



Pension Issues: Lump-Sum Distributions and Retirement Income Security

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January 7, 2009

Congressional Research Service

7-5700

www.crs.gov

CRS Report for Congress

Prepared for Members and Committees of Congress

Summary

Forty-seven percent of all workers aged 21 and older participated in employer-sponsored retirement plans in 2006, but not all of these workers will receive a pension or other income from these plans when they retire. Some will instead receive a “lump-sum distribution” from their retirement plan when they change jobs. A typical 25-year-old today will work for seven or more employers before age 65, and could receive several such distributions before reaching retirement age.

In most cases, a lump-sum distribution from a retirement plan can be “rolled over” into an individual retirement account (IRA) or another employer’s plan so that it will be preserved until the worker reaches retirement age. However, many recipients of lump-sum distributions use all or part of their distributions for current consumption rather than depositing the funds into another retirement plan. To discourage individuals from spending their savings before retirement, regular income taxes and a 10% additional tax are levied on most pension distributions received before age 59½ that are not rolled over into another retirement account. In addition, employers are required to withhold for income tax purposes 20% of distributions that are paid directly to recipients. Although federal law allows employers to “cash out” accrued pension benefits of less than \$5,000 without obtaining the employee’s consent, employers must deposit distributions of \$1,000 or more into an individual retirement account unless they are directed to do otherwise by the recipient.

According to data collected by the Census Bureau in 2006, 16.2 million people had up to that time received at least one lump-sum distribution from a retirement plan at some point in their lives. Most of them (13.9 million, or 86%) had received their most recent distribution between 1980 and 2006 and before they had reached age 60. Among this group, the average (mean) value of the most recent distribution they received (measured in 2006 dollars) was \$26,845. The median value was \$8,864. The typical recipient was 37 years old at the time of the distribution. Thus, most recipients of lump-sum distributions were 25 or more years away from retirement.

Of survey respondents who reported that they had received at least one lump-sum distribution, 45% said that they had rolled over the entire amount of the most recent distribution into an IRA or other retirement plan, accounting for 70% of the dollars distributed as lump sums. Another 41% of recipients said that they had saved at least part of the distribution in some way. Of those who reported that they received their most recent distribution between 1990 and 1999, 47% said that they had rolled over the entire amount into another plan, accounting for 71% of the dollars distributed as lump-sums. Of those who reported that they received their most recent distribution between 2000 and 2006, 46% said that they had rolled over the entire amount into another plan, accounting for 73% of the dollars distributed as lump-sums.

Lump-sum distributions that are spent rather than saved can reduce future retirement income. If the lump-sum distributions received between 1980 and 2006 that were not rolled over had instead been invested in retirement accounts that earned the average annual rate of return on AAA-rated corporate bonds, they would have grown to a median value of \$8,800 by 2006. In that year, the median age of those who had not rolled over their distributions was 44. If this amount were to remain invested until the recipient reached age 65 and earned an average annual rate of return of 6%, it would grow to a value of \$29,900. With this amount, a 65 year-old man could at current interest rates purchase a level, single-life annuity that would pay \$220 in monthly income for life.

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Overview: Pension Coverage and Tax Policy

Employers who sponsor retirement plans for their employees do so voluntarily; however, an employer who sponsors a retirement plan must comply with both the Employee Retirement Income Security Act of 1974 (ERISA, P.L. 93-406) and the provisions of the Internal Revenue Code that govern the tax treatment of retirement plans. Since the 1920s, Congress has provided tax incentives for employers to sponsor retirement plans and for workers to participate in these plans. Among the most important of these provisions are the deduction from company income of employers' contributions to retirement plans, the exclusion from employee income of employer contributions, and the deferral of income taxes on investment gains until money is either withdrawn from the plan or pension payments begin. The tax revenue forgone by the federal government as a result of the deductions and deferrals granted to qualified retirement plans is substantial. According to the U.S. Office of Management and Budget, the net exclusion for employer pension plan contributions and earnings will result in \$541 billion in forgone tax revenue over the five fiscal years from 2009 through 2013.¹ The substantial tax subsidy provided to employer-sponsored retirement plans is one reason that it is important for Congress to be well-informed about the effectiveness of these plans in helping workers to achieve income security in retirement.

According to data collected by the Census Bureau, 47% of all workers aged 21 and older in the United States participated in employer-sponsored retirement plans in 2006.² (See **Table 1.**) Not all of these workers, however, will receive a pension or other retirement income from these plans. Some will not participate in the employer's retirement plan long enough to earn the right to a pension — a process called vesting.³ Others will receive a "lump-sum distribution" from the plan when they change jobs. A typical 25-year-old today will work for seven or more employers before age 65.⁴ Thus, many workers are likely to receive one or more distributions from a retirement plan before reaching retirement age. What an individual does with a lump-sum distribution — even a relatively small one — can have a significant impact on his or her wealth and income during retirement. Lump-sum distributions that are spent on current consumption rather than saved for retirement will not be available to augment a worker's retirement income. Workers who spend lump-sum distributions from employer-sponsored retirement plans rather than save them could be undermining their financial security in retirement.

¹ U.S. Office of Management and Budget, *Budget of the United States Government, Fiscal Year 2009: Analytical Perspectives*, Table 19-1, p. 291. Only the exclusion from taxes of employer contributions for employee health insurance (\$1.05 trillion) and the deduction for interest on home mortgages (\$577 billion) will reduce federal income tax revenues by more than the exclusion for pension contributions and earnings from 2009 to 2013.

² This figure includes full-time and part-time workers in both the public and private sectors. A "retirement plan" may be either a traditional defined benefit pension plan or a retirement savings plan, such as those authorized under Internal Revenue Code §§401(k), 403(b), and 457(b).

³ ERISA allows sponsors of retirement plans to choose between two methods of vesting: "cliff" vesting and "graded" vesting. Under cliff vesting in a defined benefit plan, a participant must be 100% vested after no more than five years of service. Under "graded" vesting, a participant is 20% vested after three years, 40% vested after four years, 60% vested after five years, 80% vested after six years, and 100% vested after seven years. In a defined contribution plan, the vesting schedule applicable to an employer's matching contributions may not exceed three years under year cliff vesting or six years under graded vesting. Employers can vest participants faster than these schedules.

⁴ Estimated by the Congressional Research Service (CRS) from data published by the U.S. Bureau of Labor Statistics, "Employee Tenure in 2008," BLS News Release, USDL 08-11344, Sept. 26, 2008.

Table 1. Participation in Employer-sponsored Retirement Plans in 2006

Wage and salary workers aged 21 and older, in thousands

	Number of workers	Number in a retirement plan	Percent in a retirement plan
Age			
Under 35	40,438	14,221	35.2
35 to 44	31,077	15,919	51.2
45 to 54	29,970	16,937	56.5
55 or older	20,390	9,816	48.1
Race/ethnicity			
White	99,328	46,994	47.3
Black	14,289	6,195	43.4
Asian/Native American	8,258	3,704	44.9
Sex			
Male	63,355	30,544	48.2
Female	58,520	26,349	45.0
Marital status			
Married	72,284	36,956	51.1
Not Married	49,591	19,937	40.2
Education			
High School or less	40,501	14,282	35.3
Some college	44,858	20,223	45.1
College graduate	36,516	22,388	61.3
Monthly individual income (2006)			
Lowest quartile	30,472	6,056	19.9
Second-lowest quartile	30,472	11,973	39.3
Second-highest quartile	30,463	17,431	57.2
Highest quartile	30,467	21,433	70.4
Size of firm where employed			
Under 25 workers	24,973	4,755	19.0
25 to 99 workers	15,283	5,674	37.1
100 or more workers	81,619	46,464	56.9
Employment status			
Part-year or part-time	32,527	10,938	33.6
Year-round, full-time	89,349	45,955	51.4
Total	121,875	56,893	46.7

Source: CRS tabulations from the 2004 panel of the Survey of Income and Program Participation.

Notes: Monthly income is individual income averaged over four months in 2006. Quartile rank is based on all wage and salary workers aged 21 and older. Workers with total monthly individual income of \$1,622 or less in 2006 were in the fourth (lowest) income quartile. Those with income of more than \$4,300 were in the first (highest) income quartile. Median total monthly individual income among workers 21 and older was \$2,669.

Preserving Retirement Assets When Changing Jobs

Defined benefit (DB) pension plans are required by law to offer participants a benefit in the form of an annuity – a stream of monthly payments for life. In general, the annuity can begin no later than the plan’s normal retirement age, which in most cases cannot be later than 65. The annuity usually is based on the employee’s average salary and length of service with the employer. With each year of service, a worker accrues a benefit equal to either a fixed dollar amount per month or year of service or a percentage of his or her final pay or average pay. A worker who is vested in a defined benefit plan and who leaves the employer before reaching retirement age can claim his or her benefit upon reaching retirement age. According to the Pension Benefit Guaranty Corporation (PBGC), there are 11.8 million people who are vested former participants in private-sector defined benefit plans.⁵ Although employers who sponsor defined benefit plans are required to offer participants an annuity, many also offer employees the option to take their accrued benefit as a lump-sum when they separate from the employer.⁶ According to the Department of Labor, 52% of participants in private-sector defined benefit plans are in plans that offer lump-sum distributions.⁷

A defined contribution (DC) plan is much like a savings account maintained by the employer on behalf of each participating employee. The employer contributes a specific dollar amount or percentage of pay into the account, which is usually invested in stocks and bonds. In some plans, the size of the employer’s contribution depends on the amount the employee contributes to the plan. When the worker retires, the benefit that he or she receives will be the balance in the account, which is the sum of all the contributions that have been made plus interest, dividends, and capital gains (or losses). At retirement, the worker usually has the choice of receiving these funds as a lump sum or through a series of withdrawals. DC plans are not required to offer annuities. A participant in a DC plan who separates from the employer before retirement sometimes has the option of leaving his or her retirement account in the former employer’s plan. According to data collected by the Bureau of the Census, 5.4 million people had a retirement account in a former employer’s defined contribution plan in 2006. The mean balance in these accounts was \$43,636 and the median balance was \$20,000.⁸ A departing participant in a DC plan also may be allowed to withdraw the funds from the account or to deposit (“roll over”) the funds into an individual retirement account (IRA) or into another employer’s retirement plan.

Workers who elect to take lump-sum distributions from retirement plans must decide whether or not to roll over the distribution into another employer’s plan (if the plan accepts rollover contributions) or into an IRA. Most distributions received before age 59½ that are not rolled over into another retirement account within 60 days are subject to both regular income taxes and an additional 10% tax on the amount of the distribution.

⁵ PBGC, *Pension Insurance Data Book: 2007*. In addition to the 11.8 million vested former participants, there were 20.2 million current participants and 12.1 million retired participants in private-sector defined benefit plans.

⁶ A lump-sum distribution from a DB plan must be no less than the present value of participant’s accrued benefit, expressed as an annuity beginning at the plan’s normal retirement age. If the plan is a cash balance plan, the distribution can be equal to the participant’s notional account balance. See CRS Report RS22765, *Lump-Sum Distributions Under the Pension Protection Act*, by Patrick Purcell.

⁷ U.S. Department of Labor, National Compensation Survey: Employee Benefits in Private Industry in the United States, 2005, Bulletin 2589, May 2007.

⁸ CRS analysis of the 2004 panel of the *Survey of Income and Program Participation* (SIPP).

Congress has amended the Internal Revenue Code (IRC) several times to encourage departing employees to leave their accrued retirement benefit in the former employer's plan or roll over these funds into another qualified retirement account.

- Section 72(t) of the IRC imposes a 10% tax — in addition to ordinary income taxes — on distributions from retirement plans received before age 59½. Distributions that are not rolled over into an Individual Retirement Account (IRA) or another employer's tax-qualified retirement plan within 60 days are subject to both regular income tax and the 10% additional tax.⁹
- The Unemployment Compensation Amendments of 1992 (P.L. 102-318) requires employers to give departing employees the option to transfer a lump-sum distribution directly to an IRA or to another employer's plan. If the participant instead chooses to receive the distribution, the employer is required to withhold 20%, which is applied to any taxes due on the distribution.¹⁰
- IRC §411(a)(11) allows a plan sponsor to distribute to a departing employee his or her accrued benefit under a retirement plan without the participant's consent if the present value of the benefit is less than \$5,000.¹¹ The Economic Growth and Tax Relief Reconciliation Act of 2001 (P.L. 107-16) requires that if the present value of the distribution is at least \$1,000, the plan sponsor must deposit the distribution into an IRA unless otherwise instructed by the participant.

There may be times when the recipient of a lump-sum distribution faces current expenses that are more pressing than concerns about retirement income. This is especially so when the recipient is in a period of unemployment or must pay for the care of a relative who is ill or disabled. Consequently, Congress has sought to *encourage* recipients to roll over pre-retirement distributions but has not *required* such distributions to be rolled over into an IRA or another retirement plan. Allowing lump-sum distributions while placing an additional 10% tax on amounts that are not rolled over represents a compromise among the competing policy objectives of preserving assets until retirement and providing access to assets in time of need.

How Many People Have Received Lump-Sum Distributions?

According to the information reported to the Census Bureau in 2006, an estimated 16.2 million individuals aged 21 and older had received at least one lump-sum distribution from a retirement plan at some point during their lives. Of this number, 13.9 million people (85.8%) had received their most recent distribution in 1980 or later and while they were under age 60. Of these 13.9

⁹ Under IRC §72(t), the 10% penalty is waived if the distribution is made in a series of "substantially equal periodic payments" based on the recipient's life expectancy or if the recipient has retired from the plan sponsor at age 55 or older. There are other exceptions to the 10% additional tax that apply under special circumstances. See CRS Report RL31770, *Individual Retirement Accounts and 401(k) Plans: Early Withdrawals and Required Distributions*, by Patrick Purcell.

¹⁰ If the distribution is not rolled over within 60 days, the 20% withheld is applied to the taxes owed on the distribution. If the distribution is rolled over within 60 days, the 20% withheld is credited toward the income tax that the individual owes for the year. If the participant has received the distribution in cash, then to roll over the full amount of the distribution, the recipient must have access to other funds that are at least equal to 20% withheld by the employer.

¹¹ Distributions of \$5,000 or more require the participant's written consent. The \$5,000 limit was established by the Taxpayer Relief Act of 1997 (P.L. 105-34). The amount had been set at \$3,500 by Retirement Equity Act of 1984. It was originally established at \$1,750 by ERISA in 1974.

million people, 45.2% had rolled over the entire amount of the most recent distribution they had received into another tax-qualified plan, such as an IRA or another employer's retirement plan. (See **Table 2**.) Although fewer than half of people who received a lump-sum distribution had rolled over the entire amount into another retirement account, rollovers accounted for 70% of the dollars distributed as lump sums. (Not shown in Table 2.)

Some recipients of lump-sum distributions who do not roll over the entire amount into another retirement plan either roll over part of the distribution or save some of the distribution in another way. Participants in the Census Bureau's Survey of Income and Program Participation (SIPP) who reported that they had not rolled over the entire amount of the most recent lump-sum distribution they received were asked what they did with the money. Nineteen options were listed on the survey questionnaire, and respondents could provide more than one response if they used the money for more than one purpose. (Survey participants were asked only *how* they used the money, not *how much* was used for each purpose). Nine of the categories listed on the survey fit the standard economic definition of saving in that they lead to (or are expected to lead to) an increase in a household's net worth.¹² These nine saving options were:

- investing in an IRA, annuity, or other retirement program but not through a rollover contribution;
- putting some or all of the funds into a savings account or certificate of deposit,
- investing in stocks, mutual funds, bonds, or money market funds,
- investing in land or other real property,
- investing in a family business or farm,
- using funds to purchase a home, pay off a mortgage, or make home improvements,
- using funds to pay bills or to pay off loans or other debts,
- saving for retirement expenses, but not through a rollover contribution, and
- saving or investing in other ways.

Among those who reported that they had received at least one lump-sum distribution since 1980 and before age 60, 41% said that although they had not rolled over the entire amount of the most recent distribution, they had saved at least some of the distribution in one of the other ways listed above. (See **Table 2**.)

The data presented in **Table 2** illustrate how the likelihood of having rolled over a lump-sum distribution varied with a number of demographic and economic variables. For example, older workers were more likely than their younger colleagues to have rolled over a lump-sum distribution into an IRA or other retirement plan. According to the data collected by the Census Bureau, among workers under age 60 who received a distribution between 1980 and 2006, only 38% of those under age 35 rolled over the entire amount into an IRA or other retirement plan. Of those who received a distribution between the ages of 35 and 44, 49% rolled over the entire

¹² The other categories listed on the survey were: bought a car, boat, furniture or other consumer items; used for vacation, travel, or recreation; paid expenses while laid off; used for moving or relocation expenses; used for medical or dental expenses; paid or saved for education; used for general or everyday expenses; gave to family members or charity; paid taxes; and spent in other ways. Of these, only paying or saving for education might be considered saving.

amount. Fifty percent of those who received a distribution between the ages of 45 and 54 rolled over the entire distribution, as did 58% of those who received a distribution between the ages of 55 and 59. Individuals who reported their race as white, those who were married at the time of the survey, those with a college degree, and those whose monthly income in 2006 was in the top income quartile were more likely to have rolled over their most recent lump-sum distribution than those of other races, those who were unmarried, those who did not have a college degree, and those whose incomes were in the lower three quartiles of the income distribution.¹³ Although more men than women had rolled over their most recent lump-sum distribution into another retirement plan, the difference was comparatively small (47% vs. 44%).

The characteristics of the distribution itself, as well as those of the recipient, were associated with different probabilities that the distribution was rolled over into another retirement plan. Distributions of less than \$5,000 (measured in 2006 dollars) were less likely to have been rolled over than were distributions of more than this amount. Only one-fourth of distributions of less than \$5,000 were rolled over, compared to almost half of distributions of \$5,000 to \$19,999 and about two-thirds of distributions of \$20,000 or more.

Distributions that were received mainly because of actions taken by the recipient were more likely to have been rolled over than were distributions that resulted from events that were beyond the recipient's control. Fifty-one percent of distributions that were received because the recipient retired, quit to go to school, quit to take another job, or otherwise quit voluntarily were rolled over into another retirement account, compared to 38% of distributions that were received because of the death of a worker or because the recipient was separated involuntarily, quit due to illness, injury, or family obligations, or because the business where the recipient worked had closed.

Distributions received from 1980 to 1989 were less likely to have been rolled over than were distributions received from 1990 through 2006, but there was almost no difference in the percentage of distributions received from 1990 to 1999 that were rolled over compared to distributions received from 2000 to 2006. Thirty-seven percent of distributions that were received in the 1980s were rolled over into another retirement account, compared to 47% of those received in 1990s and 46% of those received between 2000 and 2006.

¹³ The individual's marital status and income quartile in 2006 may have differed from his or her marital status and income in the year that the distribution was received, but those two variables are not available on the SIPP.

Table 2. Disposition of Most Recently Received Lump-sum Distribution

Lump sums received between 1980 and 2006 by individuals under age 60

	Received a distribution (thousands)	Rolled over entire amount (percent)	Saved some of the distribution (percent)	Spent entire distribution (percent)
Age when received				
Under 35	6,003	38.0	45.0	17.0
35 to 44	4,005	49.1	37.9	13.0
45 to 54	2,859	50.1	41.3	8.6
55 to 59	1,047	57.9	34.3	7.8
Race				
White	12,219	47.1	40.0	12.9
Other	1,695	31.2	51.5	17.3
Sex				
Male	6,532	46.7	40.4	12.9
Female	7,382	43.8	42.3	13.9
Marital status in 2006				
Married	8,851	50.3	38.1	11.6
Not married	5,063	36.2	47.2	16.6
Education				
High school or less	3,072	30.2	52.7	17.1
Some college	5,375	40.2	46.0	13.8
College graduate	5,463	58.4	30.6	11.0
Monthly income in 2006				
Lowest income quartile	3,479	36.2	47.6	16.4
Second-lowest quartile	3,486	35.9	48.7	15.4
Second-highest quartile	3,472	44.4	43.3	12.3
Highest income quartile	3,477	64.2	26.1	9.7
Amount of distribution				
Less than \$5,000	4,972	26.1	52.9	21.0
\$5,000 to \$9,999	2,388	47.0	39.2	13.8
\$10,000 to \$19,999	2,277	47.7	40.4	11.9
\$20,000 or more	4,278	65.0	29.8	5.2
Reason for distribution				
Retired or quit job	7,511	51.0	36.1	12.9
All other reasons	6,402	38.3	47.6	14.1
Year of distribution				
1980 to 1989	1,794	37.4	44.4	18.2
1990 to 1999	4,846	46.9	40.8	12.3
2000 to 2006	7,274	45.9	41.1	13.0
Total	13,914	45.2	41.4	13.4

Source: CRS tabulations from the Survey of Income and Program Participation.

Notes: Monthly income is person's average income over four months in 2006. Quartile rank is based on income of individuals who received a lump-sum between 1980 and 2006 before age 60. Individuals with total monthly individual income of less than \$1,464 in 2006 were in the fourth (lowest) income quartile. Those with income of more than \$4,754 were in the first (highest) income quartile. Median total monthly individual income among those who had received a lump sum was \$2,876. Lump-sum distributions were adjusted to 2006 dollars.

How Much Were the Distributions Worth?

The average (mean) value of lump-sum distributions paid to individuals under age 60 from 1980 to 2006 was \$21,888 in nominal dollars. Expressed in constant 2006 dollars, the mean value of the distributions was \$26,845. (See **Table 3**) Because the mean value of lump-sum distributions is skewed upward by a relatively small number of large distributions, the typical distribution is more accurately portrayed by the median, which in nominal dollars was \$7,500. Adjusted to 2006 dollars, the median distribution was \$8,864. The typical recipient was 37 years old at the time he or she received the most recent lump-sum distribution. Thus, most people who received these distributions were 25 or more years away from retirement.

Table 3. Amount of Lump-Sum Distributions in Nominal and Constant Dollars

Lump-sums received between 1980 and 2006 by people under age 60

Recipient Age and Amount of Distribution:	Mean	Median
All recipients of lump-sum distributions:		
Age when lump sum received	38	37
Amount of lump-sum distribution in nominal dollars	\$21,888	\$7,500
Amount of lump-sum distribution in 2006 dollars	\$26,845	\$8,864
Those who rolled over most recent distribution:		
Age when lump sum received	40	39
Amount of lump-sum distribution in nominal dollars	\$33,989	\$12,867
Amount of lump-sum distribution in 2006 dollars	\$41,032	\$16,202
Those who did not roll over most recent distribution:		
Age when lump sum received	37	35
Amount of lump-sum distribution in nominal dollars	\$11,926	\$4,500
Amount of lump-sum distribution in 2006 dollars	\$15,167	\$5,430

Source: CRS tabulations from the 2004 panel of the Survey of Income and Program Participation

Notes: The dollar amount of lump-sum distributions was adjusted to constant 2006 dollars based on the Personal Consumption Expenditure Index of the National Income and Product Accounts.

The average value of lump-sum distributions differed between amounts that were rolled over and those that were not. Among recipients who rolled over the entire amount of the most recent distribution they received, the mean distribution was worth \$41,032 in 2006 dollars. The median value of distributions that were rolled over was \$16,202. Those who did not roll over the entire distribution received lump-sums with a mean value of \$15,167 in 2006 dollars. The median value in 2006 dollars of distributions that were not rolled over was \$5,430.¹⁴ Workers who rolled over the entire distribution were older than those who did not. The median age of those who rolled

¹⁴ The SIPP questionnaire asked those who reported receiving a lump-sum distribution, "What was the total amount of the lump-sum or rollover?" Since enactment of P.L. 102-318 in 1992, employers have been required to withhold for tax purposes 20% of distributions from retirement plans that are paid to the plan participant rather being directly rolled over into another retirement plan. Lump-sum distributions can be rolled over into an IRA tax-free within 60 days, but the recipient must have enough cash on hand to make up the difference between the gross amount of the distribution and the amount received after 20% has been withheld for any potential tax liability. Although the SIPP asked for the "total amount" of the rollover, we cannot determine from the survey data whether respondents who received lump sums directly were reporting the gross amount of the distribution or the distribution net of the 20% withheld for any income tax liability that would arise if the distribution were not rolled over within 60 days.

over the entire distribution to another retirement account was 39, while the median age of those who did not roll over the entire distribution was 35.

How Much Retirement Wealth Was Lost from Lump-Sums that Were Spent Rather than Saved?

Although younger workers typically receive smaller lump-sum distributions than older workers receive, substantial amounts of retirement wealth can be lost by spending rather than saving even a small sum, especially in the case of workers who are many years away from retirement. To estimate the potential loss in retirement wealth incurred by individuals who did not roll over their lump-sum distributions, CRS calculated the amounts that these individuals could have accumulated if they had rolled over the entire distribution into another retirement plan. For individuals who reported on the SIPP that they had not rolled over the most recent lump-sum distribution they received, CRS calculated the amount that would have been accumulated by 2006 if the entire amount had been rolled over into another retirement account in the year it was received. The estimates were based on two possible rates of return:

- the total annual rate of return paid by AAA-rated corporate bonds in each year between the year the distribution was received and 2006; and
- the total annual rate of return of the Standard & Poor's 500 stock index in each year between the year the distribution was received and 2006.

If all of the respondents who reported that they had not rolled over their most recent lump-sum distribution would have instead rolled over the full amount into a fund that earned the total annual rate of return on AAA-rated corporate bonds, the distributions would have attained a mean value of \$38,256 by 2006. The median value of these accounts would have been \$8,800. If the lump-sums had been rolled over into investments that grew at a rate equal to the total annual return of S&P 500 index, the distributions would have had a mean value of \$47,811 by 2006. The median value of these accounts would have been \$8,700

If we consider age 65 to be retirement age, the typical individual who had received a distribution but did not roll it over into another retirement account was 28 to 30 years away from retirement in the year that he or she received the distribution. Their mean age in the year that they received their distributions was 37 and their median age was 35. In 2006 — the year of the survey — the median age of these individuals was 44.

As noted above, the median value of lump-sum distributions that were not rolled over would have reached \$8,700 by 2006 if they had been invested in an S&P 500 stock market index fund. Assuming a future average annual total rate of return in the stock market of 8%, a 44 year-old individual who invested \$8,700 for 21 years would accumulate \$43,800 by age 65. At current interest rates, this would be enough for 65 year-old man to purchase a level, single-life annuity that would provide monthly income of \$315 for life.

If the lump sums that were not rolled over had been rolled over into accounts paying the same rate of return as AAA-rated corporate bonds, they would have reached a median value of \$8,800 in 2006. Assuming 44 year-old individual invested \$8,800 in bonds for 21 years at an average annual rate of return of 6.0%, it would grow to \$29,900 by age 65. For this amount, a 65 year-old man could purchase a level, single-life annuity that would provide a monthly income of \$220.

What Factors Influence the Rollover Decision?

Older recipients and those who received larger-than-average lump sums were relatively more likely to have rolled over their distributions into an IRA or other tax-qualified retirement plan. In other words, both the recipient's age and the amount of the distribution were positively correlated with the probability that a lump-sum distribution would be rolled over into another retirement plan. Simple correlations, however, show the relationship between only two variables; for example, between age and the likelihood of a rollover, or between the amount of the distribution and the likelihood of a rollover. In fact, many variables simultaneously affect the rollover decision, and some of them may interact with each other. The decision to roll over a lump-sum or to spend it is affected not just by the recipient's age, and not just by the size of the distribution, but by both of these factors, and by many others simultaneously. The decision to save a lump-sum distribution or spend it, like most choices, is made in the context of many variables.

To study the relationship between the rollover decision and a set of variables suggested by both economic theory and previous research, CRS developed a regression model in which the *dependent*, or response, variable could have two possible values: 1 (true) if the entire lump-sum distribution was rolled over into another retirement plan, and 2 (false) if any of the distribution was used for any other purpose. The independent variables we tested were the individual's age in the year the distribution was received, race, sex, level of education, monthly income in 2006, the amount of the lump-sum distribution in 2006 dollars, the year the distribution was received, and whether the distribution was received because of the employee's retirement or voluntary separation from the employer or because of reasons outside the recipient's control.¹⁵ In the model, we restricted the sample to lump-sums received from 1980 to 2006 by people under age 60 in the year of the distribution. Results of the model are shown in **Table 4**.

Our analysis found that the variable with the strongest statistical relationship to the likelihood that a lump-sum distribution was rolled over was the amount of the distribution, adjusted to 2006 dollars. In the regression model, lump-sum distributions were divided into four size categories: less than \$5,000; \$5,000 to \$9,999; \$10,000 to \$19,999; and \$20,000 or more. Relative to distributions of less than \$5,000, the probability that a distribution was rolled over was positive and statistically significant for all larger distribution amounts. Lump sums of \$5,000 to \$9,999 were 126% more likely to have been rolled over than lump sums of less than this amount. Lump-sum distributions of \$10,000 to \$19,999 were 118% more likely to have been rolled over than lump sums of less than \$5,000. Distributions of \$20,000 or more were 374% more likely to have been rolled over than were distributions of less than \$5,000.

¹⁵ Distributions were classified as voluntary if they were received because the recipient retired, quit to go to school, quit to take another job, or otherwise quit voluntarily. They were classified as involuntary if they were received because of the death of a worker or because the recipient was separated involuntarily, quit due to illness, injury, or family obligations, or because the business where the recipient worked had closed.

Interpreting the Regression Results

We used a logistic regression or “logit” for our analysis. This is a form of multivariate regression that was developed to study relationships in which the *dependent* (response) variable can have only a limited number of values, such as yes (true) or no (false). In this model, the dependent variable indicates whether a lump-sum distribution was rolled over into another retirement account (1 = yes; 2 = no). The model measures the likelihood of observing the dependent variable having a value of 1 (“yes”) when a particular independent variable is changed, given that every other independent variable is held constant at its mean value. The model estimates a coefficient (also called a parameter estimate) for each independent variable and calculates the standard error of the estimate. The standard error measures how widely the coefficients are likely to vary from one observation to another. In general, the greater the absolute value of the parameter estimate, the more likely it is to be statistically significant.

The model also generates for each independent variable a statistic called an *odds ratio*. The odds ratio is a measure of how much more (or less) likely it is for a particular outcome to be observed when a given independent variable is “true” ($x=1$) than it is when that independent variable is “false” ($x=0$). For example, in this model, there is a variable that has a value of 1 if the recipient received a lump-sum distribution of \$20,000 or more (in 2006 dollars), and a value of 0 if the distribution was less than that amount. Recipients of lump sums of less than \$5,000 were the reference group for the model. In **Table 4**, this variable is shown as having an odds ratio of 4.738. This means that *other things being equal* (and measured at their mean values), a recipient of a lump-sum distribution of \$20,000 or more was 374%% more likely than a recipient of a lump sum of less than \$5,000 to have rolled over the entire distribution into another retirement plan.

As was illustrated by the data presented in **Table 2**, lump sums received in 1990 or later were more likely to have been rolled over than were lump sums received between 1980 and 1989, but lump sums received in the 1990s and those received from 2000 to 2006 were about equally likely to have been rolled over. These relationships also held in the regression analysis. Other things being equal, lump sums received in the 1980s were 41% less likely to have been rolled over than those received between 1990 and 1999. The difference in the probability that a lump sum received between 2000 and 2006 was rolled over compared to a lump sum received between 1990 and 1999 was not statistically significant.

When the effects of other variables were held constant, the reason for the lump-sum distribution continued to have a strong statistical relationship to the probability that the distribution was rolled over into another retirement account. Distributions that were received because the recipient retired, quit to go to school, or quit to take another job were 36% more likely to have been rolled over than distributions that were received because of the death of a worker or because the recipient was separated involuntarily, quit due to illness, injury, or family obligations, or because the business where the recipient worked had closed.

Individuals aged 35 and older were more likely to have rolled over a lump-sum distribution than those under 35, but once other variables were controlled for, the effect of the individual’s age was relatively small, except for those aged 55 and older, and thus nearest to retirement. Other things being equal, individuals aged 35 to 44 were 19% more likely than those under 35 to have rolled over their most recent lump-sum distribution, and those aged 45 to 54 were 30% more likely than those under 35 to have rolled over their most recent lump-sum distribution. Individuals who were 55 to 59 years old were 74% more likely than those under age 35 to have rolled over their most recent lump-sum distribution.

The recipient's highest level of education completed had a strong statistical relationship to the likelihood that a lump-sum distribution was rolled over into another retirement account. Relative to those with a high school education or less, recipients with some college were 49% more likely to have rolled over their most recent distribution into an IRA or other retirement plan. College graduates were 170% more likely than those with just a high school education to have rolled over their most recent lump-sum distribution. The fact that rolling over a lump-sum was positively correlated with the recipient's overall level of education could be considered encouraging to the prospect that savings behavior can be influenced by efforts to educate workers about the importance of saving pension distributions for their consumption needs during retirement.

Race was also a significant variable on the model. Recipients of lump-sum distributions who classified themselves as white were 80% more likely than non-white recipients to have rolled over their most recent distribution into an IRA or other retirement plan. The variable indicating the recipient's sex also was statistically significant. Other things being equal, men were 20% less likely than women to have rolled over their most recent lump-sum distribution into another retirement plan. This result is of particular interest because the descriptive statistics in Table 2 showed that slightly more men than women had rolled over their most recently received lump-sum distribution (47 vs. 44%). The regression results imply, however, that when the effects of other variables are taken into account, men had a slightly lower propensity than women to have rolled over a lump-sum distribution into another retirement plan.

The SIPP collected information about each respondent's current income, but not their income in the year that they received their most recent lump-sum distribution. We entered the individual's current average monthly income, expressed as a quartile ranking, into the regression model as a proxy for income in the year the distribution was received. Recipients' average monthly incomes over four months in 2006 were grouped into quartiles. Those in the lowest income quartile were omitted from the model as the reference group. Individuals with total monthly individual income of less than \$1,464 in 2006 were in the fourth (lowest) income quartile among individuals who had received a lump-sum distribution after 1979 and before age 60. Those with income of more than \$4,754 were in the first (highest) income quartile. Median total monthly individual income among those who had received a lump-sum distribution was \$2,876. Relative to recipients with monthly income in the lowest quartile, those whose monthly income was in the second-lowest quartile were neither more nor less likely to have rolled over their most recent lump-sum distribution into an IRA or other retirement account, other things being equal. Individuals with income in the second-highest quartile were 34% more likely than those in the lowest income quartile to have rolled over their most recent lump-sum distribution into another retirement account, while recipients whose monthly income was in the highest quartile were 112% more likely than those in the lowest income quartile to have rolled over their most recently received lump sum.

Table 4. Estimated Probability of Rolling Over a Lump Sum into a Retirement Plan

Lump sums received between 1980 and 2006 by people under age 60

Logistic Regression Results					
Response Variable: Full distribution was rolled over into an IRA or other retirement account					
Independent variable:	Weighted Mean	Parameter Estimate	Standard Error	Pr > ChiSq	Odds Ratio
Intercept	—	-2.541	0.158	<.0001	—
Race (1 = white)	0.878	0.588	0.108	<.0001	1.801
Sex (1 = male)	0.469	-0.226	0.070	0.0012	0.798
Age = 35 to 44	0.288	0.176	0.083	0.0336	1.192
Age = 45 to 54	0.205	0.260	0.092	0.0047	1.297
Age = 55 to 59	0.075	0.551	0.130	<.0001	1.735
Education: some college	0.386	0.396	0.091	<.0001	1.486
Education: college graduate	0.393	0.993	0.095	<.0001	2.700
Monthly income: third quartile	0.250	0.071	0.094	0.4505	1.073
Monthly income: second quartile	0.250	0.290	0.096	0.0024	1.337
Monthly income: first (top) quartile	0.250	0.752	0.104	<.0001	2.120
Lump sum amount: \$5,000 - \$9,999	0.172	0.816	0.097	<.0001	2.262
Lump sum amount: \$10,000-\$19,999	0.164	0.777	0.099	<.0001	2.175
Lump sum amount: \$20,000 or more	0.307	1.556	0.088	<.0001	4.738
Received lump sum 1980 to 1989	0.129	-0.535	0.109	<.0001	0.586
Received lump sum 2000 to 2006	0.523	0.081	0.073	0.2691	1.084
Retired or quit voluntarily	0.540	0.307	0.068	<.0001	1.359

Source: Congressional Research Service.

Notes: Lump-sum distributions were adjusted to 2006 dollars. The “odds ratio” is a measure of how much more (or less) likely it was for a lump-sum to have been rolled over when a particular independent variable was “true” (x = 1) than it was when that independent variable was “false” (x = 0).

n = 4,527 records.

Association of Predicted Probabilities and Observed Responses:

Concordant = 74.3%, Discordant = 25.4%, Tied = 0.3%

Implications for Public Policy

The results of this analysis indicate that while fewer than half of lump-sum distributions from retirement plans that individuals received between 1980 and 2006 were rolled over into IRAs or retirement plans, about 70% the dollars distributed as lump sums were rolled over. Although lump-sum distributions received since 1990 were more likely to have been rolled over than were distributions received in the 1980s, distributions received from 2000 to 2006 were no more likely to have been rolled over than were distributions received in the 1990s.

Many recipients of lump-sums who did not roll over their distributions into an IRA or other retirement plan saved at least some of the money in another way. While 45% of lump-sum recipients rolled over the entire amount, another 41% used at least part of their lump-sum to purchase a home or business, invest in stocks or bonds, or to make a deposit to a savings account. Thus, 86% of all recipients saved at least part of their lump-sum distribution. Nevertheless, taking a distribution and saving part of it is not a tax-efficient way to save. Distributions received before age 59½ that are not rolled over into another tax-qualified retirement plan within 60 days are subject to both ordinary income tax and a 10% additional tax. Any part of the distribution that is not rolled over may be subject to both income tax and the 10% additional tax.

Although the lump-sum distributions that were not rolled over tended to be relatively small — with a median value in 2006 dollars of \$5,430, compared to a median value of \$16,202 for lump-sums that were rolled over to another account — most were received by workers who were more than 25 years away from retirement. Consequently, many of these distributions could have grown to substantial amounts had they been rolled over into IRAs or other retirement plans. Among the sample of lump-sum recipients examined for this report, those who did not roll over their most recent lump sum distribution gave up retirement wealth with an estimated median value of \$43,800 at age 65 if it had been invested in stocks, or \$29,900 if it had been invested in bonds.

The laws that Congress has passed with respect to taxation of early distributions from retirement plans represent a compromise among several competing objectives, including:

- encouraging employees to participate in retirement plans,
- promoting the preservation of retirement assets,
- allowing participants to have access to their retirement savings when they would otherwise face substantial economic hardship, and
- assuring that the tax preferences granted to pensions and retirement savings plans are not used for purposes other than to fund workers' future financial security.

If any one of these objectives were paramount, devising the most effective policy with respect to lump-sum distributions would be relatively uncomplicated. If preserving retirement assets were the only important consideration, Congress could require all distributions from pension plans to be rolled over into another account and held there until the individual reaches retirement age. Stricter limits on access to retirement funds before retirement, however, could inhibit employee participation in retirement savings plans. This, in turn, could result in more people being unprepared for retirement than currently results from some pre-retirement distributions being spent rather than saved. Likewise, allowing easier access to retirement savings could help people meet other important expenses, but only at the expense of less financial security in retirement.

Given the competing demands that Congress faces in devising tax policy for pre-retirement distributions from pensions and retirement savings plans, the most likely outcome is that these policies will continue to represent a compromise among competing objectives. Policy analysts who have studied the effects of federal tax laws on the disposition of lump-sum distributions have suggested several options for consideration, including changing the tax rate or the withholding rate on lump-sum distributions that are not rolled over; having the tax rate vary with the age of the recipient or with the size of the distribution; requiring at least part of the distribution to be rolled over directly into another retirement plan; and encouraging plan sponsors to educate recipients about the importance of preserving these distributions so that the funds will be available to provide for their financial security during retirement.

Product number RL30496

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