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A Look at Private-Sector Retirement Plan Income After ERISA

KEY FINDINGS

- **Retirement income generated by private-sector retirement plans has become more prevalent—not less prevalent—since the passage of ERISA in 1974, and this is true across all income groups.** In 2009, 34 percent of retirees received private-sector retirement plan income—either directly or through a spouse—compared with 21 percent in 1975. Among retirees with private-sector retirement plan income, the median amount of income received per person in 2009 was $6,000, compared with about $4,500 in 2009 dollars in 1975. Further, the survey data used to analyze retiree income do not fully capture distributions from DC pension plans and IRAs, and thus likely underestimate the increase in retirement plan income since ERISA.
- **The share of workers with access to pension plans at their current employer has been substantial and fairly steady since 1979.** While coverage has been consistent, an increasing share of private-sector workers has worked for employers that sponsor DC pension plans, and a decreasing share has worked for employers that sponsor DB pension plans.
- **The extent to which retirees have depended on private-sector retirement plans may be overstated by looking only at statistics on retirement plan coverage because coverage does not always result in retirement income.** Although many retirees worked at employers that sponsored DB pension plans, the combination of vesting rules, the timing of benefit accrual, and labor mobility resulted in many retirees getting little or no retirement income from private-sector retirement plans.
- **In 1975, when nearly 90 percent of private-sector workers with retirement plans were covered by DB pension plans, only about one in five retirees received any income from private-sector retirement plans.** Among retirees with private-sector retirement plan income in 1975, the median amount of annual income received per person was about $4,500 in 2009 dollars.
- **Social Security benefits consistently have been the largest component of retiree income and the predominant income source for lower-income retirees.** In 2009, Social Security benefits were 58 percent of total retiree income and more than 85 percent of income for retirees in the lowest 40 percent of the income distribution. Even for retirees in the highest income quintile, Social Security benefits represented more than one-third of income in 2009. Over the past 35 years, the share of retiree income from Social Security has averaged 53 percent.
- **By supplementing Social Security, retirement plans play a complementary role in the U.S. retirement system.** The formula used to calculate Social Security benefits ensures that Social Security replaces a much higher portion of earnings for workers with lower lifetime earnings. Not surprisingly, higher income retirees have typically gotten a lower portion of their income from Social Security benefits and have relied more on retirement plan income.

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Introduction

The Employee Retirement Income Security Act of 1974 (ERISA) established sweeping changes in the regulation of pension plans, including new rules regarding reporting and disclosure, funding, vesting, and fiduciary duties.[1] ERISA was aimed primarily at "assuring the equitable character" and "financial soundness" of defined benefit (DB) pension plans.[2] Since ERISA's enactment, two trends have changed the nature of retirement savings. First, a decreasing share of private-sector employees have worked for employers that sponsor traditional DB plans and an increasing share have worked for employers that sponsor defined contribution (DC) pension plans, particularly 401(k) plans. Second, individual retirement accounts (IRAs), created by ERISA, have become increasingly important as a repository for pension benefits of all types—both private-sector and public-sector plans, and both DB and DC plans—accrued by employees who have separated from their employers, either due to retirement or job change.

The movement away from employer-managed DB plans toward employee-directed DC plans—or, in the case of assets transferred to an IRA, toward accounts outside of the employer plan system—has raised concerns among some in the public policy community.[3] These concerns typically focus on whether Americans will have adequate retirement resources and whether they have the ability to manage assets prior to and in retirement. To help provide context for retirement policy discussions, this paper examines the role that private-sector pensions historically have played in providing retirement income.

Note to the Reader: How the Term *Pension Plan* Is Used in This Report

Often the term *pension* is used to refer to a traditional DB plan, and *retirement plan* is used to refer to a DC plan. In this *Perspective*, the term *pension plan* refers to both DB plans and DC plans, including 401(k) plans.

The Department of Labor has stated:

> "The Employee Retirement Income Security Act (ERISA) covers two types of pension plans: defined benefit plans and defined contribution plans....Examples of defined contribution plans include 401(k) plans, 403(b) plans, employee stock ownership plans, and profit-sharing plans."*

The Current Population Survey (CPS), the primary source of data on pension coverage and pension income that are used in this *Pespective*, also does not distinguish between DB plans and DC plans when asking whether a worker's employer offers a plan or when asking whether an individual received income from a plan.

The question for pension coverage in the March CPS is:

> *Other than Social Security, did [any] employer or union that (name/you) worked for in [the past year] have a pension or other type of retirement plan for any of its employees?*

The question for pension income in the March CPS is:

> *During [the past year] did (you/anyone in the household) receive any pension or retirement income from a previous employer or union, or any other type of retirement income [other than Social Security or VA benefits]?*

When subsequently asking for the source of the retirement income, the CPS specifically mentions profit-sharing plans as an example of a "company or union pension."†

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* See www.dol.gov/dol/topic/retirement/typesofplans.htm.

† The Internal Revenue Code makes distinctions among pension, profit-sharing, and stock bonus plans. And, because most 401(k) plans are profit-sharing plans, they would be distinguished from pension plans under tax law. However, the distinction between the plans is not because one type is a DB plan and one is a DC plan. Rather, under tax law, the primary difference between pension plans and profit-sharing plans is that employer contributions to DC pension plans cannot be based on company profits, whereas employer contributions to profit-sharing plans may be based on company profits—although they are not required to be. (See 26 C.F.R. § 1.401-1 "Qualified pension, profit-sharing, and stock bonus plans.") For example, money purchase plans are a type of DC plan and they are classified as pension plans under tax law. In general, pension, profit-sharing, and stock bonus plans are governed by many of the same sections of the Internal Revenue Code.

Decline in the Share of Workers Covered by Private-Sector DB Pensions

The share of workers with access to pension plans at their current employer has been fairly steady since 1979, the first year for which these data are available (Figure 1).[4] Overall, among all wage and salary workers aged 21 to 64, 56 percent worked for an employer that sponsored a pension plan (either DB, DC, or both) in 2009.[5] (The CPS questionnaire does not distinguish between DB and DC pension plans.) In 1979, 60 percent of wage and salary workers worked for employers that sponsored pension plans. Over the entire time period from 1979 to 2009, the portion of workers who worked for employers that sponsored pension plans averaged 59 percent and ranged from 55 percent to 63 percent. Focusing solely on private-sector wage and salary workers, 55 percent worked for firms that sponsored retirement plans in 1979, and 50 percent worked for firms that sponsored plans in 2009. Over the entire time period from 1979 to 2009, the portion of private-sector workers who worked for employers that sponsored plans averaged 54 percent and ranged from 50 percent to 60 percent.

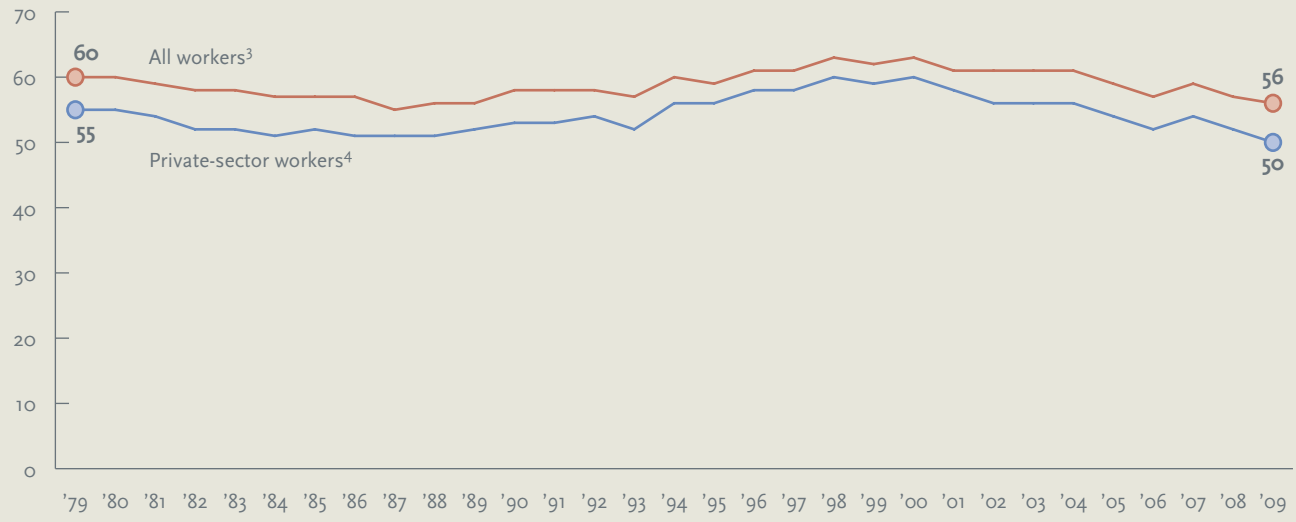
> The share of workers with access to pension plans at their current employer has been fairly steady since 1979.

Although the share of workers with access to workplace retirement plans did not change markedly over this period, there was a shift in the type of pension plan offered.[6] In 1975, the year after ERISA was passed into law, 87 percent of active participants in private-sector retirement plans had primary coverage through DB plans (Figure 2).[7] The proportion of workers with primary coverage through DB plans dropped steadily over time, falling to about 70 percent by the mid-1980s and below 50 percent by the mid-1990s.[8] By 1998, 56 percent of active participants in private-sector retirement plans were covered by primary DC plans, and 39 percent had a supplemental DC plans.[9]

Figure 1

Pension Coverage Has Been Stable over Time

Workers aged 21 to 64 at employers sponsoring[1] pension plans[2] as a percentage of wage and salary workers, 1979–2009



[1]The survey question asks each worker if the employer or union that they worked for in the previous year has a pension or other type of retirement plan for any of the employees.
[2]Pension plans include both DB and DC pension plans.
[3]The series plots all wage and salary workers covered by a pension plan as a percentage of all wage and salary workers.
[4]The series plots private-sector wage and salary workers covered by a pension plan as a percentage of all private-sector wage and salary workers.
Source: ICI tabulations of the March Current Population Survey

Figure 2

Private-Sector Pension Plan Participants by Type of Pension Coverage

Number and percentage of active participants in private-sector pension plans, 1975–1998

	Active participants (thousands)			Percentage of active participants		
Year	Primary DB	Primary DC	Supplemental DC	Primary DB	Primary DC	Supplemental DC
1975	26,817	3,921	5,948	87.2%	12.8%	19.4%
1976	27,119	4,591	6,993	85.5	14.5	22.1
1977	27,655	5,141	7,623	84.3	15.7	23.2
1978	28,613	5,424	8,258	84.1	15.9	24.3
1979	29,008	5,790	9,368	83.4	16.6	26.9
1980	29,736	6,203	10,134	82.7	17.3	28.2
1981	29,687	7,224	10,629	80.4	19.6	28.8
1982	29,361	8,120	12,087	78.3	21.7	32.2
1983	29,576	9,395	14,191	75.9	24.1	36.4
1984	29,812	9,902	15,303	75.1	24.9	38.5
1985	28,894	11,550	16,018	71.4	28.6	39.6
1986	28,536	12,672	16,188	69.2	30.8	39.3
1987	28,347	13,437	16,110	67.8	32.2	38.6
1988	27,864	14,106	15,180	66.4	33.6	36.2
1989	27,240	15,485	15,242	63.8	36.2	35.7
1990	26,323	16,116	15,671	62.0	38.0	36.9
1991	25,701	17,133	15,281	60.0	40.0	35.7
1992	25,318	19,474	16,300	56.5	43.5	36.4
1993	25,091	19,780	16,621	55.9	44.1	37.0
1994	24,591	20,948	16,516	54.0	46.0	36.3
1995	23,531	23,038	16,482	50.5	49.5	35.4
1996	23,262	24,173	17,199	49.0	51.0	36.3
1997	22,724	27,045	18,531	45.7	54.3	37.2
1998	22,972	29,139	18,526	44.1	55.9	35.6

Note: Primary plan status and secondary plan status are not reported on Form 5500. For firms with multiple pension plans, the status was inferred by U.S. Department of Labor analysts. Data are available through 1998; after 1998, the Department of Labor no longer reported plan data by primary and secondary status.

Source: U.S. Department of Labor tabulations of Form 5500

DB Pension Coverage Does Not Always Generate Income in Retirement

The extent to which retirees have depended on private-sector pensions may be overstated by looking only at statistics on pension coverage, as coverage does not always result in retirement income. In particular, not all employees covered by DB pension plans would have received income from the plans in retirement. Vesting rules, the timing of benefit accrual in traditional DB plans, and the frequency of job change all affect the likelihood that DB plan coverage generates pension income in retirement.[10] Before addressing how these factors can affect pension income, the next section briefly describes how benefits are determined in a traditional DB plan.

The extent to which retirees have depended on private-sector pensions may be overstated by looking only at statistics on pension coverage, as coverage does not always result in retirement income.

How Benefits Are Determined in a Traditional DB Plan

Vesting Rules

Pension benefits are vested when a worker's accrued benefits cannot be revoked for any reason, including termination of employment. There are two primary vesting methods: cliff vesting and graduated vesting. Under cliff vesting, benefits are not vested until a certain number of years of employment or "service," after which time benefits are 100 percent vested. Under graduated vesting, a portion of benefits vest each year until benefits are fully vested. For example, 20 percent of benefits may vest each year for five years until benefits are fully vested.

Benefit Formula

Benefits that a worker earns in a DB plan are based on a formula that defines the amount of benefits to be paid upon retirement. For example, a traditional DB plan typically defines the benefit as an annual payment that begins at retirement.[11] A typical benefit formula in a DB plan is one that pays an annual benefit equal to a percentage of a worker's compensation.[12] In these plans, the percentage of salary typically increases based on the number of years worked for an employer, up to a maximum percentage. The measure of compensation is typically an average salary from the worker's highest earning years, such as average compensation from a worker's five highest earning years.[13] The annual benefit payment that is calculated using the benefit formula is typically expressed in the form of a single-life immediate annuity; that is, benefit payments continue until the death of the participant, with no additional payments, such as a death benefit, made upon or after death.[14]

Illustrative Example of Benefit Calculation

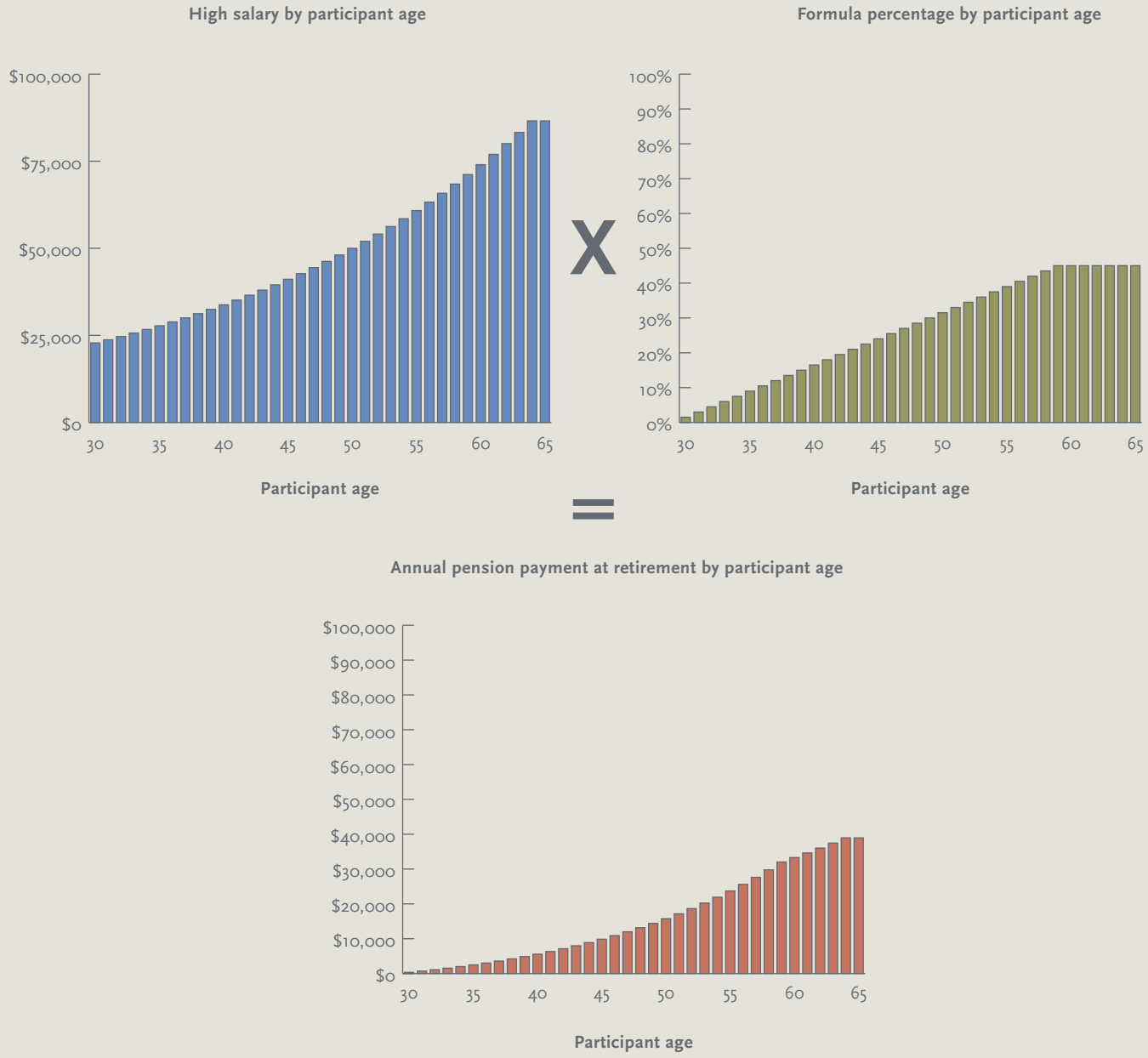
This section provides an example of how benefits are calculated in a traditional DB plan. For simplicity of illustration, this example assumes that the benefit formula uses a participant's highest annual earnings during the time the worker is covered by the plan. If, instead, the formula used an average of five years of earnings, calculated accruals would differ slightly from the results presented below, but the magnitude and pattern of benefit accruals would be similar.

The plan in the example pays an annual benefit that begins at age 65 (or retirement, if later) and is equal to 1.5 percent of an employee's highest salary per year of service in the plan, with a maximum annual benefit of 45 percent of the employee's highest salary (i.e., the formula percentage increases up to 30 years of service). Figure 3 illustrates the benefit calculation for a worker who earns $50,000 per year at age 50 and experiences 3 percent inflation and 1 percent real wage growth during his or her working career. The worker's service in the plan begins at age 30, at which point the employee is earning $22,819 (which, accounting for inflation, would be equivalent in real value to $41,214 at age 50), and continues until age 64, at which point the employee is earning $86,584 (equivalent in real value to $57,242 at age 50). The percentage of high salary used to calculate retirement benefits increases over the worker's time of service until age 59, the thirtieth year of service, where the percentage used reaches the maximum of 45 percent. The annual pension payments to which the worker is entitled at retirement increases over the worker's entire time with the employer, reaching $38,963 at age 64 (equivalent in real value to $25,009 at age 50). At age 65, the individual retires and begins receiving pension payments.

Figure 3

Example of Benefit Calculation in a Defined Benefit Plan

Formula: 1.5% of highest salary per year up to 30 years
Assumptions: annual inflation of 3%; annual increase in real earnings of 1%



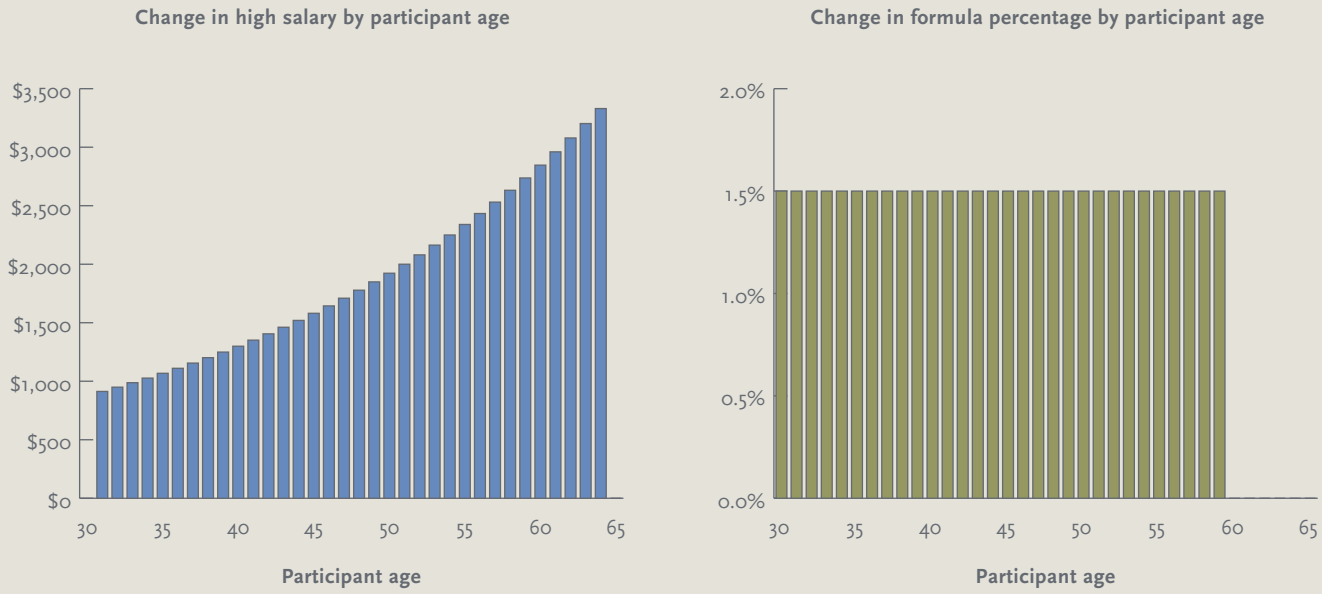
Source: Investment Company Institute

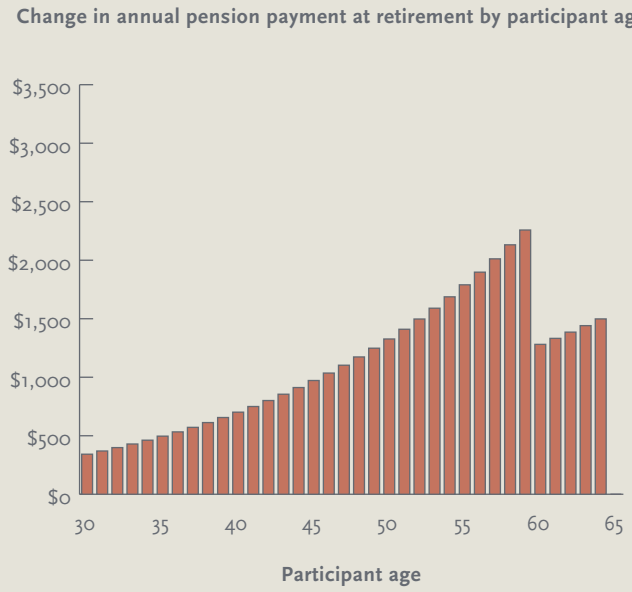
Figure 4 shows the change by year in the annual retirement benefit for the worker in this example, as well as the change by year in the components used to calculate the benefit. As can be seen in the upper right panel, the percentage of high salary used in the calculation increases by 1.5 percent every year until the percentage reaches its maximum. At that point, the formula percentage does not change regardless of additional service. If the worker's salary was unchanged over his or her career, the change in annual retirement benefits would follow the same pattern as the formula percentage: it would increase by the same amount each year (1.5 percent of salary) until the employee had 30 years of service, after which it would be unchanged. However, because nominal salary is assumed to increase over time in the example, not only does the percentage of earnings increase with each additional year of service, but the amount of earnings used to calculate the benefit also increases with each additional year of service. This would be true if earnings increased only in line with inflation; any increase in real earnings over time would reinforce this tendency. Thus, even though the maximum percentage of high salary is reached when the worker is age 59, the annual pension payments to which the worker is entitled at retirement increases with each additional year of work as salary continues to increase.

Figure 4

Example of Changes in Benefits and the Components of Change in a Defined Benefit Plan

Formula: 1.5% per year up to 30 years x highest salary
Assumptions: annual inflation of 3%; annual increase in real earnings of 1%





Source: Investment Company Institute

Vesting Rules Affect the Number of Plan Participants Who Receive Benefits

One reason why a worker covered by a DB pension plan may not receive income in retirement is that the worker may have separated from the job before accrued pension benefits vested.

Pre-ERISA

Prior to the enactment of ERISA, there was no federal statutory requirement for vesting of pension plan benefits. Figure 5 reports data on vesting schedules in medium and large private-sector DB pension plans (plans with 100 or more participants) in early 1974,[15] prior to the passage of ERISA.[16]

Among active DB plan participants in 1974, 88 percent were in plans where benefits vested prior to retirement eligibility. The remaining 12 percent of active DB plan participants were in plans that lacked provisions for vesting benefits prior to retirement; that is, if the employee separated from the firm prior to being eligible for retirement, the individual had no right to receive benefits. The 88 percent of active participants in plans that vested were split into 70 percent covered by plans with cliff vesting and 18 percent covered by plans with graduated vesting. Including both plans with cliff vesting and plans with graduated vesting, about one-third of active participants were in plans where benefits fully vested after 10 to 14 years of service, about one-third of participants were in plans where benefits fully vested after 15 to 19 years of service, and 12 percent of participants were in plans where benefits fully vested after 20 years of service or more.[17]

In addition to a service requirement, some plans also required that participants reach a certain age before benefits were vested (Figure 5). In 1974, 43 percent of active DB plan participants in cliff-vesting plans, representing 30 percent of all active DB plan participants, had an age restriction in addition to a service requirement, including 6 percent of participants that vested at 50 years of age or older. Another 5 percent of active DB plan participants were in graduated-vesting plans with an age restriction.

Figure 5

Vesting Schedules Prior to ERISA

Percentage of DB plan participants in medium and large private-sector firms by DB vesting schedule, 1974

Plan benefits vest[1]	**88**
Cliff vesting	**70**
With no age restriction	39
Less than 10 years of service	2
10 to 14 years of service	24
15 to 19 years of service	9
20 years of service or more	4
With both age and service restrictions	30
By years of service	
Less than 10 years of service	1
10 to 14 years of service	10
15 to 19 years of service	18
20 years of service or more	2
By age restriction	
At age 40 or earlier	16
At age 41 to 45	8
At age 50 or later	6
Sum of age plus service or other requirement	1
Graduated vesting	**18**
With no age restriction	12
Less than 10 years of service	1
10 to 14 years of service	2
15 to 19 years of service	4
20 years of service or more	5
With age restriction	5
Less than 10 years of service	0
10 to 14 years of service	0
15 to 19 years of service	4
20 years of service or more	1
Age and service not determinable or no full vesting	1
Vesting provisions not determinable	**1**
Plan lacked vesting provisions[2]	**12**

[1] *Because some plans had both cliff and graduated vesting schedules, the sum of the categories adds to more than the total. Subtotals may not add to the category total because of rounding.*

[2] *To have a right to benefits, a plan participant must have been eligible for retirement under the plan at the time of separation from the employer.*

Source: Thompson 2005 tabulations of U.S. Department of Labor data

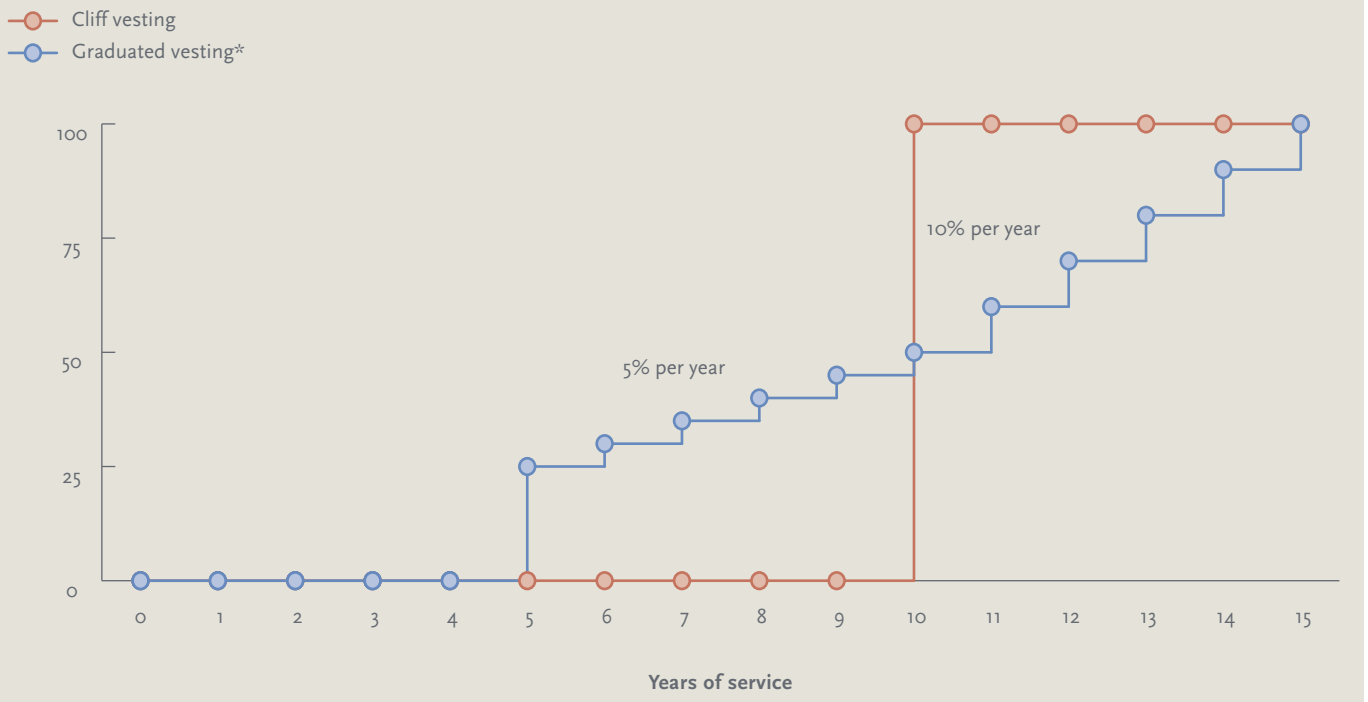
Post-ERISA

ERISA placed minimum vesting requirements on private-sector pension plans (Figure 6).[18] ERISA required plans with cliff vesting to vest 100 percent of accrued benefits by 10 years of service or less. ERISA required plans with graduated vesting to vest 100 percent of accrued benefits by 15 years of service or less and to vest benefits at least as fast as a schedule that vested 25 percent of benefits after five years, 5 percent additional each year for the next five years, and 10 percent additional each year for the next five years.[19] In addition, ERISA did not allow plans to restrict vesting based on age.[20] ERISA vesting requirements generally went into effect starting in 1976.[21] The bulk of DB plan participants were in plans that were required to change their vesting schedules because of the new rules. Prior to the passage of ERISA, only 27 percent of active private-sector DB plan participants were in plans that already met the ERISA minimum vesting requirements (Figure 7).

Figure 6

Minimum Vesting Requirements Implemented by ERISA

Percentage of benefits vested by years of service and type of vesting schedule



**Under ERISA, an alternative graduated vesting schedule was available: 50 percent of benefits vested when service was five years or more and age plus service totaled 45 years, with 10 percent additional in each of the next five years; or, if earlier, 50 percent of benefits vested after 10 years, with 10 percent additional in each of the next five years.*

Source: Graham 1988

Figure 7

ERISA Shortened Vesting Periods for the Bulk of Defined Benefit Plan Participants

Percentage of active DB plan participants in medium and large private-sector firms by DB vesting schedule in 1974 (pre-ERISA)

Vesting met ERISA standards	27
Vesting did not meet ERISA standards	72
Plan had more restrictive vesting schedule	60
*Plan lacked vesting provisions**	12
Vesting method not determinable	1

**To have a right to benefits, a plan participant must have been eligible for retirement under the plan at time of separation from the employer.*

Source: Graham 1988 tabulations of U.S. Department of Labor data

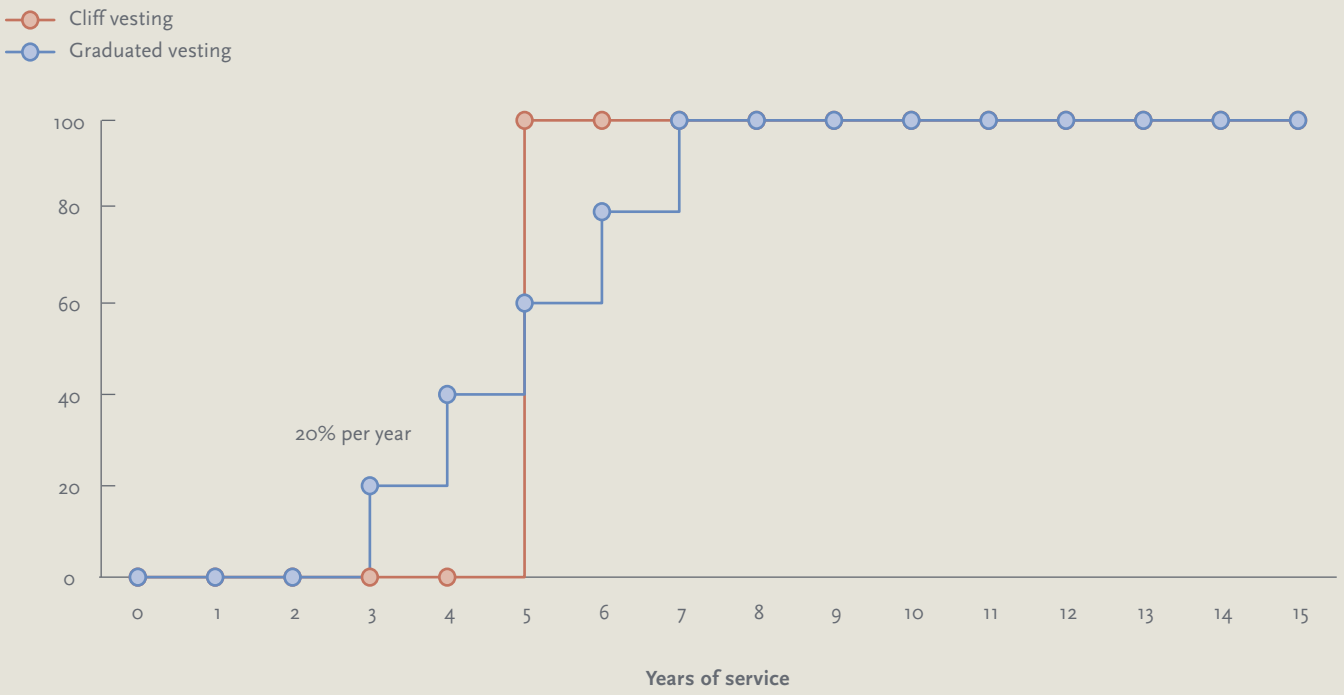
Tax Reform Act of 1986

The Tax Reform Act of 1986 (TRA '86) tightened the minimum vesting requirements established by ERISA (Figure 8). TRA '86 required plans with cliff vesting to vest accrued benefits in five years or less and required plans with graduated vesting to be fully vested in seven years or less, and to vest benefits at least as fast as 20 percent after three years and 20 percent additional each year for the next four years. TRA '86 vesting requirements generally went into effect starting in 1989.[22] As was the case with ERISA, the bulk of DB plan participants were in plans that were required to change their vesting schedules because of the new rules. Prior to the passage of TRA '86, only 5 percent of active DB plan participants were in plans that already met the TRA '86 minimum vesting requirements (Figure 9). Fully 87 percent of DB plan participants in 1986 were in plans with 10-year cliff vesting, the minimum cliff-vesting requirement set by ERISA.

Figure 8

Minimum Vesting Requirements Under TRA '86

Percentage of benefits vested by years of service and type of vesting schedule



Source: Graham 1988

Figure 9

TRA '86 Further Shortened Vesting Periods for the Bulk of Defined Benefit Participants

Percentage of active DB plan participants in medium and large private-sector firms by DB vesting schedule

Vesting met TRA '86 standards	5
Vesting did not meet TRA '86 standards	95
Plan had 10-year cliff vesting	87
Plan had other vesting schedule	8

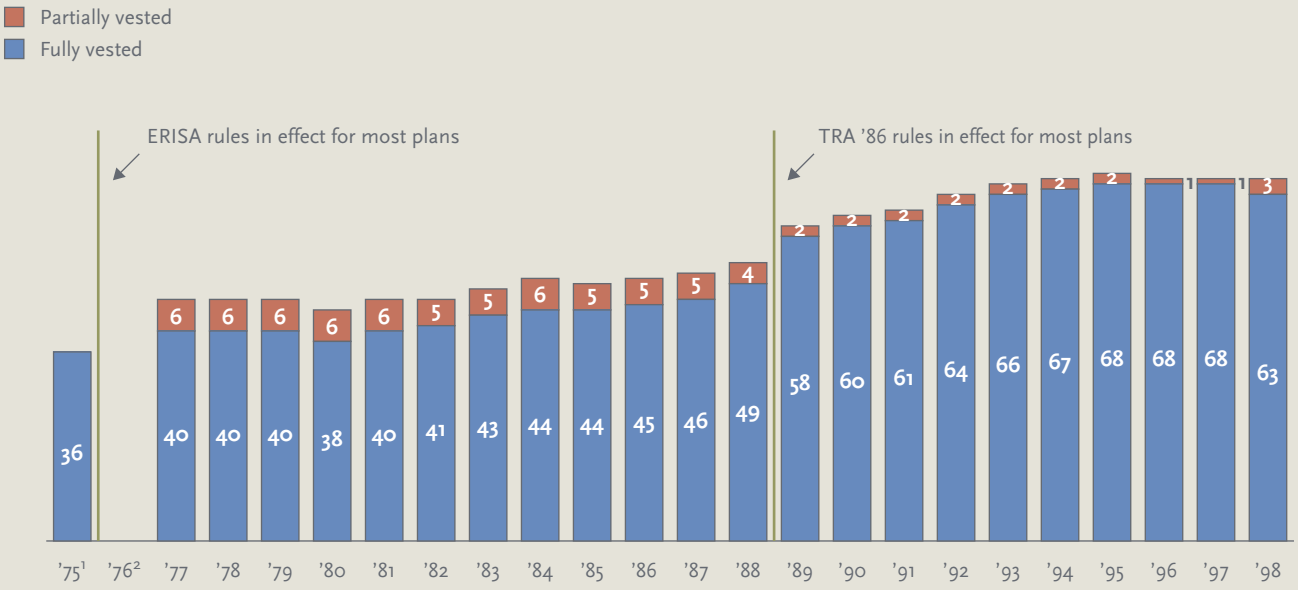
Source: Graham 1988 tabulations of U.S. Department of Labor data

Both the implementation of vesting rules by ERISA and the tightening of vesting rules by TRA '86 preceded an increase in the percentage of private-sector DB plan participants who were vested (Figure 10).[23] In 1975, among active participants in DB plans with 100 or more participants, only 36 percent were fully vested. In 1977, the second year that ERISA vesting rules were in effect, 40 percent of active DB plan participants were fully vested and 6 percent were partially vested; and by 1986, 45 percent of active DB plan participants were fully vested and 5 percent were partially vested. In 1989, the first year that TRA '86 vesting rules were in effect, 58 percent of active DB plan participants were fully vested and 2 percent were partially vested; and by 1995, 68 percent of active DB plan participants were fully vested and 2 percent were partially vested.[24]

Figure 10

Vesting of Active Defined Benefit Participants over Time

Percentage of active participants in private-sector DB plans by vesting status, plans with 100 or more participants, 1975–1998



[1] *Data on partial vesting are not available for 1975.*
[2] *Data are not available for 1976.*
Source: U.S. Department of Labor

Timing of Benefit Accruals

Even if fully vested, employees who were covered by a DB plan but were separated from an employer before normal retirement age[25] may not have earned much in the way of benefits and may have received the benefit as a lump-sum payment at the time of separation from employment.[26]

Figure 4 illustrated the change in annual pension benefits associated with an additional year of service for a hypothetical individual in a DB plan. However, expressing benefit accruals as an increment to a stream of payments that begin at age 65 does not accurately reflect the value of benefit accruals in the year that the benefits are earned. Expressing DB benefit accruals in terms of their current value provides a more accurate portrayal of the change in accruals over time.

Even if fully vested, employees who were covered by a DB plan but were separated from an employer before normal retirement age may not have earned much in the way of benefits.

Determining the current value of DB benefit accruals is perhaps best explained by separating the calculation into two steps. The first step is to calculate the amount needed to purchase a single-life immediate annuity at age 65 that would provide payments equal to the increase in pension benefits earned by an additional year of work. This amount is the value that benefits accrued in a given year will be worth on the day the worker retires. The second step is to take the value of pension accruals at retirement and calculate the present value of the accrual in the year it is earned.

For example, using the same assumptions used above to illustrate DB plan benefit calculations,[27] by working an additional year from age 50 to age 51, the hypothetical worker in the illustration increases the annual pension payment received at retirement from $15,750 per year to $17,160 per year, an increase of $1,410 (Figure 4).[28] Assuming a nominal interest rate of 6 percent, an actuarially fair single-life immediate annuity of $1,410 would cost a 65-year-old $14,003.[29] However, a 51-year-old would not value a stream of annuity payments that begins at age 65 as highly as would a 65-year-old. To a 51-year-old individual, a payment of $14,003 at age 65 would be equivalent to a payment of $6,193 today.[30] That is, an individual would typically value a payment of $14,003 at age 65 the same as a payment of $6,193 at age 51 because a payment of $6,193 at age 51 could be invested, earn 6 percent interest every year, and be worth $14,003 when the worker reaches age 65. To put the current value of the DB benefit accrual in perspective, $6,193 received at age 51 would represent 11.9 percent of the individual's salary.[31] Figure 11 plots similar calculations for every year of the hypothetical worker's career.

During a worker's tenure at a firm, the current value of DB plan benefit accruals generally increases as the worker gets older. This is for two reasons. First, because the measure of salary used in the benefit formula is the worker's highest salary, each additional year of service tends to add more to annual pension benefits than the last (Figure 11, top left panel). As noted earlier, even after the percentage of salary used in the formula reaches a maximum of 45 percent, additional benefits continue to accrue because of salary increases.

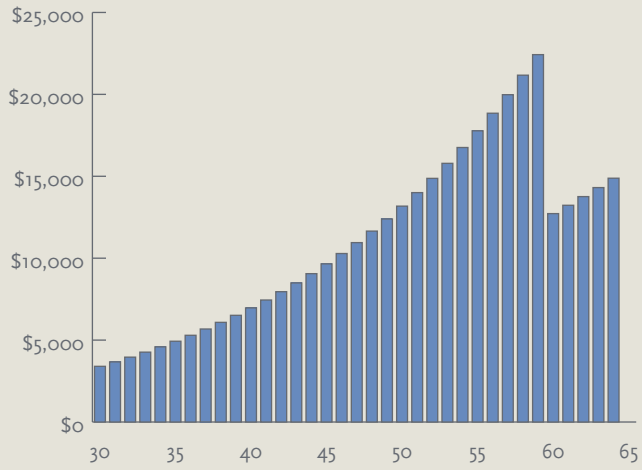
The second reason that the present value of DB benefits increases with the worker's age is the time value of money. Even if each additional year of service increased the annual pension benefit by the same dollar amount, a dollar of annual income starting at age 65 is worth more (in present value) to a 60-year-old worker than it is to, say, a 30-year-old worker. The effect of the time value of money can be seen by comparing the value of DB accruals at retirement (Figure 11, top left panel) to the value of DB accruals in the year in which they are earned (Figure 11, top right panel). For example, at age 64, an additional year of service increases the plan participant's pension payments by about $1,500 per year. This is about the same increment to pension income that the worker earned at age 52. At retirement, an actuarially fair annuity that paid $1,500 per year would be worth just under $15,000. Thus, at age 52 and at age 64, the worker accrued about the same amount of benefits when valued at age 65. Valued in the year the benefits are earned, however, accruals at age 64 are twice as high as accruals at age 52.

Figure 11

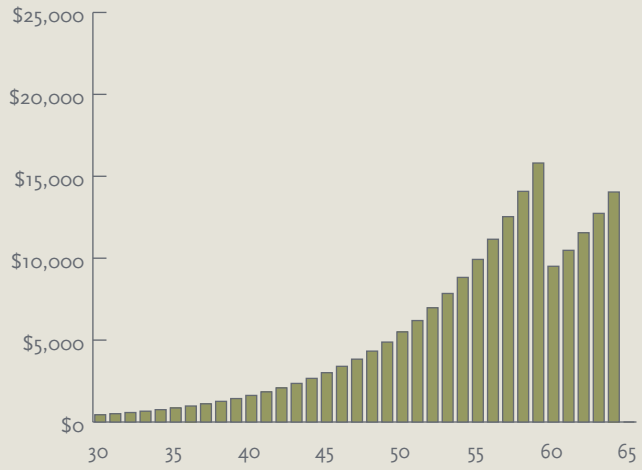
Example Expressing Defined Benefit Accruals as Current Value

Formula: (1.5% per year up to 30 years) x (highest salary)
Assumptions: salary by age as shown in Figure 3; annual inflation of 3%; annual increase in real earnings of 1%; future benefits discounted at 6%

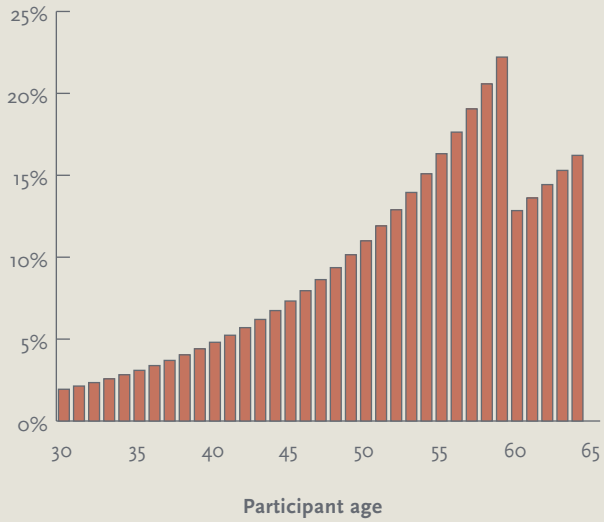
DB plan benefit accruals by age expressed as value at retirement



DB plan benefit accruals by age expressed as value in current year



DB plan benefit accruals by age expressed as current value as a percentage of salary



Source: Investment Company Institute

Back-Loaded Benefit Accrual

More generally, DB pension accruals depend on both the participant's age and the participant's tenure. Benefit accrual in a traditional DB plan typically is "back loaded"; that is, all else equal, the value of accruals in any given year will tend to be much higher for workers with more years of service and for workers who are closer to retirement age.[33] Figure 12 shows the present value of DB pension benefit accruals as a percentage of salary for four hypothetical employees with continuous covered employment at a single firm starting at ages 25, 35, 45, and 55, respectively, using the same assumptions as used above.[34] Holding age constant, benefit accruals are higher for workers with more tenure (up to the maximum 30 years of service used in the formula). Similarly, holding tenure constant, benefit accruals are higher for workers closer to retirement age. Depending on the length of tenure, the value of benefits accrued by hypothetical workers in a given year is less than 10 percent of salary until workers are in their mid-forties to mid-fifties. However, for a worker closer to retirement, the value of pension benefits accrued in a given year can reach 30 percent of the worker's current salary.

For those workers covered by a DB pension, the back-loaded accrual of benefits places a premium on having long tenure with a single employer and on separating from employment close to retirement age. (Because of this, DB pensions may be a particularly attractive way to structure compensation for firms wanting to retain long-tenured employees.) This premium can be illustrated using the following example:

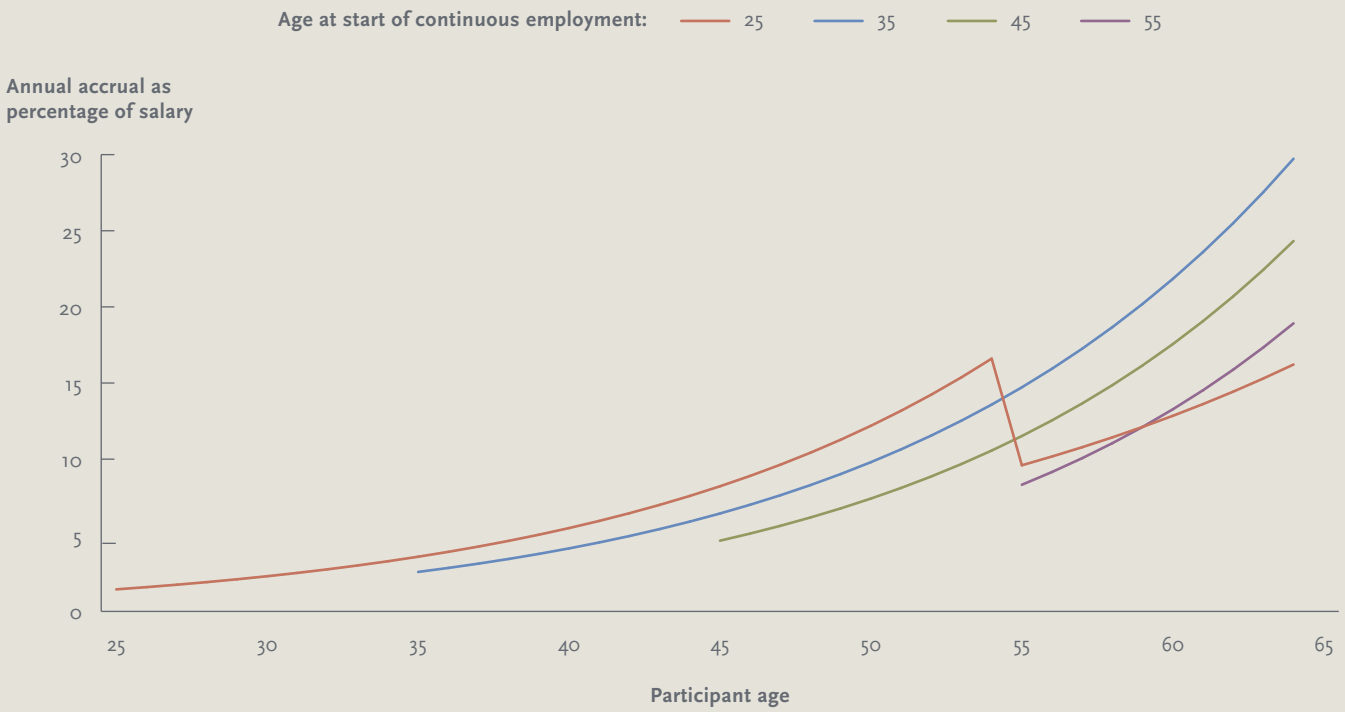
Suppose there are two individuals who work from age 25 to age 64, retire at age 65, and over the course of their working careers are both covered by a DB pension for 30 years out of the 40 years that they work. The two workers have nearly identical work histories, with earnings growth and DB plan benefit formulas the same as the hypothetical workers described above. The only difference between the two is the number of employers for whom they work and the ages at which they are covered by a pension plan. The first worker has no pension coverage initially, but works for a single employer that sponsors a DB pension for 30 years ending at age 64. The second worker also has 30 years of coverage under DB plans, but at three different employers with three separate 10-year stints of employment ending at age 34, age 44, and age 54, respectively. The last 10 years of his or her career is at a firm without a pension plan.

At age 64, the first worker gets an annual pension payment equal to 45 percent (1.5 percent x 30 years) of the amount he or she earned at age 65. For the second worker, each stint of employment provides the worker with a annual payment beginning at age 65 that is equal to 15 percent (1.5 percent x 10 years) of the highest salary that he or she earned at each employer. However, because of inflation and real wage growth, the worker's salary is higher at age 64 than at younger ages. In particular, in this example, 15 percent of salary at age 34 is equivalent to 5 percent of salary at age 64; 15 percent of salary at age 44 is equivalent to 7 percent of salary at age 64; and 15 percent of salary at age 54 is equivalent to 10 percent of salary at age 64. Thus, the second worker gets a combined benefit from all three plans equal to 22 percent of his or her salary at age 64, less than half as large as the benefit received by the first worker.

Figure 12

Benefit Accrual Under a Traditional Defined Benefit Pension Plan Is Back Loaded

Benefit accrual under a hypothetical DB pension plan by age and age at start of continuous employment
Formula: 1.5% per year up to 30 years; highest salary; benefits vest immediately
Assumptions: annual inflation of 3%; annual increase in real earnings of 1%; future benefits discounted at 6%



Source: Investment Company Institute; hypothetical example

Frequency of Job Change Among Private-Sector Workers

One reason vesting rules and back-loaded benefit accrual can limit the amount of pension income actually paid out by DB plans is that the private-sector workforce is mobile; that is, workers tend to change jobs and employers on a regular basis. In 2010, among private-sector workers aged 25 to 64, the median tenure (length of time) at their current job was five years (Figure 13).[35] This amount of labor mobility is not new: in 1983, the median tenure at their current job for this same age group of workers was also five years. Worker mobility explains why the shorter vesting periods that were adopted by private-sector DB plans following the passage of ERISA—and later, TRA '86—could have a substantial impact on the share of DB plan participants who were vested. It also helps explain why many workers, even if they spend the majority of their careers in jobs where they are vested in DB pensions, may accrue relatively few benefits.

The fact that the mobility of the private-sector workforce as a whole is little changed in the past 30 years is at odds with the conventional wisdom that today's workers are more mobile. In particular, it is commonly believed that today's workers have less job security, lower quality jobs, and are less likely to retire from "lifetime jobs."[36] Workers are considered to have lifetime jobs if they stay with a single employer for a substantial period ending at or near retirement, even if they change jobs periodically early in their careers.

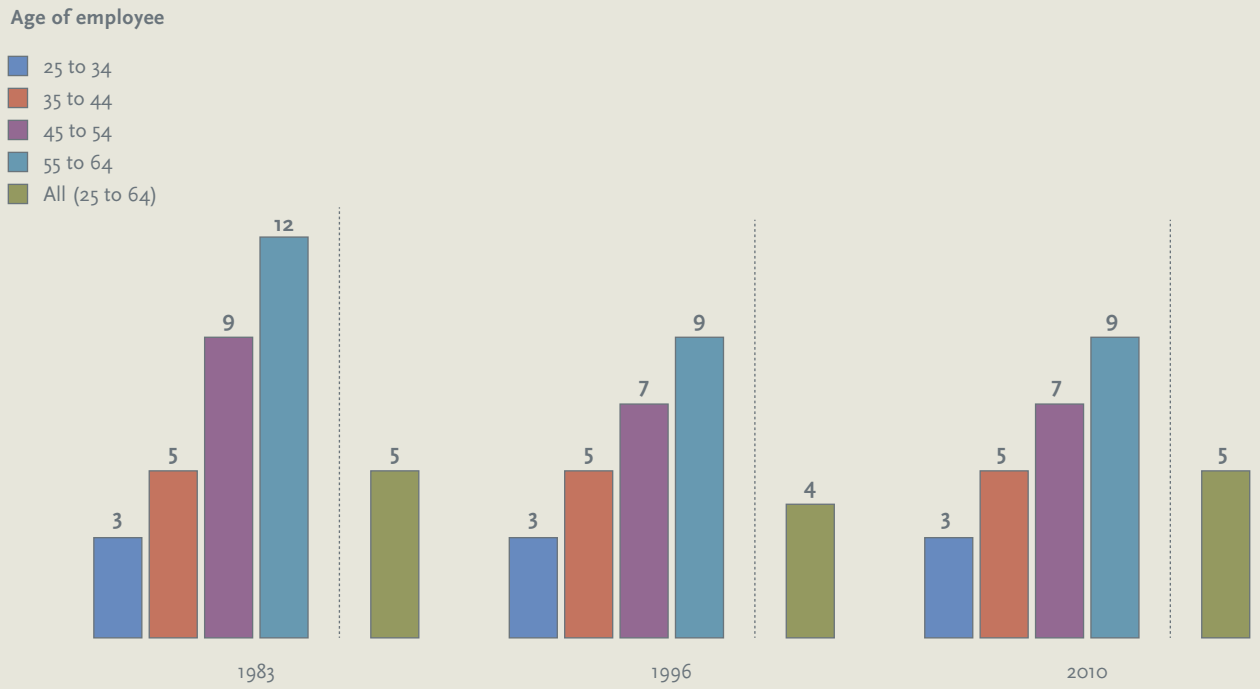
The fact that the mobility of the private-sector workforce as a whole is little changed in the past 30 years is at odds with the conventional wisdom that today's workers are more mobile.

There is some evidence to support the view that retiring from a lifetime job is less prevalent today than it was in the past.[37] The fact that median tenure for all workers is unchanged since 1983 obscures the different

Figure 13

Median Tenure for Private Sector Wage and Salary Workers

Length of employment at current employer in years by age group, selected years



Source: ICI tabulations of the Current Population Survey

trends across age groups and gender. Median tenure is little changed for workers under age 45, but the median tenure for workers aged 45 or older has declined (Figure 13). For example, median tenure for private-sector workers aged 55 to 64, which was 12 years in 1983, declined to nine years by 1996 and was still nine years in 2010. Looking at the entire distribution of tenure among 54- to 64-year-old private-sector workers in 1983, one-third had tenure of 20 years or more (Figure 14). By 2010, only one-quarter of private-sector workers aged 55 to 64 years had tenure of 20 years or more. Private-sector male workers more than accounted for the decline in tenure in this age group, as the share of men with tenure of 20 years or more fell from 43 percent in 1983 to 29 percent in 2010.

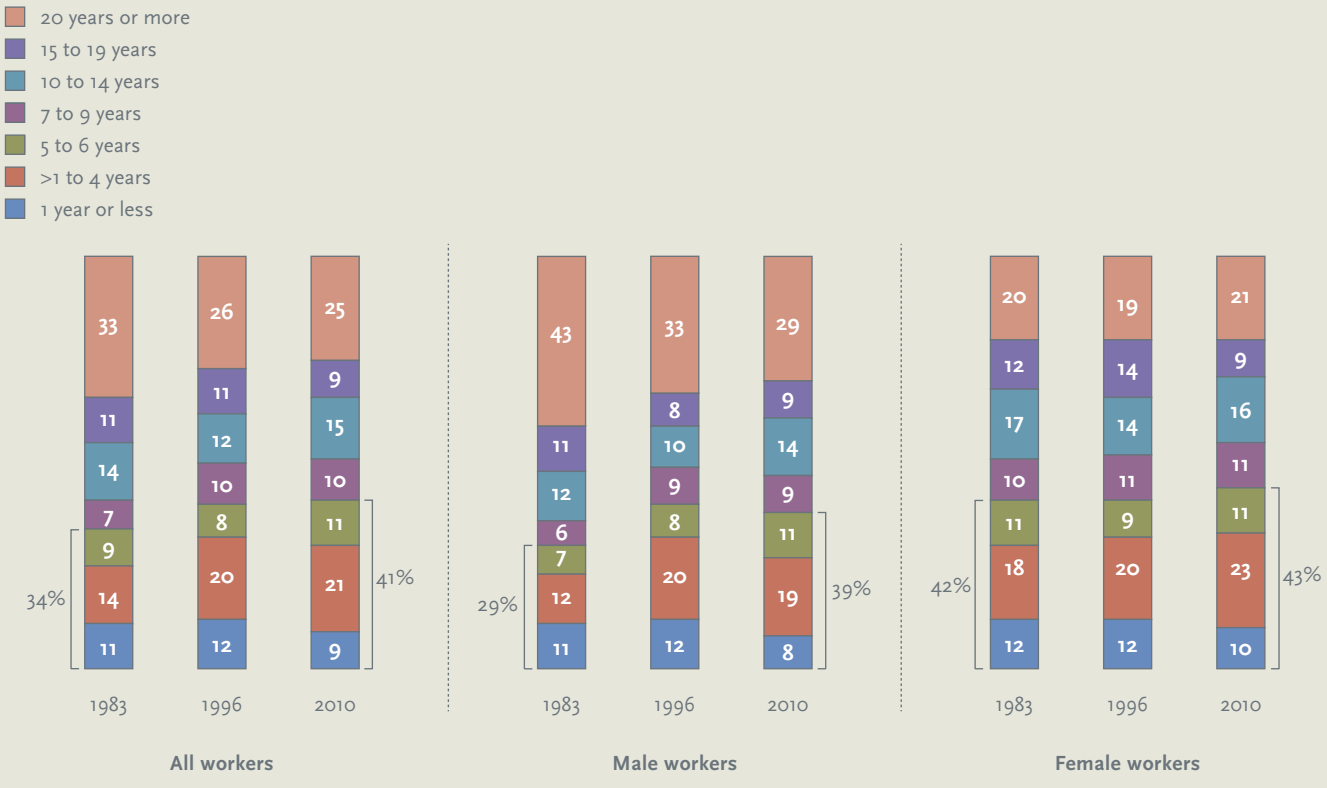
Although there is some evidence that retiring from a lifetime job is less prevalent today than it was 30 years ago, it was never the case that lifetime jobs were very prevalent to begin with. Even in 1983, 34 percent of private-sector workers aged 55 to 64 years had tenure of six years or less, not far below the 41 percent of workers in this age group with tenure of six years or less in 2010 (Figure 14). And, for female workers aged 55 to 64 years, there has been little change in the length of tenure since 1983.

Although there is some evidence that retiring from a lifetime job is less prevalent today than it was 30 years ago, it was never the case that lifetime jobs were very prevalent to begin with.

Figure 14

Length of Job Tenure Among Pre-Retirees

Percentage of private-sector wage and salary workers aged 55 to 64 by length of employment at current employer, selected years



Note: Components may not add to the total because of rounding.
Source: ICI tabulations of the Current Population Survey

Data on worker mobility illustrates that, for private-sector workers overall, mobility has changed little over time. To the extent that there has been an increase in mobility among private-sector workers, it appears to be concentrated in one group of workers: middle-aged men.[38]

Translating DB Pension Coverage into Retirement Income

It is widely believed that the decline in the share of private-sector workers covered by DB pensions that has occurred since the passage of ERISA has led—or will lead in the near future—to a substantial drop in retiree income from DB pensions.[39] In addition, there is skepticism as to the ability of DC pensions to fill the void.[40] However, the extent to which previous generations received income from private-sector DB plans cannot be gleaned simply by looking at data on pension coverage.

Not all workers covered by DB pension plans would have received benefits from the plans, and the amounts received would likely be less than what would be implied by simple calculations that assume workers retire from their employer after a lengthy period of employment. Private-sector workers change jobs frequently. In order to receive any benefits, workers must participate in a plan long enough to vest. But, vesting alone does not ensure benefits will be of great value: the accrual of benefits in a traditional DB plan is typically back loaded, which puts a premium on having long tenure at a single employer and separating from service close to the retirement age designated by the plan.

Not all workers covered by DB pension plans would have received benefits from the plans.

The decline in private-sector DB pensions does not necessarily mean that private-sector DB pension income has become less prevalent among retirees. If nothing else had changed over this time period, the decline in the share of private-sector workers covered by DB plans would have led to a decline in the share of retirees with DB pension income. However, over this same period, shorter vesting periods led to an increase in the share of DB plan participants who had vested benefits.[41] If the share of private-sector workers covered by DB pensions had remained unchanged over this time period, increased participant vesting would have led to an increase in the prevalence of DB pension income. However, over this period, the share of private-sector workers with DB pension coverage decreased. Whether decreased DB pension coverage or increased vesting among DB plan participants had the larger impact can only be determined by looking at data on retirement income.

Historical Importance of Pension Income in Retirement

To provide context for discussing the implications of the declining share of private-sector workers covered by DB pension plans, this section examines data on retiree income to determine the historical importance of private-sector pensions. The data analyzed are from the Current Population Survey (CPS), a survey conducted by the Bureau of Census for the Bureau of Labor Statistics. The CPS is the most widely used data source for measuring economic well-being across the U.S. population.[42]

Although some portion of the pension income reported in the CPS is presumably from DC plans, there is evidence that distributions from DC plans and IRAs may be underreported in the CPS.

Data on pension income are derived from a question that asks if individuals received any "pension or retirement income from a previous employer or union, or any other type of retirement income?" If the individual has pension or retirement income, they are then asked the source of the income, with several options listed, including an open-ended "other source" category. Neither the question on the presence of pension income nor the question on the source of the income distinguishes between DB or DC pensions.[43] Although some portion of the pension income reported in the CPS is presumably from DC plans,[44] there is evidence that distributions from DC plans and IRAs may be underreported in the CPS.[45]

The Current Population Survey Measure of Income

The Current Population Survey (CPS) is a monthly household survey conducted by the Bureau of Census for the Bureau of Labor Statistics (BLS). The survey is one of the most widely used sources for data on unemployment, employment, hourly and weekly earnings, and worker demographic information such as industry, occupation, race, and ethnicity. Every March, the BLS supplements the typical monthly survey questions with a special set of detailed questions on the components of income, and those data are used to produce commonly used measures such as the official poverty rate. The so-called "March Supplement" is the only regular source of detailed income data from the CPS.

The CPS March Supplement collects income information for each person 15 years or older in the sample. Data are collected on the amount of income received in the preceding calendar year from each of the following sources: earnings, unemployment compensation, workers' compensation, Social Security, supplemental security income, public assistance, veterans payments, survivor benefits, disability benefits, pension or retirement income (including income from IRAs, Keoghs, and DC plans), interest, dividends, rents, royalties, estates, trusts, educational assistance, alimony, child support, and financial assistance from outside of the household.

The CPS attempts to measure income that is consistent with the concept of income in the National Income and Product Accounts (NIPA) and does not necessarily aim to measure income that is consistent with other definitions of income, such as the definition of income under the federal income tax. In particular, capital gains, whether or not they are realized, are not included in the NIPA definition of income, and are thus not included in the CPS measure.

The income of the household does not include amounts received by people who were members during all or part of the previous year if these people no longer resided in the household at the time of the interview. The survey collects income data for people who are current residents even if they did not reside in the household during the previous year.

In addition, the income data collected by the U.S. Census Bureau include money income received before payments for personal income taxes, Social Security, union dues, and Medicare deductions. Receipts of noncash benefits such as food stamps, health benefits, and subsidized housing are not included.

For additional information, see www.census.gov/cps/.

For the analysis that follows, retirees are defined as individuals aged 65 years or older with income and who, if single, did not work, or, if married, neither the individual nor the spouse worked. To limit the effect on the statistics of those reporting very high or very low income, the highest and lowest 1 percent of the per capita income distribution are excluded from the tabulations. For married individuals, the income of couples is pooled and each spouse is allocated half of total income, as well as half of total income from each source.

Composition of Retiree Income over Time

Overall, between 1975 and 2009, Social Security remained the primary source of retiree income, and the share of income from pensions increased. As far back as the CPS has data, Social Security benefits have been the most important source of retiree income, having typically accounted for more than half of annual income for retirees as a group (Figure 15). In 2009, 58 percent of retiree income was Social Security benefits—not much changed from the 54 percent of retiree income for which Social Security benefits accounted in 1975. The ratio of Social Security benefits to total retiree income fell from 54 percent in 1975 to 48 percent in 1989 before increasing again. Between 2000 and 2009, the Social Security share of retirement income has been between 54 percent and 58 percent.

In 2009, the second most important source of retiree income was pension income (Figure 15). The CPS data identify the source of pension income, enabling separate identification of private-sector pension sources (which include payments from company or union pensions, regular payments from annuities, and regular payments from IRAs and 401(k)s) and government pension sources (which include payments from state and local government employee pensions, federal government employee pensions, and military pensions).[46] In 2009, for retirees as a group, 26 percent of retiree income was from pensions (both DB and DC), about equally split between private-sector and government pensions. This compares with 20 percent of total retiree income from pensions in 1975, with just over 11 percent from government pensions and just over 8 percent from private-sector pensions.

Overall, between 1975 and 2009, Social Security remained the primary source of retiree income and the share of income from pensions increased.

The third largest source of retiree income in 2009 was income earned from owning assets outside of retirement accounts (Figure 15). Asset income includes interest, dividends, and rental income. Asset income does not include funds obtained by selling assets—neither the return of principal nor the realized gains.[47] Asset income represented 19 percent of total retiree income in 1975 and rose to 30 percent in 1984 before declining to 12 percent in 2009.[48]

Figure 15

Retirement Income by Source over Time

Percentage of total retiree[1] income by source, on a per capita basis,[2] 1975–2009

	Source of income					
Year	Social Security	Public assistance	Private pension	Government pension	Asset income[3]	Other
1975	54%	3%	8%	11%	19%	4%
1976	53	3	9	11	19	4
1977	53	3	9	12	19	4
1978	54	3	9	10	21	4
1979	53	3	8	11	23	3
1980	53	3	8	11	23	3
1981	52	2	8	10	26	2
1982	52	2	8	10	26	2
1983	51	2	8	11	26	2
1984	48	2	8	10	30	2
1985	49	2	8	11	28	2
1986	50	2	9	11	27	2
1987	49	1	9	11	26	2
1988	49	1	10	11	26	2
1989	48	2	10	11	26	2
1990	49	1	11	11	26	2
1991	50	2	12	11	23	3
1992	52	1	12	12	20	3
1993	53	1	12	12	18	3
1994	55	1	12	11	18	3
1995	55	1	11	11	18	3
1996	55	1	13	11	18	3
1997	53	1	11	12	19	3
1998	52	1	12	11	21	3
1999	53	1	13	11	19	3
2000	55	1	12	11	17	3
2001	55	1	13	11	17	3
2002	56	1	13	12	14	3
2003	56	1	14	12	14	3
2004	57	1	14	13	13	3
2005	55	1	14	13	14	3
2006	54	1	14	11	17	3
2007	56	1	13	12	15	3
2008	56	1	14	13	13	3
2009	58	1	13	13	12	3

[1] Individuals aged 65 and older with non-zero income and not working; for married couples, neither the individual nor the spouse worked. Sample excludes highest 1 percent and lowest 1 percent of the income distribution.

[2] Income of married couples is pooled and each spouse is allocated half of total income, as well as half of income from each source.

[3] Asset income includes interest, dividends, and rents earned on assets held outside retirement accounts.

Source: ICI tabulations of the March Current Population Survey

Sources of Income Varied Across Retiree Income Groups

This section examines how the sources of retirement income vary based on the economic resources available to a household. For purposes of determining whether an individual has a type of income and for calculating per capita income, the income of married couples is pooled and each spouse is allocated half of total income, as well as half of total income from each source. Figure 16 shows the sources of income by income quintile, with individuals ranked by per capita total income. The data are shown for 1975 (the first year for which data are available) and 2009 (the latest year for which the data are available).

Composition of Retiree Income by Income Quintile in 2009

For all but the highest income quintile of retirees, Social Security benefits were the predominant source of income in 2009 (Figure 16). The sum of Social Security benefits and public assistance represented 90 percent or more of income for the lowest two income quintiles. The share of retiree income from Social Security benefits and public assistance declines with income. For the third and fourth income quintiles of retirees, Social Security plus public assistance represented 77 percent and 60 percent of income, respectively, in 2009. Although, retirees in the highest income quintile have more varied sources of income, Social Security benefits represented more than one-third of this group's total income.

> For all but the highest income quintile of retirees, Social Security benefits were the predominant source of income in 2009.

In contrast to Social Security benefits, the share of income from pensions increased with income in 2009 (Figure 16). That pension income was a more important source of income for retirees with higher income is not surprising given how policymakers have structured both Social Security and employer-provided pensions. The formula used to calculate Social Security benefits ensures that Social Security replaces a much higher portion of earnings for workers with lower lifetime earnings.[49] To maintain living standards in retirement, workers with higher lifetime earnings have had to rely more heavily on private savings and employer-sponsored pensions to supplement Social Security. In this way, Social Security and employer-provided pension plans are complementary.[50]

In 2009, the share of retiree income from pensions ranged from 3 percent for the retirees in the lowest income quintile up to 39 percent for retirees in the highest income quintile (Figure 16). Income from private-sector pensions in 2009 represented 2 percent of income for retirees in lowest income quintile, 10 percent for the middle quintile, 17 percent for the fourth quintile, and 18 percent for retirees in the highest quintile. Income from government employee pensions in 2009 represented 1 percent of income for retirees in lowest income quintile, 5 percent for the middle quintile, 11 percent for the fourth quintile, and 21 percent for retirees in the highest quintile.

Composition of Retiree Income by Income Quintile over Time

Over time, the role of public assistance in providing retiree income has diminished as Social Security benefits became more generous, particularly at the lower-end of the lifetime-earnings distribution.[51] Other than this shift, there has been little change in the importance of Social Security benefits in providing retiree income since 1975: Social Security has remained the most important source of retiree income, particularly for lower-income retirees. Throughout the income distribution, the share of income from the sum

of Social Security benefits and public assistance was about the same in 2009 as it was in 1975, although more of the income was from public assistance in 1975.

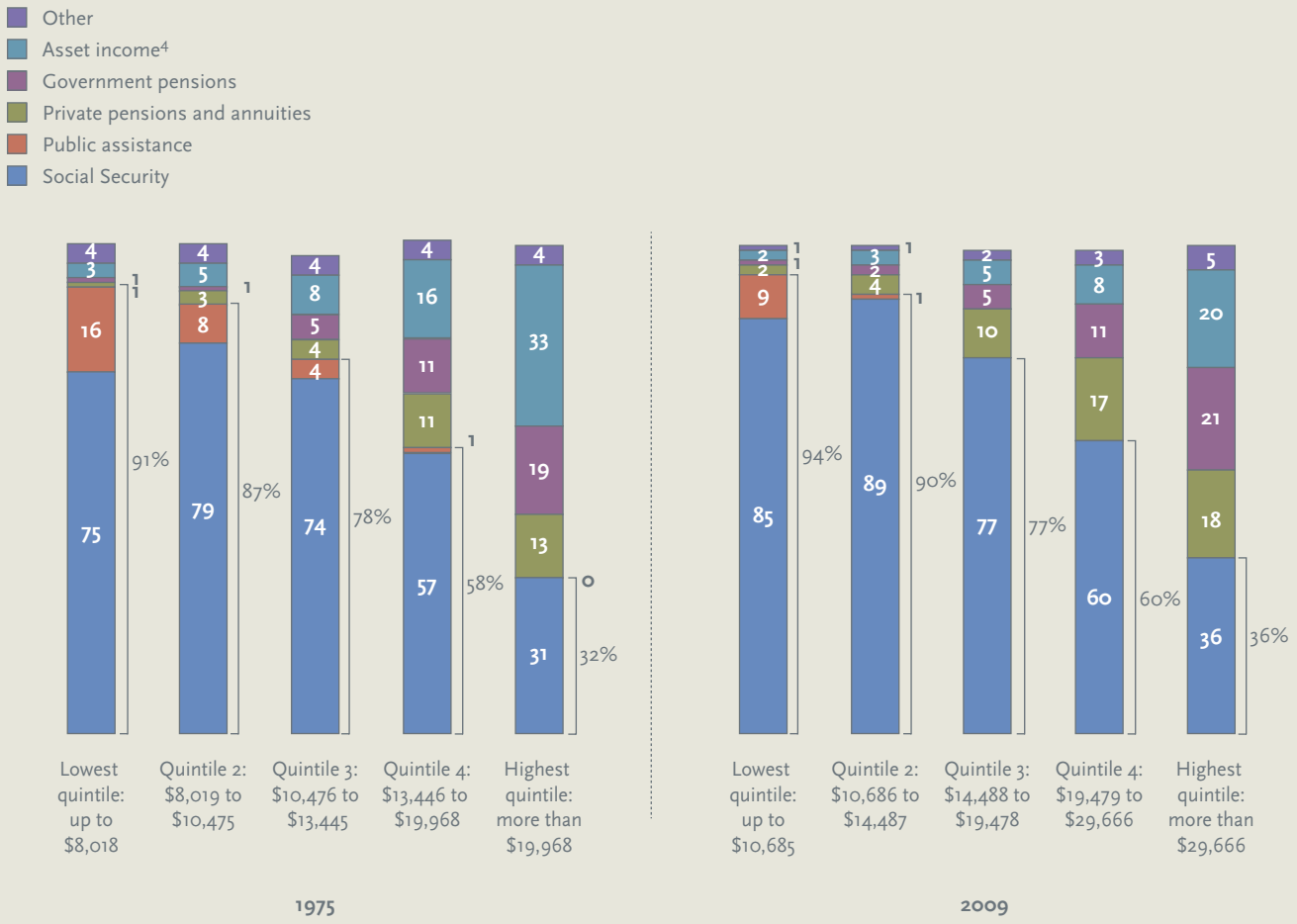
The importance of pension income, from both private-sector and government pensions, has increased over time for all retiree income groups. Focusing on private-sector pensions, retirees in the lowest income quintile received less than 1 percent of income from private-sector pensions in 1975; in 2009 retirees in the lowest income quintile received 2 percent of income from private-sector pensions. For retirees in the middle income quintile, the share of income from private-sector pensions increased from 4 percent in 1975 to 10 percent in 2009. For retirees in the highest income quintile, the share increased from 13 percent in 1975 to 18 percent in 2009.

The importance of pension income, from both private-sector and government pensions, has increased over time for all retiree income groups.

Figure 16

Source of Retirement Income by Amount of Per Capita[1] Income

Percentage of total retiree[2] income by source and income quintile,[3] 2009 dollars, 1975 and 2009



[1]Income of married couples is pooled, and each spouse is allocated half of total income, as well as half of income from each source.
[2]Individuals aged 65 and older with non-zero income and not working; for married couples, neither the individual nor the spouse worked. Sample excludes highest 1 percent and lowest 1 percent of the income distribution.
[3]The top 1 percent and bottom 1 percent of the income distribution were excluded from the calculations. For married couples, neither the individual nor the spouse worked.
[4]Asset income includes interest, dividends, and rental income earned on assets held outside retirement accounts.
Source: ICI tabulations of the March Current Population Survey

The Impact Pension Changes Have Had on Retiree Income

To date, the decline in the portion of private-sector workers who are covered by DB pensions has not led to a reduced share of retiree income from private-sector pensions. The share of retiree income from private-sector pensions has increased over time and throughout the income distribution. Some of this increase may be attributable to the growth of DC pension plans.[52] Indeed, because the CPS data do not fully capture distributions from DC plans and IRAs, the growth in the importance of income from private-sector pensions is likely understated.[53] Some of this increase may be, counter to conventional wisdom, attributable to growth in income from private-sector DB pensions. That is, the effect on retiree income of the decline in the share of private-sector workers covered by DB pensions may have been outweighed by covered workers becoming more likely to receive retirement benefits from the plans as vesting rules were first implemented by ERISA and then tightened by TRA '86.

Trends in Retiree Pension Income

To quantify the potential effects on future retirees of the decline in the share of private-sector workers covered by DB pensions, this section focuses more narrowly on trends in retiree pension income, measured on a per capita basis. That is, as with the analysis above, each married individual is assumed to have received pension income if either spouse received pension income. If a married couple had pension income, half of total pension income was allocated to each spouse.

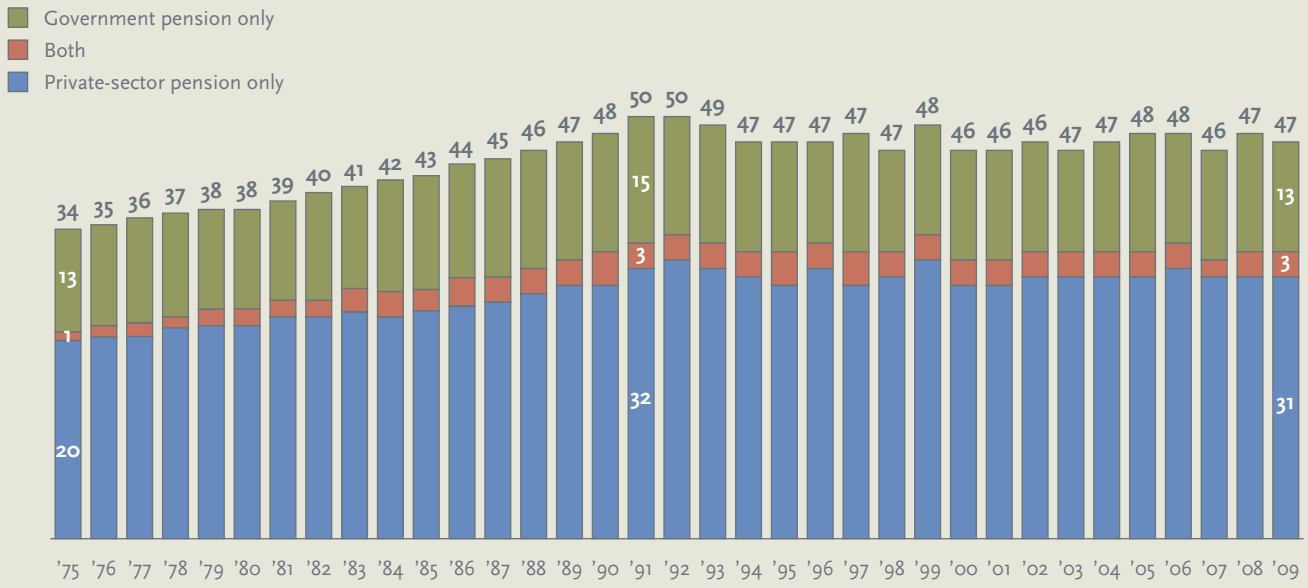
> To date, the decline in the portion of private-sector workers who are covered by DB pensions has not led to a reduced share of retiree income from private-sector pensions.

The importance of pension income has increased, not decreased, over time. In 1975, 34 percent of retirees received pension income (Figure 17).[54] That percentage increased to 50 percent in 1991. After 1991, the percentage

Figure 17

Receipt of Income from Pension by Type of Pension

Percentage of retirees with pension income by type of pension, 1975–2009*



**Individuals aged 65 and older with non-zero income and not working; for married couples, neither the individual nor the spouse worked. Sample excludes highest 1 percent and lowest 1 percent of the income distribution.*
Source: ICI tabulations of the March Current Population Survey

has varied but has remained above 45 percent. Only a portion of these individuals have received this income from private-sector pensions. In 1975, 20 percent of retirees received pension income only from private-sector pensions, 13 percent received pension income only from government pensions only, and 1 percent received income from both private-sector and government pensions. By the time the share of retirees with pension income peaked in 1991, these percentages were 32 percent, 15 percent, and 3 percent, respectively. Since 1991, the shares with pension income from private-sector pensions only, from government pensions only, and from both have remained fairly stable.

In 1975, the median per capita pension benefit for the 20 percent of retirees with pension income only from private-sector pensions was almost $4,600 per year in constant 2009 dollars (Figure 18). By 2009, the median annual benefit for the 31 percent of retirees who received pension income only from private-sector pensions was $6,000 per person. Over the entire period from 1975 to 2009, the median per capita private-sector pension benefit averaged about $4,800 per year and ranged from about $3,800 to $6,000 in constant 2009 dollars.[55]

Workers with government pensions tend to have higher pension benefits. In 1975, the median per capita annual pension benefit for the 13 percent of retirees with pension income only from government pensions was $9,915 in constant 2009 dollars. By 2009, the median annual benefit for the 13 percent of retirees that received pension income only from government pensions was about $14,800 per person. However, some of the difference in pension amounts between those with pension income only from government pensions and those with pension income only from private-sector pensions is due to the fact that, at least historically, many of these workers were not covered under the Social Security system during the time they worked for the government.[56] On average, lower Social Security benefits of government workers accounted for over 40 percent of the difference between the median per capita income from government pensions and the median per capita income from private-sector pensions in 2009.

Figure 18

Receipt of Income from Government and Private-Sector Pensions[1] Among Retirees[2]

On a per capita basis,[3] 2009 dollars, selected years

	With private-sector pension only			With government pension only			With both private-sector and government pension		
		Per capita income			Per capita income			Per capita income	
Year	Percentage of sample	Median pension	Median pension plus Social Security	Percentage of sample	Median pension	Median pension plus Social Security	Percentage of sample	Median pension	Median pension plus Social Security
1975	20.0%	$4,553	$14,270	12.9%	$9,915	$15,549	1.3%	$13,927	$19,115
1980	22.7	4,006	14,169	13.7	8,701	15,528	2.0	11,752	21,220
1985	25.7	3,909	15,168	14.7	9,622	16,678	2.5	10,380	20,066
1990	30.2	4,543	15,582	14.2	10,839	18,636	3.8	10,441	20,551
1995	30.5	4,670	16,736	12.7	10,676	19,390	3.8	12,076	22,432
2000	29.7	5,705	17,919	13.4	11,560	20,781	3.0	13,762	25,013
2005	31.2	5,842	18,420	13.8	13,308	22,382	3.1	14,128	25,255
2009	30.9	6,000	19,697	13.1	14,808	24,653	3.1	14,400	26,993

[1] Includes income from both DB and DC pensions.
[2] Individuals aged 65 and older with non-zero income and not working; for married couples, neither the individual nor the spouse worked. Sample excludes highest 1 percent and lowest 1 percent of the income distribution.
[3] Income of married couples is pooled and each spouse is allocated half of total income, as well as half of income from each source.
Source: ICI tabulations of the March Current Population Survey

The percentage of retirees with any type of pension income—from either private-sector or government pensions—was higher in 2009 than it was in 1975 for all income groups (Figure 19). However, the trends in pension receipt between 1975 and 2009 varied by income. In any given year, receipt of pension income has been positively correlated with total retiree income. For example, in 1975, only 3 percent of retirees in the lowest income quintile received pension income of any type compared with 70 percent of retirees in the highest quintile. Between 1975 and 1991, the percentage of retirees with pension income increased for all income groups, and increased to 11 percent and 80 percent, respectively, for the lowest and highest income quintiles. After 1991, the percentage of retirees with pension income remained fairly flat for the highest two income quintiles and the lowest quintile, but declined for the second and third income quintiles. For example, the percentage of retirees in the middle income quintile with pension income increased from 30 percent in 1975 to 57 percent in 1991, but then fell back to 49 percent by 2009.

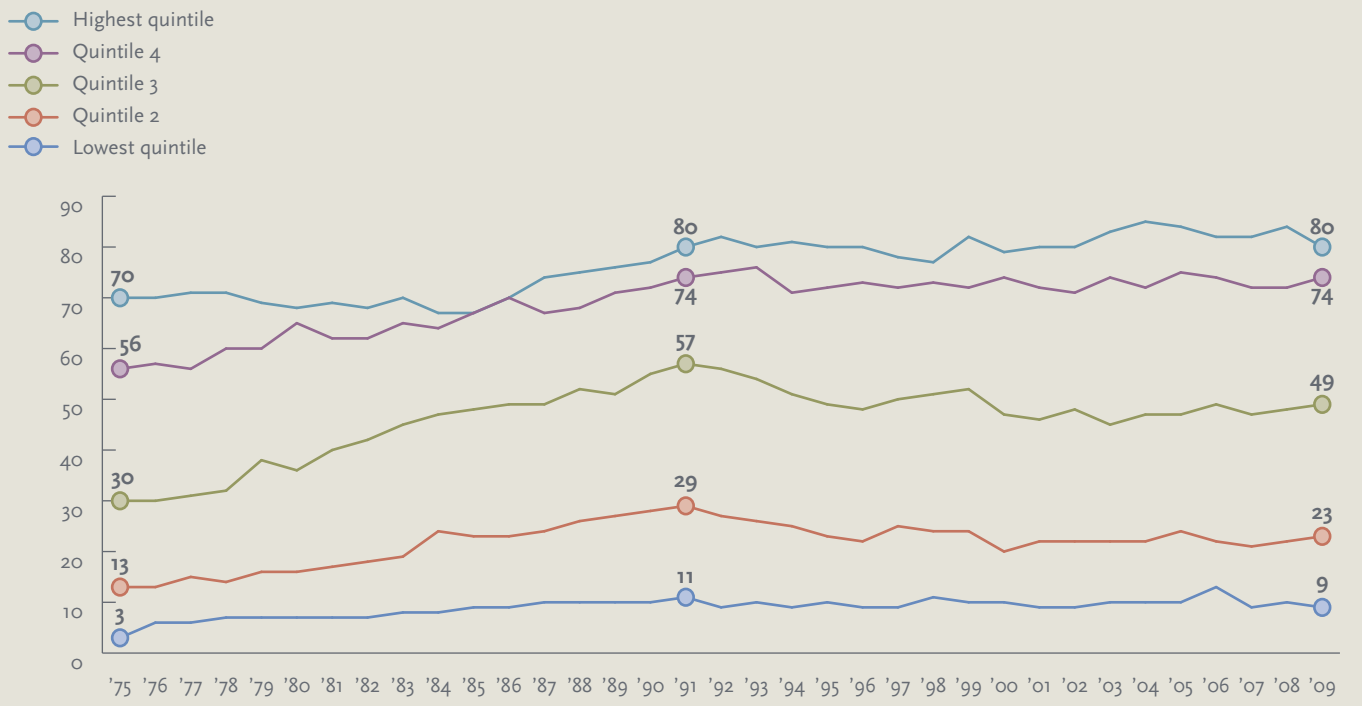
Private-Sector Pension Income

The concern about the decline of the DB pension system is not typically expressed in regard to all pension income, but with respect to income from private-sector pensions. The percentage of retirees receiving income from private-sector pensions was higher in 2009 than it was in 1975, increasing from 21 percent to 34 percent of retirees (Figure 18).[57] As with pension income generally, this percentage was higher in 2009 than it was in 1975 for all income groups (Figure 20, top panel). However, unlike the receipt of pension income generally, the decline in the percentage of retirees with income from private-sector pensions since 1991 is not as pronounced in the second and third income quintiles, and there has been a slight drop in the share of highest income quintile retirees with private-sector pension income. This is because part of the decline in pension receipt among middle income groups since 1991 and part

Figure 19

Receipt of Income from Any Type of Pension by Income Quintile

Percentage of retirees[1] with government or private-sector pension[2] income by income quintile tabulated on a per capita basis,[3] 1975–2009



[1]Individuals aged 65 and older with non-zero income and not working; for married couples, neither the individual nor the spouse worked. Sample excludes highest 1 percent and lowest 1 percent of the income distribution.

[2]Pensions include both DC and DB pensions.

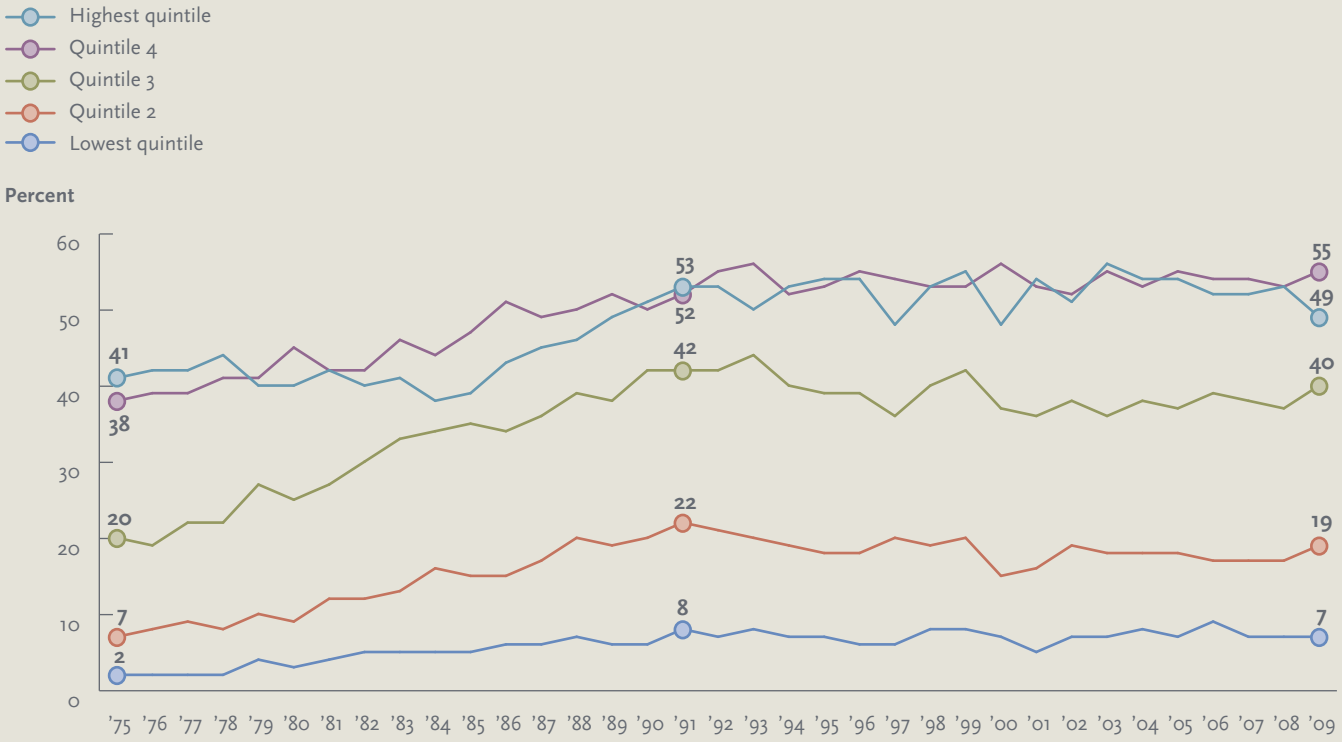
[3]Income of married couples is pooled and each spouse is allocated half of total income, as well as half of income from each source.

Source: ICI tabulations of the March Current Population Survey

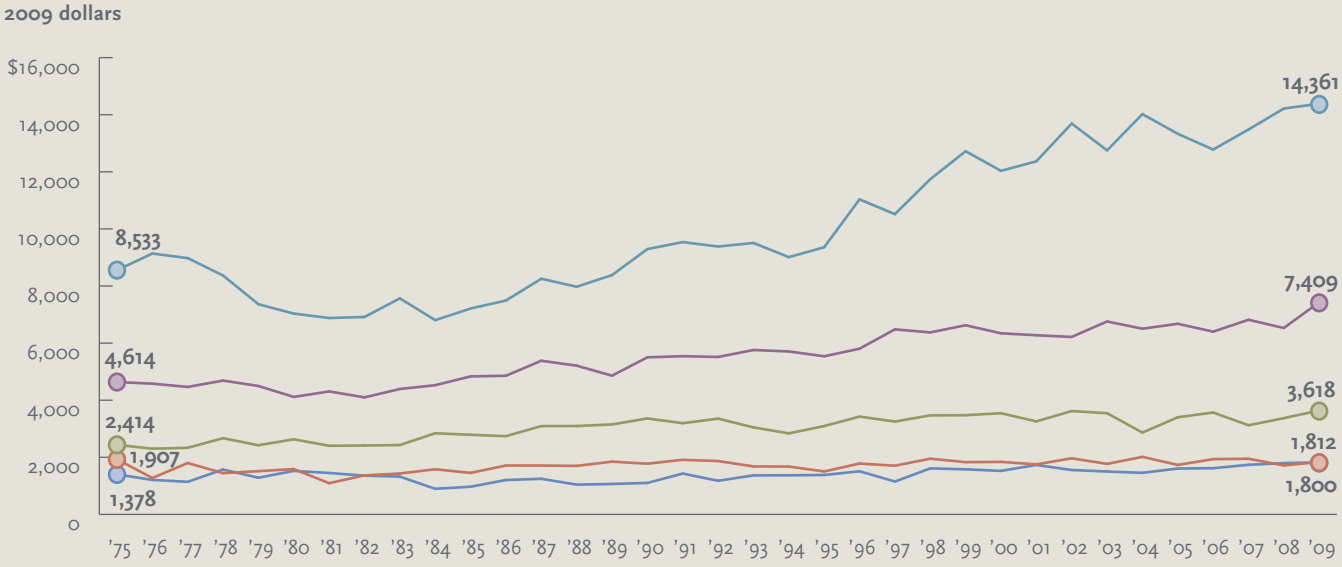
Figure 20

Receipt of Income from Private-Sector Pension by Income Quintile

Percentage or retirees[1] with private-sector pension[2] income, tabulated on a per capita basis,[3] 1975–2009



Median private-sector pension income for retirees,[1] on a per capita basis,[3] 2009 dollars, 1975–2009



[1] *Individuals aged 65 and older with non-zero income and not working; for married couples, neither the individual nor the spouse worked. Sample excludes highest 1 percent and lowest 1 percent of the income distribution.*

[2] *Pensions include both DC and DB pensions.*

[3] *Income of married couples is pooled and each spouse is allocated half of total income, as well as half of income from each source.*

Source: ICI tabulations of the March Current Population Survey

of the increase in the percentage of the highest quintile with pension income since 1991 is due to those retirees with government pension income moving up in the retiree income rankings. Over the entire period, the percentage of retirees in the lowest income quintile with private-sector pension income increased from 2 percent in 1975 to 7 percent in 2009, from 20 percent to 40 percent for the middle income quintile, and from 41 percent to 49 percent for the highest income quintile. Focusing on the middle income quintile after 1991, the percentage of individuals receiving private pension income fell 2 percentage points between 1991 and 2009 from 42 percent to 40 percent. This represents only one-quarter of the 8 percentage point decline in the percentage of middle quintile individuals receiving any type of pension income (from 57 percent to 49 percent) over the same period.[58]

The percentage of retirees with any type of pension income—from either private-sector or government pensions—was higher in 2009 than it was in 1975 for all income groups.

Not only did the share of retirees receiving income from private-sector pensions increase between 1975 and 2009, the median per capita private-sector pension income for retirees with private-sector pension income increased from about $4,500 to $6,000, in constant 2009 dollars.[59] This was generally true across the income distribution (Figure 20, lowest panel). For example, among those with private-pension income, median per capita private-sector pension income, in constant 2009 dollars, increased from about $1,400 per year in 1975 to $1,800 in 2009 for retirees in the lowest income quintile; increased from about $2,400 to about $3,600 for the middle income quintile; and increased from about $8,500 to about $14,400 for the highest income quintile.

Conclusion

The importance of private-sector DB pensions in providing retirement income is often exaggerated. The time before the emergence of 401(k) plans in 1981 has been characterized by many as the golden age of the golden watch: a time when most private-sector workers retired with a monthly pension check that replaced a significant portion of their pre-retirement income. Against this standard, 401(k) plans are judged to be falling short.

The facts support a different narrative: there was no golden age of pensions. Although many worked at employers that sponsored DB pension plans, the combination of vesting rules, back-loaded benefit accrual, and labor mobility resulted in many retirees receiving little or no retirement income from private-sector pensions. For example, in 1975, when nearly 90 percent of private-sector workers with a pension were covered by a DB plan, only about one in five retirees received any income—either directly or through a spouse—from a private-sector pension, and the median amount of income received per individual with private-sector pension income was about $4,500 in 2009 dollars.

As this paper has shown, private-sector pension income has become more prevalent over time, not less prevalent. In 2009, just over one-third of retirees received private-sector pension income, and the median per capita amount of income of those with private-pension income had increased to $6,000. Further, because the survey data used to analyze retiree income are not fully capturing payments from DC plans and IRAs, the increase in pension income since ERISA is likely understated.

Additional Reading

Appendix: "A Look at Private-Sector Retirement Plan Income After ERISA," *Investment Company Institute Perspective*. Available at www.ici.org/per16-02_appendix.pdf.

"Who Gets Retirement Plans and Why," *Investment Company Institute Perspective*. Available at www.ici.org/pdf/per14-02.pdf.

"401(k) Plan Asset Allocation, Account Balances, and Loan Activity in 2009," *Investment Company Institute Perspective,* forthcoming. Will be available at www.ici.org/pdf/per16-03.pdf.

"The Evolving Role of IRAs in U.S. Retirement Planning," *Investment Company Institute Fundamentals*. Available at www.ici.org/pdf/per15-03.pdf.

ICI Resources on 401(k) Plans. Investment Company Institute. Available at www.ici.org/401k.

Notes

[1] For a detailed history of ERISA, see Wooten 2004; for a history of private pensions, see Sass 1997. For brief histories of pension regulation, see Employee Benefit Research Institute 2005, Mazaway 2004, and Salisbury 2001. For a history of the development of 401(k) plans, see Holden, Brady, and Hadley 2006.

[2] ERISA (Public Law 93-406) § 2.

[3] For a discussion of the issues and concerns surrounding the shift from DB pensions to DC pensions, see, for example, U.S. Government Accountability Office 2007 and 2009; Munnell and Sundén 2004 and 2006; Mulvey and Purcell 2008; Purcell 2009a; and Purcell and Topoleski, 2009.

[4] Data reported in Figure 1 are from the Current Population Survey (CPS), a survey conducted by the Bureau of Census for the Bureau of Labor Statistics. Data reported in Beller and Lawrence 1992 show that, for the period prior to 1979, the proportion of private-sector wage and salary workers covered by pension plans tripled between 1940 and 1970 and then remained relatively flat thereafter.

[5] See U.S. Census Bureau and U.S. Department of Labor, Current Population Survey for more information about the survey.

[6] For a more detailed discussion of the shift in the type of pensions offered, see Mitchell and Schieber 1998.

[7] Data reported in Figure 2 are from U.S. Department of Labor (DOL) tabulations of Form 5500 data, reported in U.S. Department of Labor 1996 and 2001–2002. Primary plan status and secondary plan status are not reported on Form 5500. For firms with multiple pension plans, the status was inferred by DOL analysts. Data are available through 1998; after 1998, DOL no longer inferred primary and secondary status for plans.

[8] At least through 1992, the available data suggest that the growth in DC plans, and the associated decline of DB plans, was not due primarily to firms with existing DB pension plans dropping the plans and adopting DC plans. Analyzing the time period between 1977 and 1985, Gustman and Steinmeier 1992 and Ippolito 1995 conclude that the decline in the portion of the workforce covered by DB plans was not due primarily to the dropping of DB plans by firms, but rather to a shift in employment from firms that tend to offer DB plans to firms that tend to offer DC plans. Using panel data, Kruse 1995 confirms that between 1981 and 1985, the growth in DC plans came mainly from the adoption of DC plans by both firms that had not previously offered a pension plan and firms that maintained their DB plan. Investigating the period from 1985 to 1992, Papke 1999 finds that only a fraction of ongoing sponsors, approximately 20 percent, dropped DB plans entirely and adopted DC plans.

[9] A supplemental DC plan can supplement either a primary DB plan or a primary DC plan.

[10] For a discussion of the risks of DB plans for plan participants, see Bodie, Marcus, and Merton 1988, Samwick and Skinner 2004, Poterba et al. 2007, Schrager 2009, and Poterba et al. 2010.

[11] A cash balance plan is another type of DB plan. This plan defines the benefit as a lump sum payable at retirement rather than as an annual payment. Each participant's benefit is typically expressed as a "notional account" balance. Each year the employer adds to the notional account a notional amount equal to a percentage of compensation wages or salary. That notional contribution grows at a stated annual rate (chosen by the plan sponsor) until retirement. Although the concept of an "account" is used to express the value of the benefit, there is no actual account; the notional account simply is a way to express the results of the benefit formula. According to U.S. Department of Labor 2010, about one out of four active DB plan participants were in cash balance plans in 2007. For an overview of cash balance plans see Quick 1999.

[12] The benefit formula need not be based on compensation. For example, plans with so-called dollar-amount formulas pay a flat benefit per year of service, typically without regard to the participant's compensation. According to U.S. Bureau of Labor Statistics 1982, among active participants in private-sector DB plans at medium and large firms in 1981, 50 percent participated in plans with terminal-earnings benefit formulas; 16 percent were in plans with career-earnings benefit formulas; 32 percent were in plans with dollar-amount benefit formulas; and the remainder had some other type of formula. Among professional and administrative workers in 1981, 93 percent were in plans with either terminal-earnings or career-earnings formulas. In contrast, more than half of production workers in 1981 were in plans with dollar-amount formulas. U.S. Bureau of Labor Statistics 2005 reports that in 2003, the latest available data on benefit formulas, 77 percent of DB plan participants were in traditional DB plans, and 23 percent were in hybrid plans, such as cash balance plans. Of participants in traditional DB plans, 56 percent (or 43 percent of all DB plan participants) were in with plans with terminal-earnings formulas, and 13 percent (or 10 percent of all DB plan participants) were in plans with career-earnings formulas.

[13] U.S. Bureau of Labor Statistics 2005 reports that, among private-sector DB plan participants in plans with terminal-earnings formulas in 2003, 85 percent were in plans which used average earnings over five years in the formula, with 60 percent in plans using the highest consecutive five years, 24 percent using the highest five years, and 1 percent using the last five years.

[14] Pension rules require a joint-and-survivor annuity to be the default payment method from a DB plan for a married participant. However, the benefit formula is typically expressed in terms of a single-life annuity. If the participant chooses to receive a joint-and-survivor annuity, annual pension payments are reduced, on an actuarial basis, relative to the choice of a single-life annuity.

[15] In 1975, the earliest data available, 94 percent of active DB plan participants were in plans with 100 or more participants. See DOL 1996, Table E7 and Table E9.

[16] The pre-ERISA vesting statistics presented in Figures 4 and 5 are from two studies from the U.S. Bureau of Labor Statistics: Thompson 2005 and Graham 1988. Both studies used data from a survey of pension plans with 100 or more participants conducted in early 1974 by the U.S. Department of Labor.

[17] These statistics can be calculated using the data presented in Figure 4, but are not separately tabulated and reported in Figure 4.

[18] In addition to setting minimum vesting requirements, ERISA and other legislation introduced or tightened other minimum standards for pension plans. To the extent that these standards were not met prior to the enactment of the legislation, the new rules would have increased the likelihood that a worker at a firm that sponsored a pension plan would be eligible for benefits. These include rules regarding minimum age and service requirements (before which employees are not eligible to accrue benefits); rules regarding the number of hours of work necessary for an employee to qualify for a year of service; and rules regarding the treatment of breaks in service for workers who separate from an employer but later resume employment with the same employer. Thompson 2005 discusses the extent to which firms met some of these other requirements prior to ERISA.

[19] An alternative graded vesting schedule was also allowed under ERISA. Under the alternative, 50 percent of benefits vested when service was 5 years or more and age plus service totaled 45 years, with 10 percent additional in each of the next 5 years; or, if earlier, 50 percent of benefit vested after 10 years, with 10 percent additional in each of the next 5 years.

[20] For most plans, ERISA allowed plans to delay participation until the later of the employee attaining age 25 or the completion of one year of service. However, once participating in a plan, plans were not allowed to limit vesting based on age.

[21] For plans in existence on January 1, 1974, ERISA vesting rules applied to plan years beginning after December 31, 1975. For new plans, the rules applied immediately. For plans that were part of a collective bargaining agreement, the rules applied to plan years beginning after the earlier of (a) the closing of the current collective bargaining agreement or (b) December 31, 1980. See ERISA (Public Law 93-406) § 211.

[22] TRA '86 vesting rules applied to plan years beginning on or after January 1, 1989. For plans that were part of collective bargaining agreement, the rules applied in plan years beginning on of after the earlier of (a) the latter of (i) January 1, 1989 or (ii) the closing of the current collective bargaining agreement or (b) January 1, 1991. See TRA '86 (Public Law 99-514) §1113.

[23] Other factors may have contributed to the higher proportion of participants who were vested. For example, as mentioned in note 8, many firms with DB plans were in declining industries. If firms in declining industries became less likely to hire new workers, then the average tenure of their workforce would have increased over time. The timing of the discrete jumps in the percentage of participants who were vested, however, suggests that vesting rule changes had a substantial impact.

[24] There was also an increase in the absolute number of active DB plan participants that were either fully or partially vested. In 1977, there were approximately 12 million active participants in private-sector DB plans that were fully or partially vested. This number peaked at over 16 million in 1993, with an additional 1.5 million active participants vested in 1989 alone.

[25] Normal retirement age is defined by the plan. Tax laws restrict the normal retirement age from being above age 65 (unless the participant has fewer than five years of service). IRS rules impose some restrictions on the ability of plans to use a normal retirement age lower than 62. U.S. Bureau of Labor Statistics 2005 reports that, in 2003, 73 percent of workers at firms with a DB plan were in plans with a normal retirement age of 65.

[26] The ability to receive benefits in the form of a lump-sum payment at retirement was relatively rare in traditional DB pension plans as late as 1989. Moore and Muller 2002 reported that 2 percent of DB plans with over 100 participants offered a lump-sum option at retirement in 1989. By 1997, the authors reported that the percentage had risen to 23 percent, but attributed the increase largely to the growth in the share of DB plans that were cash balance plans. U.S. Bureau of Labor Statistics 2005 found that, in 2003, 48 percent of workers at firms with DB plans were in plans that offered a lump-sum distribution at retirement. Lump-sum distributions to employees separating prior to retirement appear to have been more prevalent, however, particularly for employees with small benefit accruals. ERISA specifically allowed plans to automatically distribute benefits as a lump-sum payment to separating employees that had vested benefit accruals of $1,750 or less in present value. This dollar amount was subsequently increased to $3,500 starting in 1985, and it is currently $5,000. Atkins 1986 reports that, in 1984, 10 percent of workers covered by a single-employer DB pension could have received, when separating from employment, the full amount of their benefit accruals as a lump sum. Another 20 percent of workers covered by a single-employer DB pension could have received a lump sum if the accrual was $1,750 of less, and another 9 percent could have received a lump-sum payout of their own contributions.

[27] The worker in this example worked for the same firm from age 30 to age 64 and retired at age 65. The worker earned $50,000 at age 50 and experienced 3 percent inflation and 1 percent real wage growth every year employed at the firm. The worker was covered by a DB pension that paid an annual benefit in retirement equal to 1.5 percent of the worker's highest salary for every year worked, up to 30 years.

[28] At age 50, the worker has earned annual payments at retirement equal to $15,740 ($50,000 * 1.5% * 21 years of service). At age 51, the worker has earned annual payments at retirement equal to $17,160 ($52,000 * 1.5% * 22 years of service). Thus, the additional year of work earned the worker an additional $1,410 by working the year from age 50 to age 51.

[29] An "actuarially fair" investment is one that is expected, in present value, to provide a dollar of benefit for a dollar invested. An annuity is a payment that continues until death, at which point payments cease. To make the math more tractable, all calculations in this paper assume that annuity payments are made annually, 364 days after the purchase of the annuity; that is, the annuity is purchased the day the annuitant turns 65, and the annual payment is made the day before the annuitant turns age 66. The cost of $1 of annual income from an actuarially fair annuity purchased at age 65 is

$$\sum_{t=65}^{t=T} \frac{\Pr(alive)}{(1+r)^{(t-64}}$$

where t is the time period indexed by the annuitant's age; T is the age where the probability of the annuitant being alive is 0 percent; Pr(alive)t is the probability that an individual alive at age 65 is alive at the end of time period t; and r is the nominal risk-free interest rate. Assuming a risk-free nominal interest rate of 6 percent and using 2005 data on life expectancy for the entire U.S. population (i.e., both males and females—a so-called unisex annuity) from Arias 2010, a 65-year-old could purchase $10.07 of annual income with an investment of $100.

[30] For a 51-year-old individual, the present discounted value of $14,003 paid at age 65 is calculated as $14,003/(1+0.06)$^{(65-51)}$. This calculation implicitly assumes a survivor's benefit equal in value to the annuity would be paid if the worker died before age 65.

[31] At age 51, the worker's salary in the illustration is $52,000, thus the DB benefit accrual as a percentage of salary is calculated as $6,193/$52,000. Expressing accruals as a percentage of salary in this way makes the accrual of (employer-funded) benefits under a given DB plan comparable to the amount of employer contributions that would be made under a DC pension.

[32] Consider, for example, a worker whose nominal salary does not increase over the working career. Suppose this worker makes $50,000 of nominal income every year and is covered by a plan that pays 1.5 percent of the worker's highest salary per year of service, and all assumptions are as above. Each additional year of service increases the annual pension benefit payable at age 65 by $750 (=$50,000 * 1.5). However, a 35-year-old worker would value this accrual at $1,297, whereas a 45-year-old worker would value it at $2,322.

[33] By law, private-sector DB pensions are limited in their ability to back load benefits directly through the benefit formula. That said, a DB benefit that pays a flat percentage of final pay, or a flat percentage of highest average pay, accrues benefits at a faster rate later in a worker's career even though the formula per se is not back loaded.

[34] Because the present value of benefit accrual is expressed as a percent of salary, all that is needed to calculate the benefit is an assumption as to the growth rate of earnings; no assumption is needed as to the absolute level of compensation used in the formula. Alternative assumptions—such as using the average of the highest three years of earnings rather than the highest single year of earnings—would change the absolute level of accruals, but not the back-loaded pattern of accruals. Similarly, if the annuitant life tables—which incorporate the longer life expectancy of annuitants compared to the life expectancy of the entire population—are used to calculate the value of the annual pension payments, the value of accruals would increase but the pattern of accruals over time would be similar.

[35] Statistics reported in the text and in Figure 13 and Figure 14 are based on ICI tabulations of Current Population Survey (CPS) data. The Bureau of Labor Statistics (BLS) reports tabulations of the data, which are available every two years, in a press release. The latest BLS press release is available at www.bls.gov/news.release/pdf/tenure.pdf. For time series data, the BLS releases are compiled and published in Copeland 2010.

[36] See, for example, Greenhouse 2008. For a discussion of, and rebuttal to, this conventional wisdom, see Sherk 2008.

[37] See Farber 2007 for a review of literature on trends in long-term employment and for analysis of the 1973–2006 time period.

[38] The decline in long tenure among private-sector male workers aged 55 to 64 has coincided with the decline in the share of private-sector workers covered by DB pensions. It is not clear in which direction, if any, there is a causal link. It may be that a change in the economy that is associated with both long-tenure and DB pension coverage changed, and there is no direct link between the two trends. For example, if manufacturers were more likely than other employers to offer a DB plan and were more likely to have long-tenured male employees, then the decline in manufacturing jobs could have contributed to both trends without any causal link between pension plan design and labor mobility. Or perhaps the workforce became more mobile and DC plans, with less back-loaded benefits accrual, became more attractive to workers than DB plans. However, tenure has declined primarily in one group of workers. Presumably younger workers and female

workers were just as likely to prefer DC plans to DB plans in 1983 as they are today. Munnell et al. 2006 rejected the hypothesis that increased labor mobility led to the growth of 401(k) plans, citing evidence that the growth in 401(k) plans preceded the observed decline in worker tenure. Indeed, to the extent that labor mobility played a role in the growth of 401(k) plans, it was likely due not to an increase in labor mobility, but simply because private-sector workers have always been mobile, and the introduction of 401(k) plans in 1981 provided a vehicle with which employers could supply the latent demand of workers for more portable pension benefits. A third possibility is that the decline of DB plans and the growth of 401(k) plans led to more mobility. Munnell et al. 2006 concluded that, to the extent there is a causal link, the hypothesis that the growth of 401(k) plans increased labor mobility is more likely. This hypothesis is also consistent with the findings of Stewart 2002, which found that, although there was no trend in the likelihood of leaving a job between 1975 and 2000, workers were more likely to switch from one employer to another and less likely to switch from employment to unemployment. Based on these findings, Stewart 2002 concludes that job change has become less costly. The increase in the share of the workforce covered by 401(k) plans and the decrease in the share of the workforce covered by a traditional DB plan could have contributed to a reduction in the cost to a worker of changing jobs.

[39] See, for example, Jaffe 2004; Munnell et al. 2008; and Butricia et al. 2009.

[40] See, for example, Munnell and Sunden 2004 and 2006; Government Accountability Office 2007 and 2009; and Purcell 2009a. In contrast, Samwick and Skinner 2004, Poterba et al. 2007, Schrager 2009, and Poterba et al. 2010 project that, in many circumstances, workers can expect 401(k) plans to generate more retirement benefits than a typical DB plan would generate. In addition, although not directly comparing 401(k) plans and DB plans, Holden and VanDerhei 2002 and Brady 2009 conclude that 401(k) plans can provide retirees with adequate retirement resources.

[41] It is possible that the decline in the share of private-sector workers covered by a DB plan is related to the fact that, for any given benefit formula, minimum vesting standards increased the costs to an employer of sponsoring a DB pension plan because a larger share of employees became entitled to benefit. For example, Beller and Lawrence 1992 include vesting rule changes when noting that ERISA and future legislation increased the costs of sponsoring a DB plan by "the imposition of minimum plan standards for participation, vesting, and retirement; requirements for the funding of past service liabilities, amortization of investment gains and losses within prescribed periods; and the establishment of the Pension Benefit Guaranty Corporation (PBGC), financed by plan premium payments" (p. 69). Munell et al. 2006 showed that the rate of increase in the number of DB plans slowed after ERISA and that there was a net decrease in the number of DB plans following TRA '86. The increase in DB plan terminations after TRA '86 and the eventual 25 percent drop in DB plan participants are attributed to two factors: "restrictions on very small [DB] plans that benefitted only highly paid individuals, and applications dropped after 1990 when the government placed an excise tax on the reversion of money from over-funded plans." Interestingly, tightening of minimum vesting requirements in TRA '86—and the associated increase in the cost of offering a DB plan—is not mentioned as a contributing factor.

[42] For examples of studies using CPS data to examine income among the elderly, see Purcell 2009b, McDowell 2010, and Social Security Administration 2010a.

[43] The option to list the source of the income as a "company or union pension" specifically mentions that profit-sharing plans should be included in that category. Most private-sector DC plans, including 99.7 percent of 401(k) plans, are legally classified as profit-sharing plans, although it is not clear that DC plan participants would be familiar with the term. IRAs were first enumerated in the list of income sources in the March 1980 survey (1979 data) when they are included as an example of a source that would fall into the "other source" category. In the March 1988 survey (1987 data), "regular payments from IRA or Keogh accounts" is listed as a separate source category. In the March 1992 survey (1991 data), regular payments from 401(k) plans are added to the IRA and Keogh source category. Few regular payments from IRAs, Keoghs, or 401(k) plans are reported separately, although some payments from 401(k) plans could be reported as being from a company pension or as being from an "other source."

[44] As early as 1975, 13 percent of active pension plan participants in the private-sector had a primary DC plan, and another 19 percent had a supplemental DC plan. By 1991 (the first year 401(k) plans were listed as a source of retirement income), those percentages had increased to 40 percent and 36 percent, respectively (see Figure 2),

[45] For a discussion of the CPS questionnaire and the implications for measuring income in retirement, see Sabelhaus and Schrass 2009. The study finds that, in 2006, only $6.4 billion in income is separately identified in the March CPS as coming from regular payments from IRAs, Keoghs, and DC plans. Other available data report much higher income amounts coming from IRAs alone. For example, the Federal Reserve Board Survey of Consumer Finance reports that U.S.households withdrew $95.2 billion from IRAs in 2006. Tax return data show that there were $124.7 in taxable IRA distributions in 2006, including $105.7 billion in taxable withdrawals reported by tax returns where the primary taxpayer was age 55 or older.

[46] The survey asked respondents the source of retirement income. The income is categorized as from a private-sector pension if the source is a company or union pension; regular payments from

annuities; regular payments from IRAs, Keogh accounts, or 401(k) plans; other sources; or "don't know." The income is categorized as from a government pension if it is from a federal government pension, state or local government pension; or U.S. military retirement pension. For income from a U.S. railroad retirement pension, half of the income was characterized as coming from a government pension and half of the income was characterized as coming from Social Security benefits.

[47] The CPS attempts to measure income consistent with the concept of income in the National Income and Product Accounts (NIPA) and does not necessarily aim to measure income that is consistent with other concepts of income, such as the definition of income under the income tax. Capital gains, whether or not they are realized, are not included in the NIPA definition of income and thus are not included in the CPS measure of income. For example, if shares of stock held in a taxable account were sold to fund retirement expenses, neither the proceeds from the sale nor the portion of the proceeds that represented capital gains would be included in the CPS measure of income. If shares of stock held in a taxable account were sold and the proceeds from the sale were reinvested in an interest-bearing savings account, the sale itself would not produce measureable income, but the interest subsequently earned from the deposit of the proceeds would be included in measured income.

[48] For a discussion of the volatility over time in asset income, see the appendix.

[49] For an explanation of the formula used to calculate benefits, see www.ssa.gov/OACT/COLA/piaformula.html.

[50] The complementary roles of Social Security and employer-provided pensions are not an unintended consequence of policy. For example, since the enactment of Social Security, Congress has allowed private-sector employers to "integrate" their pension plans with Social Security. That is, applicable law permits a higher benefit formula (in DB plans) or a higher employer contribution rate (in DC plans) on earnings not covered by Social Security than on earnings covered by Social Security. For a discussion of integration of pension benefits with Social Security, see Perun 2002.

[51] According to estimates by the Social Security Administration Office of Chief Actuary presented in Martin and Weaver 2005, replacement rates in 1940 at the normal retirement age (NRA)—measured as first year benefits divided by career average indexed earnings—ranged from 29 percent for a "low earner" (earns 45 percent of the average wage index) to 17 percent for a "high earner" (earns 160 percent of the average wage index). Two periods of expansion, first in the 1950s and then again in the 1970s, increased benefits substantially. Concerns about the program's financing led to legislation in 1977 and 1983 that stabilized benefits as a percentage of earnings slightly below their peak values. For those retiring currently, Social Security benefits at NRA are about twice as high when measured as a percentage of average earnings than at the inception of Social Security: benefits are projected to replace 55 percent of career average earnings for a "low earner" and 34 percent of career average earnings for a "high earner." Social Security Administration 2010b projects that, under current law, replacement rates at NRA are projected to remain stable throughout the 75-year projection period.

[52] Gustman et al. 2009 looked at the components of wealth in 2006 for a sample of households with at least one member born between 1948 and 1953 (between 53 and 58 years of age in 2006). For this age group, the value of DC pension benefits plus IRA balances was of a similar magnitude as the value of their accrued DB pension benefits. The study does not differentiate between private-sector pensions and government pensions.

[53] See note 46.

[54] As above, retirees are defined as individuals aged 65 years or older with income and who, if single, did not work, or, if married, neither the individual nor the spouse worked. To limit the effect on the statistics of those reporting very high or very low income, the highest and lowest 1 percent of the per capita income distribution are excluded from the tabulations. For married individuals, the income of couples is pooled and each spouse is allocated half of total income, as well as half of total income from each source.

[55] Figure A3 in the appendix reports the data for every year from 1975 to 2009. Figure A4 presents the data separately for each income quintile. Figure A5 presents the data on the basis of the educational attainment of the household head.

[56] Federal government workers hired prior to January 1, 1984, were eligible to participate in the Civil Service Retirement System (CSRS). CSRS participants were not covered by Social Security while working for the federal government and do not pay the Social Security portion of the employee payroll tax—the so-called OASDI tax, which is currently 6.2 percent of earnings. Instead, these workers make contributions to the CSRS equal to 7 percent of earnings. CSRS workers are required to pay the Medicare portion of the employee payroll tax—the so-called HI tax, which is currently 1.45 percent of earnings. Federal workers who were covered by CSRS and return to federal government employment after a break in service of more than a year are covered by CSRS Offset. CSRS Offset participants pay the Social Security portion of the payroll tax and contribute an additional 0.8 percent of salary to CSRS. They are eligible for the same pension benefits as CSRS workers, but the benefits are offset to account for Social Security benefits earned during the time the worker participated in CSRS Offset. Federal government workers hired on or after January 1, 1984, are covered by the Federal Employees Retirement System (FERS). FERS participants have a less generous pension benefit formula than CSRS participants, but are covered by Social

Security. FERS participants pay the 6.2 percent OASDI tax and contribute 0.8 percent of earnings to FERS. For a discussion of CSRS, see www.fhwa.dot.gov/legsregs/directives/orders/m30001c/p1ch10s3.htm. For a discussion of FERS, see www.fhwa.dot.gov/legsregs/directives/orders/m30001c/p1ch10s4.htm.

For a discussion of the evolution of state and local pension plans, see Mitchell et al. 2000 and Clark et al. 2009. State and local employees were not included in Social Security when the program was instituted. In 1950, Congress allowed employees not covered by a pension to participate in Social Security. In 1954, employees covered by a pension plan were allowed to be covered by Social Security. Clark et al. 2009 reports an estimate that 28 percent of state and local workers are currently not covered by Social Security.

[57] The percentage of retirees receiving income from private-sector pensions is the sum of the percentage with private pension only and the percentage with both private and government pension as reported in Figure 18. This data is also presented in the appendix in Figure A7.

[58] As noted earlier, the increased prevalence of pension income as measured in the CPS likely understates the magnitude of the increase. See note 46.

[59] These statistics are presented in Figure A7. As explained in note 58, the percentage of retirees receiving income from private-sector pensions can be calculated using Figure 18. However, the median amount of private-sector pension income among all retirees with private-sector pension income, including retirees with both private-sector and government pension income, is not tabulated separately in Figure 18.

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