

# The last private industry pension plans: a visual essay

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**H**aving sufficient income during retirement years is a concern for many Americans. In years past, many employers provided a pension plan—formally a defined benefit plan—that ensured periodic payments for the life of the retiree and his or her spouse. Such plans are becoming rare for workers in private industry. In 2011, only 10 percent of all private sector establishments provided defined benefit plans, covering 18 percent of private industry employees. Decades ago, broad coverage of these plans allowed the Bureau of Labor Statistics (BLS) to analyze and tabulate considerable detail about how they worked.<sup>1</sup> Today, the declining number of plan participants limits such detail. This essay will explore the details of the last private industry pension plans.

Despite their decline within private industry, pension plans are still prevalent among government workers. BLS data show that 78 percent of state and local government workers had such coverage in 2011. Most federal government employees have defined benefit coverage as well. Within all levels of government, plans such as defined benefit plans have been the subject of recent debates because of budget constraints. Several states have reduced plan coverage or generosity; in other cases, states continue to discuss potential reductions.<sup>2</sup>

This visual essay focuses on what remains of defined

benefit plans in private industry. In addition to the decline in coverage, recent trends among these plans reflect employer decisions to convert to cash balance plans or limit future accruals. Differences in coverage and provisions by various establishment and worker characteristics are considered; note that these characteristics are not independent. For example, observed differences by industry may be related to differences in occupation, union status, and other variables.

The charts and text on the pages that follow offer several perspectives: current plan features, changes to the data over time, and additional details about defined benefit plans. Terminology that is specific to defined benefit plans is defined as each chart is explained.<sup>3</sup>

All data presented here are from the BLS National Compensation Survey and predecessor surveys of the incidence and provisions of employee benefits over the past 30 years. The reference date of the most recent incidence data is 2011, whereas the reference date of certain detailed provision data is 2010. Information about the survey and additional data are available from BLS at <http://www.bls.gov/ncs/ebs/>.<sup>4</sup>

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## Notes

<sup>1</sup> Data are collected from a sample of employers selected to represent all employers in private industry. As with all sample surveys, data are subject to sampling error—the difference between the results for a sample and the results for the universe (all private industry employers). The magnitude of the sampling error is identified by the standard error, which the BLS publishes for all current estimates of defined benefit plans. In general, standard errors are larger for smaller estimates. In addition, data from the survey are collected from employers under a pledge of confidentiality that the data will be used for statistical purposes only. Data that might reveal the identity of a surveyed establishment or any other data from such an establishment are not published. These restrictions limit the amount of data that the BLS is currently able to publish for defined benefit plans.

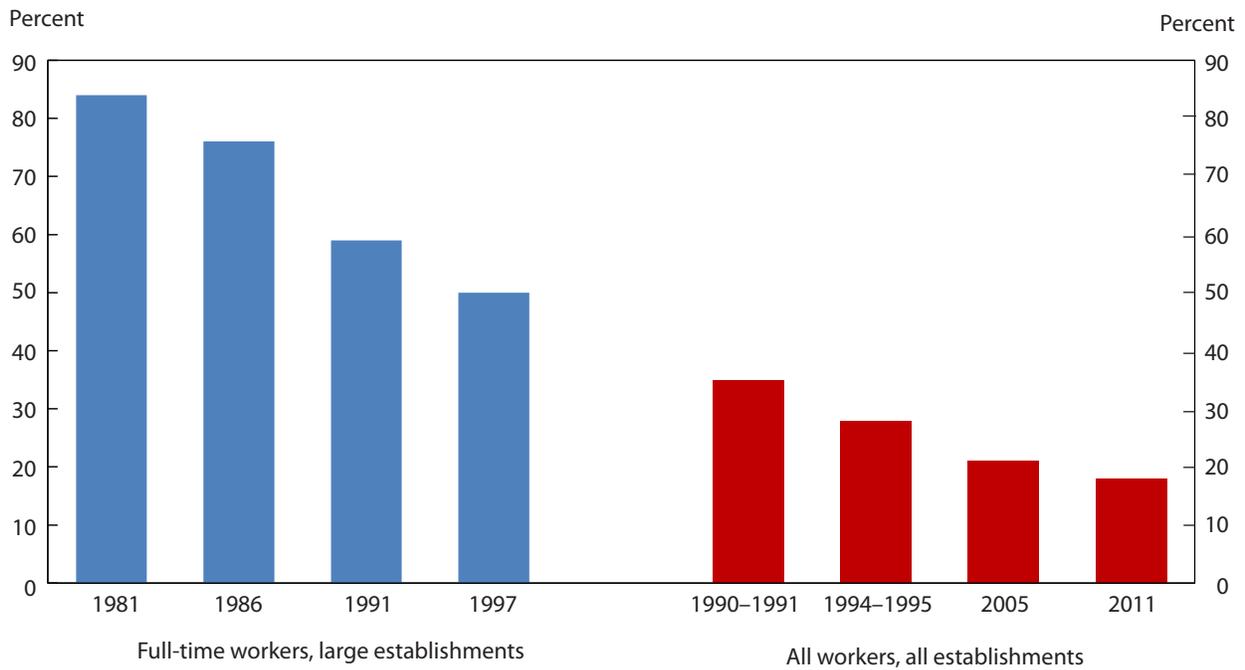
<sup>2</sup> Details on the financial status of state-defined benefit pen-

sion plans are available from the Pew Center on the States, [http://www.pewcenteronthestates.org/initiatives\\_detail.aspx?initiativeID=328880](http://www.pewcenteronthestates.org/initiatives_detail.aspx?initiativeID=328880).

<sup>3</sup> For more comprehensive definitions, see the BLS Glossary of Employee Benefit Terms, <http://www.bls.gov/ncs/ebs>.

<sup>4</sup> Data from the BLS National Compensation Survey include the percentage of establishments offering a defined benefit plan, the percentage of workers with access to a plan (that is, a plan that is available to workers once they meet certain requirements, such as completing a service requirement or agreeing to make periodic contributions), the percentage of workers participating in a plan (that is, currently covered by the plan, having met all requirements), and detailed plan provisions (such as the formula to compute benefits or the age at which benefits are available).

**1. Percentage of employees participating in defined benefit pension plans, private industry, for selected years during 1981–2011**

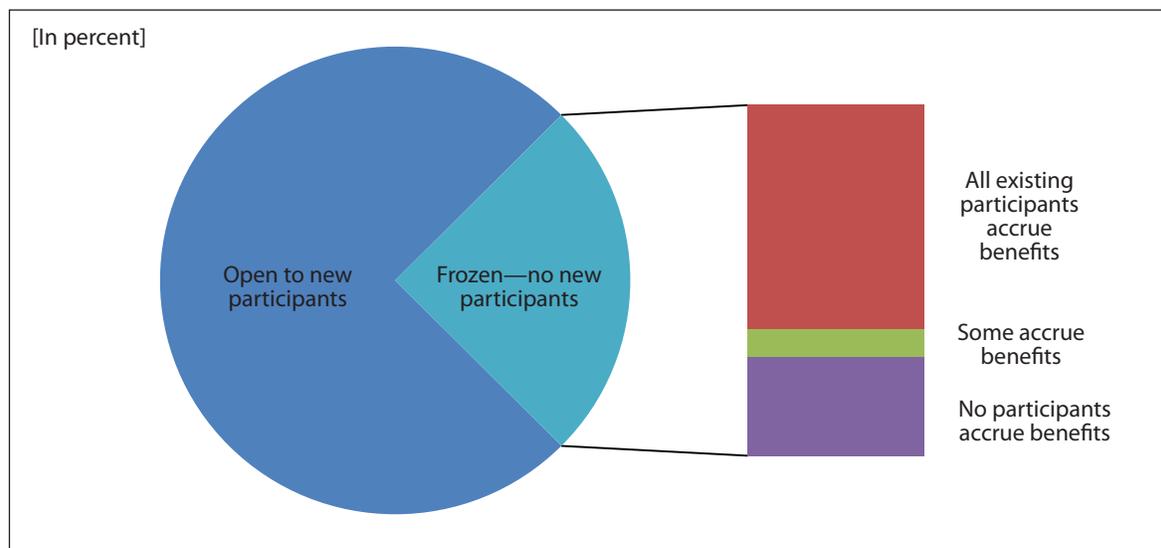


NOTE: Information shown for 1990–1991 and 1994–1995 uses combined data from separate surveys of small and large private establishments.

SOURCE: U.S. Bureau of Labor Statistics.

- BLS data on the incidence and provisions of employee benefits have been available for most years since the late 1970s, although the survey name and scope of workers covered have changed over time.
- The earliest data are limited to full-time employees in larger private establishments; these workers had extensive defined benefit pension plan coverage in the early 1980s.
- Surveys of smaller private establishments were added in 1990. Combining data from these surveys with those from larger private establishments yields estimates of pension coverage among all private employers, shown beginning in 1990.
- Beginning in 2000, one annual survey covered all private establishments, regardless of employment.
- Coverage among all private industry workers was 35 percent in the early 1990s; such coverage in 2011 stands at 18 percent.

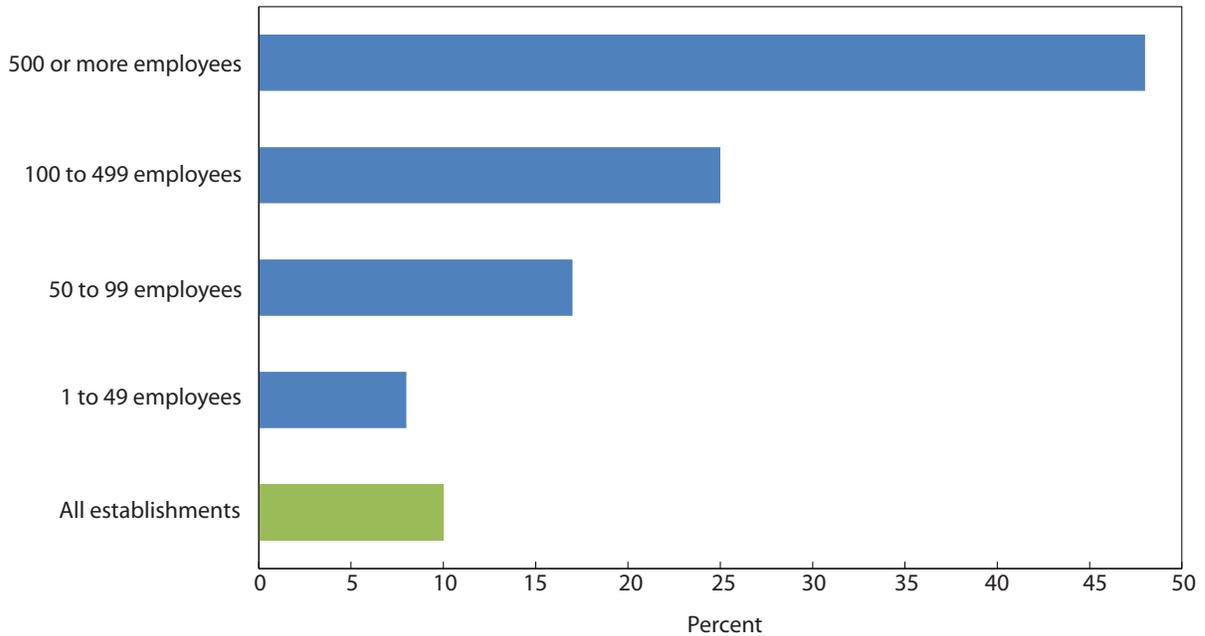
## 2. Percentage of defined benefit pension plan participants in open and frozen plans, private industry, 2011



SOURCE: U.S. Bureau of Labor Statistics.

- A relatively recent phenomenon among private industry employers still offering defined benefit plans is “frozen plans,” which are closed to new employees. In addition, some such plans stop accruing benefits for current employees.
- BLS began capturing information on frozen defined benefit plans in 2009, when 1 in 5 participants was in a frozen plan. By 2011, that figure had increased to 1 in 4 participants.
- Because frozen plans are closed to new employees, as current employees retire or otherwise leave the plan and new employees are hired, the percentage of workers covered by these plans will decline over time. This decrease will likely be reflected in the BLS defined benefit coverage statistics in the future.
- Among those employees covered by a plan that is frozen, two-thirds are in plans that continue to accrue benefits to all current participants. The remaining employees are in plans that either restrict accruals to certain groups of workers (for example, based on tenure) or cease accruals for all participants.

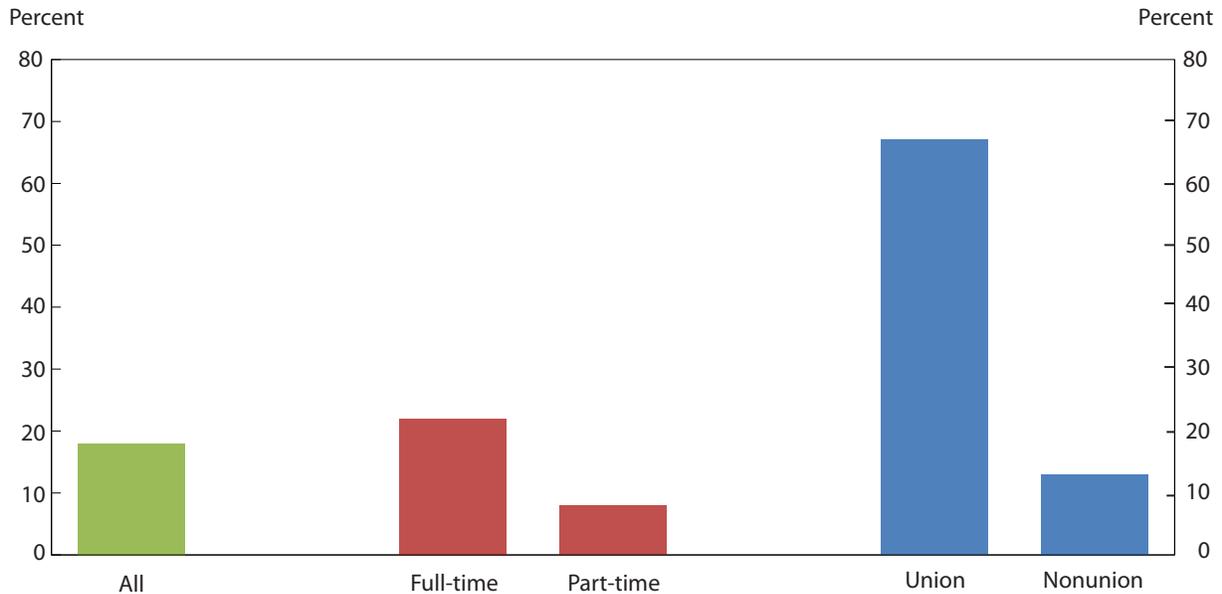
**3. Percentage of private industry establishments offering defined benefit pension plans, by number of employees, 2011**



SOURCE: U.S. Bureau of Labor Statistics.

- Although most BLS data on benefits reflect the proportion of *workers* covered, data were added in recent years on the percentage of *establishments* offering a plan. In 2011, 10 percent of private industry establishments offered a defined benefit pension plan to their employees.
- The number of employees in the establishment appears to be a key factor in whether an employer offers a defined benefit plan. Among establishments with fewer than 50 workers, 8 percent offered a defined benefit plan. In contrast, among establishments with 500 or more workers, 48 percent offered a plan.

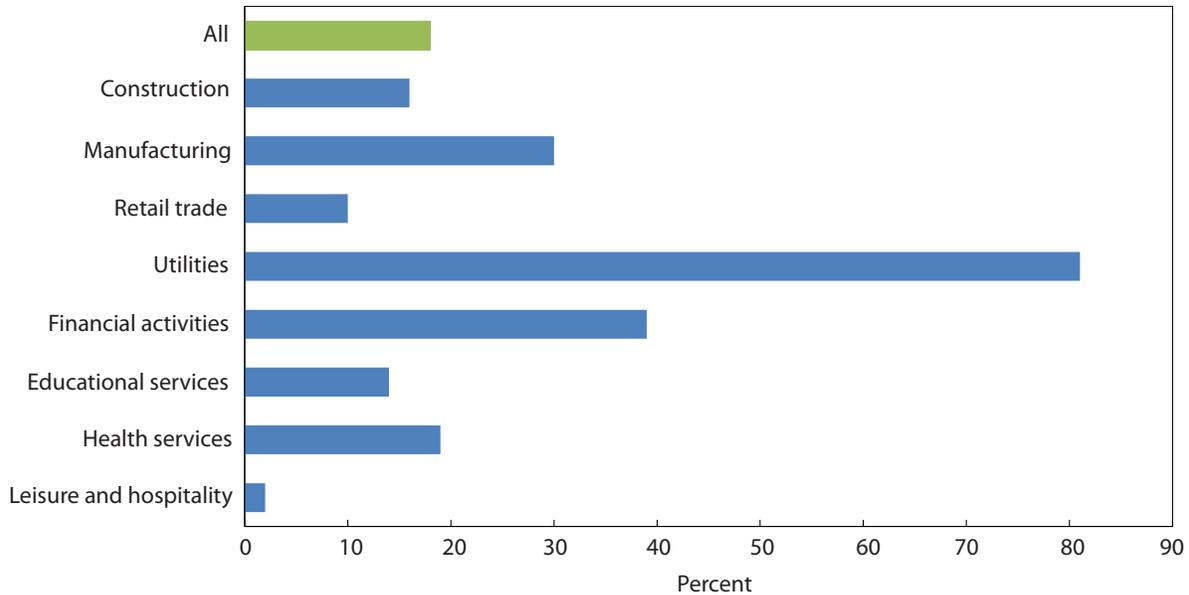
#### 4. Percentage of employees participating in defined benefit pension plans, by selected characteristics, private industry, 2011



SOURCE: U.S. Bureau of Labor Statistics.

- In private industry, union workers (those covered by a collective bargaining agreement) are covered more often by a defined benefit plan than are nonunion workers. In 2011, defined benefit plans covered 67 percent of union workers compared with 13 percent of nonunion workers.
- Full-time workers are covered more often by a defined benefit plan than are their part-time counterparts—22 percent versus 8 percent.
- Earlier BLS studies also showed coverage differences by union status and by full-time and part-time workers. In 1993, 81 percent of full-time union workers in larger private establishments were covered by a defined benefit plan; 48 percent of their full-time nonunion counterparts had such coverage.
- Also in 1993, 56 percent of full-time workers in larger private establishments had pension coverage compared with 26 percent of part-time workers.
- These distinctions, especially the large difference between union and nonunion workers, are related to differences seen in other characteristics, such as industry, occupation, and geography.

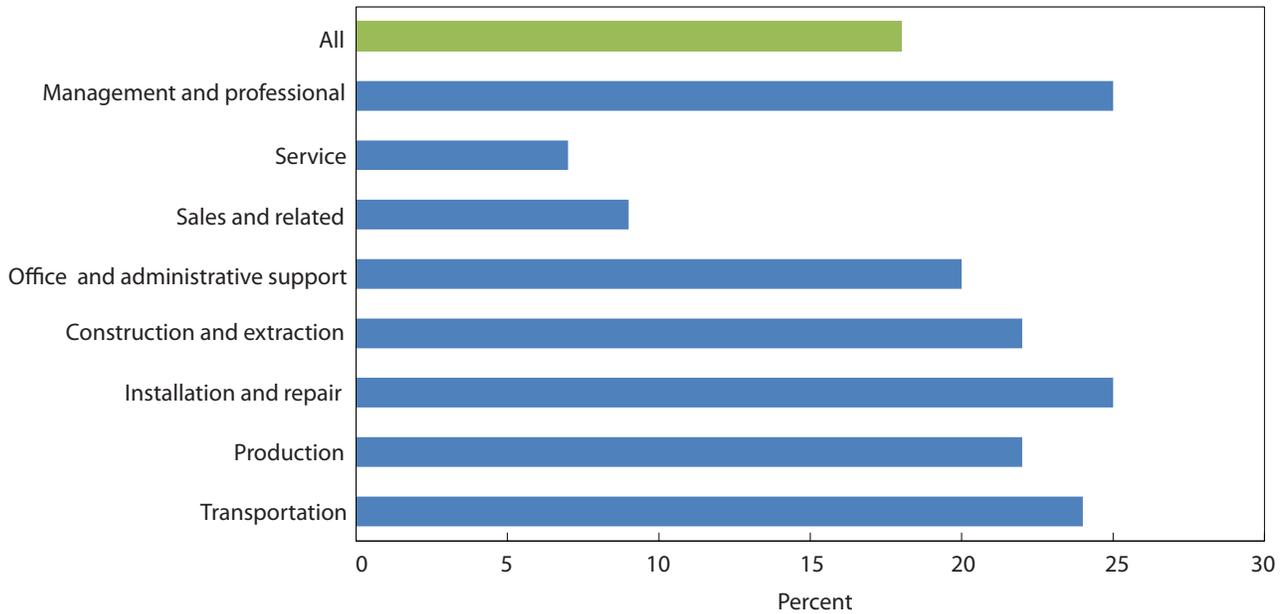
**5. Percentage of employees participating in defined benefit pension plans, by selected private industries, 2011**



SOURCE: U.S. Bureau of Labor Statistics.

- Although 18 percent of all private industry workers are currently covered by a defined benefit plan, the percentage varies with the industry.
- The utility industry is among industries with the highest percentage of covered workers, 81 percent.
- In the construction industry, 16 percent of workers are covered by a defined benefit plan, whereas in leisure and hospitality (including the accommodation and food service industries), only 2 percent are covered.
- Some industry groups vary widely. For example, the chart shows that 39 percent of all workers in the broad financial activities industry are covered by a defined benefit plan. Not shown is that, in this industry, 51 percent of workers in credit intermediation and related activities (an industry that includes banking) have coverage, whereas in real estate and rental and leasing, only 8 percent have coverage.
- Although historical data by industry are limited, coverage among full-time workers in larger private establishments in 1993 was 61 percent among goods-producing industries (including construction and manufacturing) and 52 percent among service-providing industries. Both of these sectors have declined in coverage. In 2011, coverage among all workers in goods-producing industries was 28 percent compared with 18 percent in service-providing industries.

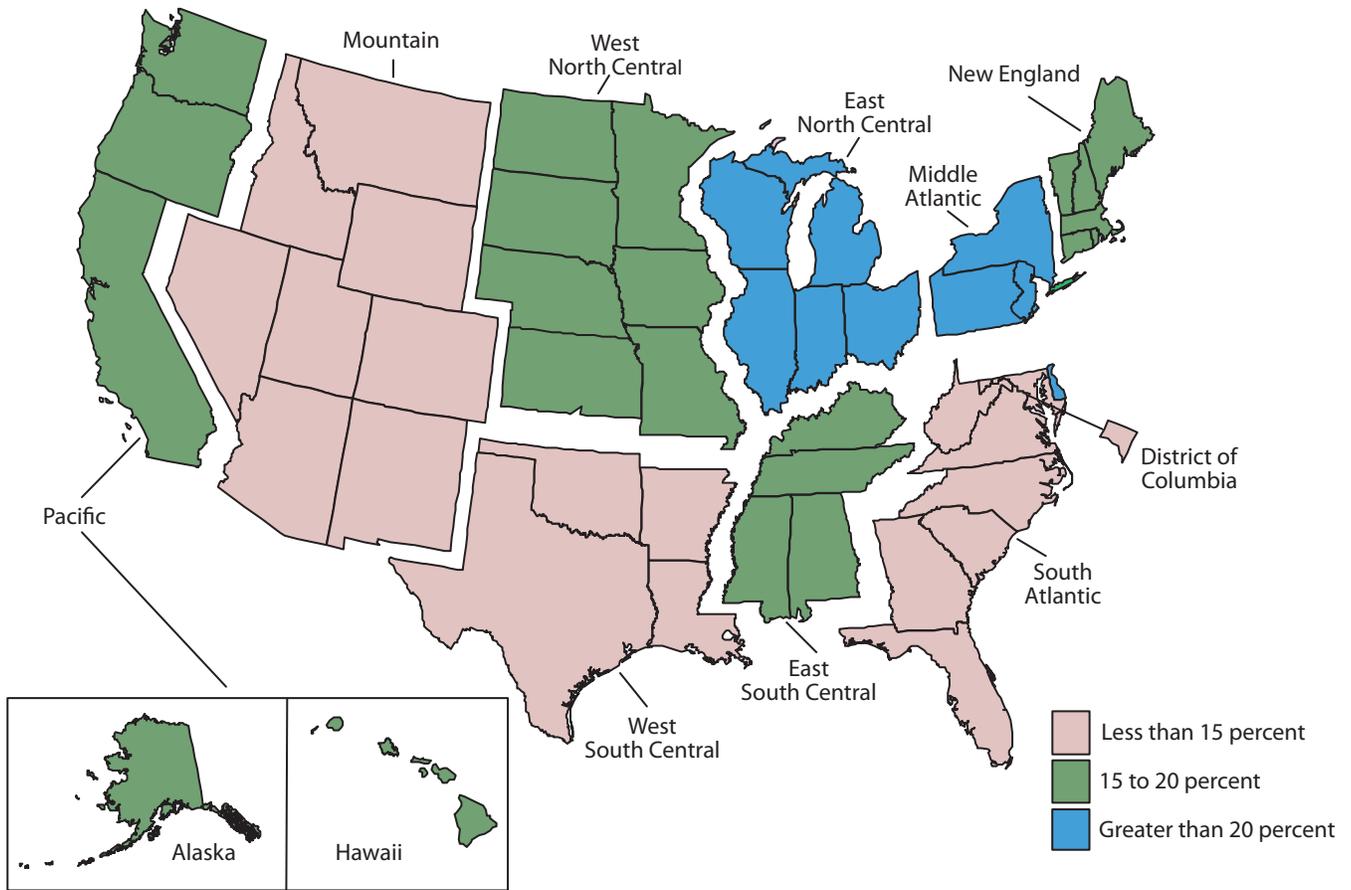
**6. Percentage of employees participating in defined benefit pension plans, by selected occupation groups, private industry, 2011**



SOURCE: U.S. Bureau of Labor Statistics.

- Pension coverage varies with the job being performed.
- Among those occupation groups with a relatively high percentage of workers covered by a pension plan are management and professional occupations, construction and extraction occupations, installation and repair occupations, production occupations, and transportation occupations.
- Service and sales occupations had relatively low defined benefit plan coverage.

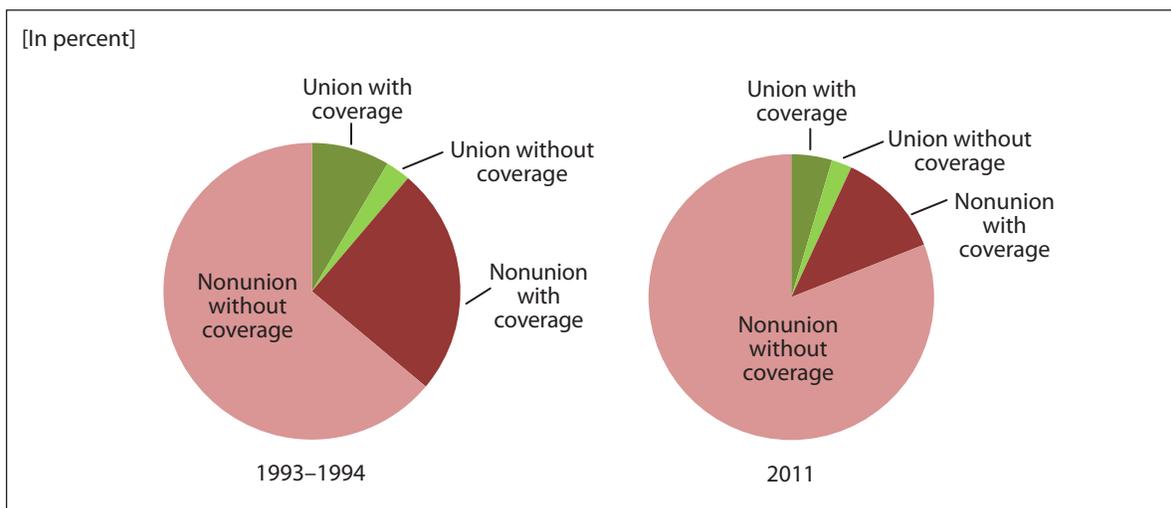
**7. Percentage of employees participating in defined benefit pension plan, by geographic region, private industry, 2011**



SOURCE: U.S. Bureau of Labor Statistics.

- Defined benefit plan coverage is relatively more prevalent in the Middle Atlantic and East North Central regions, perhaps associated with certain industries or higher concentrations of union workers.
- Relatively low rates of defined benefit coverage were found in the Mountain, West South Central, and South Atlantic regions.

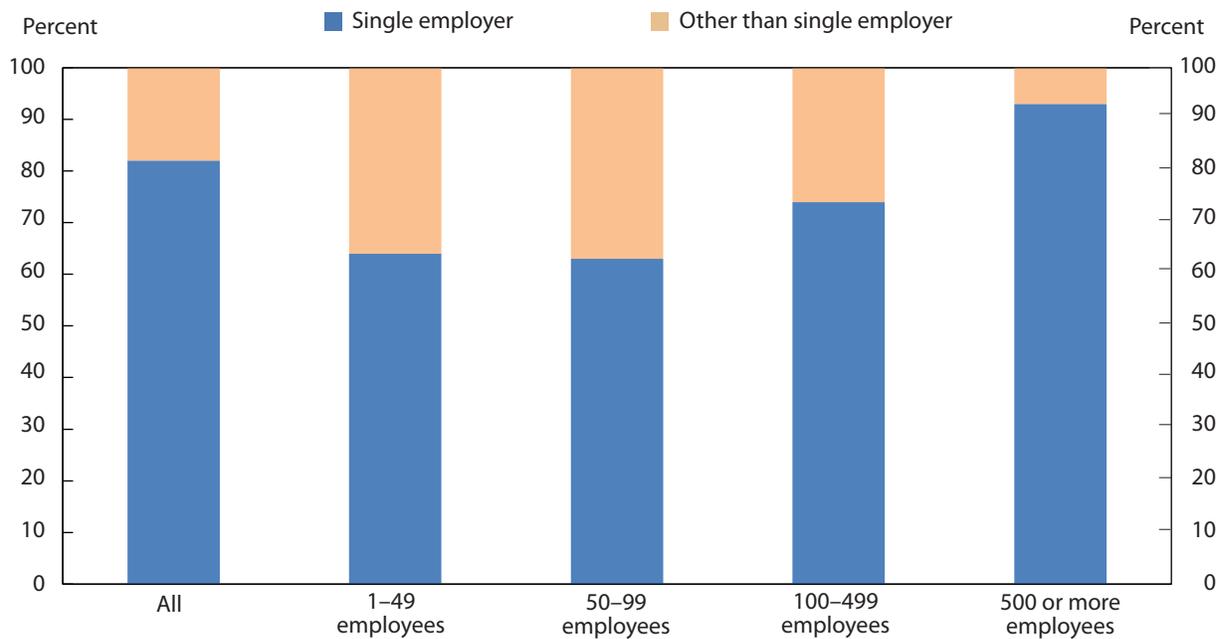
**8. Percentage of workers with and without defined benefit pension coverage, by union status, private industry, 1993–1994 and 2011**



SOURCE: U.S. Bureau of Labor Statistics.

- The decline in pension coverage over the past 30 years is a function of two contemporaneous trends: a decline in coverage among all workers and a shift in employment toward those groups of workers with less coverage.
- For example, among larger private establishments in 1993, 81 percent of full-time union employees had pension coverage while only 48 percent of their nonunion counterparts had such coverage. Similarly, among smaller private establishments in 1994, pensions covered 72 percent of full-time union workers and 12 percent of full-time nonunion workers. Combined, the proportion with pension coverage was nearly 3 times greater among full-time union workers than among full-time nonunion workers (76 percent versus 28 percent).
- Today those ratios are much different. Although the proportion with pension coverage has declined for both union and nonunion workers, the decline has been greater for nonunion workers. In 2011, 67 percent of union workers had pension coverage (down from 76 percent, a 12 percent drop). Among nonunion workers, 13 percent had coverage (down from 28 percent, a 54 percent drop).
- To compound this loss of coverage, employment over the same period has shifted away from union jobs, the very jobs more likely to have coverage. In 1993, just over 11 percent of private industry workers were in jobs covered by a union contract; in 2011, that figure dropped to just under 7 percent.

**9. Percentage of defined benefit pension plan participants, by plan sponsor, private industry, 2010**

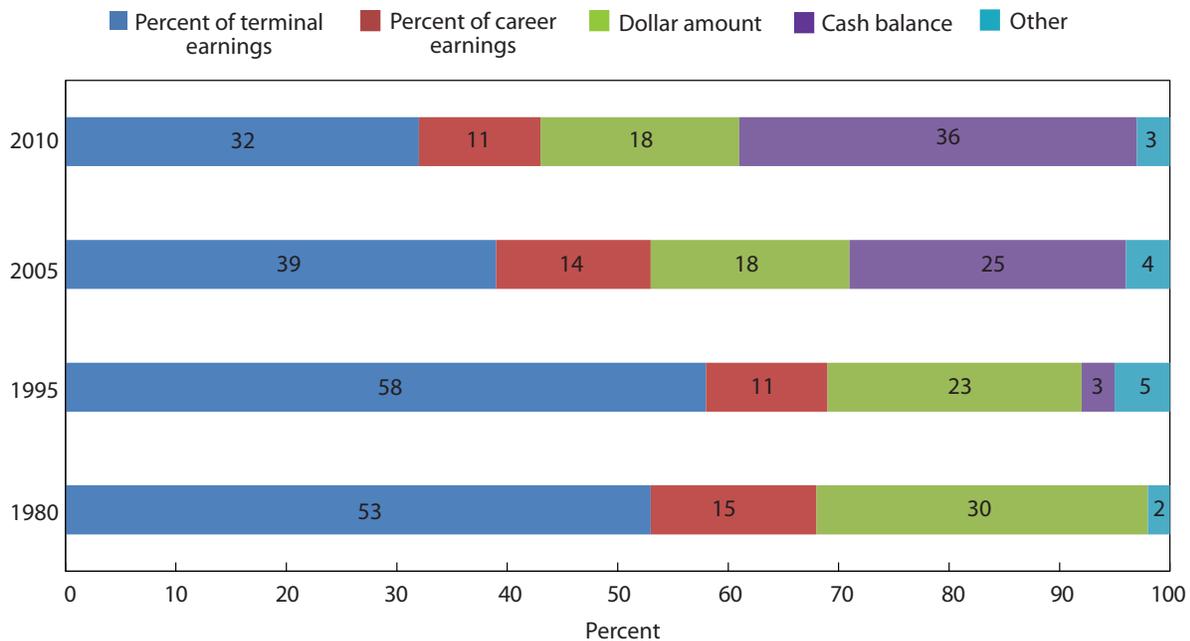


NOTE: Because of the small amount of data, BLS is not able to distinguish between workers covered by a multiemployer plan, some other plan sponsor, or those in which the sponsor is unknown.

SOURCE: U.S. Bureau of Labor Statistics.

- A pension plan offered by one employer to its workers is known as a single-employer plan. In contrast, some workers may be covered by a *multiemployer* plan, which involves multiple small employers that are joint parties to a collective bargaining agreement with a single union.
- Single-employer coverage is relatively high among participants working for establishments with 500 or more employees (93 percent); in the smallest employment group (1 to 49 workers), single-employer plans cover 64 percent of participants.
- Because of the small number of plans and the screening of such small numbers to maintain confidentiality, presenting data separately for multiemployer plans is not always possible. However, for single-employer plan coverage that is not universal, inferences can be made regarding the extent of multiemployer plan coverage.
- One such inference can be made in the trade, transportation, and utilities industry group. Published data indicate that two-thirds of participants had single-employer coverage, suggesting that some workers in this industry group may be covered by multiemployer plans. The trucking industry, which is noted for having many smaller establishments and employees who may work for a number of different employers, is one industry within the larger group that may be covered by multiemployer plans.
- Multiemployer plans were nearly universal among workers in the construction industry, in which the transient nature of work results in employees working for multiple employers. In contrast, single-employer coverage was nearly universal in the financial activities industry.

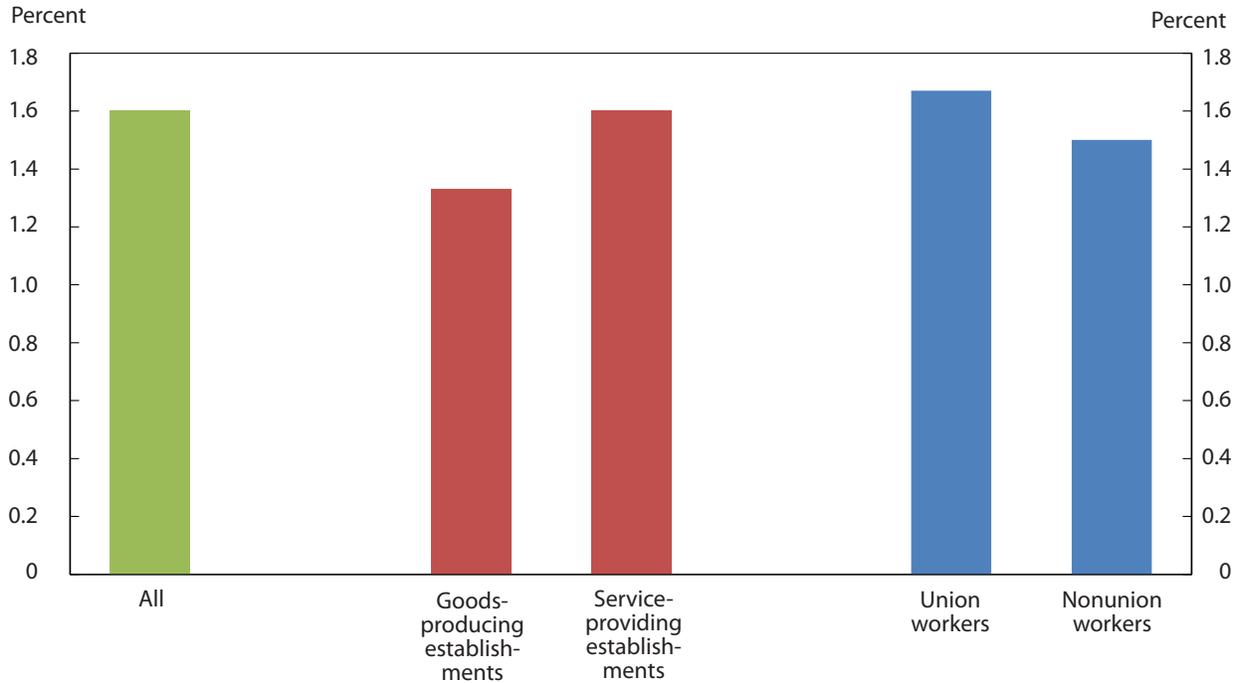
**10. Percentage of defined benefit pension plan participants, by formula, private industry, for selected years during 1980–2010**



SOURCE: U.S. Bureau of Labor Statistics.

- Historically, defined benefit plans have included formulas that allowed employees to determine their future benefits on the basis of certain variables, such as earnings and length of service. Examples include percentage of terminal earnings (such as 1.5 percent × years of service × average of final 5 years’ earnings) and dollar-amount formulas (such as \$40 per month × years of service). Together, these plans are referred here as “traditional” plans.
- Over the past 15 years, employers have adopted alternative approaches to defined benefit plans, basing pension benefits on the value of accounts designated for each covered worker. Still, these plans—like all defined benefit plans—must maintain sufficient funds to pay future benefits; the account is merely a means of expressing the current value of the plan. Most of the plans are cash balance plans, with formulas designating a percentage of earnings and a rate of return to be credited to an employee’s account each year. Together, these plans are referred here as “nontraditional” plans.
- The major difference between traditional and nontraditional defined benefit plans can be regarded as the difference between knowing what your pension will be in the future and knowing what the value of your plan is today. In a traditional plan, the current value of the plan is not known but a participant can estimate future benefits. In contrast, in a nontraditional plan, the current value is known but future benefits are unknown.
- In 2010, about 60 percent of pension plan participants were in traditional plans, half of which contained terminal earnings formulas. Thirty years earlier, all participants were in traditional plans, including 53 percent with terminal earnings formulas and 30 percent with dollar-amount formulas.

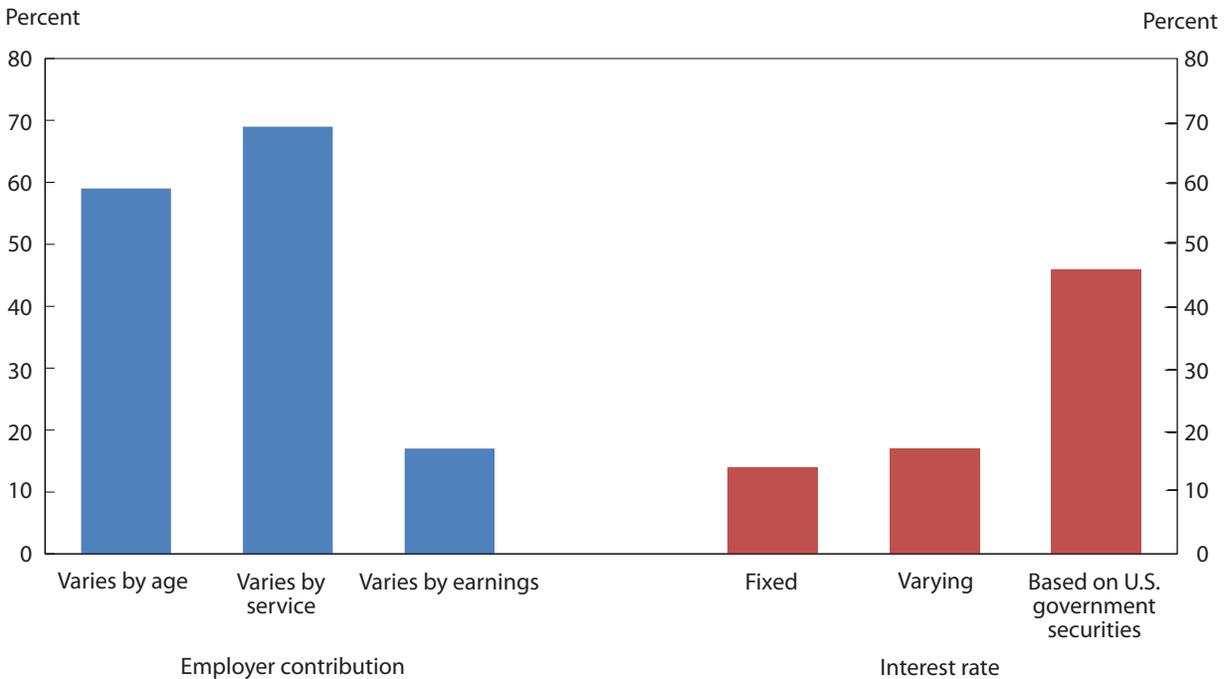
**11. Median flat multiplier, in percentage of terminal earnings formula plans, by union status, for goods-producing and service-providing establishments, private industry, 2010**



SOURCE: U.S. Bureau of Labor Statistics.

- Approximately half of those covered by a terminal earnings formula have benefits computed with use of a flat percentage; the remainder have formulas that vary the percentage by earnings, service, or both.
- For 2010, the median flat percentage of earnings amount (the “multiplier”) is  $1.6 \times$  years of service; thus, someone with 30 years of service would receive 48 percent of his or her earnings. These multipliers have changed little over time: in 1983, the average multiplier was 1.59 percent.
- A terminal earnings pension benefit also depends on how earnings are calculated. Plans include average earnings over several years; more years generally result in a lower average. For example, average earnings over 5 years are likely to be lower than average earnings over 3 years. Most plans use average earnings over 5 years.

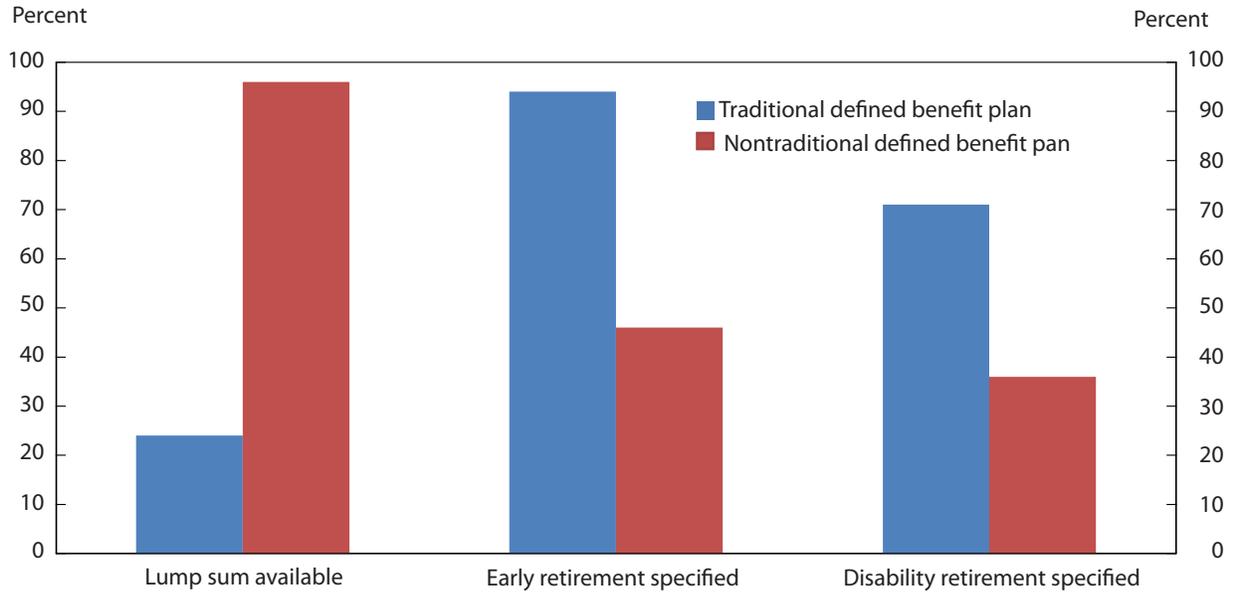
## 12. Percentage of participants in cash balance plans, by selected features, private industry, 2010



SOURCE: U.S. Bureau of Labor Statistics.

- Cash balance pension plans specify a formula for determining annual employer contributions to employee accounts as well as specify an interest rate applied to account balances.
- Four out of five workers covered by a cash balance plan have a specified formula that varies the employer annual contribution based on age, length of service, or both. For example, a formula might equal 1 percent of an employee's salary for those with less than 10 years of service and 2 percent of an employee's salary for those with a greater length of service.
- Interest applied to cash balance accounts was most often based on the announced rate for certain U.S. government securities. In other cases, the plan specified a fixed or varying interest rate.

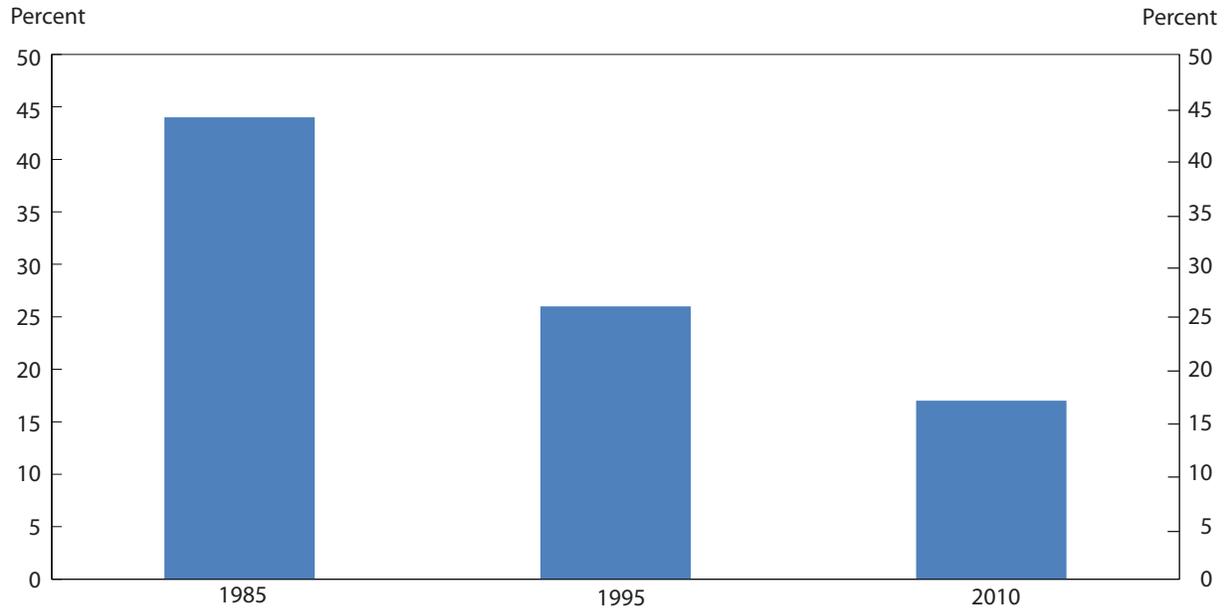
**13. Percentage of traditional and nontraditional defined benefit pension plan participants, by availability of selected plan features, private industry, 2010**



SOURCE: U.S. Bureau of Labor Statistics.

- The difference between a traditional defined benefit plan (in which future benefits are known) and a nontraditional plan (in which the current value of the plan is known) manifests itself in a number of provisions related to the availability of benefits. For example, nearly all nontraditional plans allow payment in a lump sum (which equals the cash balance); only 1 in 4 participants in traditional plans can receive lump-sum benefits.
- Furthermore, early retirement (with benefits reduced to account for their receipt over a longer period) and disability retirement are standard features of traditional defined benefit plans. In contrast, many nontraditional plans do not specify requirements for early or disability retirement. In essence, the current value of such plans is available at any time.

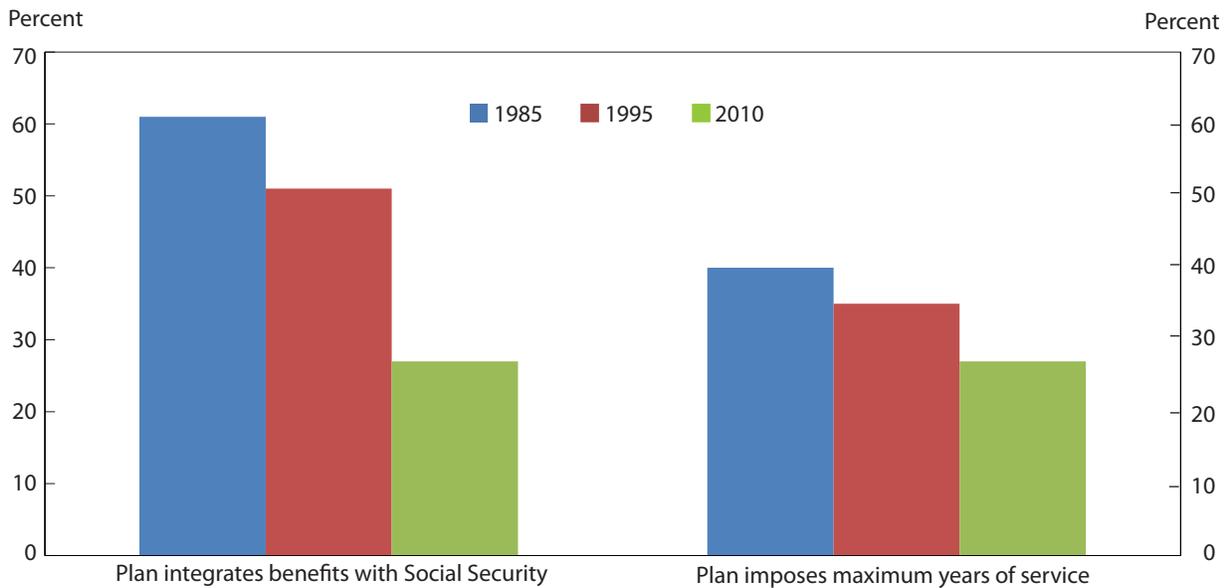
**14. Percentage of defined benefit pension plan participants with normal retirement benefits available before age 62, private industry, 2010**



SOURCE: U.S. Bureau of Labor Statistics.

- A shift to later retirement ages appears to be taking place among those with traditional defined benefit plans; in 2010, less than 20 percent of participants could receive full benefits before age 62. Similar data for 1985 show that about 45 percent of covered workers could receive full benefits before age 62.
- One factor that may influence this shift to later retirement ages is the change in retirement age for Social Security. Although reduced Social Security benefits continue to be available at age 62, the age at which full benefits are available is rising gradually from 65 to 67. For example, individuals born in 1945 (and therefore reaching age 65 in 2010) can receive full benefits at age 66.

**15. Percentage of defined benefit pension plan participants in plans with selected features, private industry, 2010**



SOURCE: U.S. Bureau of Labor Statistics.

- Some defined benefit plans “integrate” benefits with Social Security, essentially reducing available benefits to account for employer contributions to Social Security. One method of integrating benefits is through a two-step formula that applies one multiplier to earnings covered by Social Security and a higher multiplier to excess earnings.
- Two-step formulas are seen in both traditional defined benefit plans (in which the multiplier varies by earnings) and cash balance plans (in which the contribution level varies by earnings).
- In 2010, 27 percent of participants in defined benefit plans were covered by an integration formula. Twenty-five years earlier, such formulas covered 61 percent of participants.
- Defined benefit plans may limit the number of years of service that are used to calculate benefits. In 2010, 27 percent of participants were in plans with a maximum service provision, often 30 or 35 years. In 1985, such maximum provisions applied to 40 percent of participants.
- Most defined benefit plans impose a 5-year vesting requirement; benefits are not available until the employee has completed 5 years of service, at which time, benefits cannot be forfeited. Changes in laws governing pension plans have lowered vesting requirements over the years. In 1983, nearly all participants were subject to 10-year vesting.
- Defined benefit plans may offer various options for receipt of benefits, including periodic payments to the retiree, periodic payments with spouse survivor benefits, and lump-sum payments. In 2011, BLS began asking whether survivor benefits are available to same-sex or opposite-sex domestic partners. About 35 percent of those covered by a private sector defined benefit plan had the option to provide survivor benefits to domestic partners. The data show no difference between same-sex and opposite-sex partners.