan, the greater the amount available to a participant upon retirement. Increased knowledge of investing could help defined contribution plan participants obtain the highest rate of return consistent with their tolerance for risk.

Participants in defined benefit pension plans should be aware of factors, such as normal and early retirement provisions, benefit formulas, etc., and how they impact the amounts received at retirement. Such information will indicate whether additional funds are needed to meet retirement goals and whether retirement lifestyle expectations should be adjusted. ■

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[1] Although the Social Security Administration defines aged units to include married couples living together, with at least one member 55 or older, and nonmarried persons 55 or older, the author only examined income data for aged units 65 years or older. Income figures do not include income of others not in the aged unit, but living in the same household. For more information, see Social Security Administration, *Income of the Population 55 and Older, 1994*, Publication No. 13-11871, (Social Security Administration, 1996).

[2] For more information, see Dallas L. Salisbury (Ed.), *Assessing Social Security Reform Alternatives* (Washington, DC: Employee Benefit Research Institute, 1997); and William J. Wiatrowski, "Social Security in the United States and Chile," *Compensation and Working Conditions*, Fall 1998, pp. 12-17.

[3] This article is an expansion of information in Ann C. Foster's, "Employer-provided Retirement Benefits," in *Personal Finances and Worker Productivity*, Proceedings of the Personal Finance Employee Education Best Practices and Collaborations Conference, November 5-6, 1997, (Vol. 1, No. 1), edited by E. Thomas Garman, John E. Grable, and So-Hyun Joo, Blacksburg, VA: Virginia Tech, 1997, pp. 115-126.

[4] Defined benefit pension plans use predetermined formulas to calculate retirement benefits. In a defined contribution plan, an account is set up for each participant. Generally, the employer, and often the employee as well, make fixed (or defined) contributions to the account. Benefits at retirement are not predetermined, but depend on contributed amounts and any investment earnings.

The term 401(k) refers to the section of the Internal Revenue Code that allows employees to choose to have a portion of their compensation (otherwise payable in cash) invested in a qualified defined contribution plan on a tax-deferred basis. In the Employee Benefits Survey, similar arrangements authorized under section 403(b) of the Internal Revenue Code are also tabulated as 401(k) plans.

[5] For more information, see Ann C. Foster, "Employee Benefits in the United States, 1994-95," *Compensation and Working Conditions,* Spring 1998, pp. 56-61; and *BLS Reports on Employee Benefits in the United States, 1990-91*, Summary 93-4, (Bureau of Labor Statistics, 1993).

[6] See *Employee Benefits in Medium and Large Private Establishments, 1995,* Bulletin 2496, (Bureau of Labor Statistics, 1998); *Employee Benefits in Small Private Establishments, 1994*, Bulletin 2475, (Bureau of Labor Statistics, 1996); and *Employee Benefits in State and Local Governments, 1994*, Bulletin 2477, (Bureau of Labor Statistics, 1996).

[7] See *Employee Benefits in Medium and Large Private Establishments, 1991,* Bulletin 2422, (Bureau of Labor Statistics, 1993); *Employee Benefits in Small Private Establishments, 1990*, Bulletin 2388, (Bureau of Labor Statistics, 1991); and *Employee Benefits in State and Local Governments, 1990,* Bulletin 2398, (Bureau of Labor Statistics, 1992).

[8] For more detailed information, see Ann C. Foster, "Employee Participation in Savings and Thrift Plans, 1993," *Monthly Labor Review*, March 1996, pp.17-22.

[9] In 1994-95, for example, 6 percent of employees in medium and large private establishments who participated in a deferred profit-sharing plan were required to contribute. In contrast, 36 percent were in plans where employee contributions were allowed, but not required. For more information, see *Employee Benefits in Medium and Large Private Establishments, 1995;* and Ann C. Foster, "Defined Contribution Retirement Plans Become More Prevalent," *Compensation and Working Conditions,* June 1996, pp. 42-44.

[10] For more detailed information on ESOPs, see *Fundamentals of Employee Benefit Programs*, Fifth Edition, (Washington, DC: Employee Benefit Research Institute, 1997).

[11] Money purchase pension plans are sometimes thought of as defined benefit pension plans because they often, like defined benefit pension plans, provide a fixed payment to participants at retirement. These fixed payments, however, are generated by using the funds accumulated in an employee's account to purchase an annuity that guarantees a periodic payment for life. For more information, see Ann C. Foster, "Defined Contribution Retirement Plans Become More Prevalent."

[12] Information on section 457 and 403(b) plans may be found in *Fundamentals of Employee Benefit Programs.*

[13] In 1990-91, 44 percent of employees in medium and large private establishments participated in a 401(k) type plan compared to 15 percent in small private establishments and 18 percent in State and local governments. For more information see *Employee Benefits in Medium and Large Private Establishments, 1991; Employee Benefits in Small Private Establishments, 1990;* and *Employee Benefits in State and Local Governments, 1990.*

[14] Some employees participating in money purchase pension plans are required to contribute, usually on a pretax basis. In 1994-95, 5 percent of State and local government employees were in money purchase pension plans where required employee contributions are made on a pretax basis**.** These contributions allow an employee to defer taxes, but are not considered salary reduction arrangements under section 401(k) of the Internal Revenue Code. Under Section 401(k) a participant must voluntarily elect to have a contribution made to a 401(k) type plan. For more information see *Fundamentals of Employee Benefit Programs*. Additional information on types of 401(k) arrangements may be found in Ann C. Foster, "Defined Contribution Retirement Plans Become More Prevalent."

[15] Because of low coverage rates and high nonresponse rates in the 1994 survey of small private establishments, information on detailed provisions of defined benefit plans was not reported. For this reason, the analysis in this section is confined to participants in medium and large private establishments and State and local governments. For more information, see *Employee Benefits in Small Private Establishments, 1994.*

[16] Data in this section are for the primary formula used to compute benefits. Alternative formulas are sometimes available to provide a minimum benefit for employees with short service or low earnings. For more information, see *Employee Benefits in Medium and Large Private Establishments, 1995*; *and Employee Benefits in State and Local Governments, 1994.*

[17] For more information, see *Employee Benefits in Medium and Large Private Establishments, 1995*; and *Employee Benefits in State and Local Governments, 1994.*

[18] Public sector participants in plans with a terminal earnings formula also included 18 percent where the percent per year varied by service and 3 percent where the percent varied by earnings; less than 0.5 percent were in plans where the percent per year varied by age or by earnings and service. Private sector participants in plans with a terminal earnings formula also included 41 percent where the percent per year varied by service, 13 percent by earnings and service, and 8 percent by service; less than 0.5 percent were in plans where the percent per year varied by age. For more information, see *Employee Benefits in Medium and Large Private Establishments, 1995;* and *Employee Benefits in State and Local Governments, 1994.*

[19] For more information, see *Employee Benefits in Medium and Large Private Establishments, 1995.*

[20] It should be noted that cash account and percent of contribution formulas resemble those found in defined contribution plans. The Internal Revenue Service, however, classifies them as defined benefit plans because the employer guarantees a certain level of benefits. For more information, see *Employee Benefits in Medium and Large Private Establishments, 1995.*

[21] For more information, see *Employee Benefits in Medium and Large Private Establishments, 1995;* and *Employee Benefits in State and Local Governments, 1994.*

[22] For more information, see Ann C. Foster, "Early Retirement Provisions in Defined Benefit Pension Plans," *Compensation and Working Conditions,* September 1996, pp. 12-17; and Olivia S. Mitchell, "Trends in Pension Benefit Formulas and Retirement Provisions," in John A. Turner and Daniel J. Beller, eds., *Trends in Pensions 1992* (U.S. Department of Labor, Pension and Welfare Benefits Administration, 1992), pp. 177-216.

[23] For more information, see *Employee Benefits in Medium and Large Private Establishments, 1995;* and *Employee Benefits in State and Local Governments, 1994.*

[24] For more information, see *Employee Benefits in State and Local Governments, 1994;* and *Employee Benefits in Medium and Large Private Establishments, 1995.*

[25] For more information, see Harriet Weinstein, "Post-retirement Pension Increases," *Compensation and Working Conditions,* Fall 1997, pp. 47-50.

[26] *Ibid*.

[27] For more information, see *Employee Benefits in Medium and Large Private Establishments, 1995.*

[28] For more information, see *Federal Retirement: Federal and Private Sector Retirement Program Benefits Vary,* GAO/GCD-97-40, (Washington, DC: General Accounting Office, 1997). It should be noted that data from the Current Population Survey show that, in 1993, the mean contribution rate for workers participating in 401(k) plans was 7 percent of earnings, whereas the median was 6 percent. These findings most likely reflect the concentration of employer match rate policies that stop matching when employee contribution rates reach these levels. For more information, see William F. Bassett, Michael J. Fleming, and Anthony P. Rodrigues, *How Workers Use 401(k) Plans: The Participation, Contribution and Withdrawal Decisions,* Staff Report Number 38 (Federal Reserve Bank of New York, March 1998).

[29] See Michael Bucci, "Lump Sum Benefits Available from Savings and Thrift Plans," *Monthly Labor Review,* June 1993, pp. 57-60.

[30] See Sharon A. DeVaney and Ya-Ping Su, "Factors Predicting the Most Important Source of Retirement Income," *Compensation and Working Conditions,* Fall 1997, pp. 25-31.